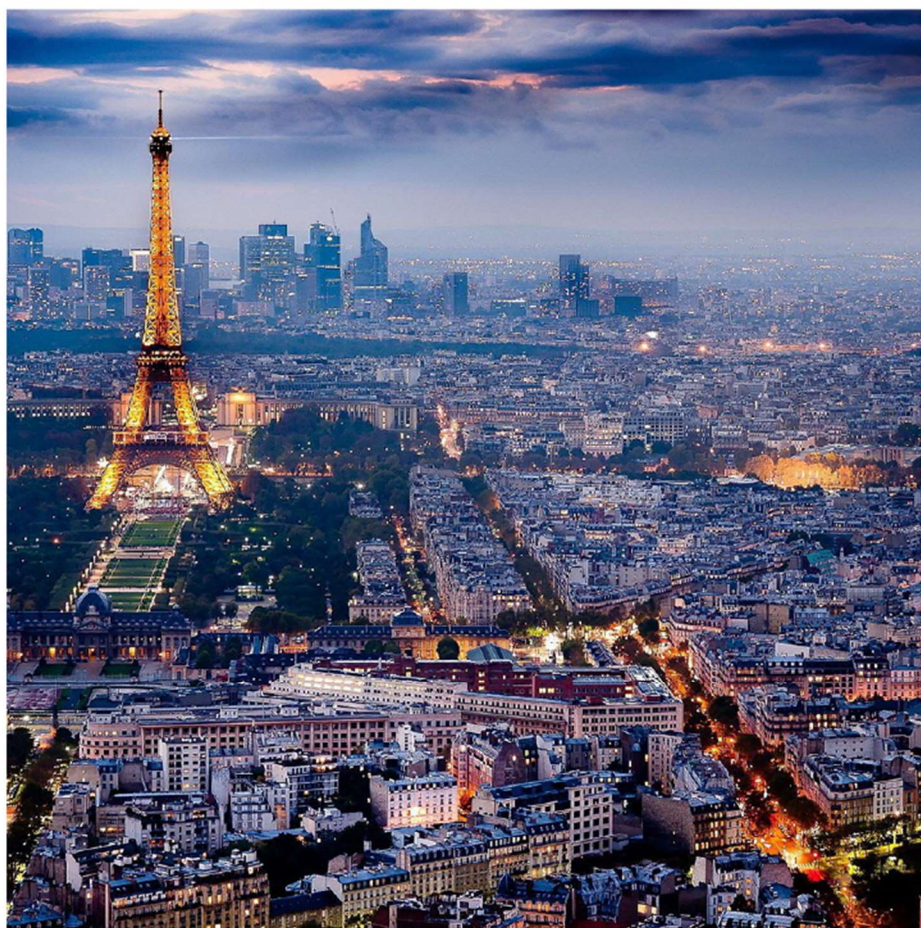


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Pedagogical Sciences

Проблемы развития речи у обучающихся с интеллектуальными нарушениями

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Аннотация

Обогащение активного словаря имеет большое значение для развития познавательной деятельности обучающихся, так как слово, его значение является средством не только речи, но и мышления. Взаимосвязь познавательного и речевого развития очевидна. Речь сопровождает и совершенствует познавательную деятельность у обучающихся в начальных классах школы, делает более целенаправленной и осознанной трудовую активность, способствует проявлению творчества и фантазии. Развитие активного словаря в онтогенезе обусловлено развитием представлений об окружающей действительности. По мере того, как ребенок знакомится с новыми предметами, явлениями, признаками предметов и действий, обогащается его активный словарь. Освоение окружающего мира происходит в процессе неречевой и речевой деятельности при непосредственном взаимодействии с реальными объектами и явлениями, а также через общение со взрослыми. Одной из главных задач воспитания и обучения обучающихся в начальных классах школы является развитие речи, речевого общения. Владение родным языком – это не только умение правильно построить предложение. Обучающиеся в начальных классах школы должны научиться рассказывать: не просто называть предмет, но и описать его, рассказать о каком-то событии, явлении, о последовательности событий.

Ключевые слова; психического развития, нервной деятельности, фразовой речи, нарушения речи, фонетико-фонематическая сторона, лексика-грамматический строй, импрессивной и экспрессивной речи, мимико-жестикulatoryными, аграмматизмы, диалогического общения, языковой, сенсомоторный.

Keywords; mental development, nervous activity, phrasal speech, speech disorders, phonetic-phonemic side, vocabulary-grammatical structure, impressive and expressive speech, mimic-gestural, agrammatism, dialogic communication, linguistic, sensorimotor.

Специфика речевого развития обучающихся с интеллектуальными нарушениями в начальных классах школы определяется особенностями высшей нервной деятельности и их психического развития. У обучающихся с интеллектуальными нарушениями в начальных классах школы отмечается недоразвитие высших форм познавательной деятельности, конкретность и поверхностность мышления, замедленное развитие речи и ее качественное

своеобразие, нарушение словесной регуляции поведения, незрелость эмоционально-волевой сферы. Характерным для данных детей также является позднее развитие речи.

Исследования некоторых ученых, Н. А. Александровой [1], Е. А. Алябьевой [2], А. Г. Арушановой [3], Л. С. Выготского [4] и др., указывают на то, что у обучающихся с интеллектуальными нарушениями в начальных классах школы развитие речи существенно отличается от развития речи у их нормально развивающихся сверстников. Многие дети с интеллектуальными нарушениями не начинают говорить и к 4-5 годам. Для большинства обучающихся с интеллектуальными нарушениями в начальных классах школы развитие речи в младшем школьном возрасте только начинается. Первые слова появляются у них после 3 лет, фразы – к началу младшего школьного возраста [3]. Значительное отставание отмечается у данных детей в появлении фразовой речи. При этом временной интервал между первыми словами и фразовой речью у них более длительный, чем у детей в норме [2].

По материалам А. А. Леонтьева, известно, что нарушения речи у обучающихся с интеллектуальными нарушениями в начальных классах школы являются очень распространенными и имеют стойкий системный характер, т.е. у таких детей страдает речь как целостная функциональная система. Нарушаются все компоненты речи: фонетико-фонематическая сторона, лексика, грамматический строй. У обучающихся с интеллектуальными нарушениями в начальных классах школы отмечается несформированность как импрессивной, так и экспрессивной речи.

У обучающихся с интеллектуальными нарушениями в начальных классах школы оказываются несформированными в большей или меньшей степени все этапы речевой деятельности. Отмечаются слабость мотивации, снижение потребности в речевом общении, нарушено смысловое программирование речевой деятельности, создание внутренних программ речевых действий. Вследствие целого ряда причин нарушаются реализация речевой программы и контроль за речью, сличение полученного результата с предварительным замыслом [5]. Эти речевые расстройства оказывают отрицательное влияние на психическое развитие ребенка, эффективность его обучения.

По данным А. С. Зайцевой, речевые нарушения у обучающихся с интеллектуальными нарушениями в начальных классах школы подразделяются на две группы:

1. Недоразвитие речи как симптом синдрома нарушения интеллекта, при котором у ребенка обнаруживается недостаточное внимание, восприятие, слабая память, недостаточность контроля за своими действиями и за речью, несформированность фонетико-фонематической и лексико-грамматической сторон речи.

2. На фоне нарушения интеллекта могут быть любые речевые нарушения не как проявление умственной отсталости, а дополнительно к ней без причинно-следственной соотнесенности речевой и интеллектуальной неполноценности [6].

По материалам исследований П. Я. Гальперина, Д. Б. Эльконина, известно, что нарушения речи умственно отсталых обучающихся имеют сложную структуру. Они разнообразны по своим проявлениям, механизмам, стойкости и требуют дифференцированного подхода при их анализе. Известно, что уровни речевого развития у детей с идиотией, имбецильностью и дебильностью существенно различаются. Симптоматика и механизмы речевых расстройств определяются не только наличием общего, диффузного недоразвития мозга, что обуславливает системное нарушение речи, но и локальной патологией зон, имеющих непосредственное отношение к речи, что еще более усложняет картину нарушений речи при нарушении интеллекта [7].

У большинства обучающихся с интеллектуальными нарушениями в начальных классах школы «наблюдаются специфические расстройства речи по типу алалии (с греч. – «отсутствие речи») – это системное недоразвитие речи при котором страдают фонетико-

фонематическая и лексико-грамматическая ее стороны и дизартрии (с греч. – «расстройство сочленения») – это нарушение произносительной стороны речи, обусловленное органической недостаточностью иннервации мышц речевого аппарата (каша во рту). По данным А. А. Леонтьева, в целом, большинство обучающихся с интеллектуальными нарушениями в начальных классах школы овладевают элементарной речью только к 4-5 годам, но при этом у них обнаруживаются следующие отклонения: звукопроизношение нарушено; фразовая речь изобилует фонетическими и грамматическими искажениями; недосформирована семантическая сторона речи» [5, с. 214].

Все исследователи подчеркивают ограниченность запаса слов у обучающихся с интеллектуальными нарушениями. Наиболее важными причинами бедности словарного запаса является низкий уровень их умственного развития, ограниченность представлений и знаний об окружающем мире, несформированность интересов, снижение потребности в речевых и социальных контактах, а также слабость вербальной памяти.

По материалам И. А. Коробейникова, в целом у обучающихся с интеллектуальными нарушениями в начальных классах школы недоразвиты все компоненты устной речи, касающиеся фонетико-фонематической и лексико-грамматической сторон. Кроме того, у них «обнаруживаются все виды речевых нарушений как сопутствующие проявления интеллектуального дефекта. Может быть механическая дислалия (нарушение звукопроизношения из-за нарушения строения артикуляционного аппарата), ринолалия (нарушение речи из-за расщелины артикуляционного аппарата), дизартрия (нарушение всей звуковой системы речи из-за нарушенной иннервации артикуляционного аппарата – параличи, парезы), могут быть алалии, афазии, заикание» [8, с. 227].

Итак, с точки зрения развития речи обучающиеся с интеллектуальными нарушениями в начальных классах школы представляют собой весьма неоднородную категорию. Среди них имеются дети, совсем не владеющие речью, и дети с формально достаточно хорошо развитой речью. Но всех их объединяет ограниченное понимание обращенной речи, привязанность к данной ситуации, с одной стороны, и оторванность речи от деятельности – с другой. Речь такого дошкольника не отражает истинных интеллектуальных возможностей ребенка, не может служить полноценным источником передачи ему знаний.

Вот почему при диагностике речевого нарушения у ребенка младшего школьного возраста с интеллектуальными нарушениями важно ориентироваться на, выделенные Р. Е. Левиной, уровни речевого недоразвития, соотнося с ними состояние речи конкретного ребенка и определяя при этом вид его речевого нарушения.

Р. Е. Левина выделяет три уровня речевого развития, которые отражают типичное состояние компонентов языка у обучающихся с интеллектуальными нарушениями в начальных классах школы и, как следствие, с общим недоразвитием речи [9].

Первый уровень речевого развития характеризуется отсутствием речи, это так называемые «безречевые дети», которые пользуются «лепетными» словами, звукоподражаниями, сопровождают «высказывания» мимикой и жестами. Например, «би-би» может означать самолет, самосвал, пароход.

Второй уровень речевого развития имеют дети, в лексиконе которых, кроме жестов и «лепетных» слов появляются, хотя и искаженные, но достаточно постоянные общеупотребительные слова (например, «лябока» вместо «яблоко»). Произносительные возможности этих детей значительно отстают от возрастной нормы, нарушена слоговая структура (например, наиболее типично для них сокращение количества слогов: «тевики» вместо «снеговики»).

Третий уровень речевого развития характеризуется наличием развернутой фразовой речи с элементами лексико-грамматического и фонетико-фонематического недоразвития. Свободное общение затруднено. Дети этого уровня вступают в контакты с окружающими

только в присутствии знакомых (родителей, воспитателей), вносящих соответствующие пояснения в их речь. Например, ребенок говорит: «Мамой ездилась пак. а потом ходила де летька, там звяна. потом аспалькинебили. потом посьли пак» вместо: «С мамой ездила в зоопарк, а потом ходила, где клетка – там обезьяна. Потом в зоопарке не были. Потом пошли в парк».

Важно учитывать и то, что расстройства речи у обучающихся с интеллектуальными нарушениями в начальных классах школы проявляются на фоне грубого нарушения познавательной деятельности, аномального психического развития в целом. По данным В. А. Калягина, Т. С. Овчинниковой, при нарушении интеллекта в различной степени нарушены многие уровни порождения речевого высказывания: смысловой, языковой, сенсомоторный. При этом наиболее недоразвитыми оказываются высокоорганизованные сложные уровни (смысловой, языковой), требующие сформированности операций анализа и синтеза, абстрагирования, обобщения и сравнения [10].

У обучающихся с интеллектуальными нарушениями в начальных классах школы в силу недоразвития коры головного мозга наблюдаются следующие особенности в развитии речи. По данным А. К. Марковой, фразовая речь, формирующаяся у некоторых детей, отличается большим количеством фонетических и грамматических искажений. Овладение грамматическим строем речи на протяжении младшего школьного возраста, как правило, не происходит. Особенно страдает связность речи. Одной из характерных особенностей становится стойкое нарушение согласования числительных с существительными [11].

У обучающихся этой группы медленно развивается словарь, замедленно формируются обобщающие понятия, с трудом абстрагируются от конкретной ситуации, их речевая продукция сводится к использованию заученных речевых шаблонов. Пассивный словарный запас у таких младших школьников значительно превышает активный, но это касается, как правило, восприятия отдельных изолированных слов. Есть слова, которые дети с интеллектуальными нарушениями произносят с опорой на картинку, но не понимают, когда их произносит другой человек, вне привычной ситуации. Это свидетельствует о том, что у младших школьников с интеллектуальными нарушениями длительное время сохраняется ситуативное значение слова. Семантическая нагрузка слова у них значительно меньше, чем у нормально развивающихся сверстников.

Состояние диалогической речи обучающихся с интеллектуальными нарушениями в начальных классах школы, имеющих общее недоразвитие речи III – IV уровня, разными авторами оценивается различно. По мнению Т. Б. Филичевой, младшие школьники с общим недоразвитием речи затрудняются в построении связной монологической речи, но владеют бытовой и диалогической речью [12].

Н. И. Чуприкова отмечает, что речь обучающихся с интеллектуальными нарушениями в начальных классах школы носит преимущественно ситуативный характер и имеет форму диалога, у детей нет навыков и умений связно излагать свои мысли, для них характерна подмена связного высказывания односложными ответами на вопросы или разрозненными нераспространенными предложениями [13].

Л. М. Шипицына предлагает ряд параметров для оценки уровня диалогического общения детей: содержание, диалогического отношения, средства общения, коммуникативно-семантический тип высказывания, способы общения. Оценка диалогической речи обучающихся в начальных классах школы III – IV уровня по данным параметрам позволяет условно выделить три группы детей [14].

К первой группе относятся обучающиеся с достаточно высоким уровнем овладения способами диалогического общения. Дети хорошо ориентируются в ситуации, общение между ними разворачивается в виде ряда взаимосвязанных высказываний. Обучающиеся инициативно обращаются к взрослому; обращаются друг к другу с вопросами,

комментариями, побуждающими высказываниями. Диалогическое общение между детьми носит доброжелательный характер. Обучающиеся данной группы быстро устанавливают контакт со взрослыми и сверстниками, стремятся к постоянному общению, хорошо общаются в присутствии незнакомых людей, легко сменяют способы общения, находят общения с разными партнерами.

Эти дети отвечают на все вопросы, их предложения полные и распространенные, имеют интонационную выразительность.

Обучающиеся второй группы хорошо ориентируются в ситуации общения. Они быстро устанавливают контакты со взрослыми и сверстниками. Инициативные высказывания детей чаще всего связаны с запросом информации. На высказывания сверстников отвечают в основном практическими действиями. Иногда комментируют свои действия и действия партнера. Диалогическое общение носит доброжелательный характер. Однако у этой группы обучающиеся быстро наступает усталость от общения, отмечается стереотипность способов общения. Они затрудняются отвечать на некоторые вопросы, иногда отвечают на них при помощи подсказок. В речи у них встречаются отдельные неточности, единичные аграмматизмы, предложения простые, чаще нераспространенные.

К третьей группе относятся обучающиеся с низким уровнем развития диалогической речи. Инициативные высказывания практически отсутствуют, либо связаны с решением познавательной задачи и обращены к взрослому. Дети действуют молча или комментируют свои действия, ни к кому не обращаясь. На высказывания сверстников не реагируют. Иногда вступают в конфликтные отношения со сверстниками. У них отмечается узкий спектр круга общения, затруднение в смене партнера по общению, избирательность и узкий круг общения. Отмечаются нарушения в структурировании текста, постоянная помощь со стороны экспериментатора, бедность, неточность лексики, аграмматизмы, односложные ответы «да», «нет».

У всех трех групп отмечаются затруднения лексико-грамматического характера при продуцировании высказываний, а также трудности взаимопонимания, связанные с фонетическим оформлением речи. Диалогическая речь носит ситуативный характер. Если у обучающегося наблюдается достаточно развитый диалог, то это позволяет ему легко входить в контакт со взрослыми и со сверстниками.

В большинстве случаев у обучающихся с интеллектуальными нарушениями в начальных классах школы снижена потребность в общении как со взрослыми, так и со сверстниками. Обращению к взрослому как к партнеру по деятельности отмечается редко. Невелико количество контактов, обусловленных познавательным отношением к объектам деятельности. Предпочтительным видом коммуникации являлась совместное чтение и обсуждение книг.

При диалоге у обучающихся с интеллектуальными нарушениями в начальных классах школы отмечается содержательная бедность, структурная неполнота используемой речевой продукции, диалогические контакты носят ситуативный характер, отмечается низкий уровень личностной активности даже при вопросно-ответной форме общения.

В диалогическом общении у обучающихся с интеллектуальными нарушениями в начальных классах школы испытываются коммуникативные трудности, вызванные неумением строить общение с учетом структуры диалога:

1. Не умеют задавать вопрос и отвечать на заданный вопрос.
2. Не могут правильно сформулировать побуждение (предложение, приказание, просьба) или отказаться от выполнения того, что высказано как просьба или приказ.
3. Затрудняются в формулировке сообщения с целью информирования собеседника или утверждения своей мысли.
4. Не владеют нормами и правилами этикетного общения в диалоге.

Итак, анализ литературы показал, что в исследованиях психологов отмечается отставание в речевом развитии обучающихся в начальных классах школы от возрастной нормы, которое проявляется в том, что:

1. Медленно и неточно осуществляется перенос речевого опыта в сходные ситуации, речь недостаточно регулирует деятельность.
2. Обучающийся долгое время общается только вопросно-ответной формой, контекстная речь формируется с трудом.
3. Самостоятельный рассказ сводится к простому перечислению отдельных предметов и действий, изображенных на картинке, ребенок при этом не пытается сделать свой рассказ логически связным и более полным.
4. Внимание к речи окружающих и контроль за своей речью у обучающихся с интеллектуальными нарушениями детей значительно снижены, вместе с тем чаще всего они не проявляют потребности в общении с окружающими людьми, их коммуникативная активность снижена.

Исследования Л. С. Волковой показывают, что у обучающихся с интеллектуальными нарушениями в начальных классах школы снижена потребность в общении, наблюдаются трудности в развитии речевых средств общения. Общение со взрослыми «носит в основном практический, деловой характер, а личностное общение встречается значительно реже. Недоразвитие коммуникативной функции речи не компенсируется другими средствами общения, в частности мимико-жестикультурными. Амимичное (лишенное мимики) лицо, плохое понимание жеста, употребление лишь примитивных стандартных жестов характерно для этой категории детей» [15, с. 704].

Таким образом, интеллектуальный дефект отрицательно влияет на речевое развитие ребенка, затрудняет общение детей между собой и со взрослыми, а также подготовку к обучению в школе. Несовершенство коммуникативной речевой функции не компенсируется у обучающихся в начальных классах школы, как это имеет место у детей, например, с нарушением слуха, другими средствами общения, в частности мимико-жестикультурными. Это обуславливает наличие случаев отвержения таких детей в коллективах обычных сверстников. Ребенок с интеллектуальными нарушениями в младшем школьном возрасте имеет существенные отклонения в развитии коммуникативных навыков. В то же время тенденции их развития те же, что и нормально развивающихся сверстников. При правильной организации жизни такого ребенка, требующей возможно более раннего включения психолого-педагогической диагностики и специального коррекционного обучения и воспитания, многие дефекты развития коммуникативно-речевой сферы таких младших школьников могут быть скорректированы и предупреждены.

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BU GÜN XARICI DİLİ BİLMƏK NƏ ÜÇÜN VACIBDIR?

Əkbərova Əsmayə Bəxtiyar qızı

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Abstract:

In modern times in Azerbaijan, we are witnessing more closely how the demand for foreign languages plays an important role. If you know a language, you can read literature written by foreign authors, watch movies, get information about the people who represent that language, use foreign websites, get acquainted with the culture and traditions of foreign countries, get international education abroad, and meet new friends. Knowing a foreign language creates more opportunities in building a future career and develops a person's intellectual skills. When a person knows a second language, he has the ability to think faster and be more careful.

A foreign language is, first of all, a means to enter the world of special knowledge. It is also a basis for progress in all areas of the educational process. In modern times in Azerbaijan, we are witnessing more closely how the demand for foreign languages plays an important role. If you know a language, you can read literature written by foreign authors, watch movies, get information about the people who represent that language, use foreign websites, get acquainted with the culture and traditions of foreign countries, get international education abroad, and meet new friends. Knowing a foreign language creates more opportunities in building a future career and develops a person's intellectual skills. When a person knows a second language, he has the ability to think faster and be more careful. A foreign language is, first of all, a means to enter the world of special knowledge. It is also a basis for progress in all areas of the educational process.

Keywords: *representative of the language, career test, international education, intellectual ability, to communicate, global business, diplomatic language.*

1. GİRİŞ:

Azərbaycanda müasir dövrümüzdə xarici dillərə tələbatın necə önəmli bir rol oynadığını günü-gündən daha yaxından şahidi oluruq. Dil bildikdə xarici müəlliflərin yazdığı ədəbiyyatı oxumaq, filmlərə baxmaq, həmin dilin təmsilçisi olan xalq haqqında məlumat almaq, xarici saytlardan istifadə etmək, xarici ölkələrin mədəniyyəti, adət-ənənələri ilə tanış olmaq olar. Xaricdə beynəlxalq təhsil almaq, yeni dostlarla tanış olmaq olar. Xarici dili bilmək gələcək karyeranın qurulmasında daha çox imkanlar yaradır və insanın intellektual bacarığını inkişaf etdirir. İkinci dili bildikdə insan daha tez fikirləşmək, daha da diqqətli olmaq bacarığına malik olur. Xarici dil, hər şeydən əvvəl, xüsusi biliklər aləminə daxil olmaq üçün bir vasitədir. Bu, həmçinin təlim-tərbiyə prosesinin bütün sahələrində irəliləyiş üçün bir zəmindir.

Son onilliklər ərzində dünyamız bir-birindən daha çox asılı olub və yeni texnologiyalar bizə bütün dünyada insanlarla sıx əlaqədə işləməyə imkan verib. Ölkələrlə əlaqələr artdıqca, xarici dildə danışmağa ehtiyac da artır. Bugünkü dünyada fəaliyyət göstərməyə həm mədəni, həm də linqvistik cəhətdən hazır olan, maariflənmiş vətəndaşlara ehtiyacımız var. Xarici dil öyrənmək başqaları ilə həqiqətən ünsiyyət qurmağı və əlaqə yaratmağı öyrənməkdən ibarətdir - bu, yalnız insanlarla qarşılıqlı əlaqədə inkişaf etdirilə bilən inanılmaz mühüm həyat bacarığıdır. Xarici dilə yiyələndiyiniz zaman, kiminsə dediyini başa düşmək, düzgün lüğət və qrammatikanı xatırlamaq, bu söz və

grammatikanı lazımı kontekstdə yerləşdirmək və cavab vermək kimi yeni fəvqəlbəşəri gücünüzü istifadə edə bilərsiniz.

2. BU GÜN XARICI DİLİ BİLMƏYİN VACIBLIYI

İndi getdikcə daha çox insan xarici dili ikinci dil kimi öyrənməyə vaxt ayırır. Bir çox ölkələr öz məktəb proqramına xarici dili daxil edir və uşaqlar daha gənc yaşda ingilis dilini öyrənməyə başlayırlar. Bəs xarici dili öyrənməyin əsl dəyəri nədir?

İstər yeni iş axtarırsınız, istərsə də dünyanı səyahət etməyi planlaşdırırsınız, xarici dili öyrənmək həm şəxsi, həm də peşəkar şəkildə həyatda irəliləyişinizə kömək edə bilər. Qlobal iş bazarında rəqabət apara, karyera bacarıqlarınızı artırma və bütün dünyada insanlarla tanış olmağa başlaya bilərsiniz.

Bu gün dünyada danışılan 6500 dildən niyə ingilis dilini öyrənməyə üstünlük verirsiniz? Dünyada üçüncü ən çox danışılan dil olan ingilis dili 118-dən çox ölkədə geniş şəkildə danışılır, tədris olunur və bütün dünyada ticarət dili və ya diplomatik dil kimi istifadə olunur. Elmin, aviasiyanın, kompüterlərin, diplomatiyanın və turizmin dilidir. Nəhayət, o, beynəlxalq ünsiyyətin, medianın və internetin dilidir.

İstər peşəkar, istərsə də şəxsi səbəblərdən asılı olmayaraq, ingilis dilinin əhəmiyyətini başa düşmək hədəflərinizə çatmağınıza kömək edəcək. İngilis dili bacarıqlarınızı öyrənməyə və tətbiq etməyə davam etməyiniz üçün bir neçə səbəb var.

Xarici dil öyrənmək bəziləri üçün narahatedici, bəziləri üçün isə əyləncəli bir prosesdir. Ancaq hamının ortaq düşüncəsi xarici dil öyrənməyin çətin olmasıdır. Bu gün bir çox insan xarici dilləri demək olar ki, eyni metodlardan istifadə edərək öyrənməyə başlayır. Dili axıcı bir səviyyəyə çatdırmaq üçün göstərdikləri səydən şikayət etməyənlər isə, demək olar ki, yoxdur.

Xarici dilləri bilmək bizə şəxsi və peşəkar inkişafımız üçün bir çox üstünlüklər verir. İş axtaran insanlar xarici dilin iş tələbləri arasında çox vacib bir meyar olduğunu bilirlər. Böyük və korporativ şirkətlərin dil tələbini xüsusi vurğulandırdıqdan da göründüyü kimi karyeranızı uğurlu başlamaq üçün xarici dil önəmlidir.

Ölkəmizdə əsasən iki dil, ingilis və rus dilləri tələb olunur.

Xarici əlaqəsi olmayan müəssisələrin belə vakansiyalar tərtibatı zamanı xarici dili əsas tələb olaraq qeyd etməsinin səbəbi bir çox iş proqramlarının, cihazların dilinin azərbaycan dilində olmaması və iş mühitində terminlərdən geniş istifadəsidir. İş dünyasında istifadə olunan bir çox kompüter proqramının dili xarici dillərdədir. Əlavə olaraq, xarici dil bilən şəxslərin bir çox mənbədən məlumat almaq imkanı bilavasitə işi daha effektiv etməyə fürsət yaradır.

Araşdırmalar göstərir ki, birdən çox xarici dildə danışan uşaqlar sosial vəziyyətlərdə bəzi üstünlüklərə malikdirlər. Bir araşdırmaya görə, ikidilli uşaqlar başqalarının perspektivlərini qiymətləndirməkdə birdilli uşaqlardan daha yaxşıdır, çünki onlar yaşadıkları situasiyaya görə hansı dildən istifadə edəcəklərini seçməlidirlər. Keçmişdə insanlar ikinci xarici dil öyrənmənin çətinliyi yaradacağını söyləməkdən çəkinirdilərsə, bu gün bir çox araşdırmalar bunun əksini sübut edir. Çünki zehni faydaları ilə yanaşı, insanların özünə inam hissəsinin yaxşılaşdığı, psixoloji cəhətdən özlərini daha rahat hiss etdiyi ortaya çıxıb. Tələbə həyatı həyatınızı asanlaşdırır

İkinci xarici dili öyrənmək, xüsusən də xaricdə təhsil almağı düşünən tələbələr üçün unikal bir fürsətdir. Tələbə olduğunuz müddətdə part-time iş imkanlarından və stajlardan daha asan yararlanmağınıza, şəhər həyatına uyğunlaşmaq və yeni dostlar tapmaqda sizi bir addım irəli aparacaq bir çox imkanlardan yararlanmağınıza kömək edir. Eyni zamanda, ikidilliliyin üstünlükləri arasında, xüsusən də xaricdə təhsildən sonra karyera qurmağı düşünürsünüzsə, iş tapmaq və ölkədəki yerli bizneslərdə, eləcə də beynəlxalq şirkətlərdə yaşamaq şansınız daha yüksək olacaq. Perspektiviniz inkişaf edir. Bu bir həqiqətdir ki, öyrəndiyiniz hər şey sizi başqalarından fərqləndirəcək və görmə qabiliyyətini artıracaq bacarıqlar əldə etməyə imkan verəcək bir

vəziyyətdir. İkinci xarici dil öyrənmək təkcə təhsil, iş və ya tətill üçün səfər edəcəyiniz ölkələrdə rahatlığınız üçün deyil; həm də yaradıcılığınızı artıracaq, yaddaşınızı gücləndirəcək və dünyaya baxışınızı dəyişdirəcək bacarıqlara sahib olmanıza kömək edəcək və açıq fikirli və anlayışlı bir fərdə çevriləcəksiniz. İş bazarında daha çox şansınız var.

İkidiilliliyin üstünlükləri arasında tələbələr və yeni məzunları maraqlandıran ən mühüm məsələ iş imkanlarıdır. İkinci dil öyrənmək təsəvvür etdiyinizdən daha çox karyera imkanları açır.

Şübhəsiz ki, bəşəriyyət üçün qloballaşan dünyada insan üçün bir xarici dili bilmək zəruridir. Yəqin ki, işiniz üçün xaricə müraciət etmək, xaricdə ingilis dilini öyrənmək və ya dil problemi olmadan ingilis dilində rahat səyahət etmək kimi bir məqsədiniz var. Bəlkə də çox sevilən bir yazarın işini ana dilində oxumaq istəyirsiniz. Ancaq qarşınızda böyük bir problem var: İngilis dili!

Məqsədiniz nə olursa olsun, bu gün əcnəbi dili öyrənmək yaşı tələblərindən biridir. İngilis dili bilmək faydaları hansılardır? İngilis dili öyrənmək həqiqətən vacibdirmi? Bir çox dilli insanların ümumi xüsusiyyətləri hansılardır? Bu cür sualların cavablarını maraqlıdırsa, İngilis dili öyrənmək üçün ən yaxşı 10 səbəbi birlikdə araşdıraq ...

Bəzən xarici dili öyrənmək qeyri-mümkün görünür, amma ekspertlərin fikrincə, bir neçə həftə ərzində hər hansı bir səviyyədə ünsiyyət qurmaq mümkündür və bir neçə aydan sonra bu dili yetərincə öyrənmək olar.

Xarici dili öyrənməkdə nə üçün maraqlı olduğunuzu anlamaqda çətinlik çəkirsənsə, sizin üçün hazırladığımız ən yaxşı 6 səbəbi bizdən eşidin...

1. **Etibarlılığınızı artırma bilərsiniz ...**
2. **Xarici bir dili öyrənərkən beyninizin necə yorulduğunu bilirsiniz,**
3. **Dostlarınızın dairəsini genişləndirə bilərsiniz ...**
4. **Daha keyfiyyətli təhsil ala bilərsiniz...**
5. **Xəyalınızdakı ölkədə yaşaya bilərsiniz**
6. **Daha rahat iş tapa bilərsiniz**

3. NƏTİCƏ:

Xarici dili öyrənmək rahat iş deyil. Hazırkı dövərdə xarici dili bilmək xüsusi əhəmiyyət kəsb edir. Bəzi insanlar xarici dili ona görə öyrənirlər ki, çünki bu onlara işlə əlaqədar lazımdır. Digərləri çoxlu səfər etdiklərindən dil öyrənir, qalanları üçün isə bu sadəcə hobbidir. Xarici dili bilən bütün şəxslər digər ölkələrin insanları ilə ünsiyyət saxlaya, əcnəbi müəlliflərin kitablarını orijinaldan oxuya bilərlər ki, bu da öz növbəsində dünyagörüşün artmasına kömək edir.

Xarici dil öyrənməyin birinci faydası beyin gücünü artırmasıdır. Yəni siz yeni bir dil öyrəndiyiniz zaman beyninizin müxtəlif bacarıqları inkişaf etdirməyə başlayır. İstənilən xarici dil ilə ilk dəfə tanış olduğumuz zaman çoxlu asan və çətin sözlər ilə qarşılaşırıq. Həmçinin qarışıq qrammatika, cümlə strukturu ilə də rastlaşa bilərik. Yeni xarici bir dil öyrəndiyimiz zaman beynimiz bu sözləri, qrammatika qaydalarını anlayıb, qavrayıb və daha sonra müəyyən bölmələrdə bu məlumatları saxlamalı olur. Bu proses davamlı olaraq baş verdiyi üçün də zamanla beynin məlumatlararası əlaqə qurma, məntiqi düşünmə, bir problemi tez və effektiv bir yolla həll etmək kimi bacarıqlarını sürətlə inkişaf etməyə başlayır.

Xarici dil öyrənməyin ikinci faydası yaddaşı gücləndirməsidir. Beynimizi nə qədər çox işlətsək, o da bir o qədər çox yaxşı funksiyalarını işlədər. Xarici bir dil öyrənmək isə bunun üçün əla yoldur. Belə ki, xarici bir dil öyrəndiyimiz zaman istifadə etdiyimiz və yadda saxlamağa çalışdığımız sözlər sayəsində zamanla beynimizin yadda saxlama qabiliyyəti inkişaf etməyə başlayır. Hər dəfə daimi olaraq biz yeni bir söz öyrəndimiz, onu danışmaq prosesi zamanı cümlələrdə istifadə etdiyimiz zaman beynimiz bir növ gimnastika etmiş olur.

Xarici dil öyrənməyin üçüncü faydası multifunksional ola bilməyə yardımçı olmasıdır. Hər bir şeyin sürətlə dəyişdiyi müasir dünyamızda bəzən hər gün bir çox işi etməyə məcbur oluruq.

Bu da bizləri çox vaxt işləri vaxtında çatdırmadığımız zamanlar əsəbi, aqressiv və yorğun hallara salır. Edilən bir araşdırmaya görə, xarici bir və ya bir neçə dil bilən insanlar daha multifunksional olur. Gün ərzində birdən çox etməli olduqları işlər olsa belə rahatlıqda vaxtında həmin işləri edə bilirlərə. Xarici dil öyrənməyin dördüncü faydası digər sahələrdə də inkişaf etməyimizə təkan verməsidir. Uşaq vaxtı evdə və ya məktəbdə niyə xarici bir dili öyrənməyimiz ilə bağlı bir çoxumuz suallar vermişik. Çox vaxt bizə iş və təhsil ilə bağlı avantaj əldə edəcəyimizi desələr də, xarici dil öyrənməyin digər bir faydasını demək unudulurdu. Xarici bir dil öyrənmək beyin, yaddaş, qərar verə bilmə və digər bacarıqları inkişaf etdirir. Bununla yanaşı çox vaxt riyaziyyat, fizika, standart oxuyub anlama bacarıqlarını da inkişaf etdirmiş oluruq.

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UNIVERSITETLƏRDƏ “EV TAPŞIRIĞI” NIN TƏŞKILI

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ABSTRACT

In Azerbaijan, homework is typically utilized as a learning tool for class activities in Azerbaijan. It increases students' academic accomplishments and gives them the chance to enhance their learning habits and performance. However, depending on their cultural background, beliefs, attitudes, and educational attainment, kids have varying perspectives on homework. Although homework had some psychological effects on students' learning and influenced their ability to manage their free time, the results showed that homework helped and supported students' learning. Students were able to learn new things, improve their ability to learn, and attain better academic results. Students' ability to work together and communicate with professors to clarify assignments was also encouraged. Teachers should help students understand this idea, use homework as a learning tool, and help them learn how to manage their assignments. Additionally, it should be used in a way that encourages students to work on assignments, gives them the chance to illustrate how they grasp the lessons, and teaches them how to do their work without copying others.

Keywords: *benefits, features, controversial points, academic results, home assignments*

1. GIRIŞ:

Ev tapşırıqları müəllim-professor heyəti tərəfindən tələbələrə adi dərslərindən başqa vaxt ərzində yerinə yetirilməsi üçün verilən işdir. Bu fəaliyyətlər onların biliklərini təzələyir və tələbələr öz anlayışlarını tətbiqə çevirmək imkanı əldə edirlər. Bununla belə, ev tapşırığı tələbələrə uyğun şəkildə verilməlidir. Tədqiqatlar göstərmişdir ki, ev tapşırıqlarının həddən artıq yüklənməsi tələbələrin akademik maraqlarını itirməklə yanaşı, həm də onları fiziki və emosional yorğunluğa aparır (Copper, 1994). Eynilə, bu, şagirdlərin ev tapşırıqlarına münasibətinə təsir edir və öyrənmədə müsbət nəticə vermir. Warton (2001) bildirir ki, ev tapşırığı azyaşlı uşaqların emosional vəziyyətinə təsir edir və onlarla valideynləri arasında münaqişələr yaradır. Bəzi hallarda tələbələr ev tapşırığını yerinə yetirmək istəmirlər, çünki onlar ev tapşırıqlarını müəllimlərini razı salmaq üçün edirlər (Paudel, 2012). Beləliklə, tədqiqatın məqsədi ev tapşırığının tələbələrin öyrənməsinə təsirini araşdırmaqdır.

Akademik tapşırıqlar tələbələrin universitet karyerası boyunca ehtiyac duyacaqları «öz-özünə öyrənmə» və «problemi həlletmə» növlərini əks etdirir. Tapşırıqları vaxtında, müstəqil və tənqidi təfəkkür vasitəsi ilə yerinə yetirmək vərdişinin inkişaf etdirilməsi ali təhsilin artan tələbləri üçün əvəzsiz fəaliyyətdir. Universitetdə Ev tapşırıqları çox vaxt tənqidi düşüncə, təhlil, tətbiq əsaslı olaraq real dünya ssenarilərində konsepsiyaların tətbiqi ilə bağlıdır. İngilis dilində ev tapşırıqları kursdan, səviyyədən və xüsusi təlim məqsədlərindən asılı olaraq geniş şəkildə dəyişə bilər.

Universitet tələbələrinə ev tapşırıqlarının verilməsi təhsilin ayrılmaz hissəsidir və müxtəlif məqsədlər üçün həyata keçirilir. Bunun faydalarını və bəzi mübahisəli məqamlarını nəzərdən keçirək:

1.1. Ev tapşırıqlarının verilməsinin faydaları:

1. Mövzunun dərinləşdirilməsi

• Dərstdə öyrənilən mövzuları evdə təkrar etmək və tətbiq etmək tələbələrə biliklərini möhkəmləndirməyə imkan yaradır.

2. Tədqiqat bacarıqlarının inkişafı

• Tələbələr müstəqil şəkildə resurslardan istifadə etməyi, araşdırma aparmağı və analiz etməyi öyrənirlər.

3. Vaxtın idarə edilməsi

• Ev tapşırıqları tələbələrə vaxtı düzgün planlaşdırma və öz üzərlərində işləmə bacarığını inkişaf etdirməyə kömək edir.

4. Fikirlərin yaradıcılığı və kritik düşünmə

• Tələbələr məsələlərə müxtəlif aspektlərdən baxmağı öyrənir və yaradıcı həll yolları təklif edə bilirlər.

1.2. Mübahisəli məqamlar:

1. *Yüklənmə riski*: Çoxlu ev tapşırıqları tələbələrin digər fəaliyyətlər üçün vaxtının olmamasına və stressə səbəb ola bilər.

2. *Bərabərsizlik problemi*: Hər tələbənin eyni resurslara çıxışı olmaya bilər, bu da onların nəticələrinə təsir göstərə bilər.

3. *Praktik tapşırıqların əskikliyi*: Tapşırıqların çoxu nəzəri ola bilər, halbuki tələbələr praktik təcrübələrdən daha çox faydalanır.

4. *Təkrarlılıq və maraqsızlıq*: Bəzi hallarda, tapşırıqlar tələbələr üçün maraqsız və motivasiya azaldıcı ola bilər.

2. EFEKTIV EV TAPŞIRIQLARININ XÜSUSIYYƏTLƏRİ

1. **Dəqiqlik və Məqsədəuyğunluq**: Tapşırıqlar konkret öyrənmə məqsədinə xidmət etməlidir.

1. **Müxtəliflik**: Müxtəlif mövzu və formatlarda tapşırıqlar tələbələrin marağını artırır

2. **Vaxt Məsuliyyəti**: Tələbələrə tapşırıqları vaxtında yerinə yetirə bilmək üçün kifayət qədər zaman verilməlidir.

3. **Geri Bildirim**: Müəllimlər tapşırıqlara dair konstruktiv geri bildirim verməlidir ki, tələbələr öz inkişaflarını izləyə bilsinlər.

Ev tapşırığının mürəkkəbliyi və müddəti fənlərdən asılı olaraq dəyişə bilər və məqsədi anlayışı artırmaq, bacarıqları təkmilləşdirmək və müstəqil öyrənməni dəstəkləməkdir.

2.1. Ümumi tapşırıq növləri

• **Akademik Tədqiqat**: Müəyyən bir mövzu üzrə dərin tədqiqatların aparılması, müxtəlif mənbələrdən məlumatların toplanması, nəticələrin aydın və qısa şəkildə təqdim edilməsi.

• **Linqvistik təhlil**: dilin strukturunu və mənasını, o cümlədən qrammatika, sintaksis və semantikanın təhlili.

• **Diskurs təhlili**: Siyasi çıxışlar və ya reklamlar kimi xüsusi kontekstlərdə dilin necə istifadə olunduğunu təhlil etmək.

• **Şifahi təqdimatlar**: PowerPoint kimi əyani vəsaitlərdən istifadə etməklə müxtəlif mövzularda təqdimatlar hazırlamaq və çatdırmaq.

2.2. Universitetdə ev tapşırıqlarının növləri

a) *Esse*

b) *Problem paketləri*

c) *Layihələr*

a) ESSE

- *Analitik esselər:* Bunlar sizdən mətni, filmi və ya digər medianı təhlil etməyi, onu komponent hissələrinə ayırmağı və mənasını və əhəmiyyətini qiymətləndirməyi tələb edir.
- *Arqumentativ esselər:* Bunlar oxucunu müəyyən bir nöqteyi-nəzərdən inandırmaq üçün dəlillərlə dəstəklənən aydın bir arqument təqdim etməyi əhatə edir.
- *Müqayisəli esselər:* Bunlar iki və ya daha çox mətni, ideyanı və ya konsepsiyayı müqayisə edir və müqayisə edir.

b) PROBLEM PAKETİƏRİ

• **«Problem paketləri»** adətən təyin olunan və müntəzəm olaraq verilməli olan suallardan ibarət paketlərdir. Orta məktəbdəki oxşar tapşırıqlarla müqayisədə universitetdəki ev tapşırıqları arasındakı ən böyük fərq, onların həqiqətən çətin olmalarıdır və bir çox digər kursların tələbələri onların üzərində birlikdə işləməyə təşviq edirlər.

• **Tənqidi Düşüncəni gücləndirən Ev tapşırığı zehni əzəllərinizi inkişafı üçün bir fürsətdir.** Gecənin gec saatlarında çalışan tələbə, problem və esse anlayışlarını daha dərinədən başa düşə və tətbiqinə kömək edə bilər. Ev tapşırıqlarını zehni idman zalı kimi düşünün; hər bir tapşırıq tələbəni tənqidi düşünmə bacarıqlarını gücləndirəcək şəkildə məlumatları təhlil və sintez etməyə, qiymətləndirməyə sövq edən yeni bir məşqdır.

c) LAYİHƏLƏR

- Universitetdə layihə tapşırıqları vermək vacibdir.
- Layihə işi, laboratoriya əməliyyatlarını tamamlamaq və tətbiq etmək üçün tələbə tərəfindən fərdi və ya qrup halında götürülmüş tapşırıq və ya problemi əhatə edən planlaşdırılmış və mütləq formalaşdırılmış işdir.
- Ən yaxşı yol odur ki, onlar layihənin mövzusunı özləri seçə bilsinlər. Tələbələr adətən qruplarda işləyirlər, əməkdaşlıq etmək və birlikdə ünsiyyət qurmaq üçün sosial bacarıqlarını inkişaf etdirirlər.
- Onlar iş üsulunu seçir, tapşırıqları bölür və layihənin nəticəsini razılaşdırırlar.
- Layihə, **«Etməklə Öyrənmək»** və **«Prosesi Yaşamaqla Öyrənmək»** üsulundan istifadə edilərək həyata keçirilir.

d) MÜZAKİRƏ YAZILARI

- *Analitik esselər:* Bunlar sizdən mətni, filmi və ya digər medianı təhlil etməyi, onu komponent hissələrinə ayırmağı və mənasını və əhəmiyyətini qiymətləndirməyi tələb edir.
- *Arqumentativ esselər:* Bunlar oxucunu müəyyən bir nöqteyi-nəzərdən inandırmaq üçün dəlillərlə dəstəklənən aydın bir arqument təqdim etməyi əhatə edir.
- *Müqayisəli esselər:* Bunlar iki və ya daha çox mətni, ideyanı və ya konsepsiyayı müqayisə edir və müqayisə edir.

e) OXUMAQ (BƏZƏN ÇOX OXUMAQ)

- *Kitaba rəy yazmaq:* Bunlar kitabı tənqidi təhlil etmək, onun güclü və zəif tərəflərini müzakirə etmək və ümumi qiymətləndirməni təmin etməkdən ibarətdir.
- *Kitabın xülasəsi:* Bunlar kitabın əsas ideyalarını və arqumentlərini qısa xülasə halına gətirməkdən ibarətdir.

ə) YARADICI YAZI

- *Qısa hekayələr:* Mövzuları, personajları və süjeti tədqiq edən uydurma hekayələr yazmaq.
- *Şeir: Duyğuları, fikirləri və ya təcrübələri ifadə edən şeirlər yazmaq.*
- *Ssenarilər:* Filmlər və ya televiziya şouları üçün ssenarilərin yazılması

3. UĞURLU LAYIHƏ ƏSASLI ÖYRƏNMƏ (LƏÖ) TƏTBİQİ ÜÇÜN MƏSLƏHƏTLƏR

- **Kiçik başlayın:** Güvən və təcrübə yaratmaq üçün daha kiçik, idarə oluna bilən layihələrlə başlayın.
- **Əlaqələr qurun:** Tələbələrin risk etmək və səhv etmək üçün özlərini təhlükəsiz hiss etdikləri müsbət öyrənmə mühiti yaradın.
- **Prosesi Modelləşdirin:** Tələbələrə rəhbərlik etmək üçün layihədə iştirak edən addımları nümayiş etdirin.
- **Müvəffəqiyyəti qeyd edin:** Həvəsləndirmək və ruhlandırmaq üçün tələbə nailiyyətlərini tanıyın və qeyd edin.
- **Düşünün və Uyğunlaşın:** LƏÖ tətbiqinizin effektivliyini davamlı olaraq qiymətləndirin və lazım olduqda düzəlişlər edin.

İNGİLIS DİLİN DƏRSLƏRİNDƏ UĞURLU EV TAPŞIRIQLARI ÜÇÜN MƏSLƏHƏTLƏR

- Diqqətlə oxuyun: Tapşırıq təlimatlarını və tələblərini anlayın.
- Planlaşdırın və təşkil edin: İşinizi strukturlaşdırmaq üçün kontur yaradın.
- Hərtərəfli araşdırın: Etibarlı mənbələrdən müvafiq məlumatları toplayın.
- Aydın və qısa şəkildə yazın: lazımsız jarqonlardan qaçaraq aydın və qısa bir dil istifadə edin.
- Diqqətlə yoxlayın: Qrammatika, durğu işarələri və orfoqrafik səhvləri yoxlayın.
- Mənbələrə istinad edin:
- Kömək axtarın: Kömək üçün professorunuzdan və ya repetitorunuzdan soruşmaqdan çəkinməyin.

4. NƏTİCƏ

Ev tapşırığı səmərəli və balanslı şəkildə istifadə edildikdə tələbənin öyrənməsinə və əsas həyati bacarıqlarını inkişaf etdirmək üçün güclü vasitədir. Ev tapşırığı vaxtın idarə edilməsini, özünə intizamı və müstəqil öyrənməni təşviq etməklə tələbələrə akademik və peşəkar karyeraları boyu etibar edəcəkləri bacarıqları inkişaf etdirməyə kömək edir.

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Mətnin məğzini təşkil edən lüğətin öncədən öyrədilməsinin praktiki əhəmiyyəti və öyrədilməsi strategiyaları

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Abstrakt

Mətnin məğzini təşkil edən lüğətin və ya əlaqəli sözlərin tematik və ya konseptual qruplarda öyrədilməsi dil öyrətmədə mühüm strategiyadır. Bu yanaşma sözlər arasında daha dərin əlaqələri gücləndirir, lüğətin yadda saxlanmasına və xatırlanmasına kömək edir. Bu məqalə mətnin məğzini təşkil edən lüğətin pedaqoji faydalarını araşdırır, onun fəal iştirakın təmin olunmasında, yadda saxlanmasının yaxşılaşdırılmasında və mənalı ünsiyyətin asanlaşdırılmasında rolunu araşdırır.

Açar sözlər: mətnin məğzini təşkil edən lüğət, koqnitiv yük, starteqiya, ikinci dil

Key words: blocking vocabulary, cognitive load, strategy, second language

Qreyvs lüğəti bilik sahəsinə aid olan və ya fərd tərəfindən tanınan bütün söz ehtiyatı kimi müəyyən edir. O, həmçinin bildirir ki, dilin leksikası onun söz və ifadələrdən ibarət lüğətdir. 1. Krashen leksikonun nətiqin zəhnindəki zehni lüğəti təşkil etdiyini bildirməklə Qreyvsin tərifini daha da genişləndirir. Fərdi zehni leksikon həmin şəxsin lüğət haqqında biliyidir. 2. Miller qeyd edir ki, lüğət cümlələrin yaradılması və başa düşülməsində istifadə olunan əsas tikinti blokları olan sözlər toplusudur.3.

İkinci dil kontekstində lüğətdən səmərəli istifadə edə bilmək öyrənənin əsas qayğılarından biridir. Son lüğət tədqiqatları yunan dilinin leksika anlayışına əsaslanır İngilis dilində "bir dildəki bütün sözlərə, bir dilin bütün lüğətinə aid olan" söz ilə eyni mənada istifadə edilir.4. Beləliklə, lüğət bir dilin sözləri, o cümlədən ayrı-ayrı sözlərin etdiyi kimi, müəyyən bir mənə ifadə edən bir neçə sözdən ibarət tək ifadələr və ya bir neçə söz parçaları kimi müəyyən edilə bilər. 5. Şübhəsiz ki, öyrənənlərin lüğət ehtiyatları nə qədər böyük olarsa, onların oxu və dinləmə materiallarını qavramaq və müxtəlif dil vəziyyətlərində səmərəli ünsiyyət qurmaq imkanları bir o qədər çox olacaqdır. Söz ehtiyatının səmərəli şəkildə mənimsənilməsi məsələsini həll etmək üçün həyata keçirilən bir neçə öyrənmə və yaddaş strategiyası mövcuddur. Bu strategiyalardan biri mətnin məğzini təşkil edən lüğətin öncədən öyrədilməsi strategiyasıdır. Nəzərə alınmalıdır ki, sözləri öyrənmək vakuumda baş vermir; yəni uşaqlar ayrılıqda sözlərin mənalarını mənimsəmir. Bütün öyrənmə - həm şəxsi, həm də akademik - evin, icmanın və sinifin sosial-mədəni mühitində baş verir. "Savadlılıq sosial təcrübədir, buna görə də tələbələr öyrənmə cəmiyyətinin üzvləri kimi sosial qarşılıqlı əlaqələr vasitəsilə akademik lüğəti öyrənirlər" 6. Buna görə də, effektiv dil bilgisi və savadlılığı formalaşdırmaq tələbi dildən zəngin istifadəni stimullaşdıran təcrübələr təqdim edir və müəllimlər qarşıya qoyulmuş hədəfin öyrənilməsini təşviq edən sosial kontekstlər fonunda öz tədris proqramlarını tərtib edirlər.

İngilis dilinin xarici dil kimi öyrədilməsi tədrisi pedaqoji inkişafda uzun tarixə malikdir. 19-cu əsrdə qrammatika-tərcümə metodundan 1960-cı illərdə audio-linqual metoda və 21-ci əsrdə cari kommunikativ metoduna doğru illər keçdikcə modifikasiya olunmasına baxmayaraq, bu tədris praktikalarının çoxu indi də aktualdır və müasir yanaşmalar üçün ümumi zəmin rolunu oynayır. Bu dəyişikliklər zamanı daim mövcud olan iki əsas fəlsəfə mövcud olmuşdur: daim hədəf dillə əhatə olunma və ya kontekstual dil ehtiyacı. Hansı yanaşma olmasından asılı olmayaraq istər gündəlik

kontektlər istərsə də başqa akademik fənnin terminoloji tərkibi lüğətin əhəmiyyətini daim diqqət mərkəzində saxlanılmışdır.

Mətnin və ya mövzunun məğzini təşkil edən lüğətin öyrədilməsi tələbələri yeni məzmunla cəlb etməzdən əvvəl kiçik, idarə oluna bilən əsas sözlər toplusunu təqdim etmək üçün təlimat strategiyasıdır. Bu strategiya öyrənənlərin konkret mövzu və ya fəaliyyətlə bağlı əsas lüğəti başa düşmələrini təmin edir ki, bu da öz növbəsində materialı daha yaxşı qavramağa imkan verir. Çoxlu sayda yeni sözləri təqdim etmək əvəzinə, mətnin və ya mövzunun məğzini təşkil edən lüğətin öyrədilməsi mövzunu daha dərinədən başa düşməyə və daha güclü yadda saxlamağa imkan verən əsas lüğət fondunu baza kimi yaratmağı hədəfləyir.

Deməli anlamı asanlaşdıran sözləri mətn və ya fəaliyyətlə məşğul olmamışdan əvvəl öyrətmək, tələbələrə tanış olmayan lüğətdə ilişib qalmadan materialı daha yaxşı başa düşmə imkanı verir.

Digər tərəfdən mətnin və ya mövzunun məğzini təşkil edən lüğətin öyrədilməsi müxtəlif kontekstlər və fəaliyyətlər vasitəsilə əsas terminlərə təkrar-təkrar rast gəlinməsi və kontekstual dərk sayəsində tələbələrə sözləri uzunmüddətli yaddaşa köçürmə imkanı verir. Koqnitiv yükün azaldılması strategiyası ilə yanaşılması isə mətnin və ya mövzunun məğzini təşkil edən lüğətin öyrədilməsinin bir digər əhəmiyyətini vurğulayır. Uyğunsuz və saysız hesabsız sözlərin əzbər fonda yadda saxlanması əvəzinə seçilmiş sözlər qrupuna diqqət yetirməklə, lüğətin öyrədilməsi tələbələrin həddən artıq yüklənməməsinə təmin edir və seçilmiş lüğətin fərqli metodlarla istifadə edildiyi materialdan əvvəl oyun, rol oyunu və ya qrup fəaliyyətləri kimi interaktiv tədris metodlarının istifadəsi ilə mənimsədilməsi onlara hər bir sözü daha effektiv şəkildə əməl etməyə, bu da öz növbəsində tələbələrə eyni vaxtda həm danışmaq, həm də akademik dil öyrənmə imkanı verir.

Mətnlə məşğul olmamışdan əvvəl tələbələrin materialı başa düşmək üçün əsas olan lüğətlə tanış olduğundan əmin olmaq tələbələrə lüğətin mətnin daha geniş mənasına necə uyğun gəldiyini görməyə kömək edir və dolayısı ilə sözləri yalnız təcrid olunmuş təriflərlə deyil, müvafiq kontekstlərdə təqdim etməyin əhəmiyyətini bir daha vurğulayır. Mətn tərkibində isə bütün sözlər deyil, məğzi anlamağa kömək edən sözlərə köklənmək prioritet olmalıdır. 7. Hədəflənilən lüğət tərkibinin öyrədilməsi üçün yeni lüğətdən kontekstdə inamla istifadə etməyə imkan verən və tələbələrin əsas söz və anlayışları dərinədən başa düşmələrini təmin etmək üçün nəzərdə tutulmuş effektiv strategiyalardan bəziləri ilə tanış olaq.

Hər söz üçün bir neçə nümunə cümlə təqdim etmək, tələbələrə lüğətin müxtəlif kontekstlərdə necə dəyişə biləcəyini və onun çevik şəkildə necə istifadə edildiyini görməyə kömək edən birinci strategiyadır. Bu strategiya tək-cə sözün mənalərini bilmək deyil, həm də sözlərin necə işlədiyini və oxuyub anlama kimi daha yüksək səviyyəli tapşırıqlarda söz biliklərindən necə səmərəli istifadə etməyi dərk etməyə kömək edir. 8. Lüğəti təsvir etmək üçün şəkillərdən, videolardan və ya realia istifadəsi və vizual təsvirlər və fəaliyyət felləri üçün jestlərdən və ya mimiklərdən istifadə mücərrəd sözləri daha konkret və yadda qalan edən növbəti bir strategiyadır. 9. Semantik əsaslı tərtib edilmiş cədvəllər yeni sözü sinonimlərə, antonimlərə, əlaqəli sözlərə bağlayan və uzunmüddətli yaddaşa xidmət edən bir başqa strategiyadır. 10. Strategiyaların ən yadda qalanı isə kinestetik öyrənən tələbələr üçün xüsusi ilə əhəmiyyətli olan lüğət öyrənməyi əyləncəli və interaktiv etmək üçün Bingo, Pictionary və ya "Guess the Word" kimi oyunların dərsə inteqrasiyasıdır. 11. Tələbələrə yeni lüğəti öz həyatları və ya təcrübələri ilə öz həyatları ilə əlaqələndirməsi isə tətbiqi imkan yaradaraq şagirdlər üçün lüğəti unudulmaz edir.

Nəticə

Mətnin məğzini təşkil edən lüğətin öncədən öyrədilməsi dil öyrənmə zamanı koqnitiv yükün azaldılmasında mühüm rol oynayır. Mətn və ya dərslə məşğul olmamışdan əvvəl çətin sözləri strateji olaraq müəyyən edərək və onlara müraciət etməklə müəllimlər tələbələrə effektiv şəkildə kömək edirlər. Bu təcrübə öyrənmə prosesini asanlaşdırır, tələbələrə tanış olmayan lüğətlə

mübarizə aparmaqdansa, diqqətini məzmunu başa düşmək və tətbiq etməyə imkan verir. Mətnin məğzini təşkil edən lüğətin öncədən öyrədilməsi tədris dizaynına daxil edilməsi dil öyrənmənin əlçatan, mənalı və səmərəli olmasını təmin etmək üçün sübuta əsaslanan strategiyadır. İş yaddaşına olan gərginliyi azaltmaqla, öyrənənlərə dil biliyi üçün güclü zəmin yaratmağa imkan verir.

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PSYCHOLINGUISTIC BASIS OF THE FORMATION OF EARLY ARTIFICIAL BILINGUALISM

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Abstract: the article deals with the problems of creating early artificial bilingualism from the point of view of psycholinguistics and the theory of speech activity. The basic principles and approaches to organizing the process of establishing early bilingualism outside the natural language environment are presented. The authors are based on the works of well-known Russian psycholinguists. The leading scientific provisions are the acoustic nature of language and the emotional nature of speech. These provisions make it possible to form approaches to the early teaching of a non-native language that do not contradict the process of natural acquisition of a non-native language. The presence of universal and nationally specific features of speech is taken into account.

Key words: early artificial bilingualism (early foreign language learning); sensory period; acoustic nature of language; emotional character of speech; universal and national-specific features.

Functional interaction of languages as one of the fields of linguistics in a new context, which is artificial bilingualism, as well as the use of a scientific approach for solving the set tasks, combining research and theoretical provisions of a number of fields of linguistics and related sciences: psycholinguistics, cognitive linguistics, lexicography, linguodidactics, which allowed us to develop a set of research methods aimed at multidimensional study of linguistic personality in artificial bilingualism.

The lexical and stylistic construction of the text on natural science takes into account the peculiarities of its perception by the recipient - a child of 8-9 years old. One of the common features uniting a set of such texts in Kazakh and English languages is their ability to appeal to the addressee's "children's" picture of the world, as well as the presence of the main elements of the scientific (natural science) picture of the world. The conceptual hierarchy in the thesaurus system of the corresponding "pictures" of the world is based on different principles of perception. Taking as a basis the position about the presence of a certain common "anthropocentric axis" in the human lexicon, we can distinguish a "vector triad" corresponding to the perception of the conceptual lexicon of the educational-scientific text by the child's linguistic personality:

1. Man as a creator of the scientific picture of the world;

2. Man as a social, active subject;
3. Man as an individual.

Modeling and analysis of the process of decoding the meanings of the conceptual lexicon of the educational-scientific text in the second language testifies to the great role of the so-called prototypical signs, which refer to the conventional vector of perception of the conceptual lexicon "man as an individual". These features are a property of the cognitive background in the native language.

By means of transferring prototypical features from the cognitive background of the native language an effective decoding of the meanings of the conceptual lexicon in the second language can be realized.

The organization of the process of formation of artificial bilingualism requires a psycholinguistic approach. This is conditioned by the modern situation characterized by the following features:

- the growing relevance of early foreign language teaching;
- insufficient data on the process of formation of early natural bilingualism, despite the intensive nature of this phenomenon in the conditions of modern migration;
- fragmentation of a number of theoretical provisions in the theory of speech activity presented in the works of famous Kazakhstan's psycholinguists.

The lack of psycholinguistic understanding of the process in question leads to the use of traditional approaches for modern methodology in teaching foreign languages to preschool children, and the age of the children being taught tends to decrease. The characterization of the psycholinguistic position should begin already with the terminology. We can only conditionally accept the traditional methodological term "early foreign language teaching", explaining its psycholinguistic content. Neither in the case of a child's acquisition of his/her native language, nor in the situation of the formation of both natural and artificial bilingualism is it about teaching.

Psycholinguistics is based on the assertion that humans are biologically adapted to learn and use several codes, i.e. language systems, in communication. The second system of codes (non-native, foreign language) functions according to the same regularities as the first (native language). In this connection, information about the process of assimilation of the child's native language, about the stages (periods) through which the development of the child's speech passes until the onset of the so-called sensitive period is of particular importance. After this time, the innate strategies that ensure language acquisition in general cease to be active, which also applies to speech in a non-native language. The psycholinguistic attitude convinces, first of all, of the necessity of a different approach to the organization of this process than it traditionally occurs when teaching older children and adults.

The child applies an innate strategy for acquiring the native language in the presence of speech information. "A strategy is some way of acquiring, retaining, and using information that serves certain purposes in the sense that it should lead to certain results". Traditional methods of foreign language teaching have accumulated examples of incorrect strategies that cause low effectiveness of the effort expended on learning. This leads to the accumulation of knowledge about the foreign language system, and in the absence of a "control lever" of this theoretical information, in the absence of sufficient speech practice, does not contribute to the effective learning of a foreign language. That is why it is important to consider the essence of the psycholinguistic approach to solve this problem.

Psycholinguistics considers the idea of the existence of innate strategies of native language acquisition, which are activated in the process of mastering native speech. With the acquisition of the first language, they are not lost immediately, but are retained to a certain extent until the so-called "critical" period. This is evidenced by numerous observations of easy acquisition of a second language in a linguistic environment. However, it is possible to identify the main features of strategies that can serve as a basis for organizing the process of early foreign language learning

outside the language environment.

One of the basic signs of the formation of a non-native language system is the emotional character of this process. The system of emotional-expressive means of native speech is formed in the child at the earliest stage of his/her development, in the “pre-verbal period of speech ontogenesis”. In the process of emotional interactivity with an adult, the child during this period learns the rhythmic and intonational system of native speech, the basic expressive means and the system of paralinguistic units, including mimic, gestural and pantomimic means. This period, which is usually not given serious attention in traditional descriptions of ontogenesis, is extremely important: it is responsible for building the basis of paralinguistic and prosodic means of the child's future speech. The words and syntactic constructions of native speech are superimposed on the “framework” created in this period in subsequent periods. The child's lexicon, formed at first in the form of rhythmic forms of words, begins to grow rapidly.

The national specificity of the rhythmic and intonation picture of native speech is manifested in the mother's speech. A person communicating with a small child unconsciously vividly realizes the characteristics of native speech. Such speech by its phono-stylistic parameters in English-language texts on the problems of researching children's speech is called talk to baby.

Since the expressive means of native speech are formed at the earliest stage of speech ontogenesis and the emotional factor plays a significant role in the child's language acquisition and further speech activity, the transition to the system of expressive means of another language is a natural process that requires, at the same time, the child to receive information about the corresponding means in the speech environment. The basis for the assimilation of non-native language units at all levels should be the system of means of sounding speech, as it happens in the assimilation of the native language. Unfortunately, this postulate is still not reflected in teaching methods. In the situation of natural bilingualism development, the reliance on the means of foreign-sounding speech is intuitive. The most important problem in the situation of artificial bilingualism is to translate the child's speech into the parameters of expressive means of foreign sounding speech.

From the above, we can conclude that the emotional factor should be one of the bases in the construction of the foreign language teaching model. In the practical aspect, the main task is to master the emotional-expressive complexes of the sounding speech of a given foreign language.

The process of mastering the parameters of foreign-sounding speech implies the formation of rhythmic-intonation and pronunciation skills. The main problems that arise in the situation of adult learning, namely: interference from the native language and difficulties in managing the process of formation of a new sound and intonation system due to the high degree of unconsciousness of mastering them in relation to early learning have a different character. At the age before the sensory period, which we consider in a wide range (conditionally up to 8-9 years), rhythmic and melodic parameters of foreign-language speech are subject to purposeful mastering in emotional interaction with adults under a set of psycholinguistic conditions.

- Under these conditions, articulatory skills emerge and consolidate imitatively as derived from suprasegmental features. Mastering the phonological system as a whole requires the development of differential features simultaneously with the distinction of meanings. The central task is to master the prosody of the non-native language: the design of communicative types of utterance and, as noted above, expressive means of speech.
- From the considered interdisciplinary position, the model of artificial bilingualism formation is close to the process of natural bilingualism formation. As in the situation of natural second language acquisition, the necessary conditions for the successful development of this process are, first of all:
 - emotional interaction of the child with an adult;
 - obtaining speech material (input) of sufficient volume, reflecting the units of a given foreign

language in the hierarchy of their formation in speech ontogenesis;

- the character of speech material presentation, which can be called compression.

It means the assimilation of prosodic and segmental units of sounding speech, lexical and syntactic units in their psycholinguistic interrelation, i.e. taking into account their correlation in natural speech ontogenesis, but shortened in terms of assimilation time. This factor - the compression process of representation and assimilation of non-native language units in the direction corresponding to natural language assimilation - distinguishes the model we are considering from the formation of natural bilingualism. These are the principles of construction of the training model we present.

The following questions are also essential:

1. Optimal age for the creation of artificial bilingualism. To answer this question, it is necessary to take into account the degree of formalization of native speech skills. Practice testifies to the natural successful development of early bilingualism in a bilingual environment. However, there are no sufficiently complete and systematic descriptions in terms of the intensity of the influence of each language and the child's behavior in relation to language balance. There is no doubt that the child has a strategy for acquiring two languages in a natural interactive environment. At the same time, adults' actions to attract the child's attention to one of the languages, attempts to include translation of language units and probably other purposeful actions as an explanation of grammatical forms do not contribute to the successful development of the child's speech abilities.

2. Learning content. If we reflect on the nature of the teaching material and the peculiarities of its assimilation, we should talk about the development of speech ability, which takes place in the process of using a second language in natural situations of play and communication (taking into account age-related interests).

3. The role of native language in early foreign language teaching. Despite the good imitative abilities that distinguish children of preschool and early school age, the presence of the linguistic environment of native speech, the role played by the native language in the life of the child, allows us to conclude that the development of speech elements in a second language should be conducted, "pushing back" from the features of native speech. This "pushing back" should be implicit in the relief presentation of the units of the second language in order to prevent interference from the native language. Natural acquisition of a foreign language presupposes the absence of translation.

4. A model for the development of foreign language speech ability in a second language. This model can be built by taking into account the data of speech ontogenesis mentioned earlier. The main tasks that define the model of early learning of foreign-sounding speech are:

- emotional character as a basis in the construction of the model of foreign language teaching;
- development of an idea of the system of expressive means of foreign-sounding speech;
- development of skills of rhythmic shapes of foreign language words;
- development of melodic skills for the main communicative types of utterance (narration, question, inducement), design of themorematic melody of a phrase;
- development of syntactic skills for the main communicative types of phrases;
- consideration of universal and nationally specific features of sounding speech;
- motor and tactile basis for mastering the rhythm and melody of foreign-language speech.

Non-speech actions are an indispensable component of the process of children's acquisition of speech in a second language. The necessary set of means for organizing early learning are rhymes, counting rhymes, children's poems in sound recordings, cartoons, selected to reflect the necessary features of foreign language speech. The recordings should include children's voices of native speakers of the target language. The material presented should contain story plots, which are the basis and framework for interactive learning.

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ЖАС ФУТБОЛШЫЛАРДЫҢ ТАКТИКАЛЫҚ ДАЙЫНДЫҒЫ ӘДІСТЕМЕСІ

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Аннотация. Мақалада жас футболшылардың тактикалық даярлығының әдістемесі қарастырылған. Футболда тактикалық дайындықта қолданылатын негізгі әдістер, соның ішінде ойын стратегиялары, позициялық ойын және команданы үйлестіру талданады. Бұл мақалада жас футболшылардың тактикалық дайындық әдістемесі қарастырылады. тактикалық білім — ойыншының ойлау қабілетін, стратегиялық ойлау дағдыларын дамыту үшін маңызды фактор. Мақалада жас футболшыларды тактикалық дайындау үшін қолданылатын негізгі әдістер мен теориялар талданады, соның ішінде ойын стратегиялары, позициялық ойын және командалық үйлестіру мәселелері қарастырылады. Футболшыларды ерте жастан бастап дайындау олардың физикалық және тактикалық жетілуін қамтамасыз етіп, болашақ спорттық мансабына ықпал етеді.

Кілттік сөздер: футбол, тактика, жас футболшылар, тактикалық дайындық.

Annotation. The article discusses the methodology of tactical training of young football players. Football analyzes the main methods used in tactical training, including game strategies, positional play and team coordination. In this article, the methodology of tactical training of young football players will be considered. Tactical knowledge is an important factor in the development of a player's thinking and strategic thinking skills. The article analyzes the main methods and theories used for the tactical training of young football players, including game strategies, positional play and team coordination issues. The training of football players at an early age ensures their physical and tactical maturity and contributes to their future sports career.

Keywords: football, tactics, young football players, tactical training.

Шағын футбол қазіргі уақытта қарқынды дамып келе жатқан спорт түрлерінің бірі болып табылады. Оның танымалдығы ережелердің қарапайымдылығына, ойындар өткізуге арналған бөлмелер мен алаңдарға аз талап етілуіне, жоғары эмоционалдылық пен ойын-сауыққа байланысты. Мини-футболдың жүйелі сабақтары жас спортшылардың денесіне жан-жақты әсер етеді: қозғалыс белсенділігінің жалпы деңгейін арттырады, дененің функционалдық белсенділігін жақсартады, тұтастай алғанда қамтамасыз етеді, олардың физикалық дамуына тиімді әсер етеді. Шағын футбол сабақтарын тек дене шынықтыру ғана емес, сонымен қатар моральдық-еріктік қасиеттерді қалыптастыру, үйлесімді когнитивті даму құралы ретінде қарастыруға болады [1, 2, 3].

Мини-футболдағы ойын және бәсекелестік қызметтің өзіндік ерекшелігі бар, оны зерттеу қажеттілігі оны әдістемелік қамтамасыз етуге арналған зерттеулер жүргізумен байланысты [4, 5]. Мини-футбол ойыны жас спортшылардың психологиялық қабілеттерін дамытуға жоғары талаптар қояды, өйткені біріншіден, спорттық іс-әрекеттің моторлық және психологиялық күрделілігі олардың қабылдау, психомоторлық және когнитивті салаларының психикалық қасиеттерінде көрінетін жоғары дамыған қабілеттердің нақты кешенінің болуын анықтайды, екіншіден, жаттығулар мен жарыстардың шарттары белгілі бір жеке және психодинамикалық қасиеттерді қажет етеді, техникалық-тактикалық мәселелерді

шешу процесін оңтайландыру. Көптеген ғалымдардың зерттеулері жарыс кезінде спортшылардың физикалық, техникалық және тактикалық дайындығының тең деңгейінде психологиялық фактор шешуші рөл атқаратынын атап өтті [6].

Тиімді бәсекелестік қызметті қамтамасыз ететін дайындықтың маңызды жақтарының бірі зейін функциясының даму деңгейі болып табылады. Алайда, шағын футболдағы ойыншылардың физикалық және техникалық әлеуетін іске асыру мәселесі арнайы танымдық қасиеттерді, атап айтқанда, назар аудару қасиеттерін қалыптастыру негізінде бүгінгі күнге дейін дамымаған.

Біздің болжамымыз бойынша, шағын футболмен айналысатын жас спортшылардың зейін функцияларын мақсатты түрде дамыту олардың ойын және бәсекелестік қызметте физикалық және техникалық дайындығын іске асыру дәрежесін арттыруға мүмкіндік береді. Футзал – бұл жоғары қарқынды және қысқа аралықта өткізілетін футбол түрі. Бұл спорт түрінің ерекшелігі – техникалық және тактикалық дайындықты жетілдіру қажеттілігі. Әсіресе, жас футболшыларды дайындау кезінде тиімді әдістемелерді қолдану өте маңызды. Тактикалық дайындық - ойынның әртүрлі сценарийлері бойынша футболшылардың шешім қабылдау қабілетін арттыруға бағытталған жаттығулар жиынтығы.

Тактикалық дайындық жас футболшылардың ойын кезіндегі кеңістікті пайдалану, ойын позицияларын дұрыс таңдау, шабуыл мен қорғанысты ұйымдастыру сияқты дағдыларын қалыптастыруды қамтиды. Футзал ойыны жылдам шешімдер қабылдауды және қарқынды қозғалысты талап етеді, сол себепті жаттығуларда ойынның динамикасына негізделген әдістер қолданылуы қажет. Бұл бөлімде жас футболшылардың тактикалық дайындықтарының негізгі компоненттері мен әдістері талқыланады.

Жеке және топтық тактикалық әрекеттер. Жеке тактикалық әрекеттерге ойыншының бір позициядағы әрекеті кіреді. Мысалы, қорғаныстағы ойыншының дұрыс орналаса білуі, ал шабуылда қарсыластың алдауға негізделген қозғалыстары. Топтық тактикалық әрекеттерде футболшылардың бір-бірімен үйлесімді әрекеттесуі маңызды. Бұл – ойыншылар арасындағы түсіністік пен сенімділік арқылы орындалатын қимылдар. Қысым кезінде әрекет ету. Футзалдың динамикасына байланысты қысым кезінде шешім қабылдау қабілетін дамыту қажет. Жас футболшыларға қысым жағдайында жылдам шешім қабылдау, жылдам позиция ауыстыру, және шаршыдан шығу дағдыларын дамыту қажет.

Шабуыл мен қорғанысты ұйымдастыру. Шабуыл кезінде позиция мен орын ауыстыру үлкен рөл ойнайды. Қорғаныс кезінде әрбір ойыншының өз аумағын қорғап, қарсыластың әрекетін бақылап отыруы керек. Бұл үшін кеңістікті дұрыс пайдалану және қарсыластың шабуылын болжау маңызды.

Жағдайлық ойындар. Жағдайлық ойындар – бұл ойынның нақты жағдайларына негізделген жаттығулар. Олар ойыншылардың нақты ойын сценарийлері бойынша шешім қабылдау қабілетін арттырады. Мысалы, қорғаушының қысымымен шабуыл жасау немесе екіге бір жағдайында шабуылдау.

Жаттығу әдістемесі. Жас футболшылардың тактикалық дайындығын жетілдіру үшін мынадай жаттығу түрлері ұсынылады:

Ойын позициясын таңдау. Жаттығу кезінде әрбір футболшыға өзінің ойын позициясын дұрыс анықтау үйретіледі. Әрбір жаттығуда ойыншыларға алаңдағы рөлдерін қалай өзгерту қажеттігі түсіндіріледі.

Айналмалы жаттығулар. Бұл жаттығулар ойыншылардың жылдамдығын арттыруға және оларды әртүрлі позицияларда ойнауға дайындайды. Жаттығу кезінде ойыншылар жиі ауысып, әртүрлі жағдайларда шешім қабылдауға үйренеді.

Командалық ойындар. Командалық жаттығуларда ойыншылар арасында өзара байланыс пен түсіністік қалыптасады. Олар бір-бірінің әрекетін толықтыра отырып, ортақ мақсатқа жетуге тырысады.

Тактикалық дайындық жас футболшылардың ойын барысында жылдам әрі тиімді шешім қабылдау дағдысын арттырады. Футзалдағы тактикалық әрекеттердің негізгі қағидаларын меңгеру арқылы жас спортшылар командалық ойынның негіздерін терең түсінеді және өз қабілеттерін жетілдіреді. Тиімді жаттығу әдістерін қолдану арқылы жас футболшылардың спорттық нәтижелері жақсара түседі.

Футболдың қарапайым тактикасы «соққы және жүгір» деген бұрығы допты өз бетімен теуіп, ешкімге арналмаған пас беру келмесе кеткен футбол басынан өткерген дәуір.

Қазіргі жаңа тактика негізінен пас беруде, ойыншылардың алаңда дұрыс қозғалысы, доп ала жүру және алдауына құрылған. Комбинацияда қолданылған шаблон нәтижеге жеткізбейді. Бір команданы жеңіске жеткізген тактика екінші бір командаға кері нәтиже береді. Біркоманда мен ойындағы тактика жеңіс әкелсе осы тактика келесі командамен ойында жеңіс әкелуі керек.

Мини-футбол – ойын, ал ойында өнер. Тактикалық комбинация ол жеке ойыншыдан да ұжымдық қасиеттерден және футболшылардың күш жұмсауынан құрылады. Комбинациялар ойынның өзінде оның қарсыластар командасына қарамастан құрылады. Осы ойын барысын бағдарламай комбинацияларды алдынала ойлапалу мүмкін емес. Алайда осы жағдайларға қарап алдын ала ойланған тактикалық комбинациялар жүзеге аспайды деуге болмайды. Футбол жарысында ойыншы әр түрлі тактикалық әдістер мен шешуші комбинацияларды қолдана білу керек. Ойын өз бетінше творчестволық үрдіс болғандықтан ондағы комбинацияларда шек жоқ. Футболдағы ойын басымдылығы қай команда доппен қалай өнер көрсетуіне байланысты. Қандай да болмасын шабуыл комбинациясының тактикалық қимылы ол доп алып жүру, пас, алдау, ұрымтал кезінде орын таңдай білу, қарсылас пен доп үшін күрес, қақпаға доп бағыттауға байланысты. Әр ойыншы қарапайым тактикалық әдістерді игеруі керек және олармен ойын барысында пайдалана білуі керек. Бұл оның басқа да әріптестері мен тіл табысуына керек қасиет.

Тәжірибе де футболшылардың мынандай қасиеттері қаралады:

а) доп қаталас кезінде қарсыластарына қарағанда ұрымтал орынды таңдай білуі;

ә) әр түрлі доп беру кезінде дұрыс қабылдау;

б) доппен алдаса және алып жүре білу;

в) өз бетінше тактикалық мақсатты орындау үшін дұрыс кезеңді таңдай білу;

Осылардың барлығын командаластарымен тығыз қарым-қатынас пен жүріп орындау керек. Ойын барысында ойыншы дұрыс шешім қабылдау үшін ол өзінің командаластарын қай жерде орналасқанын, қарсыластарын доптың қайбағытқа пас берілетінін, жалпы бүкіл ойынды бақылауы керек. Осыған орай ол өзінің байқай алмайтын алаң бөлшектерін жобалап ұға білу керек.

Ойын барысын ұға білу өте қажетті комбинацияларды орындауға қажет. Ойын алаңын байқай алу туғаннан болатын қасиет емес, ол біртіндеп оқужаттығу кезінде қалыптасады.

Мини-футбол ойыны өте динамикалық және эмоционалды. Ойыншыларға әр түрлі техникалық әдістерді, белгілі тактикалық бағыт беріп оқидану, әріптестері мен түсінісе білу қажет. Әйтпесе бір қателік бүкіл ойын жоспарын бұзады. Алайда осы айтылған қимылдардың барлығын ойыншылар тыныш ойын барысында емес, қиын спорттық күресте орындайды. Ойын барысында ойыншылар психикасына әр түрлі сыртқы және ішкі күштер түседі. Ол күштер техникалық әдістерді қолдауға, тактикалық жоспарды шешуде зор әсер береді. Ондай күштерге ойынның басқаша өтуі, төрешілердің іс әрекеті, жанкүйерлердің қолайсыз ауа райы жатады. Осылар ойыншының ойын кезіндегі көңілдің қобалжуын туғызады, ол біртіндеп басқа ойыншыларға қарап бүкіл командаға кері әсерін тигізеді.

Сондықтан жаттықтырушы әр футболшыны осындай ауыртпашылықтарға төзімді, шыдамды болуға үйрету керек. Ойыншылар жаттығу жарысында өзінің шамасына қарай жасау емес, оған да жоғары жасауға тырысуға үйренген болуы керек.

Әр ойыншы доп алғанда тез ғана ойланып ол допты ары қарай беруді және келесе допты қабылдауға дайын болуы керек. Бұндай жаттығулар жылдам ойын жасау үшін қажет.

Ойын барысында творчестволық, жылдам және тез кездескен қиындықты шешу керек. Футболшылар әр түрлі тактикалық қимылдар жасағанда, өзінің көз қарсыластары күтпеген және осы уақытта ойын жағдайын өзгертетін болуы қажет.

Тактикалық дамыған ойыншы өзін алаңда, қарсыластарға қарсы жақсы көрсетеді. Оны ойын жылдамдығы, ауыртпашылығы өзгерте алмайды. Ондай ойыншының творчествосында ұжымдасып ойнау және жеке комбинация жасау жоғары дамыған.

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Особенности подготовки будущих учителей информатики

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Аннотация

Статья посвящена особенностям подготовки будущих учителей информатики в условиях развития образования. Рассматриваются требования к деятельности учителей информатики, ключевые аспекты формирования профессиональной компетентности. Приведены результаты современных исследований, направленных на совершенствование методики подготовки будущих учителей информатики. Отмечается необходимость модернизации образовательных программ для соответствия вызовам цифровой эпохи.

Ключевые слова: подготовка учителей информатики, профессиональная компетентность, цифровизация образования, устойчивое развитие

Цифровое общество требует новых подходов в образовании, где особое значение имеет подготовка педагогов, способных эффективно работать в условиях постоянных технологических изменений. Президент Республики Казахстан К. Токаев выступая на республиканском съезде педагогов отметил, что «...программы педагогических специальностей в вузах в значительной степени основаны на устаревших методиках, которые не учитывают современных реалий. Нужно пересмотреть и модернизировать учебные программы, включив в них новые подходы и технологии [1]. Подготовка будущих учителей информатики приобретает особую актуальность, поскольку они играют ключевую роль в формировании цифровых компетенций у подрастающего поколения. В контексте устойчивого развития образования, подготовка учителей информатики должна быть направлена не только на передачу технических знаний, но и на воспитание ответственных цифровых граждан, способных решать глобальные проблемы современности.

Прежде чем обсуждать особенности подготовки учителей информатики, уточним, что изучают школьники по этому предмету. В Казахстане в начальной школе изучается предмет «Цифровая грамотность», а в основной и средней школе – «Информатика». В соответствии с Приказом Министра просвещения Республики Казахстан от 3 августа 2022 года № 348 «Об утверждении государственных общеобязательных стандартов дошкольного воспитания и обучения, начального, основного среднего и общего среднего, технического и профессионального, послесреднего образования» изучение информатики в школе необходимо для формирования цифровой грамотности, развития алгоритмического мышления обучающихся, развития ключевых компетенций в информационно-коммуникационных технологиях, осознания и понимания информационных процессов в жизни общества, а также научиться применять полученные знания в реальной жизни [2].

После окончания школьного курса предмета «Информатика» выпускник школы знает принципы работы компьютерных систем и сетей, основы алгоритмов и программирования, методы защиты информации. Умеет создавать, обрабатывать и представлять данные, использовать прикладное программное обеспечение, разрабатывать простые алгоритмы и

программы. Приобретает навыки эффективного использования информационно-коммуникационных технологий в учебной и повседневной деятельности, безопасного поведения в цифровой среде. Также формирует личностные качества как, ответственность за безопасное использование технологий, способность к самообучению и адаптации к новым инструментам и методам работы.

В Концепции развития высшего образования и науки в Республике Казахстан на 2023 – 2029 годы указано, что образовательные программы должны полностью соответствовать профессиональному стандарту «Педагог» [3]. Профессиональный стандарт «Педагог» определяет требования к уровню квалификации, компетенции, содержанию, качеству и условиям труда педагогов всех уровней образования и основы образовательных программ подготовки, повышения квалификации педагога и возможности для непрерывного профессионального обучения.

На основе «Карточки профессии» профессионального стандарта «Педагог» к деятельности учителей информатики предъявляются следующие требования:

1. Осуществление учебного процесса – планирование и организация учебного процесса;
2. Оценивание учебных достижений обучающихся – контроль за прогрессом и уровнем усвоения обучающимися содержания образования;
3. Поддержание общественного доверия к профессии и приобщение обучающихся к системе ценностей – поддержание высоких стандартов этики и поведения в школе и за ее пределами, расширение и укрепление ценностно-смысловой сферы личности посредством принятия единых ценностей
4. Осуществление учебно-методической деятельности – подготовка и разработка учебно-методических материалов, осуществление профессионального развития, рефлексия собственной практики и практики коллег, исследование образовательного процесса.

К личностным компетенциям педагогов предъявляются такие требования – коммуникабельность, стрессоустойчивость, готовность к саморазвитию, критическое мышление, мобильность, эмоциональная уравновешенность [4].

Требования, предъявляемые к учителю информатики должны учитываться в профессиональной подготовке педагога. Поэтапное становление учителя информатики и его знакомство с профессией представлено в таблице 1.

Таблица 1. Уровни подготовки будущих учителей информатики

Критерий	Бакалавриат	Магистратура	Докторантура
Образовательная программа	6B01505 (5B011100) «Информатика»	7M01503 «Информатика»	8D01504 «Информатика»
Цель образовательной программы	Подготовка квалифицированных педагогов, обладающих достаточным объемом знаний и уровнем компетенций, осуществляющих образовательную, инновационную, исследовательскую, информационно-аналитическую деятельность в области информатики.	Подготовка конкурентоспособных специалистов новой формации, обладающих фундаментальными знаниями, инновационными подходами, исследовательскими навыками для осуществления научной, педагогической, профессионально-практической деятельности в высших учебных заведениях, органах управления образованием, организациях образования, научно-исследовательских организациях образования.	Подготовка конкурентоспособных, компетентных научных и высокопрофессиональных педагогических кадров, владеющих профессиональными и научными компетенциями и навыками их реализации в практической и научной деятельности для обеспечения потребностей образования, науки и производства в области информатики
Срок обучения	4	1/2	3
Академическая степень	Бакалавр образования по специальности «Информатика»	«Магистр образования» по специальности «Информатика», по <i>научно-педагогической подготовке</i> присваивается академическая степень «Магистр педагогических наук» по специальности – «Информатика».	Доктор философии (PhD) по образовательной программе «Информатика»
Объем кредитов	240	60/120	180

Система подготовки учителей информатики представляет собой многоуровневую структуру, охватывающую бакалавриат, магистратуру и докторантуру, что обеспечивает последовательное повышение квалификации специалистов.

Современные исследования ученых Казахстана по вопросам подготовки будущих учителей информатики свидетельствуют о том, что казахстанская педагогическая наука активно разрабатывает новые подходы к обучению информатике и готовит педагогов, способных адаптироваться к быстро меняющемуся цифровому миру.

Ж. Аккасынова обосновывает необходимость осуществления профессиональной подготовки будущего учителя информатики на основе международной кластерной модели обучения, которая позволяет использовать весь потенциал кластерного подхода в образовании, идти в ногу со временем, отвечать вызовам современного информационного общества [5].

К. Беделов предлагает методическую систему, направленную на подготовку будущих учителей к использованию облачных технологий в профессиональной деятельности [6]. Это крайне актуально в условиях растущей облачной инфраструктуры. А. Буканова отмечает, что применение метода перевернутого обучения в изучении истории информатики играет ключевую роль в формировании профессиональных компетенций будущих учителей [7]. Е. Жабаевым предложена методика обучения компьютерных сетей для будущих учителей информатики на основе моделирования [8]. Этот подход позволяет более глубоко понять сложные сетевые концепции.

Г. Байдрахманова считает, что подготовка будущих учителей информатики в области компьютерной графики должна учитывать взаимосвязь фундаментальных основ этого раздела информатики с ее прикладными областями, что позволит будущему учителю информатики осваивать новые современные программы и применять другие их версии в проектной деятельности, будет способствовать развитию соответствующих профессиональных компетенций, необходимых для успешной деятельности, повышению профессиональной мобильности специалистов, а также обеспечит их успешное трудоустройство [9]. А. Бекежанова для раскрытия творческого потенциала студентов предлагает в процессе обучения объектно-ориентированному программированию использовать инфографику, которая наглядно демонстрирует основные понятия и оптимизирует усвоение сложного теоретического материала путем интерпретации и позволяет формировать навыки эффективного применения цифровых технологий [10]. Р. Ахитовой исследованы и предложены теоретико-методические основы применения кейс-технологий для повышения качества образования будущих педагогов информатики [11]. З. Калкабаевой исследованы теоретические и практические основы применения технологий виртуальной и дополненной реальности в учебном процессе вузов, для повышения уровня знаний и улучшения профессиональных навыков и конкурентоспособности будущих педагогов. Использование возможностей технологий виртуальной и дополненной реальности в образовании способствует конкурентоспособности специалистов направления информатики и информационно-коммуникационных технологий.

Проведенные исследования свидетельствуют о том, что в Казахстане ведется активная работа по совершенствованию системы подготовки учителей информатики.

Анализ нормативно-правовых актов демонстрирует, что современный учитель информатики должен обладать комплексом компетенций. Во-первых, это глубокие знания в области информационно-коммуникационных технологий, включающие современные языки программирования, базы данных, сетевые технологии, веб-разработку и кибербезопасность. Во-вторых, педагог должен уметь эффективно применять различные методы обучения, использовать такие цифровые инструменты, как интерактивные доски и онлайн-платформы, разрабатывать качественные учебные материалы и организовывать учебный процесс. В-третьих, важными являются компетенции в области алгоритмического и вычислительного мышления, позволяющие учителю разрабатывать и анализировать алгоритмы, решать логические задачи и строить модели. Кроме того, учитель информатики

должен обладать развитыми коммуникативными навыками, позволяющими ему объяснять сложные понятия доступным языком и эффективно взаимодействовать с учениками и коллегами. Креативность и инновационность являются неотъемлемыми качествами современного педагога, позволяющими ему искать новые подходы к обучению и внедрять инновационные технологии в учебный процесс.

Отдельно хотелось бы отметить, что учителя информатики формируют у учащихся навыки необходимые для цифровой трансформации общества и продвижение принципов устойчивого развития.

Современный учитель информатики – это не только специалист в области информационных технологий, но и педагог, способный адаптироваться к быстро меняющимся условиям и обеспечивать высокий уровень подготовки учащихся. Высшим учебным заведениям, готовящим учителей информатики, необходимо постоянно обновлять свои образовательные программы, учитывая развитие информационных технологий и новые требования к цифровой грамотности, интегрировать концепции устойчивого развития в образовательные программы. Это позволит выпускникам быть готовыми к работе в современной школе и формировать у обучающихся навыки, которые помогут им стать ответственными и активными участниками общества будущего.

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The essence of the information technology paradigm of education

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Summary

The article talks about the development of technological progress and the increase of general knowledge of humanity in the modern era, the intensive interaction of human knowledge and information of the information society, and the role of the information technology paradigm of education in the formation of the socio-cultural environment of the processes of informatization of education.

In the national education system of the Republic of Azerbaijan, more effective ways of traditional information technologies and the most important areas of education informatization are shown in all types of activities.

The current state of the education system reflects the contradictions between, on the one hand, the increasing demands on public and individual intelligence, consciousness and spirituality, human design and forecasting ability, and on the other hand, the actual level of the quality of education.

The philosophical-methodological basis of the new educational paradigm is analyzed by modern philosophy, pedagogy and the methodology of the latest integrative scientific directions.

Keywords: Education, paradigm, information technologies, information society, informatization, humanization.

The second half of the 20th century was marked by a new socio-technological revolution - the information revolution. The concept of information society appeared simultaneously with the concept of post-industrialism in the 60s and 70s of this century. Both concepts define a new stage in the development of civilization as a rapidly developing society based on the most advanced technology and a post-materialistic value system. The first quarter of the XXI century is characterized by the rapid development of global information technologies and is actively applied, and their application takes on the character of systematic innovation, causing economic, political, social transformations and even changes in the spiritual sphere.

The process of formation of a new education system takes place under the influence of very different factors and depends on the socio-cultural environment of the processes of informatization of education, on the extent to which these processes are understood from a general cultural, philosophical and methodological point of view.

In the information society, organizational activity prevails, which increases the importance of the information resource and the criteria for the initial selection of potentially relevant information from this resource. On a planetary scale, this is possible if human communication itself is technologicalized and information technology becomes the basis of education.

Since the information society is based on the intensive interaction of human knowledge and information, and the information technology education system is its most important substructure, knowledge and information are the main subject of interaction between the subjects of this subsystem. Education itself acquires the activity specificity of a special method of development and transmission of social experience - sociocultural reproduction.

Modern society is characterized by the development of technological progress and the increase in the general knowledge of mankind, which explains the growing need for people who

have the ability not only to live with the environment, but also to master this environment and navigate in the new information space. The ability to independently acquire, organize and apply the necessary knowledge in a given situation becomes the most important.

On the other hand, the scientific and technical progress that revolutionized the material culture of society gave it a qualitatively different appearance and significantly changed the life of every person. However, if the material side of people's life has changed due to the influence of science and technology development, the spiritual world has not been affected to the same extent. There is a need to humanize relations between people, to reveal their spiritual and creative potential. The changes in modern society have caused changes in the philosophy of education, brought the ideas of the inner value of human personality, self-development and self-education to the fore, and led to the emergence of a new picture of education [4]

The informational stage of the development of society and the state of social-philosophical thought are characterized by the fact that the issues of the development of society and the establishment of a new world order are intensively discussed. A new type of social structure requires a new type of man - creative, highly organized, not only in the sense of labor organization, but also to a greater extent, highly moral organization. In order to achieve this goal, it is necessary to change the axiological and hermeneutic bases of inter-institutional, stratification and interpersonal interaction, social relations in general, inside and outside the educational system.

Education, as one of the socially important institutions, attracts the interest of the world community. This is happening for a number of reasons, the main of which is the search for a way out of the global cultural crisis caused by the civilizational changes that took place in the life of society at the beginning of the XXI century. The transition to a new type of organization of society is mainly determined by the paradigm of education, that is, a set of ideas, concepts, theories, educational rules that can lead society out of crisis.

Among the most important trends of modern world development, we can mention humanization (including humanitarianization) and informatization.

Informatization of education is aimed at the implementation of the plan for improving the quality content of education, conducting scientific research works, and their implementation, and it involves the replacement of traditional information technologies with more effective ones in all types of activities in the national education system of the Republic of Azerbaijan.

The following can be attributed to the most important areas of education informatization [2]:

- formation of a virtual information environment at the educational institution level;
- system integration of information technologies in education supporting training, research and organizational management processes;
- establishment and development of a single educational information space;
- permanent provision of new scientific-technical and scientific-methodical information;
- creation of a wide network of information centers aimed at solving the problems of information provision of the educational system with computer programs.

Informatization of public life is traditionally understood as the process of application and use of computer tools in all areas of human activity, including education. During this process, according to many authors, instead of society, a socio-technical system is created, in which people lose themselves by merging with technology, especially computer technologies, and give way to "virtual existence". The experience of the Western European information society, which understands the process in a utilitarian way and surpasses the previous information revolution in terms of its importance, shows that the person is actually moving further away from the "human", from the spiritual. An attempt to resolve the contradictions between informatization and humanization of education defines the problems of this study. Thus, the problem of humanization

of information technologies is one of the central and urgent problems in the era of civilizational changes.

So informatization - on the basis of the formation, presentation and use of information resources, the state authorities and local self-government bodies, all enterprises, departments and organizations, regardless of the organizational-legal and ownership form, and citizens, for the creation of optimal conditions for ensuring the information needs and rights in this area, organizational, social is an economic and scientific-technical process [2].

The current state of the education system reflects the contradictions between, on the one hand, the increasing demands on social and individual intelligence, consciousness and spirituality, human design and forecasting ability, and on the other hand, the actual level of the quality of education. Today, the quality level of education is below the required level, and this problem can be solved only by radical changes in the philosophical foundations of the education system.

In the modern world, the informational component of reality comes to the fore, information and informational processes increasingly permeate public life and education. In order to make the right management decisions in the constantly changing conditions, the expansion of the increasing information flows that a person needs in his life forces him to constantly overcome the information barrier. A person can learn to process incoming information from the moment he gets acquainted with the sign systems created before him and "connects" it to the general spirit of the time, the public consciousness, first he adopts the existing modern information technologies, and then he creates his own. Therefore, the education system, which gives humanity the ability to develop, should solve this difficult situation.

It is extremely difficult to overcome the contradictions between the traditional educational model that corresponds to the industrial stage of human society development and the new educational paradigm that corresponds to the spirit of the times, because it is related to social changes, and individual consciousness, inertia and inflexibility have always been stumbling blocks in the historical development of human society. In addition, other social institutions (media, internet, etc.) sometimes begin to play a leading role in influencing the younger generation as they find adequate ways and means. In our opinion, this is due to the fact that the industrial structure to which it corresponds has lost its position in the information revolution and the practical absence of a moral, humanitarian component in the information technology content of modern education. It turns out that spirituality, like the human ability to sensitively perceive the smallest changes in the environment, recedes into the background in man-made civilization, although the trends in the world development of mankind are the same.

Considering the modern trends, we believe that information technology is nothing but the technology of human mental activity. This is not the case when technology (in general) represents an extreme, degenerate form of methodology, but instead, the technology of human thought, cognition, and education rises to the methodological level. Considering this, as well as the fact that information technology is not just a set of computer skills, but a social, more precisely, socio-cultural phenomenon, the author reveals the humanistic nature of the information technology paradigm. The attempt to implement a unified approach to consciousness and human activity as categories unique to humans leads to the consideration of a single structure - mental activity and the question of how it is implemented and transformed in the educational process. In other words, humanism constitutes an important and basic component of educational activity within the defined paradigm.

Methodological principles of self-realization, humanism, complementarity, unity, ecology of human consciousness and principles of development education (learning at a high level of complexity, the leading role of theoretical knowledge), including not only the methodological basis for the self-organization of people as a self-organizing system, but also culture and becomes the content of education. Principles, methods and approaches are, in our opinion, the content of

education due to their high penetration. Based on it, new methods, principles, approaches, structures, technologies and relationships are created.

It is impossible to fundamentally change the state of the system if the relations between the elements within the system, its philosophy, do not change. Partial changes are usually called improvement, modernization. The development of systems and technologies, their transition to a qualitatively new state, depends on the change of the educational paradigm. Therefore, any system can thrive under ever-changing conditions only with a clear understanding of the fundamental differences between the present and the past and the old and the new.

According to M. Kastels [5], the basis of a new type of social structure is the paradigm of information technologies with different characteristics. The first feature of the new paradigm is that information is its raw material: if in previous technological revolutions information was aimed at influencing technology, now the technologies of influencing information are actively developing.

The second characteristic of the paradigm of information technologies is related to the wide spread of the effects of new technologies: since information is an integral part of any human activity, all processes of the subject's collective and individual existence are directly formed in technologically new conditions.

As a third feature, the principle of network logic is formed, which is the basis for any modern system or set of relationships involving new information technologies. The reason is the special structure of the network, which is perfectly adapted to the increasing complexity of interactions.

A fourth feature related to the network principle is the specific flexibility of the information technology paradigm. Processes within a network are fluid and reversible, and organizations and institutions are easily changed, even fundamentally changed by rearranging their elements. In general, the configuration of the new paradigm is distinguished by its capacity for transformation and reconstruction - an extremely important feature in a new society characterized by constant changes and organizational fluidity. Castells points out the ambiguity of this feature: "Flexibility can be a liberating force, but it can also have a repressive tendency if those who rewrite the rules are always in power"[5] .

The fifth characteristic of the information technology paradigm is the intensive convergence of technologies in a highly integrated system. Information systems combine computer and telecommunication technologies, micro and optical electronics. Technological convergence accompanies the interaction of the biological and microelectronic revolutions. The paradigm of information technologies tends towards openness in its development. Comprehensiveness, adaptability, complexity and networking are its defining qualities.

The technological revolution and the civilization it created actually plunged humanity into a global crisis. There can be only one way out: new education and the search for objective foundations to build a society capable of preventing global environmental problems, natural disasters, wars and violence, hunger, and the removal of power from the people. estrangement from human-made civilization.

The increase of resources in the civil information society occurs not through the appropriation of new territories and natural resources, but through structural changes, humanization, intellectualization and informatization of society, and the use of intensive technologies of education and production. The true meaning of sustainable (sustainable) development is the creative evolution of humanity guided by the moral and ecological imperative, it is the process of the individual's ascension to spiritual heights. This is possible when the state and society "act" with each other. The meeting of the "small control effects" of the state and the "initiative" of society is a necessary condition for ensuring the future development of human civilization.

At the beginning of the 21st century, the adequate educational paradigm is the humanitarian information technologies paradigm of education, its essence is the free and conscious actions of human self-awareness, absorbing the best that has been collected throughout the history of mankind, educational knowledge and human educational activity. By examining in detail the processes of axiologizing, fundamentalizing, informatizing and humanizing education, we come to the conclusion that the basis of all these processes is the reflection of the value of a person and his creativity. Therefore, in this study, creativity is defined as a fractal structure that vertically penetrates all social structures, all levels of individual and social development. The intersubjective, intertextual and dialogic nature of the modern person ensures the implementation of the principle of self-similarity in its horizontal relationships within a certain level of interaction.

The philosophical-methodological basis of the new educational paradigm is modern philosophy, pedagogy and the methodology of the latest integrative scientific directions: informatics, synergetics, linguistic theories. The scientific basis of the modern paradigm is the synergetic and informatization principles of the modern landscape of the world, which is essentially "human-sized".

The main imperative of the information technology paradigm of education is the principle of ecology of consciousness - "reflected knowledge is built in consciousness in a special way", information is characteristic of a person (either in the form of hypertext or intertext). The method that creates new knowledge and new technologies may be entirely new or may be imported from another field of knowledge.

Today, the main direction of education policy is the establishment of a civil information society that lives in accordance with the system of moral and ethical values, and whose main system-forming element is life in general, and life and health in particular. Information technology in education is a methodology of human mental activity, it expresses the unity of mind and human activity. It is created creatively and only by man in human thinking and consciousness. No matter how perfect artificial intelligence is, it cannot compete with natural intelligence in creativity, but it can only act according to the logic of the program set by man. Based on this statement, we draw a conclusion about the humanistic nature of the information technology paradigm of education and the fractal structure of creativity in the processes of self-organization of systems at different levels. For example, human creativity is the fractal structure of the civil information society, which is presented as a self-organizing transcendental education system for the entire population.

All modern high-tech technologies are built on this unity, therefore the principle of the leading role of theoretical knowledge and the principle of the subject being aware of his actions in creating a new way of working is more fundamental than ever.

Focusing on several aspects of the complex process of "upbringing", we see it as the formation of a spiritual personality throughout life; as a meeting of age and social groups where the preservation, renewal and development of culture takes place; as a social elevator that allows a person to rise from one social level to another; as a process of "organization" of social structures, communities, systems and relations between them in the process of self-organization; as an independent movement of a person in the space of science, philosophy, art and other forms of spiritual-practical study of the world. Education as an independent movement of a person in the space of spiritual culture is possible when he/she adopts cognitive, teaching, communication, design methods and methodologies of modern philosophical and scientific theories.

Based on the above, we can come to the conclusion that it is necessary to create particularly friendly "sensory" and "smart" interfaces, which are close to the interfaces designed with their parameters and goals, to meet information needs, to solve actual problems. In addition, it can be assumed that a distinctive feature of the process of meeting information needs is its similarity with

many features of the process of additional education. In this case, first of all, we consider the creative goal of both types of processes.

Thus, the information technology paradigm of education is proposed as the educational model most adequate to the information stage of society's development. The relevance of studying the information technology paradigm of education comes from the necessity of scientific-methodical justification of pedagogical activity. Integrative approaches seem to be the most promising for future scientific development: from the acquisition of knowledge and skills to the acquisition of the world image as a system of knowledge and methods of action, to the independent construction of the world image. creativity and generation of new ideas.

Modern education should develop through the integration of progressive elements of the most important pedagogical models.

Paradigm change is an important condition and prerequisite for social progress, it allows us to influence the development of society more effectively and successfully, foreseeing the near and long-term consequences of such influence. At the same time, the expected result of the educational process today is a set of basic powers announced by the state, without which the activity of a modern person in the intellectual, socio-political, communication, information and other fields is impossible, and this fact increases the relevance of the information technology paradigm of education.

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К ВОПРОСУ ОБ ИЗУЧЕНИИ ИСПОЛЬЗОВАНИЯ ИННОВАЦИОННЫХ ТЕХНОЛОГИЙ В СОВРЕМЕННЫХ УЧЕБНИКАХ РЕСПУБЛИКИ КАЗАХСТАН

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Аннотация. Статья посвящена описанию современных школьных учебников Республики Казахстан с точки зрения использования в них инновационных технологий обучения. Рассмотрена теоретическая основа исследования данного вопроса, в частности системный, когнитивный и коммуникативно-деятельностный подходы к созданию современных школьных учебников.

Ключевые слова: инновационные технологии, школьный учебник, Казахстан.

Современное образовательное пространство Казахстана требует адаптации к новым вызовам и изменениям, связанным с глобализацией, цифровизацией и полиязычностью общества. В этой связи разработка учебников русского языка для школ страны становится важной задачей, требующей пересмотра как содержания, так и подходов к обучению. В последние годы значительное внимание уделяется инновационным технологиям, которые позволяют создавать учебные материалы, адаптированные к потребностям современных учащихся.

Исследование в данной области связано с изучением теоретических и прикладных аспектов внедрения инновационных технологий в создание школьных учебников по русскому языку в Казахстане. Актуальность проблемы обусловлена необходимостью соответствия новых учебников международным образовательным стандартам, их интеграции в многоязычную образовательную систему и создания условий для персонализированного обучения.

Теоретическая основа исследования базируется на ряде ключевых научных подходов, таких как системный, когнитивный и коммуникативно-деятельностный.

В основе системного подхода лежит понимание учебника как части целостного образовательного процесса. Он не просто служит средством передачи знаний, но выполняет более сложную роль, помогая формировать у учащихся различные компетенции: языковые, культурные, коммуникативные и даже технологические. Системный подход основывается на взаимодействии всех элементов учебного процесса — учеников, учителей, учебников, технологий и среды, что делает учебник важной частью целой образовательной экосистемы.

Современные исследования в области когнитивных наук помогают понять, как учащиеся воспринимают информацию в условиях цифровой среды. В когнитивных теориях, в частности, в теории когнитивной нагрузки, особое внимание уделено необходимости использования мультимедийных и интерактивных материалов, которые соответствуют различным типам восприятия. Это особенно важно для школьных учебников, где обучение через несколько каналов (визуальный, аудиальный и кинестетический) может значительно улучшить усвоение материала.

При коммуникативно-деятельностном подходе акцентируется внимание на развитии у учащихся практических навыков коммуникации. Для учебников русского языка в Казахстане он особенно важен, так как русский язык выполняет функцию языка межнационального общения. Учебники, основанные на этом подходе, включают ситуации, связанные с реальной жизнью, и предлагают задачи, стимулирующие учащихся к активному использованию языка в разных контекстах.

Теоретической основой исследования послужили труды казахстанских ученых Ахметовой Л.К., Бегалиевой С.Б., Бегалиной Т.Ш., Кожабековой Л.Т., Абдыгалиевой А.Ж., Батырбековой Ж.К. Также базой исследования послужили труды российских и зарубежных исследователей, активно развивающих теорию и практику цифрового обучения, мультимедийных технологий и лингвистики: Гузеев В.В., Беспалько В.П., Солдатенкова Е.В., Зимняя И.А., Маслов А.В., Джон Свеллер (John Sweller), Ричард Майер (Richard Mayer), Сугата Митра (Sugata Mitra), Говард Гарднер (Howard Gardner), Пьер Дюран (Pierre Dillenbourg), Ханна Фрай (Hannah Fry). Теории указанных учёных являются значимыми, так как:

- с точки зрения системного подхода, обозначенного в работах российских ученых, учебник рассматривается как часть более широкого образовательного процесса, где все элементы — от контента до методов обучения — тесно взаимосвязаны;
- с точки зрения когнитивной теории зарубежных исследователей, таких как Дж. Свеллер и Р. Майер, отмечается необходимость использования мультимедийных ресурсов для более эффективного усвоения информации;
- с точки зрения компетентностного и коммуникативного подхода российских и зарубежных ученых становится понятно, как учебники могут развивать практические навыки общения на русском языке в мультикультурной среде Казахстана;
- мультимедийные и интерактивные технологии являются основой для создания адаптивных учебников, что поддерживается исследованиями и опытом таких ученых, как Ричард Майер и Пьер Дюран.

Таким образом, исследовательская база опирается на междисциплинарные подходы, объединяющие достижения в области педагогики, лингвистики, когнитивных наук и цифровых технологий, что делает разработку учебников русского языка в Казахстане актуальной и многосторонней.

Кроме того, современные школьные учебники должны соответствовать современным международным стандартам образования, таким как стандарты ЮНЕСКО и требования PISA. Введение инновационных технологий, таких как адаптивные системы обучения, искусственный интеллект и интерактивные платформы, позволяет не только улучшить качество образовательного процесса, но и сделать его более гибким и соответствующим глобальным тенденциям.

Важным аспектом исследования является изучение международного опыта в создании инновационных учебников. Страны с развитыми образовательными системами, такие как Финляндия, Южная Корея и Сингапур, активно используют цифровые технологии, позволяющие постоянно обновлять содержание учебников и интегрировать в них новые формы обучения, включая интерактивные упражнения, игры и мультимедийные материалы. Опыт этих стран показывает, что использование технологий, таких как искусственный интеллект и адаптивные образовательные платформы, повышает интерес и мотивацию учащихся, а также способствует более эффективному усвоению учебного материала.

При этом разработка учебников по русскому языку в Казахстане должна учитывать специфику многоязычной и мультикультурной среды страны. Русский язык выполняет важную функцию как язык межнационального общения, что требует включения в учебники материалов, которые отражают культурные особенности региона и многоязычную

образовательную среду. Это подразумевает необходимость разработки учебников, которые бы способствовали поддержанию и развитию языковых навыков учащихся, говорящих на нескольких языках.

Отдельное внимание в исследовании уделяется применению современных образовательных технологий в учебниках русского языка. Одной из ключевых инноваций является использование мультимедийных ресурсов, таких как видео, аудио и анимации, которые делают процесс обучения более увлекательным и наглядным. Также важным направлением является использование адаптивных систем, которые позволяют индивидуализировать обучение, подстраивая материалы под уровень знаний и интересы каждого учащегося.

Несмотря на явные преимущества использования инновационных технологий, внедрение этих подходов в школьные учебники сталкивается с рядом вызовов. Прежде всего, это связано с необходимостью подготовки педагогов к использованию новых технологий. Учителя должны уметь эффективно применять цифровые инструменты в учебном процессе, что требует проведения регулярных курсов повышения квалификации и внедрения новых методик преподавания.

Кроме того, важным аспектом является доступность цифровых технологий в разных регионах Казахстана. В некоторых сельских школах все ещё отсутствует необходимая инфраструктура для полноценного использования инновационных образовательных ресурсов. Это делает необходимым поиск решений, которые позволили бы устранить эти проблемы, в том числе через государственные программы модернизации школ.

Вопросы финансирования также играют важную роль в процессе разработки и внедрения новых учебников. Создание качественных цифровых учебных материалов требует значительных финансовых вложений, включая разработку контента, техническую поддержку и обновление оборудования. Однако долгосрочные выгоды, связанные с повышением качества образования, делают такие вложения оправданными.

Таким образом, внедрение инновационных технологий в учебники позволяет улучшить качество обучения, адаптировать процесс под потребности учащихся и обеспечить их высокую мотивацию. Однако для успешного внедрения этих технологий необходимы комплексные меры, включая подготовку педагогов, улучшение инфраструктуры и поддержку со стороны государства.

Использованная литература

1. Об утверждении типовых учебных программ по общеобразовательным предметам и курсам по выбору уровней начального, основного среднего и общего среднего образования. Приказ Министра просвещения Республики Казахстан от 16 сентября 2022 года № 399. Зарегистрирован в Министерстве юстиции Республики Казахстан 23 сентября 2022 года № 29767.
2. Кашапов М.М., Пошехонова Ю.В., Кашапов А.С. Инновационные образовательные технологии. Учебник – М.: Директ-Медиа, 2022. – 264 с.

Xarici dilin tədrisində Keys metod və onun tətbiqi məsələləri

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Xülasə

Ölkəmizin çoxsahəli siyasi, iqtisadi və mədəni əlaqələrinin inkişaf etdiyi dövrdə müasir dünyada xarici dilin dövrün tələblərinə uyğun olan səviyyədə tədrisi problemi xüsusi əhəmiyyət kəsb edir. Bu gün xarici dillər ölkəmizin həm orta, həm də ali təhsil müəssisələrində tədris olunur. Onu da qeyd etmək lazımdır ki, qloballaşma dövründə xarici dilləri bilmək vacib şərt kimi irəli sürülür. Ölkəmizdə xarici dillərin öyrənilməsinə olan maraq günü-gündən artmaqdadır. Qloballaşma dövründə xarici dili bilmənin xüsusi rolunu nəzərə alaraq gənclərin bu dilin öyrənilməsinə böyük maraq göstərmələri tam təbii. Məhz buna görə də xarici dilin tədrisinə yeni ideyaların və innovativ metodların tətbiq edilməsi olduqca vacib və aktualdır. Təlimdə müxtəlif metod və priyomların tətbiqi tələbələrə xarici dil üzrə kommunikativ kompetensiyaların formalaşdırılması probleminin nəzəri-praktik baxımdan araşdırılmasında psixoloji, didaktik əsasların müəyyənləşdirilməsinə cavab verir ki, bunlardan da biri Keys metodudur.

Keys metodu mahiyyət etibarilə hadisəni yaradan səbəblərin, onun hərəkətverici amillərinin aşkara çıxarılmasını ehtiva edir. İngiliscədə vəziyyət, hadisə mənalərini verən bu metod, hər hansı bir problemin həllinin kollektiv və ya fərdi axtarışını tələb edir.

Açar sözlər: *Keys metod, xarici dil, kommunikativ kompetensiya, təhsil islahatı, mədəniyyətlərarası ünsiyyət*

Case method in foreign language teaching and issues of its application

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Summary

The problem of teaching a foreign language at the level corresponding to the requirements of the time in the modern world is of particular importance in the period when the multi-field political, economic and cultural relations of our country are developing. Today, foreign languages are taught in both secondary and higher educational institutions of our country. It should also be noted that in the era of globalization, knowledge of foreign languages is put forward as an important condition. The interest in learning foreign languages in our country is increasing day by day. Considering the special role of knowing a foreign language in the era of globalization, it is quite natural that young people show great interest in learning this language. That is why it is very important and relevant to apply new ideas and innovative methods to foreign language teaching. The application of various methods and principles in training corresponds to the determination of psychological and didactic bases in the theoretical-practical investigation of the problem of formation of communicative competences in foreign language in students, one of which is the Case method.

The case method essentially includes the discovery of the causes that created the event, its driving factors. This method, which gives the meanings of situation and event in English, requires a collective or individual search for a solution to any problem.

Keywords: *Case method, foreign language, communicative competence, educational reform, intercultural communication*

Giriş: Qloballaşan dünyada hər bir ölkənin inkişafı burada mövcud olan təhsil sisteminin keyfiyyətindən bilavasitə asılıdır. Məlum olduğu kimi, Azərbaycanın təhsil sistemi Avropa təhsil sisteminə inteqrasiya prosesindədir. Bu isə Avropa təhsil məkanında mövcud olan standartlara, qəbul edilmiş qayda və normalara riayət etməyi qarşımızda duran prioritet istiqamətinə çevrilməsini tələb edir. Bu istiqamətdə müəyyən islahatların aparılmasını və müəyyən müsbət nəticələrin əldə edilməsini qeyd etməklə, eyni zamanda Avropa təhsil sisteminə inteqrasiya istiqamətində daha ciddi, daha radikal xarakterli islahatların aparılmasının zəruriliyi bu baxımdan qeyd olunmalıdır. Onu da xüsusilə vurğulamaq lazımdır ki, islahatları tətbiq edərkən onların hansı milli-mədəni kontekstdə aparılması nəzərə alınmalıdır.(1)

Müasir dövrdə xarici dillərin tədrisinə xüsusi diqqət göstərilir və tədrisin müvəffəqiyyət gətirəcək bütün yolları, metod və metodologiyası dərinlən araşdırılır .

Müasir metodika elmi müəllim və tələbələrə saysız-hesabsız metodlar təklif etsə də yenə də bu sahədə tez-tez qarşıya həlli vacib olan problemlər çıxır . Təcrübəli və işində çox məsuliyyətli olan müəllimlər öz təcrübə və biliklərini nəzəriyyələr üzərində yox, auditoriya daxilində fəal təlim fəaliyyətləri əsasında qazanıblar . Nəzəri cəhətdən çox savadlı olmaq heç də çox yaxşı pedaqoq olmaq demək deyil. Bildiyimiz kimi xarici dili tədris edərkən müəllimin qarşısında belə bir sual durur: keçəcək materialı necə və nə üçün öyrətməlidir . Tədrisə başlayan hər bir müəllim də verdiyi kursun bu suallara nə dərəcədə cavab verdiyini müəyyən etməlidir .

1.Müasir dövrdə xarici dilin tədrisinə verilən tələblər

Müasir dövrdə hər hansı bir xarici dilin tədrisində əsasən iki tələb nəzərdə tutulur:

- 1) öz fikrini xarici dildə ifadə etmək ;
- 2) xarici dildə olan nitqi başa düşmək .

Bu tələblərin irəli sürülməsi bir daha sübut edir ki, xarici dillərin tədrisində əldə ediləcək uğurlar əsasən metodika ilə bağlıdır .

Ümumiyyətlə, istənilən metodikanı tətbiq etməzdən əvvəl üç məqama diqqət etmək lazımdır:

- 1) seçilən metod təlim məqsədi ilə uzlaşmalıdır;
- 2) seçilən metod vizual, akustik və kinestetik şagird və tələbələrin tələblərinə cavab verməlidir;
- 3) Şagird və tələbələrin dil səviyyəsində kəskin fərqlər varsa, differensiasiyadan istifadə edilməlidir.

Məlumdur ki, dil daşıyıcılarının yaşadıkları sosio-mədəni məkanda qəbul edilmiş verbal və qeyri-verbal davranış normalarına yiyələnmədən dilöyrənmə prosesində əsaslı dönüş əldə etmək və tələbələrdə ixtisas dili olan xarici dildə kommunikativ kompetensiyanın formalaşdırılmasını təmin etmək çətinidir. Onu da nəzərə almaq lazımdır ki, dil fakültələrində xarici dili ixtisas dili kimi tədris edən və yaradıcı düşüncəyə malik olan müəllimlər tələbələrdə dildən sərbəst, düzgün, adekvat və kreativ şəkildə istifadə etməklə kommunikativ niyyətlərinə nail olmaq qabiliyyətinin formalaşdırılması və inkişaf etdirilməsi üçün səmərəli iş üsulları axtarır və onları mütəmadi olaraq sınaqdan keçirirlər. Autentik filmlər vasitəsilə tələbələrə bacarıq və kompetensiyaları aşılayarkən müəllim və metodistlər bir sıra problem və çətinliklərlə rastlaşırlar. Belə ki, autentik film tələbələrə təqdim edilərkən hansı leksik vahidlərin, qrammatik strukturların və nitq modelləri mənimsənilməli, dil və nitq materialları tədrisin mərhələlərinə görə necə paylanmalı olduğu və həmin materialların səmərəli şəkildə tədrisi üçün hansı üsul və metodlardan istifadə edilməsinin daha məqsədəuyğun olması haqqında qərar məhz metodistlər və dil müəllimləri tərəfindən qəbul edilməlidir. (2)

Bu gün mədəniyyətlərarası ünsiyyətin daha geniş məna qazanması onun təhsildən başlaması tələbini ortaya qoyur.

Ali məktəblərin xarici dil ixtisaslarında tələbə gənclərin bilik və bacarıqlara yiyələnməsi, müasir dünyanın çağırışlarına cavab verən peşəkar kadr kimi hazırlanması onların kommunikasiyadan, daha dəqiq, mədəniyyətlərarası ünsiyyətdən istifadə bacarıqlarına malik olmalarını ortaya qoyur. Müşahidələrə və pedaqoji təcrübəyə əsasən deyə bilərik ki, tələbələr xarici dildə nə qədər sərbəst danışmağa səy etsələr də, peşəkar kommunikasiya bacarıqlarına yiyələnmə bilmirlər.

Tələbələrin xarici dildə mədəniyyətlərarası ünsiyyət bacarıqlarının formalaşdırılmasında didaktik modelin və çalışmalar sisteminin işlənilib hazırlanması ilk növbədə bu metodun linqvistik, psixoloji, didaktik və metodik əsaslarının işlənilib hazırlanmasını tələb edir.

Keys metodunun texnologiyası, dünya təcrübəsində 1970-80-ci illərdən, Rusiyada 1990-cı illərdən tətbiqinin mütəxəssis hazırlığında əsaslı dəyişikliklərə səbəb oldu. Keysin adətən auditoriyada diskussiya yaratmaq məqsədilə təsvir olunan real hadisə olduğundan xarici dilin tədrisində bu metoddan tələbələrdə nitq fəaliyyətində zəruri bilik və bacarıqların, həmçinin müəyyən standart və proqram səviyyəsində linqvistik kompetensiyaların formalaşdırılması üçün istifadə edilə biləcəyini göstərə bilərik. Azərbaycanın dünya təhsilinə integrasiyası və təhsil sistemində aparılan islahatlar xarici dilin tədrisində Keys metodundan istifadəni şərtləndirir. Tələbələrin qrup şəklində müzakirələri və birgə keysləri təhlil etmək, təklif olunan alqoritmlərin problem kontekstində ən yaxşısını seçmək, bu metodun başlıca məqsədidir. [3]

II.Keys metodunun tətbiqi yolları. Pedaqoji ədəbiyyatda keyslərin bir neçə növünün olduğu göstərilir. Belə bir qənaətə gəlmək olar ki, münasib keys metodu ilə tələbələrin çoxsaylı alternativ variantlar arasından öz meyarlarını işləyib hazırlamağı və həmin tapşırıqlar əsasında daha məqsədəuyğun qərarlara gəlməli və alqoritmli tərtib etməlidirlər. Həmçinin keyslərin linqvistik xüsusiyyətlərinin təhlili ilə bağlı qeyd edə bilərik ki, “multimedia resurslarından istifadə olunması öyrənilən dil ölkəsinin dil və sosial-mədəni mühitinə maksimum yaxınlaşmağa, müasir çoxmədəniyyətli dünyanın mədəni rəngarəngliyi ilə tanış olmağa imkan verir”. Interaktiv metod olaraq, Keys metodu tələbə ilə müəllimin birgə yaradıcılığına imkan yaradır, tələbə müəllimlə eyni hüquqda olur və demokratik təhsil mühiti yaranır. Keys metodunun tətbiqində əsas diqqət hazır biliklərin alınmasına deyil, təlimdə subyektlərin – tələbə və müəllimin ümumi əməkdaşlığına yönəlir və bu metodun üstünlüyü də biliklərin alınması və praktik vərdişlərin formalaşmasında deyil, dəyərlər sisteminin, həyati məqsədlərin, özünəməxsus dünyagörüşünün inkişafına xidmət etməsi ilə səciyyələnir. Belə qənaətə gəlmək olar ki, “keys dinamik təbiətlidir, çünki onun əsasını ən azı beşillik tarixə malik aktual praktik situasiyalar təşkil edir; keys fənlərarası xarakterə malikdir, çünki o, təhlili nəzərdə tutulan iqtisadi, siyasi və digər situasiyalı aspektlərin kompleksini təmsil edir; keys, bir qayda olaraq, birdən çox həllə malikdir ki, bu da onun açıqlığından xəbər verir; keys kommunikativ təbiətlidir, çünki onun əsasını diskussiyalar, kollektiv axtarış və qərarların qəbul edilməsi təşkil edir; xarici ixtisas dilinin öyrənilməsi kontekstində keysin əsasını autentik mətnlər təşkil edir”. [4]

III.Təlimdə Keys metodundan istifadənin səmərəli yolları. Keys metod, tələbələrin ehtiyaclarını, tələbatlarını, qarşıya qoyulmuş məqsədlərə uyğunluğunu, motivasiyanın formalaşdırılmasını, əməkdaşlıq mühitinin yaradılmasını, interaktivlik prinsipinin tətbiq olunmasını əsas amillərdən sayır. Hər bir əcnəbi dilin tədrisi zamanı meydana çıxan çətinliklərin aradan qaldırılması üçün tələbələrə dili öyrədilən ölkənin adət-ənənəsinin, milli dəyərlərinin, mədəniyyətinin öyrədilməsi tövsiyə olunur. Sual-tapşırıqlar, çalışmalar mədəniyyətlərarası ünsiyyət bacarıqlarının inkişaf etdirilməsində, problemin həllində tələbələrə olduqca maraqlandırır və ixtisaslarına dərindən yiyələnməyə imkan yaradır. [5]

Xarici dil dərslərində üstünlük “ənənəvi”, çox vaxt aktuallığını itirən, həmçinin dövrün tələblərinə cavab verməyən metodlara verildiyindən tələbələr linqvistik vahidlərdən, həmçinin nitq modellərindən yaradıcı formada istifadə etmək qabiliyyətinə malik olmur.

Nəticə: Keys texnologiyasının bütün üstünlüklərinə baxmayaraq, onun tətbiqi zamanı tədrisin məqsəd və vəzifələri, tələbələrin maraq və ehtiyacları, səriştəlilik dərəcəsi, fənnin işçi proqramının məzmunu və s. nəzərə alınmasını vacib şərtlərdəndir. Keys metodunun tətbiqi xarici dildə ünsiyyəti stimullaşdırır, müstəqil qərar qəbul etmək qabiliyyətini, komandada işləmək vərdişini formalaşdırır.

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The role of edpuzzle technology in facilitating listening skill in foreign language teaching

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ABSTRACT

This article explores the impact of Edpuzzle, an interactive video platform, on the development of listening skills in foreign language education. Listening, a critical yet challenging skill, is often taught passively, but Edpuzzle aims to transform this by providing an active and engaging learning experience through interactive video content. To understand its effectiveness, a survey was conducted to gather educators' perspectives on Edpuzzle's usage, its influence on student engagement and comprehension, and its role in enhancing critical listening. Survey results reveal mixed opinions among teachers, with variations in effectiveness based on factors such as usage frequency, lesson integration, and familiarity with the platform. These findings underscore both the potential and the barriers to integrating Edpuzzle into listening instruction, suggesting that it holds promise for improving listening skills in dynamic, multimedia-based learning environments.

KEY WORDS: Edpuzzle, interactive video, listening skills, foreign language education, teacher perspectives, multimedia learning.

INTRODUCTION

In the modern educational landscape, technology has transformed how content is delivered and consumed. From digital resources and online courses to interactive tools and collaborative platforms, technology enhances access to information and fosters more engaging, personalized learning experiences. It empowers educators to streamline administrative tasks, track student progress through data analytics, and create inclusive environments with assistive technologies. However, this integration also presents challenges, such as ensuring equitable access and addressing privacy concerns. As we navigate the complexities of technology in education, it becomes clear that its influence is profound, shaping the future of learning and teaching in unprecedented ways. The integration of digital tools like Edpuzzle into classrooms has enhanced accessibility, engagement, and personalization.

Listening is a complex cognitive process that involves receiving, constructing meaning from, and responding to spoken messages, and it is crucial in language acquisition, academic success, and professional communication. However, teaching this skill effectively in traditional classroom settings has often been challenging due to the passive nature of typical listening exercises.

Edpuzzle addresses these challenges by transforming how educators approach listening instruction. Initially designed as a platform to make video content interactive, Edpuzzle has grown into a versatile educational tool that can be adapted for various subjects and skills, including

listening. By integrating questions, feedback, and reflections directly into video content, Edpuzzle allows students to engage actively with material. This level of interactivity enhances attention, promotes deeper comprehension, and helps develop critical thinking skill.

Vandergrift & Goh (2012), emphasize the importance of interactive strategies in teaching listening skills, suggesting that students need more than passive listening opportunities to develop true auditory comprehension. Edpuzzle aligns with these findings by making listening an active process that requires students to think critically about what they hear and engage with the content. Moreover, real-time feedback—a key feature of Edpuzzle—ensures that students can assess their understanding immediately, adjusting their learning strategies as they go.

In an increasingly multimedia-driven world, where auditory information is prevalent in both academic and professional contexts, the ability to process and respond to spoken content is more vital than ever. These findings form the foundation of this study, which investigates Edpuzzle's role in improving listening skill.

Additionally, the study is grounded in **Hamidah Siti Farhana (Indonesia)** in her 2022 study, Hamidah investigated the role of Edpuzzle in English listening assessments among high school students. Her research highlighted the platform's effectiveness in boosting student motivation and comprehension. Edpuzzle's interactive features, such as embedded quizzes and video annotations, allowed students to practice actively and engage with the content. Moreover, the tool's accessibility and user-friendly interface made it particularly suitable for both in-class and self-directed learning. Edpuzzle takes advantage of this by presenting video content (visual and auditory elements) along with interactive tasks (such as questions and prompts), which require students to actively process the information, improving retention and understanding.

The aim is to explore the role of Edpuzzle technology in enhancing listening skill in foreign language teaching. It seeks to examine how Edpuzzle's interactive video platform can facilitate language acquisition by allowing educators to create customized listening exercises that engage students actively. The article will analyze the effectiveness of Edpuzzle in promoting comprehension, retention, and engagement among learners, highlighting its potential as a valuable tool in foreign language education. Furthermore, it aims to provide insights into best practices for integrating Edpuzzle into language curricula, ultimately contributing to more effective and dynamic language learning experiences. The main objectives of this study are to explore the effectiveness of Edpuzzle in improving listening skill among students, to assess how its interactive features enhance student engagement and comprehension during listening tasks, and to examine the role of real-time feedback provided by Edpuzzle in fostering critical thinking and reflection in the listening process. Additionally, the study aims to evaluate the application of Edpuzzle across various academic subjects and its impact on overall academic performance, while also providing insights into the integration of Edpuzzle as a tool in modern educational curricula for developing listening competencies. By blending these theoretical frameworks, Edpuzzle positions itself as a tool that not only enhances listening skill but also promotes deep, meaningful learning through active engagement, critical reflection, and multimedia integration. These theories collectively support the idea that Edpuzzle's interactive features are an effective method for fostering more robust listening comprehension and overall academic success.

In language learning, for example, listening is a foundational skill that supports speaking, reading, and writing development. Without the ability to understand spoken language, students struggle to engage in conversations, follow instructions, or grasp the nuances of tone and intent. Similarly, in academic subjects such as science or history, students must be able to listen to lectures, presentations, or discussions and extract key information, synthesize ideas, and form responses. Effective listening skill enable students to become active participants in the learning process, improving their overall academic performance. Edpuzzle represents a significant advancement in the way listening skill are taught and developed in educational settings. Its

interactive features transform traditional listening exercises into dynamic, engaging, and personalized learning experiences that cater to the needs of all students. By fostering active engagement, critical thinking, and real-time feedback, Edpuzzle helps students improve their listening skill in meaningful ways, preparing them for success in both academic and real-world contexts.

1. How does the use of Edpuzzle impact students' listening comprehension skills in a foreign language learning context?
2. What are students' perceptions of using Edpuzzle as a tool for enhancing listening skills in foreign language classes?
3. What teaching strategies can be effectively combined with Edpuzzle to improve listening skills in foreign language learners?

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METHODS

This research adopted a quantitative method to evaluate the effectiveness of Edpuzzle technology in enhancing listening skills. The study aimed to assess how educators integrate the platform into their teaching practices and its impact on student outcomes. By gathering and analyzing data from teachers, the research seeks to provide insights into the benefits and challenges of using Edpuzzle for listening skill development.

Conducted through Google Forms, the survey aimed to understand educators' perspectives, practices, and challenges within their teaching environments by Edpuzzle. The link to the Google Form was shared via Instagram, leveraging the platform's wide reach among educational communities to attract a diverse range of teacher participants. By distributing the survey on social media, the study was able to reach educators from various backgrounds and locations, ensuring a broader representation of responses.

The questionnaire was structured to include a variety of question types, totaling several questions that provided both quantitative and qualitative data. These questions were carefully crafted to capture the participants' experiences and opinions. The survey included multiple-choice questions to quickly gather straightforward responses, Likert scale questions that allowed participants to rate certain aspects on a scale, and open-ended questions that encouraged teachers to elaborate on their thoughts. This mix of question types helped balance specificity with depth, enabling the collection of comprehensive insights that go beyond simple answers.

The target audience for this survey was teachers, and all questions were formulated with a focus on issues and practices relevant to their professional experiences. Responses were collected voluntarily, making it possible for educators genuinely interested in the topic to contribute. This approach not only ensured authentic feedback but also engaged teachers who felt personally connected to the topic.

The gathered data will be analyzed with the intent of uncovering common trends, identifying shared challenges, and highlighting successful practices among teachers. This analysis aims to inform the conclusions of the article by reflecting real-world teaching experiences and

incorporating the voices of active educators. The insights will ultimately contribute to a more accurate and nuanced understanding of the challenges and opportunities present in the educational field. Through these findings, the article will be better equipped to discuss current educational dynamics from the firsthand perspectives of teachers actively involved in the profession.

RESULTS

This study analyzed the responses of 24 participants on their experiences with Edpuzzle as a tool for developing listening skills. Respondents' age ranged from 15 to 23, with the majority (50%) being 20 years old, indicating a younger demographic, likely with a mix of students and early-career educators.

Gender Distribution and Experience

Gender and experience were analyzed to provide context for interpreting the results. The sample consisted of a balanced distribution of males and females. The majority of participants had 1-5 years of experience, indicating that many respondents are relatively new to teaching, with fewer respondents having 5-10 years, 15-20 years, or more than 20 years of experience. This may influence their familiarity with Edpuzzle and other educational technologies(see Table 1).

Table 1

Statistical Information of Participants

Age range	Percentage	Gender	Percentage	Years of experience	Percentage
15-19	20.8	Male	50.0	1-5 years	62.5
20	50.0	Female	50.0	5-10 years	12.5
21-23	29.2	Gender		15-20 years	20.8

Edpuzzle Usage and Frequency (Questions 1-3)

The data reflects the distribution of learners across different language proficiency levels. The largest group, 33.3%, is at the B1 (Intermediate) level, followed by another 33.3% at B2 (Upper Intermediate). A smaller proportion, 20.8%, are at the A1 (Beginner) level, and only 8.3% are at A2 (Elementary). No data is provided for the C1 and C2 (Advanced) levels. This suggests the program focuses on intermediate learners, with fewer beginners and elementary-level students(see Figure 1).

1.What language proficiency level do you teach?

A1	A2	B1	B2	C1	C2
20,8	8,3	33,3	33,3		

1. What language proficiency level do you teach?

24 ответа

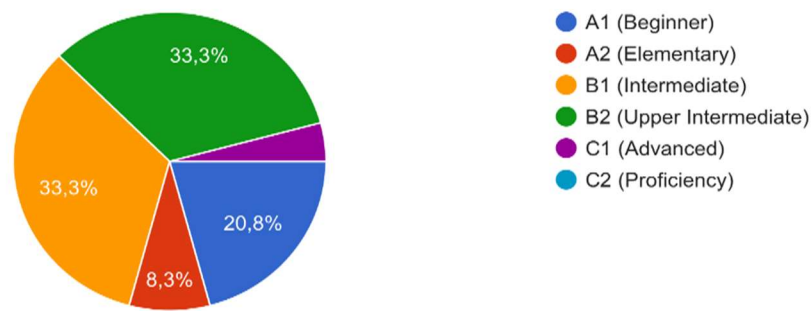


Figure 1
Language proficiency level

The data shows that 70.8% of respondents have used Edpuzzle for developing listening skills, while 29.2% have not (see Figure 2). This indicates that a significant majority of participants are already familiar with the platform for listening skill development. The high percentage of users suggests that Edpuzzle is effectively utilized for listening skills, but there remains room for broader engagement among the 29.2% who have not yet used it.

2. Have you previously used the Edpuzzle platform for developing listening skills?

Yes	No
70,8	29,2

2. Have you previously used the Edpuzzle platform for developing listening skills?
24 ответа

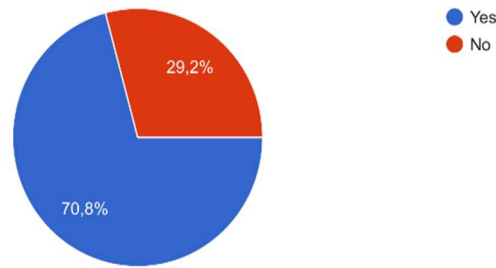


Figure 2
Previous Experience with Edpuzzle

The data shows that 25% of educators use Edpuzzle every lesson, several times a week, and once a week, indicating regular use in teaching practice, while 8.3% use it several times a month, and 8.3% rarely or never use it (see Figure 3). Most educators use Edpuzzle frequently in their teaching, with a strong focus on regular integration into lessons.

3. How often do you use Edpuzzle in your teaching practice?

Every lesson	Several times a week	Once a week	Several times a month	Rarely	Never
25	25	25	8,3		8,3

3. How often do you use Edpuzzle in your teaching practice?

24 ответа

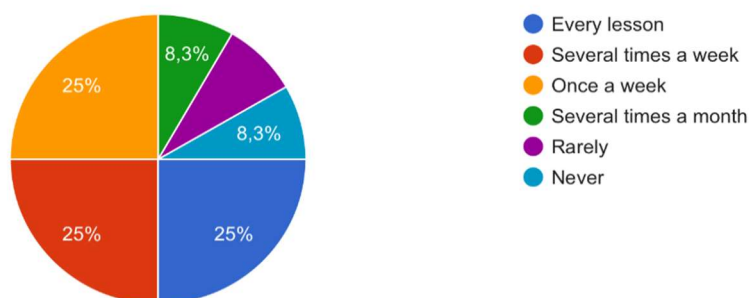


Figure 3
Frequency of Edpuzzle Usage

Perceived Role and Effectiveness of Edpuzzle (Questions 4-6)

Respondents had varied opinions on Edpuzzle's role in developing listening skills. About 41.7% felt Edpuzzle played very important role in this area, while 37.5% believed it had a minor role. Only 8.3% considered Edpuzzle no important (see Figure 4).

4. What role do you believe Edpuzzle plays in developing students' listening skills?

Very important	Fairly important	Minor	None
41,7	37,5	12,5	8,3

4. What role do you believe Edpuzzle plays in developing students' listening skills?

24 ответа

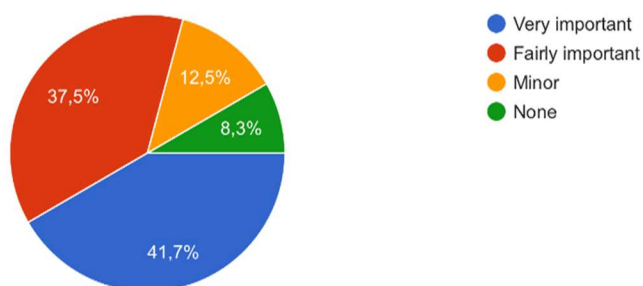


Figure 4
Importance of Edpuzzle for Listening Skills

Similarly, effectiveness ratings were mixed: 41,7% found it very effective, 29,2% fairly effective, 20,8% not very effective, and 37.5% not effective (see Figure 5). These responses indicate a wide range of views on Edpuzzle’s benefits, potentially tied to differences in teaching style or familiarity with Edpuzzle’s features.

5.How effective is Edpuzzle in helping to develop listening skills?

Very important	Fairly important	Minor	None
37,5	29,2	20,8	12,5

5. How effective is Edpuzzle in helping to develop listening skills?
24 ответа

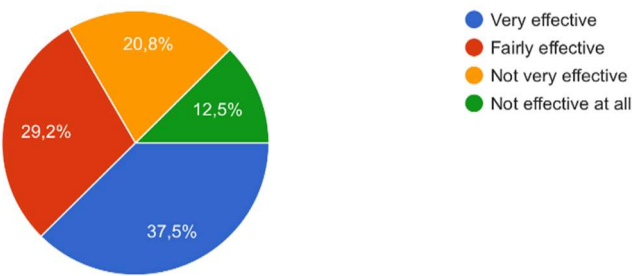


Figure 5
Effectiveness of Edpuzzle for Listening Development

The data indicates that the most beneficial feature of Edpuzzle for students is quizzes and comprehension tasks with 37.5%. The ability to pause the video is valued by 33.3% of students, and 25% find embedded questions most beneficial (see Figure 6). This suggests that interactive elements and control over video playback are key to enhancing student engagement and comprehension.

6.Which features of Edpuzzle are most beneficial for your students?

Embedded questions	Ability to pause the video	Quizzes and comprehension tasks	Other (please specify)
25	33,3	37,5	

6. Which features of Edpuzzle are most beneficial for your students?
24 ответа

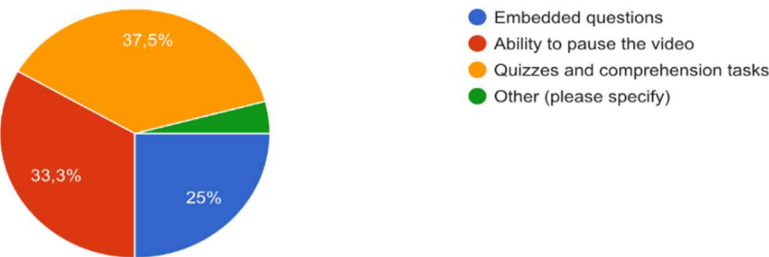


Figure 6
Most Beneficial Edpuzzle Features

Usage in Lesson Stages and Student Reactions (Questions 7-8)

When asked about the lesson stage at which Edpuzzle is used, most participants utilized it for reinforcing material 20,8% or as the main lesson activity 37,5%, while others used it for introducing new topics 25% or as homework 16,7 (see Figure 7).

7. At what stage of the lesson do you most often use Edpuzzle?

Introducing a new topic	Main lesson activity	Reinforcing material	Homework
25	37,5	20,8	16,7

7. At what stage of the lesson do you most often use Edpuzzle?

24 ответа

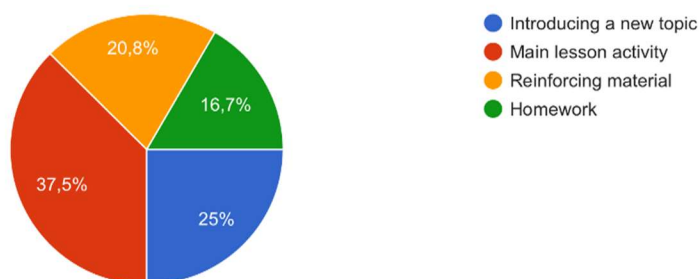


Figure 7

Lesson Stage for Edpuzzle Usage

Reactions were mostly positive, with 25% reacting very positively and 33,3% positively, though 25% remained neutral and negatively about 16,7% (see Figure 8). A small portion responded negatively, suggesting that while many students appreciate Edpuzzle, its benefits may not be universally recognized.

8. How do your students react to using Edpuzzle for listening practice?

Very positively	Positively	Neutral	Negatively
25	33,3	25	16,7

8. How do your students react to using Edpuzzle for listening practice?

24 ответа

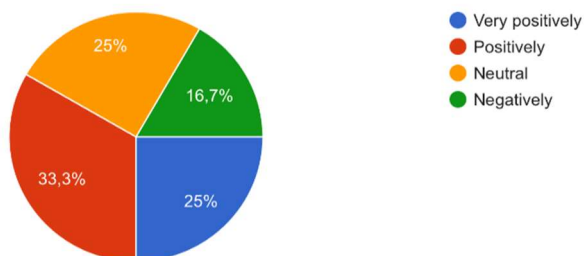


Figure 8

Students' Reaction to Edpuzzle

Other Technologies and Ease of Use (Questions 9-11)

A large majority, 79.2%, use other technologies to help develop listening skills (see Figure 9). YouTube is the most popular 50%, followed by Quizlet 41.1% and Google Classroom 8.3% (see Figure 10). A majority of educators integrate other technologies, with YouTube and Quizlet being the most commonly used tools for listening skill development.

9.Do you use other technologies to develop listening skills?

Yes	No
79,2	20,8

9. Do you use other technologies to develop listening skills?
24 ответа

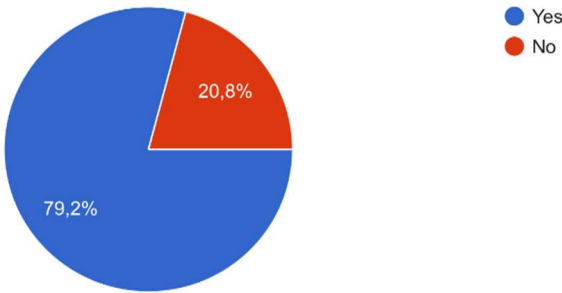


Figure 9
Use of Other Technologies for Listening

10.If you answered “yes” to the previous question, which other technologies do you use?

YouTube	Quizlet	Google Classroom	Other
50	41,7	8,3	

10. If you answered “yes” to the previous question, which other technologies do you use?
24 ответа

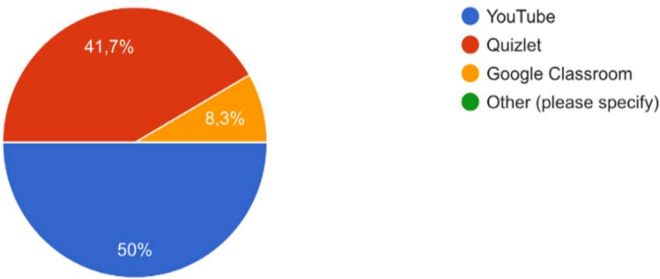


Figure 10
Other Technologies Utilized

The majority of educators found Edpuzzle easy to learn. 54.2% described it as “very easy” and 33.3% as “fairly easy.” Only 12.5% found it difficult, indicating that Edpuzzle’s interface is user-friendly for most users.(see Figure 11). Most educators found Edpuzzle’s interface easy to learn, with a large proportion describing it as very easy or fairly easy.

11. How easy was it for you to learn the interface and features of Edpuzzle?

Very easy	Fairly easy	Difficult	Very difficult
54,2	33,3	12,5	

11. How easy was it for you to learn the interface and features of Edpuzzle?

24 ОТВЕТА

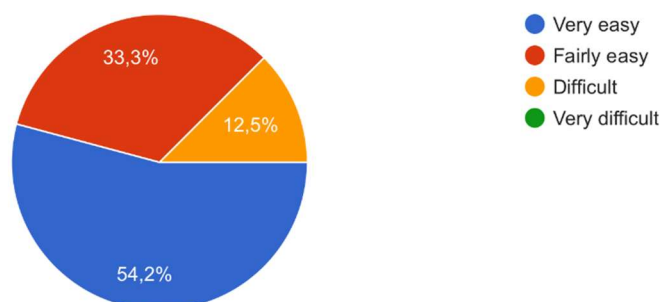


Figure 11
Ease of Learning Edpuzzle

Student Perceptions of Edpuzzle's Usefulness (Questions 12-14)

Most students find Edpuzzle useful for listening practice. 37.5% find it "extremely useful," and 37.5% think it is "somewhat useful." Only 8.3% find it "not very useful," showing a strong positive perception among students (see Figure 12). Students generally find Edpuzzle highly useful for listening practice, with many reporting it significantly enhances their skills.

12. Do your students find Edpuzzle to be a useful tool for listening practice?

Extremely useful; it significantly helps them improve and feel more confident in listening tasks.	Very useful; they feel it enhances their listening skills and understanding of audio content.	Somewhat useful; they find it helpful at times, but it doesn't significantly impact their overall listening ability.	Not very useful; they don't notice much improvement or benefit from using Edpuzzle for listening practice.	Not useful at all; they feel it doesn't help improve their listening skills.
37,5	16,7	37,5	8,3	

12. Do your students find Edpuzzle to be a useful tool for listening practice?

24 ответа

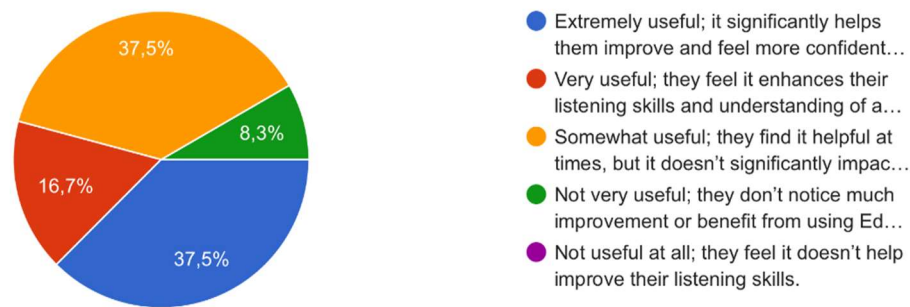


Figure 12
Students' Perception of Edpuzzle

Edpuzzle has increased the time students spend on listening practice for many. 45.8% report a significant increase, while 33.3% say it has slightly increased the time spent. Only 12.5% say the time spent on listening has decreased (see Figure 13). Educators generally find Edpuzzle highly useful for listening practice, with many reporting it significantly enhances students skills.

13. Since you started using Edpuzzle, has the time students spend on listening practice increased?

Yes, it has increased significantly; they spend much more time practicing listening skills.	Yes, it has increased slightly; they spend a bit more time on listening activities than before.	No, there hasn't been much change in the time they spend on listening practice.	No, the time spent on listening has actually decreased.
45,8	33,3		12,5

13. Since you started using Edpuzzle, has the time students spend on listening practice increased?

24 ответа

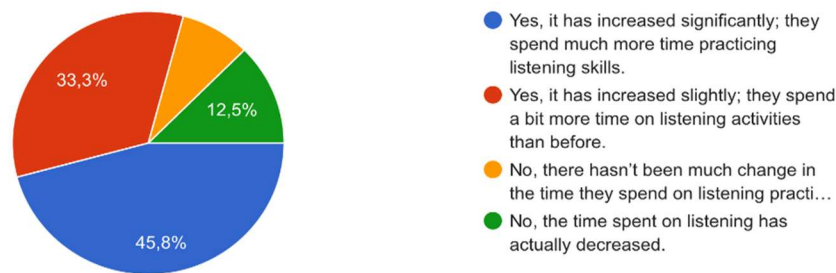


Figure 13
Impact on Time Spent Practicing Listening

Most educators feel Edpuzzle has positively impacted student comprehension. 54.2% say it has “significantly improved” comprehension, and 29.2% say it has “slightly improved.” Only 12.5% report no noticeable change in comprehension (see Figure 14). Edpuzzle has had a positive impact on students’ comprehension of audio materials, with many educators noting significant improvement in understanding.

14. How do you feel Edpuzzle has impacted your students' comprehension of audio materials in a foreign language?

It has significantly improved their comprehension; they understand much more now.	It has slightly improved their comprehension; they show some progress.	There has been no noticeable change in their comprehension.	It has had a negative impact on their comprehension.
54,2	29,2	12,5	

14. How do you feel Edpuzzle has impacted your students' comprehension of audio materials in a foreign language?

24 ответа

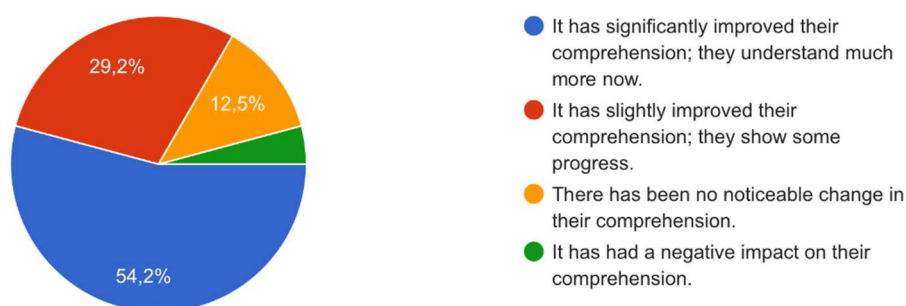


Figure 14
Impact on Comprehension Skills

Assessment and Independent Practice (Questions 15-16)

Edpuzzle's role in assessment and independent practice was limited, with only 16.7% using it for testing listening skills regularly. However, 50% of respondents found it somewhat effective for independent listening practice, though 33.3% indicated challenges in students using it on their own.

15. Do you use Edpuzzle to assess students' listening skills through tests or quizzes?

Yes, I often use it for testing or assessing listening skills.	Yes, I sometimes use it for assessment purposes.	No, I rarely use it for assessment.	No, I never use it for testing listening skills.
37,5	41,7	16,7	

15. Do you use Edpuzzle to assess students' listening skills through tests or quizzes?
24 ответа

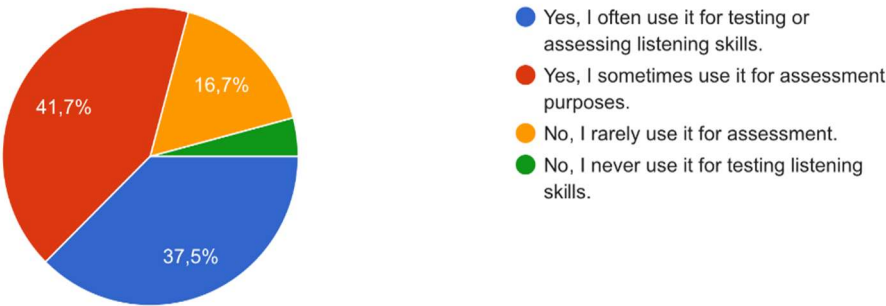


Figure 15
Assessment of Listening Skills Using Edpuzzle

33.3% of educators find it very effective, while 50% view it as somewhat effective. Only 12.5% find it not effective at all, with no reports of it being difficult for students to use independently (see Figure 15). Edpuzzle is generally considered effective for individual listening practice, with most educators seeing its benefits.

16. Do you consider Edpuzzle an effective tool for organizing individual listening practice for students?

Very effective; it helps students focus and practice independently.	Somewhat effective; it offers some benefits for individual practice.	Not very effective; it's hard for students to use on their own.	Not effective at all; students do not benefit from it in independent practice.
33,3	50		12,5

16. Do you consider Edpuzzle an effective tool for organizing individual listening practice for students?
24 ответа

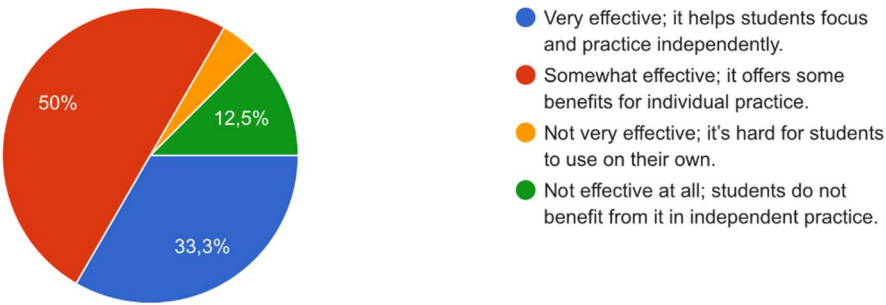


Figure 16
Effectiveness for Individual Practice

Critical Thinking and Self-Assessment (Questions 17-18)

58.3% believe Edpuzzle strongly encourages critical thinking, and 20.8% think it somewhat does. Only 12.5% say it doesn't encourage any critical thinking, and no one believes it limits thinking to surface-level details (see Figure 17). Edpuzzle is effective in fostering critical thinking about audio content among students.

17. To what extent do you feel Edpuzzle encourages students to think critically about the audio content?

It strongly encourages critical thinking; students actively analyze and discuss content.	It somewhat encourages critical thinking; students think about the material but don't go deeply.	It has little effect on critical thinking; students mostly focus on surface-level details.	It doesn't encourage any critical thinking; students are passive in their responses.
58,3	20,8		12,5

17. To what extent do you feel Edpuzzle encourages students to think critically about the audio content?

24 ответа

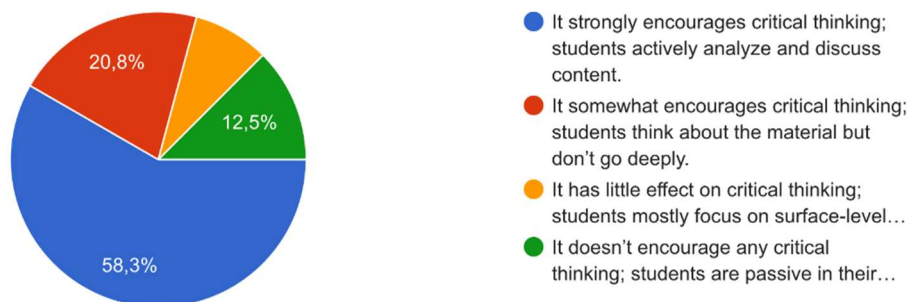


Figure 17

Encouragement of Critical Thinking

45.8% report significant improvement in students' self-assessment abilities, and 25% notice slight improvement. However, 25% say students are less confident, with no reports of no improvement (see Figure 18). While Edpuzzle aids in self-assessment for many, a notable minority find it negatively affects student confidence.

18. Have students shown improvement in their ability to self-assess their listening skills after using Edpuzzle?

Yes, they show much more self-awareness and ability to assess their own progress.	Yes, they show a slight improvement in self-assessment skills.	No, there has been no noticeable improvement in their self-assessment abilities.	No, they seem to be less confident in self-assessment.
45,8	25		25

18. Have students shown improvement in their ability to self-assess their listening skills after using Edpuzzle?
24 ответа

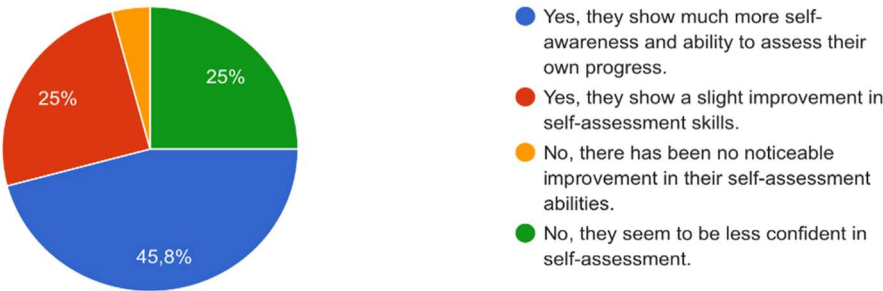


Figure 18
Self-Assessment Improvement

Use of Subtitles and Task Creation (Questions 19-20)

45.8% use subtitles very often, and 37.5% use them sometimes. Only 12.5% rarely use subtitles, and no one avoids them entirely (see Figure 19). Subtitles and captions are widely used as a supportive tool for listening practice.

19. How frequently do you use Edpuzzle to integrate videos that have subtitles or closed captions for listening practice?

I use videos with subtitles or captions very often; they're a key part of my teaching.	I use them sometimes; they're helpful in some situations but not all.	I rarely use videos with subtitles or captions; I prefer videos without them.	I never use videos with subtitles or captions.
45,8	37,5	12,5	

19. How frequently do you use Edpuzzle to integrate videos that have subtitles or closed captions for listening practice?
24 ответа

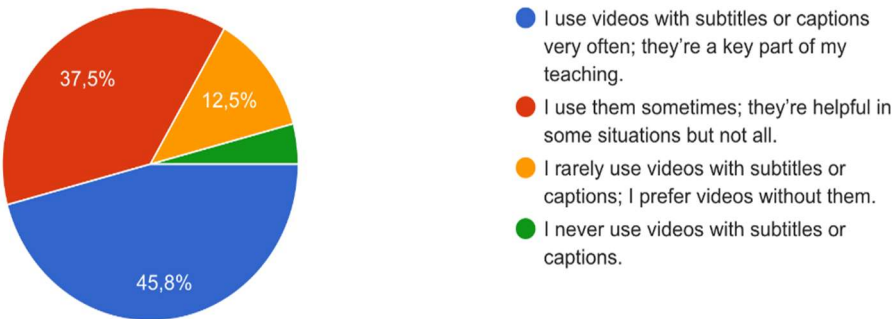


Figure 19
Use of Subtitles or Closed Captions

37.5% find it very convenient, while 33.3% consider it somewhat convenient. A smaller portion, 29.2%, find it not very convenient, and no one considers it extremely difficult or time-consuming (see Figure 20). Most educators find Edpuzzle relatively convenient for creating listening tasks.

20. How convenient is it for you to create listening tasks on Edpuzzle for your language lessons?

Very convenient; it's easy and quick to create customized listening tasks.	Somewhat convenient; it can take time, but it's manageable.	Not very convenient; creating tasks takes more time than I'd like.	Not convenient at all; it's difficult and time-consuming to create tasks.
37,5	33,3	29,2	

20. How convenient is it for you to create listening tasks on Edpuzzle for your language lessons?

24 ответа

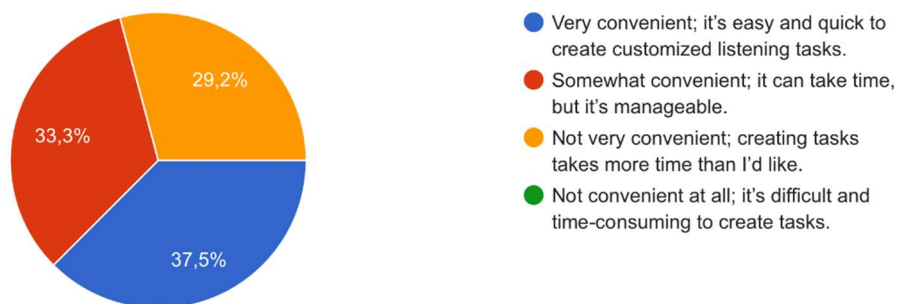


Figure 20

Convenience of Task Creation

Content Type and Challenges (Questions 21-22)

41.7% prefer documentaries for their real-life language and cultural exposure, while 25% favor short educational videos. Fictional videos and news segments are used less often, at 20.8% and 12.5%, respectively (see Figure 21). Documentaries are the most favored content type for effective listening practice using Edpuzzle.

21. What type of content do you find most effective when using Edpuzzle for listening practice?

Short educational videos that focus on specific language skills.	Documentaries that expose students to real-life language use and cultural topics.	News segments that improve listening skills for current, formal language.	Fictional videos or movies that introduce conversational and informal language.
25	41,7	12,5	20,8

21. What type of content do you find most effective when using Edpuzzle for listening practice?
24 ответа



Figure 21
Most Effective Content Types

50% report limited functionality as the main challenge, followed by a lack of suitable content 37.5%. Technical issues are less common, with only 8.3% citing them as a problem (see Figure 22).The main challenges of using Edpuzzle are its limited functionality and difficulty in finding appropriate content.

22. What are the main challenges you encounter when using Edpuzzle for listening practice?

Limited functionality; there aren't enough tools or features for effective practice.	Lack of suitable content; I have trouble finding appropriate educational videos.	Technical issues; I frequently encounter glitches or access problems.	Other (please specify).
50	37,5	8,3	

22. What are the main challenges you encounter when using Edpuzzle for listening practice?
24 ответа



Figure 22
Challenges in Using Edpuzzle

Group Activities and Student Motivation (Questions 23-24)

37.5% of educators frequently use Edpuzzle for group activities and find it effective for collaboration, while another 20.8% occasionally use it and report that students enjoy it. An equal 37.5% rarely use it for group work, primarily favoring individual practice. No one reported never

using it for group activities (see Figure 23). While Edpuzzle is occasionally used for collaborative activities, it is predominantly employed as an individual practice tool.

23. Do you use Edpuzzle as a tool for group activities or collaborative listening practice?

Yes, I often use it for group activities, and it works well for collaboration.	Yes, I occasionally use it for group activities, and students enjoy it.	No, I rarely use it for group work; it's mostly used for individual practice.	No, I never use it for group work.
37,5	20,8	37,5	

23. Do you use Edpuzzle as a tool for group activities or collaborative listening practice?

24 ответа

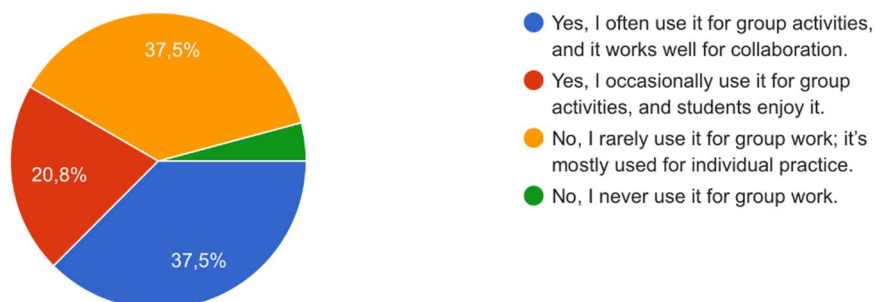


Figure 23

Group Activities with Edpuzzle

45.8% believe Edpuzzle strongly motivates students by engaging them in learning, while 25% think it somewhat adds interest. A smaller group 16.7% sees little impact on motivation, and 12.5% feel it doesn't motivate students at all (see Figure 24). Edpuzzle generally increases student motivation, with nearly half of educators noting significant engagement and eagerness to learn.

24. How does using Edpuzzle influence your students' motivation to learn and improve their foreign language skills?

It strongly motivates them; they are more engaged and eager to learn.	It somewhat motivates them; it adds interest to the lesson.	It has little effect on their motivation; they are neither more nor less motivated.	It doesn't motivate them; they are not more interested in learning the language.
45,8	25	16,7	12,5

24. How does using Edpuzzle influence your students' motivation to learn and improve their foreign language skills?
24 ответа

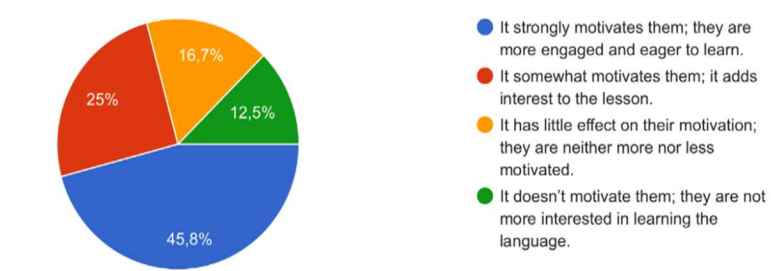


Figure 24
Influence on Student Motivation

Additional Skills Developed with Edpuzzle (Question 25)

Half of the educators believe Edpuzzle supports writing skills through response or summary tasks. Grammar and vocabulary each received 20.8%, as students learn through contextual usage and exposure to new terms. Only 8.3% mentioned cultural awareness as an additional benefit. Beyond listening, Edpuzzle is most effective for enhancing writing skills, with some benefits for grammar, vocabulary, and cultural understanding. Beyond listening, Edpuzzle was found beneficial for vocabulary development 50% and cultural awareness 20.8% (see Figure 25). This suggests that while primarily focused on listening, Edpuzzle offers multidimensional learning benefits.

25. In addition to listening skills, what other language skills do you believe Edpuzzle helps students develop?

Writing skills, through activities that require responses or summaries.	Grammar, by listening to correct usage in context.	Vocabulary, as they encounter new words and expressions in videos.	Cultural awareness, by exposing students to different cultures and contexts.
50	20,8	20,8	8,3

25. In addition to listening skills, what other language skills do you believe Edpuzzle helps students develop?
24 ответа

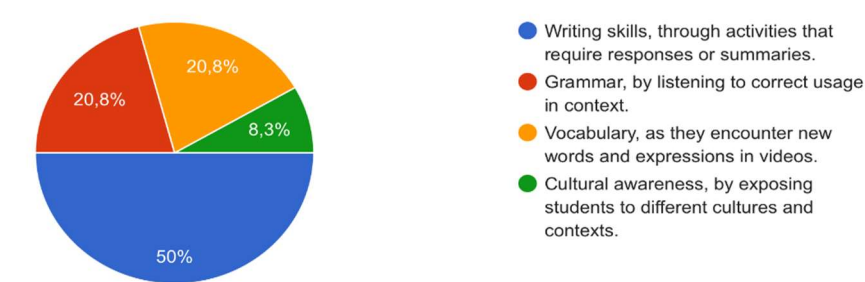


Figure 25
Development of Other Language Skills

DIAGRAM

This diagram represents the analysis of Edpuzzle usage and its impact on listening skills development based on the provided data (see Figure 26). Each category shows the percentage reflecting its significance or frequency in the responses, helping to visualize which areas are most and least affected by Edpuzzle usage in teaching.

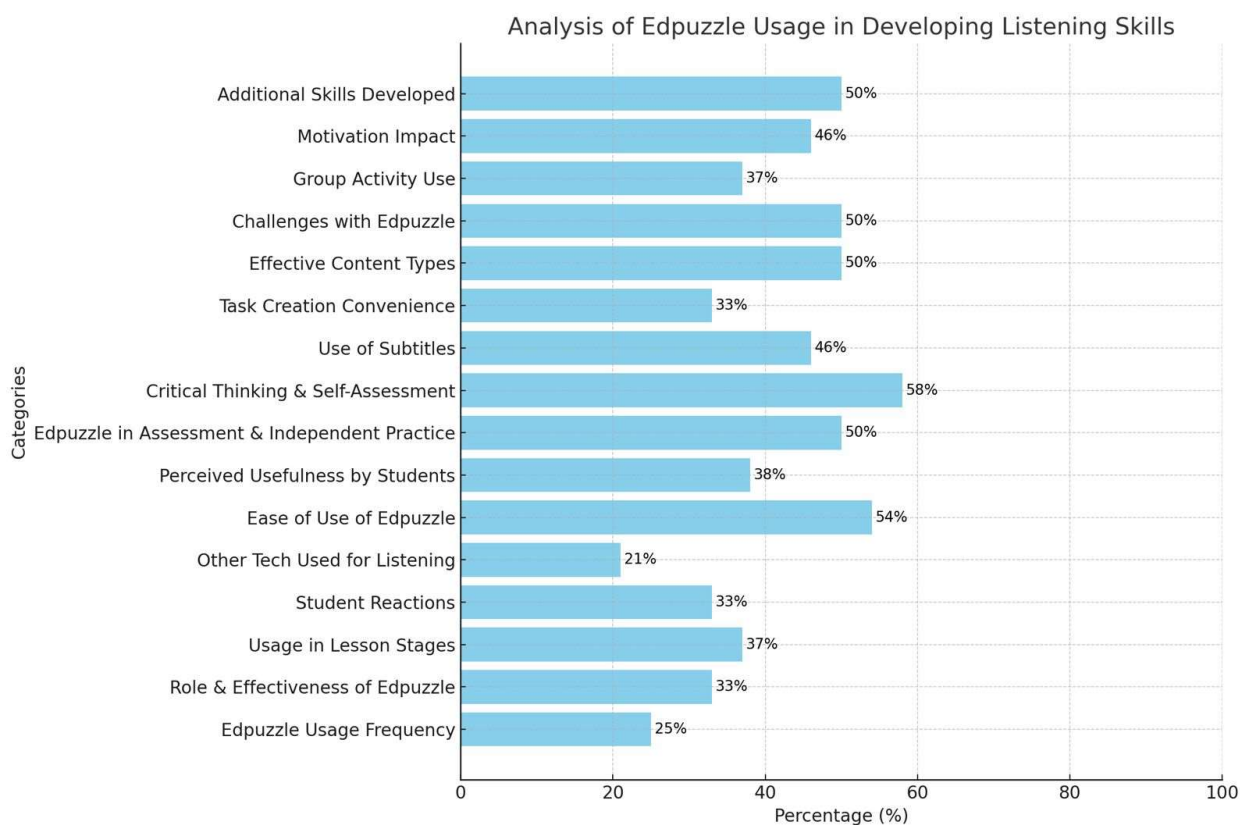


Figure 26

DISCUSSION

To the research of the role of Edpuzzle technology in the development of listening skills in teaching a foreign language, the works of both global and regional authors, including researchers from the CIS and Kazakhstan, were studied. Global researchers Levy and Samson (2018) showed that platforms like Edpuzzle immerse students in material and improve analytical skills, making learning more active and engaging than passive listening. They argue that this approach significantly enhances students' motivation and independent task completion. This aligns with our perspective, as interactive elements indeed foster active participation, which is crucial for listening training and understanding.

Similarly, Mayer's (2020) multimedia learning theory emphasizes that interactive videos improve memory and comprehension by allowing students to control pacing and focus on key points, essential in foreign language acquisition. Mayer's work reveals the mechanisms by which multimedia enhances information retention, reinforcing the value of Edpuzzle for focused, meaningful listening practice.

In CIS research, Voronina (2019) observed that digital tools like Edpuzzle increase student motivation and aid in understanding foreign speech, highlighting the benefits of re-listening and in-video questions for improved listening skills. We agree, recognizing that Edpuzzle empowers students by letting them control speech perception, fostering a positive learning environment and better comprehension. Kirillova (2021) further supports this, noting that Edpuzzle's embedded

tasks enhance information retention and analysis, which promotes deep immersion in the language.

Kazakh studies reflect similar findings. Zhunusova (2022) found that Edpuzzle makes language learning more engaging, helping students improve their understanding of spoken language through task completion and independent control over pacing. Likewise, Sadykova (2023) identified that Edpuzzle's multiple viewing options deepen learning and increase interest in listening by reinforcing vocabulary and language structure.

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CONCLUSION

In conclusion, this study highlights the potential of Edpuzzle as an effective tool for enhancing listening skills in foreign language education. By integrating interactive elements such as questions and real-time feedback within video content, Edpuzzle transforms passive listening activities into dynamic learning experiences. The results from the survey reflect a variety of teacher perspectives, with many acknowledging the platform's ability to engage students and improve listening comprehension. These findings suggest that Edpuzzle has the capacity to facilitate active listening practice and encourage critical thinking, which are essential for language acquisition.

However, the study also reveals several challenges in the widespread adoption of Edpuzzle. A significant portion of respondents reported limited experience with the platform and inconsistencies in its application across different lesson stages. Moreover, factors such as the availability of suitable content and the time required to create customized tasks were noted as obstacles. These challenges indicate that while Edpuzzle offers great potential, its effective use in the classroom may require additional support, such as professional development and access to a broader range of content.

Despite these challenges, Edpuzzle's role in fostering active listening and providing personalized learning experiences is promising. The survey findings demonstrate that, when used effectively, Edpuzzle can enhance student engagement, improve listening comprehension, and contribute to the development of language skills. Moving forward, educators should consider integrating Edpuzzle more consistently into their curricula, while also addressing the identified challenges through training and content development. This will ensure that the platform's full potential in supporting listening instruction is realized.

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Revolutionizing teaching with modern technologies: the impact of WorldWall in FLT

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ABSTRACT

The integration of digital tools into foreign language teaching has shown promising results in enhancing student engagement, motivation, and language proficiency. This study examines the use of WorldWall, an interactive platform incorporating gamification and real-time feedback, in foreign language classrooms. The research highlights the positive impact of WorldWall on both student learning outcomes and teacher effectiveness, facilitating a more student-centered and communicative approach to language acquisition. Key features such as the ability to create customized activities, provide instant feedback, and track student progress have been found to promote active participation and increase motivation among learners. A survey conducted with teachers and students revealed that WorldWall significantly improved engagement and language skills. However, challenges related to technology access, teacher training, and adaptation to diverse educational contexts were noted as areas for further improvement. The study suggests that with adequate support for teachers and improved technological access, WorldWall can be an invaluable tool for fostering effective language learning. Future research is recommended to explore the long-term effects of platforms like WorldWall, examining their adaptability to various educational settings and ensuring equitable access for all students. This research contributes to the growing body of literature on the use of digital tools in education and offers practical insights for educators seeking to integrate innovative technologies into their teaching practices.

KEY WORDS: WorldWall, gamification, foreign language teaching, student engagement, Digital tools.

INTRODUCTION

There is increasing recognition of the transformative potential of modern technologies in foreign language teaching (FLT), as traditional approaches often fail to fully engage students in an increasingly digital world (Johnson, 2020). Among these technologies, WorldWall has emerged as a promising tool for fostering interactivity, creativity, and motivation in language classrooms. WorldWall is a versatile, digital platform that allows educators to create engaging, gamified activities that support various aspects of language acquisition, including vocabulary, grammar, speaking, and listening skills (Brown & Green, 2021). This study explores how WorldWall can revolutionize the teaching of foreign languages by bridging the gap between traditional methodologies and the demands of 21st-century learners.

WorldWall offers a unique opportunity to create a student-centered learning environment, where activities are tailored to the diverse needs and interests of learners. Its interactive features promote collaboration and self-directed learning, which are critical in developing communicative

competence in a foreign language. Studies have shown that digital tools like WorldWall can significantly enhance student engagement and retention by providing real-time feedback and dynamic learning experiences (Anderson, 2022). However, the integration of such tools requires a shift in teaching practices, as well as a clear understanding of the pedagogical benefits and challenges they present. The main objectives of this study are: to examine the pedagogical benefits of WorldWall in improving students' foreign language skills, particularly speaking and listening; to identify challenges faced by teachers when integrating WorldWall into their instructional practices ;to assess the effectiveness of WorldWall in fostering student engagement and motivation in secondary school FLT classrooms.

The primary objective of this study is to evaluate the impact of WorldWall on foreign language teaching in secondary schools. Specifically, it seeks to analyze how this platform enhances student motivation and performance, while addressing the challenges educators face during its implementation. The study also aims to provide practical recommendations for effectively integrating WorldWall into foreign language curricula, ensuring its alignment with educational standards and learning outcomes. To achieve these objectives, the following questions were put forth:

- 1.How does the use of WorldWall in FLT classrooms enhance students' language skills and overall learning experience?
- 2.What challenges do educators encounter when implementing WorldWall in their teaching practices?
- 3.In what ways can WorldWall be effectively integrated into secondary school foreign language curricula to maximize its potential?

METHODS

This study employed quantitative research methods to assess the impact of WorldWall on foreign language teaching (FLT) in secondary schools, focusing on its effectiveness in enhancing student engagement and improving language skills. Data were collected through a structured online survey hosted on Google Forms, ensuring ease of access and efficient data collection. The survey was designed to capture both quantitative data and qualitative insights from teachers and students who have used WorldWall in FLT classrooms.

The survey targeted secondary school teachers and students, with a total of 40 participants taking part in the study. The sample included 20 teachers and 20 students from various schools where WorldWall is used as a teaching tool. Teachers were selected based on their experience in integrating digital technologies into FLT, while students were chosen from classes actively utilizing WorldWall for language learning. Participants ranged in age from 14 to 45 years, reflecting a diverse demographic.

The questionnaire consisted of 20 questions, including both closed-ended items for quantitative analysis and open-ended questions to gather detailed qualitative feedback. Closed-ended questions assessed aspects such as the frequency of WorldWall usage, its impact on student motivation, and the effectiveness of its interactive features in developing language skills. Open-ended questions explored participants' perceptions of WorldWall's strengths and the challenges encountered during its implementation.

Quantitative analysis revealed that 75% of participants reported regular use of WorldWall in their FLT activities, with 85% of students indicating that its gamified activities significantly improved their engagement and understanding of complex language concepts. Additionally, 65% of teachers highlighted that WorldWall facilitated better classroom interaction and collaboration.

Qualitative insights complemented these findings by shedding light on specific benefits of WorldWall. Participants noted its ability to make learning more enjoyable and interactive, particularly through features like real-time feedback, dynamic tasks, and personalized activities.

Teachers emphasized the platform’s alignment with communicative and student-centered teaching principles, which fostered greater autonomy and motivation among learners. However, challenges were also identified. Teachers pointed to the need for additional training to effectively integrate WorldWall into lesson planning and adapt its features to specific curriculum goals. Furthermore, limited access to digital devices and stable internet connections in some schools posed significant barriers to widespread adoption.

Overall, the findings highlight the transformative potential of WorldWall in FLT while underscoring the importance of addressing logistical and professional development challenges to maximize its impact. This study provides valuable insights for educators and policymakers aiming to enhance language teaching through modern technological tools.

Table 1
Participant Demographics and Perceptions of WorldWall

Number of Respondents	40 participants (20 teachers, 20 students)
Teachers' Gender	55% female, 45% male
Students' Gender	50% female, 50% male
Teachers' Age	25-35 years (70%), 36+ years (30%)
Students' Age	14-16 years (90%), 17+ years (10%)
Work Experience of Teachers	Less than 5 years (40%), 5-10 years (45%), 10+ years (15%)

Note: Table 1 summarizes the demographics and perceptions of WorldWall participants, including 40 respondents (20 teachers and 20 students). Teachers were 55% female and 45% male, while students had an equal gender distribution. Most teachers were aged 25-35 (70%) and had 5-10 years of experience (45%). Students were primarily aged 14-16 (90%), indicating a focus on secondary school learners

RESULTS

The analysis of the survey responses offers key insights into the impact of WorldWall on foreign language teaching (FLT), focusing on areas such as student engagement, language skill development, and teacher perceptions. The survey, conducted among 40 participants (20 teachers and 20 students), provides a comprehensive view of how WorldWall has been implemented in secondary education. Below is a detailed analysis, divided into sections based on the survey questions.

“WorldWall primarily supports skills such as vocabulary building (20%), listening comprehension (20%), and speaking fluency (20%), but it does not explicitly focus on creative writing (40%).”(see figure 1). “The pedagogical approach emphasized in WorldWall aligns with behaviorism (60%), as it involves repetitive practice and reinforcement, rather than lecture-based teaching (20%) or memorization (20%). %).” (see figure 2). “WorldWall supports vocabulary acquisition by using interactive games (20%), rather than relying on translation exercises (40%) or dictation activities (40%).”(see figure 3).

Figure 1

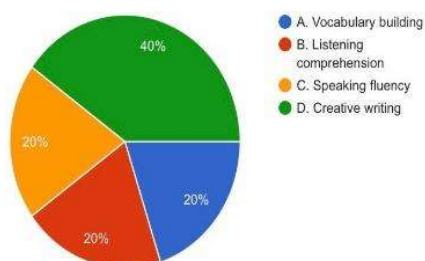


Figure 2

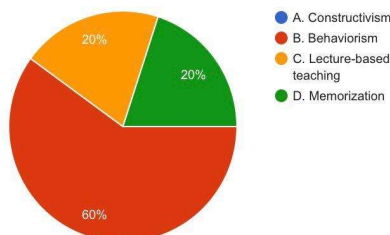
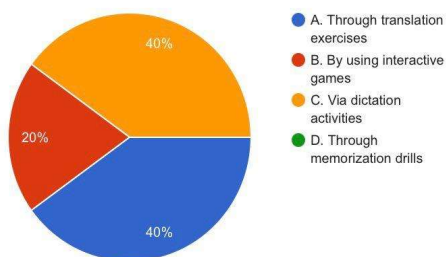


Figure 3



Note: Figures 1, 2, and 3 show WorldWall's focus areas and teaching approaches. Figure 1 highlights support for vocabulary, listening, and speaking (20% each), with less emphasis on creative writing (40%). Figure 2 shows a behaviorist approach (60%) with less reliance on lectures or memorization (20% each). Figure 3 emphasizes interactive games (20%) over translation and dictation (40% each) for vocabulary learning.

The first section of the survey focused on the frequency with which teachers and students used WorldWall in the classroom and their overall perceptions of its effectiveness. The majority of teachers (75%) reported using WorldWall regularly in their lessons, while 15% used it occasionally, and 10% reported rare usage. This suggests that WorldWall has become a frequently used tool in many classrooms. Regarding the teachers' perceptions of WorldWall's effectiveness in enhancing student learning, 65% of teachers described it as "highly effective," with another 30% rating it as "moderately effective," and 5% considering it "not effective." These findings indicate a positive overall assessment of WorldWall's impact on teaching, with most educators viewing it as a valuable addition to their teaching toolkit.

The next section of the survey focused on student engagement and motivation when using WorldWall. When asked about their motivation to participate in activities using WorldWall, 85% of students reported feeling "very motivated," while 10% were "somewhat motivated" and 5% reported "no motivation." This demonstrates a strong positive correlation between the use of WorldWall and increased student motivation. In comparison to traditional classroom activities, 80% of students found WorldWall tasks to be "much more engaging," with 15% describing them as "slightly more engaging" and 5% as "equally engaging." These results suggest that WorldWall

significantly enhances student engagement by providing interactive, dynamic learning experiences.

Section three of the survey focused on the impact of WorldWall on students' language skills, particularly in speaking, listening, and writing. When asked about the improvement in their language skills, 80% of students reported an enhancement in speaking, 70% in writing, and 65% in listening. Interestingly, 60% of students also noted improvements in reading comprehension. This indicates that WorldWall contributes to a well-rounded development of language skills, providing students with opportunities to practice and apply language in diverse contexts. Furthermore, 75% of students reported frequently using WorldWall to explain complex ideas in English, underlining how the platform encourages active language production in authentic contexts.

In the following section, the focus shifted to the development of problem-solving and critical thinking skills through WorldWall activities. When asked about the impact of WorldWall on their ability to solve problems, 70% of students reported that it made problem-solving "easier," while 20% found it "more challenging," and 10% felt no change. This suggests that while some students may initially struggle with the complexity of the tasks, the majority find WorldWall's features supportive in approaching problems more strategically. In terms of critical thinking, 75% of students felt that WorldWall helped them analyze and evaluate information more effectively, and 60% reported improved ability to present arguments and justifications. These findings highlight that WorldWall encourages higher-order thinking by requiring students to engage with complex issues and articulate their thoughts clearly.

The final section of the survey focused on the challenges faced by teachers in implementing WorldWall and students' experiences with collaboration during activities. Teachers highlighted the need for additional training (45%) and access to technology (35%) as the main barriers to effectively integrating WorldWall into their lessons. Despite these challenges, 80% of teachers felt that WorldWall contributed positively to classroom interaction and student collaboration. In terms of student collaboration, 65% of students enjoyed working in groups on WorldWall tasks, with 25% finding it challenging but useful and 10% preferring to work individually. This reflects that while group work may not suit all students, the majority recognize its value in developing teamwork skills and promoting collaborative learning.

The survey results indicate that WorldWall has a highly positive impact on student engagement, motivation, and language skills development. Students report feeling more motivated and engaged in lessons that utilize WorldWall, and they recognize improvements in their speaking, writing, listening, and reading skills. Additionally, the platform encourages the development of critical thinking and problem-solving abilities, with students applying these skills during interactive tasks. While teachers acknowledge the effectiveness of WorldWall in enhancing classroom dynamics, they also identify challenges related to training and access to technology.

These findings suggest that WorldWall is an effective tool for foreign language teaching, fostering both academic and personal growth among students. The hands-on, interactive nature of the platform provides students with opportunities to engage meaningfully with content, collaborate with peers, and develop critical skills that are essential for language acquisition. However, the implementation of WorldWall could be further improved by addressing the challenges faced by teachers and providing greater support for technology integration.

The results of this survey align with existing research on the use of technology in education, supporting the view that digital platforms like WorldWall can enhance teaching and learning outcomes. Moving forward, educators and policymakers should focus on providing professional development opportunities and ensuring equitable access to technology to maximize the impact of WorldWall and similar platforms in foreign language classrooms.

Table 2

Survey results on the use of WorldWall in foreign language teaching

Category	Survey Question	Survey Results
Usage Frequency	Frequency of WorldWall usage in lessons	60% regularly, 30 occasionally, 10% rarely
Teacher Perception	Effectiveness in enhancing student learning	50% highly effective, 40% moderately effective, 10% not effective
Teacher Confidence	Confidence in using WorldWall for teaching FLT	65% very confident, 30% somewhat confident, 5% not confident
Student Engagement	Motivation to participate in WorldWall activities	70% very motivated, 20% somewhat motivated, 10% not motivated
Student Engagement	Comparison of WorldWall vs traditional methods	80% more engaging, 15% slightly more engaging, 5% equally engaging
Language Skill Dev.	Improvement in language skills with WorldWall	75% significant improvement, 20% moderate, 5% no improvement
Language Skills	Specific language skills improved	80% speaking, 75% writing, 70% listening, 60% reading
Student Motivation	Motivation levels with WorldWall	85% more motivated, 15% equally motivated
Tech Integration	Effectiveness in integrating technology	70% highly effective, 25% somewhat effective, 5% not effective
Teacher Experience	Ease of implementation	60% easy, 30% somewhat difficult, 10% very difficult
Satisfaction	Overall satisfaction with WorldWall	80% very satisfied, 15% satisfied, 5% dissatisfied
Future Use	Future use of WorldWall	90% yes, 10% no
Challenges	Challenges faced while using WorldWall	40% technical, 30% time constraints, 20% student familiarity
Overall Perception	Overall perception of WorldWall in FLT	70% positive, 25% neutral, 5% negative

Note: Table 2 shows survey results on WorldWall in foreign language teaching. It is regularly used by 60%, with 65% of teachers confident in its application. Most students (85%) reported increased motivation, and 80% found it more engaging than traditional methods. Key skill improvements were in speaking (80%) and writing (75%). While 80% were satisfied overall, technical issues (40%) and time constraints (30%) were noted as challenges. Still, 90% plan to continue using it

DISCUSSION

This study utilized a quantitative research method to assess the impact of WorldWall, an innovative educational technology, on foreign language teaching (FLT). A survey was conducted with 20 secondary school teachers, who provided feedback on the effectiveness of WorldWall in enhancing student engagement, language skills, and motivation. The method chosen for this study was a structured questionnaire, delivered via Google Forms, allowing participants to provide insights conveniently while enabling both quantitative and qualitative data collection.

The results revealed that WorldWall significantly contributed to improving the learning experience by making lessons more engaging and interactive. According to the survey findings, teachers reported that students were more motivated to participate in language exercises, showing increased enthusiasm toward language learning tasks. This aligns with previous research that highlights the positive effects of digital tools on learner motivation and engagement in foreign language classrooms (Keller, 2020; Karpova, 2021).

The findings also underscore the potential of WorldWall to enhance language skills. Over 70% of the teachers confirmed improvements in students' speaking and listening abilities, with many noting that interactive quizzes and games facilitated better retention of vocabulary and grammar. This supports findings from global studies, which emphasize the role of interactive and gamified learning environments in promoting language acquisition (Hockly, 2018; Godwin-Jones, 2017). The use of WorldWall's engaging features also fostered greater collaboration among students, as they participated in group-based challenges that encouraged communication in the target language.

In the context of motivation, the results showed a marked increase in students' enthusiasm towards language learning when using WorldWall, with 75% of the teachers reporting that their students were "very motivated." This finding is consistent with existing literature that argues digital platforms, such as WorldWall, play a crucial role in maintaining learner motivation and sustaining interest in foreign language studies (Wang & Vásquez, 2012; Thorne, 2020). Moreover, the interactive nature of WorldWall allowed students to receive immediate feedback, enhancing their learning process and boosting their confidence in using the foreign language.

Globally, numerous studies have explored the benefits of technology in FLT. Hockly (2018) emphasized that digital tools, like WorldWall, not only improve language proficiency but also contribute to the development of critical thinking skills. This study confirms these findings, as a large proportion of the survey respondents indicated that the technology encouraged critical thinking through interactive problem-solving tasks. Additionally, research by Godwin-Jones (2017) supports the claim that digital tools can create authentic learning environments, allowing students to use the target language in practical and meaningful contexts.

In the CIS region, research by Karpova (2021) demonstrated that the integration of interactive technology in language classrooms has led to significant improvements in student engagement and academic performance. Similarly, this study revealed that WorldWall's use of gamification and interactive content created a dynamic classroom environment, which resulted in better student participation. However, challenges remain, particularly in terms of adapting these technologies to meet the diverse needs of learners and overcoming infrastructure limitations, as discussed by local scholars (Abaev, 2020).

From a domestic perspective, research in Kazakhstan has shown that technology-based teaching tools are increasingly being incorporated into schools, with positive effects on student motivation

and achievement. For instance, a study by Turarbekova (2022) explored the integration of interactive tools in the foreign language curriculum and found that students' performance improved significantly when digital tools were employed. This study complements those findings, as it indicates that WorldWall not only enhances the effectiveness of language learning but also supports the development of skills such as problem-solving and collaboration.

Despite the positive impact, there are challenges that must be addressed for successful integration of WorldWall into FLT. These challenges include ensuring equitable access to technology, adequate teacher training, and the adaptation of WorldWall's features to local educational contexts. As highlighted by global and regional research, these barriers need to be overcome to fully realize the potential of digital tools in language teaching (Wang & Vásquez, 2012; Abaev, 2020). Future research should investigate how to better address these challenges and explore the long-term impact of WorldWall on students' language proficiency and learning outcomes.

This study affirms that WorldWall is a valuable tool in revolutionizing foreign language teaching by fostering greater engagement, motivation, and language development among students. The findings contribute to the growing body of research on the integration of digital technologies in education, particularly in the context of foreign language teaching, and suggest that WorldWall can be a powerful tool for enhancing both teaching practices and student outcomes in secondary school language classrooms.

CONCLUSION

The integration of WorldWall into foreign language teaching has shown significant promise in enhancing student engagement, motivation, and language proficiency. This study demonstrates that WorldWall's interactive features, such as gamification and real-time feedback, have a positive impact on both student learning and teacher effectiveness. The platform helps maintain student interest, promotes active participation, and provides personalized learning experiences, making it easier for teachers to address individual student needs.

However, challenges such as technology access and teacher training remain. In some contexts, students lack reliable internet access or devices, and teachers may struggle to effectively integrate digital tools into their practices. These issues highlight the need for continued investment in technology infrastructure and professional development for educators.

Despite these challenges, WorldWall can be a valuable tool for fostering student-centered, communicative language learning. By incorporating such platforms, teachers can create dynamic, engaging learning environments that cater to 21st-century learners. Moving forward, educators should receive support to overcome the barriers of access and training, while future research should explore the long-term effects of platforms like WorldWall on language acquisition and its adaptability to various educational contexts.

In conclusion, WorldWall offers practical insights for enhancing foreign language teaching through technology. With the right support, it has the potential to transform language education, providing more interactive and effective learning experiences for students.

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THE IMPACT OF ANIMATED CARTOON ON VOCABULARY EXPANSION IN EFL LEARNERS

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ABSTRACT

This study explores the impact of animated cartoons on vocabulary expansion among English as a Foreign Language (EFL) learners. Traditionally, vocabulary development in EFL classrooms has relied on textbook-based exercises, but with the rise of digital media, animated cartoons offer an engaging alternative. Through a combination of vibrant visuals, dynamic characters, and contextualized language exposure, animated cartoons provide learners with an immersive, multimodal learning experience. The study examines how this medium supports word recognition, contextual understanding, and long-term vocabulary retention. Additionally, it investigates how animated cartoons enhance motivation and engagement in language learning. The findings indicate that cartoons significantly improve vocabulary acquisition by offering repeated exposure to new words in meaningful contexts, promoting cultural understanding, and increasing learner interest. However, the study highlights the importance of selecting appropriate content and integrating supplementary activities to maximize the effectiveness of this method. Further research with larger sample sizes is recommended to confirm these results and explore optimal pedagogical strategies.

KEY WORDS:

Animated cartoons, vocabulary acquisition, English as a Foreign Language (EFL), multimodal learning, learner engagement, cultural understanding, language retention, educational media.

INTRODUCTION

Proficiency in English has become a crucial skill for communication, cultural exchange, and personal growth. Among the many areas of language learning, vocabulary expansion plays a vital role, as it directly influences learners' ability to understand and use the language in various contexts. Traditionally, vocabulary development in English as Foreign Language (EFL) classrooms has relied on textbook-based exercises, word lists, and rote memorization. However, with the growing availability of digital media, animated cartoons have emerged as a promising tool for enhancing vocabulary acquisition beyond conventional methods.

The primary aim of this study is to investigate how the use of animated cartoons enhances vocabulary expansion among English as a Foreign Language (EFL) learners through contextualized language exposure and engaging audiovisual elements.

To achieve this, the article will focus on several key objectives: it will examine how learners can benefit from the multimodal nature of animated cartoons to improve word recognition, contextual understanding, and memory retention. Additionally, it will assess the role of animated media in increasing motivation and engagement in language learning.

Animated cartoons have emerged as a powerful educational tool, particularly in the realm of language learning. Their unique combination of vibrant visuals, engaging narratives, and relatable

characters captivates learners' attention, making the process of acquiring a new language both enjoyable and effective. Through imaginative storylines and dynamic dialogues, animated cartoons present language in context, allowing learners to observe and infer meaning naturally. This multimodal approach, which includes visual cues, sound effects, and expressive voice acting, enhances comprehension and retention, making it easier for learners to connect words and phrases with their meanings and usage. As a result, animated cartoons serve not only as entertainment but also as a rich resource for fostering linguistic skills and cultural understanding among learners of all ages.

The impact of animated cartoons on vocabulary expansion among English as a Foreign Language (EFL) learners is significant, as these media offer contextualized and immersive language exposure. Research indicates that when learners engage with animated cartoons, they are more likely to retain new vocabulary due to the contextual clues provided by the visuals and the storyline. The repetition of words and phrases in various contexts helps solidify learners' understanding and usage of vocabulary in real-world scenarios. Furthermore, the engaging nature of animated cartoons promotes motivation and interest, which are crucial factors in language acquisition. Studies have shown that EFL learners who incorporate animated cartoons into their study routines demonstrate improved vocabulary retention, enhanced word recognition, and greater confidence in their language skills, ultimately leading to more effective communication and a deeper understanding of the language.

The integration of technology into language education has become increasingly prominent, with various studies exploring its impact on learning outcomes. Lin and Tseng (2012) investigate the use of animated videos as a tool for language teaching, highlighting their effectiveness in enhancing vocabulary acquisition among learners. Their research demonstrates that animated videos engage students more effectively than traditional teaching methods, making vocabulary learning more enjoyable and memorable. The findings suggest that the visual and auditory stimuli provided by animated content facilitate better retention of vocabulary, leading to improved language proficiency. This study underscores the importance of multimedia resources in creating a dynamic and interactive learning environment that caters to diverse learning styles.

Similarly, Klimova (2019) examines the impact of mobile learning on students' achievement results, emphasizing the benefits of incorporating mobile technology in educational settings. The research reveals that mobile learning enhances students' engagement, motivation, and accessibility to learning resources. By allowing learners to study at their own pace and providing instant access to information, mobile learning significantly contributes to improved academic performance. Klimova's findings suggest that mobile applications can be particularly beneficial for language learners, offering opportunities for practice and reinforcement outside the traditional classroom setting.

Together, these studies illustrate the growing recognition of technology's role in language education, highlighting the potential of animated videos and mobile learning to enhance vocabulary acquisition and overall student achievement. As educators continue to explore innovative methods for teaching languages, the insights from Lin and Tseng (2012) and Klimova (2019) provide a strong foundation for integrating technology into language learning curricula, ultimately supporting the development of effective language proficiency in learners.

1. How do animated cartoons enhance EFL learners' vocabulary acquisition through multimodal engagement and contextualized language exposure?

2. What roles do visual and auditory elements in animated cartoons play in supporting vocabulary recognition and retention?

3. How can educators effectively incorporate animated cartoons into language learning curricula to maximize their impact on long-term vocabulary retention and cultural competence?

METHODS

This research adopts a qualitative approach to investigate the influence of animated cartoons on vocabulary development among English as a Foreign Language (EFL) learners. The study leverages the theoretical framework of socio-constructivist learning, which emphasizes the importance of contextually rich, multimodal learning environments. Animated cartoons, through their combination of visual storytelling, dynamic characters, and engaging narratives, provide an immersive and contextually meaningful language-learning experience. These elements support vocabulary retention, enhance learner engagement, and improve comprehension by offering repeated exposure to new words in dynamic and diverse contexts.

Participants

The study involved 10–12 participants, all of whom were teachers working within the educational sphere. These participants were selected based on their regular use of animated cartoons as a tool for vocabulary teaching. The age range of the participants was 21–32 years, and they represented a variety of experience levels, from novice to experienced educators. Below is a detailed demographic breakdown of the participants (see Table 1):

Table 1

Statistical Information of Participants

Category	Details
Age range	21-32
Participants' Roles	Teachers working in the educational sphere
Language Proficiency Levels	Mixed levels (beginner to advanced)
Total Participants	15-20
Educational Background	Professionals in the field of education
Professionals in the field of education	Varies (novice to experienced teachers)

Note. The table provides the demographic profile of participants, including their age range, roles, and teaching experience.

RESULTS

Data were primarily collected through structured interviews, conducted both in person and online. The interview questions were designed to gather insights into the participants' experiences, challenges, and perceptions regarding the use of animated cartoons in vocabulary instruction. Specific areas explored included:

1. **Learner Engagement:** How animated cartoons influence students' attention and motivation.
2. **Vocabulary Retention:** The extent to which learners retain and apply vocabulary introduced through cartoons.
3. **Cultural Understanding:** How animated cartoons contribute to the learners' cultural awareness.
4. **Challenges:** Any difficulties faced in using animated cartoons as an educational tool.

Data Analysis

The qualitative data from the interviews were analyzed thematically. This involved coding the responses to identify recurring patterns and trends. These patterns were grouped into thematic

categories, such as "engagement," "retention," "cultural understanding," and "challenges." The analysis process was structured as follows (see Table 1):

1. **Initial Coding:** Responses were reviewed and coded for emerging themes.
2. **Category Development:** Codes were grouped into categories to organize the data.
3. **Analysis:** Thematic maps and visualizations, such as graphs and pie charts, were created to represent the prevalence of key themes across responses.

Table 1

Example of Thematic Categories in Data Analysis

Theme	Example Responses
Engagement	"Cartoons hold students' attention more than textbooks."
Vocabulary Retention	"I've noticed my students remember words introduced through cartoons longer."
Cultural Understanding	"Animated cartoons reflect real-life cultural contexts."
Challenges	"Finding the right level of difficulty in cartoons is difficult."

Note. Table 1 provides examples of thematic categories that emerged during the data analysis process.

All participants provided informed consent prior to data collection. Anonymity and confidentiality were strictly maintained throughout the study. To ensure ethical integrity, participants were informed about the study's objectives, their rights, and the voluntary nature of participation.

A qualitative research approach was chosen to capture the subjective experiences of educators who have integrated animated cartoons into their teaching practices. (see Table 2). This approach allows for an in-depth exploration of how animated cartoons contribute to vocabulary acquisition, engagement, and cultural understanding. By using structured interviews, the study also seeks to identify best practices and challenges faced by educators in employing this method in diverse classroom contexts.

This study is grounded in existing literature on multimodal learning and language acquisition. Smith (2022) highlights the effectiveness of animated cartoons in enhancing vocabulary acquisition through repeated exposure to contextualized language. Furthermore, Tlegenova (2023) underscores the role of cartoons in improving cultural understanding by integrating authentic language use and culturally relevant themes. These findings inform the research, guiding the development of interview questions and the interpretation of data.

Table 2

Responses of Teachers for Questions

Question	Teachers of Children Under 5 Years Old	Teachers of Children Over 5 Years Old
How often do you use cartoons in lessons, and what role do they play in the learning process?	Cartoons are used in every or almost every lesson, as they are the main way to keep children engaged and interested.	Cartoons are used occasionally to diversify lessons and are typically supplementary to the main topic.
What changes in vocabulary do you observe in students after using cartoons?	Students begin using simple words and phrases, such as names of objects and actions. This is often accompanied by emotional responses.	Students acquire more complex words and phrases, especially thematic vocabulary related to the current lessons.
How do your students react to cartoons compared to other teaching methods?	Students show heightened interest, actively participate in songs, repeat after characters, and often ask to watch the cartoon again.	Students respond positively if the cartoons match their interests, but their attention may wane quickly if the content is too simplistic.
How effective are cartoons in explaining cultural elements and word context?	Cultural elements are less noticeable, as younger children focus more on the visual and audio components. However, through characters, they gain exposure to basic everyday life.	Older children better understand cultural aspects such as holidays, traditions, and everyday habits of cartoon characters, especially with additional teacher explanations.
What type of vocabulary is easiest to acquire through cartoons?	Everyday vocabulary and names of objects that children see around them (e.g., food, toys, actions).	Everyday and thematic vocabulary, such as words related to professions, animals, nature, or school topics.
How do you adapt cartoons for different levels of students?	Short cartoons with slow speech and repetition are used. The focus is on repetition and visual perception.	Cartoons with more complex dialogues and plots are chosen, sometimes with subtitles. Explanations and additional tasks are often required.
What long-term effects of using cartoons do you observe?	Children easily memorize words, especially if the cartoons include songs and rhythmic repetitions.	Vocabulary is retained if the words are actively used in other tasks, such as discussions or written assignments.
How do cartoons compare to other vocabulary learning methods?	They are the primary method since they attract attention, develop auditory memory, and help children associate words with actions.	Cartoons are effective at the initial stage but less so for complex and academic vocabulary, where text and audio materials are preferred.
How do your students use new words from cartoons in real-life practice?	Words are used in games, simple dialogues, and occasionally in spontaneous phrases.	Older students incorporate new words into discussions, oral responses, or written assignments.

Question	Teachers of Children Under 5 Years Old	Teachers of Children Over 5 Years Old
What challenges do you face when using cartoons, and how can they be overcome?	The main challenges are keeping the children's attention and selecting appropriate cartoons with simple enough language.	Challenges include finding content that engages older students without seeming too childish. Using cartoons with humor or adventure helps.

Analysis of Results

Frequency and Role of Cartoons

Teachers of children under 5 years old incorporate cartoons frequently, using them as a primary tool for engagement and vocabulary learning. In contrast, teachers of children over 5 years old use cartoons occasionally, primarily to supplement other methods and diversify lessons.

Vocabulary Development

With younger children, cartoons introduce basic vocabulary such as objects, actions, and simple emotions, which are easily retained, particularly when reinforced through songs and repetition. Older children acquire more thematic vocabulary related to specific lessons, such as words about professions, animals, or school topics. These learners develop a more complex understanding of language through cartoons, as they are exposed to a wider range of vocabulary.

Student Engagement

Younger students show strong engagement with cartoons, participating in songs, repeating after characters, and requesting to watch cartoons again. For older children, engagement is still positive, but their attention may wane if the cartoons are perceived as too simplistic. This highlights the need for more complex content when working with older learners.

Cultural Elements and Word Context

For younger children, cultural elements are less prominent due to their focus on visual and auditory components. However, they are still introduced to basic cultural concepts, such as family dynamics or everyday activities, through the actions of the cartoon characters. In contrast, older students benefit from a more nuanced understanding of cultural contexts such as holidays and traditions, especially when supplemented by teacher explanations.

Adaptation to Student Levels

Teachers of younger children use shorter cartoons with slow speech and repetition to match the developmental stage of their students. For older children, cartoons with more complex dialogues and plots are selected, sometimes with subtitles or additional explanations to enhance comprehension.

Retention and Long-Term Effects

Younger children tend to retain vocabulary better when it is reinforced through repetitive elements like songs or visual cues, which solidify their understanding of new words. Older students, however, retain vocabulary more effectively when it is applied in real-world contexts, such as through discussions or written tasks.

Comparison with Other Methods

For younger children, cartoons are considered the primary method of vocabulary learning due to their ability to attract attention and enhance memory. Older children benefit from cartoons, but for more academic vocabulary, other resources like textbooks or specialized audio-visual materials are preferred.

Practical Application of Vocabulary

Younger children tend to use vocabulary in simpler contexts, such as games or basic dialogues. Older children incorporate new words into discussions, oral responses, and written assignments, applying their vocabulary in more complex, academic contexts.

Challenges and Solutions

For younger children, teachers face challenges related to maintaining attention and selecting age-appropriate content. For older children, the challenge lies in finding cartoons that are engaging yet not too childish. Teachers suggest using cartoons with humor or adventure to better capture the attention of older learners.

DISCUSSION

This study explores the impact of animated cartoons on vocabulary acquisition among English as a Foreign Language (EFL) learners, comparing the results with Tlegenova's (2023) research on Kazakh language education.

Tlegenova (2023) highlights that animated cartoons facilitate vocabulary acquisition by providing contextualized language exposure. This study found that younger children (under 5 years old) acquire simple vocabulary through repeated exposure in cartoons, aligning with Tlegenova's findings. Older children (over 5 years old) in this study also benefit from cartoons for learning thematic vocabulary, as Tlegenova suggests. However, for more complex academic vocabulary, additional resources were needed, as both studies indicate. Tlegenova emphasizes that cartoons promote cultural understanding, which is also evident in this study. While younger children focus more on visual and auditory cues, older children better grasp cultural references in cartoons. This aligns with Tlegenova's argument that culturally relevant content in cartoons enhances both language and cultural competence. Both studies agree that cartoons boost learner engagement. Tlegenova notes that the entertaining nature of cartoons increases motivation, a finding supported by this study, where younger children showed high engagement with songs and characters. However, older children in this study showed shorter attention spans if the content was too simplistic, similar to Tlegenova's observation that cartoons must be relevant to older learners' interests to maintain engagement.

Both studies highlight the flexibility of cartoons for different proficiency levels. Tlegenova notes that cartoons can be simplified for beginners or made more complex for advanced learners, a strategy observed in this study, where younger children engaged with simple, repetitive cartoons, while older children required more complex narratives. Both studies identify challenges in using cartoons. Tlegenova notes the need for culturally relevant cartoons, while this study found that younger children had difficulty staying focused during longer cartoons. Older children required content that wasn't too childish. Both studies suggest selecting cartoons carefully based on the learners' age and interests.

CONCLUSION

This study explores the impact of animated cartoons on vocabulary acquisition among English as a Foreign Language (EFL) learners, with a focus on how cartoons enhance learner engagement, cultural understanding, and vocabulary retention. The findings indicate that animated cartoons are an effective tool for language learning, particularly for **younger children** (under 5 years old). Cartoons help introduce basic vocabulary, promote engagement through repetition and songs, and provide a fun, interactive learning experience. For **older children** (over 5 years old), cartoons serve as an excellent supplementary tool for expanding vocabulary related to specific topics, though they are less effective for more complex or academic language, where additional resources are necessary.

Teachers reported that cartoons foster a positive emotional connection to language learning, increase motivation, and support long-term vocabulary retention. The study also highlights the adaptability of cartoons, showing that they can be tailored to different age groups and proficiency levels. However, challenges such as maintaining attention in younger children and finding appropriate content for older learners were identified.

Overall, this research underscores the value of incorporating animated cartoons into language education curricula as a versatile, engaging, and effective method for enhancing vocabulary acquisition and fostering both linguistic and cultural competence. Future studies may explore how cartoons can be used to teach more complex language skills and assess their long-term impact on overall language proficiency.

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Pedagogical foundations of the socialization of middle school students

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Keywords: school environment, socialization of students, demographic factors, pedagogical explanation.

The development and upbringing of a person is determined by the social environment. Social development is the development and upbringing of the individual through the adoption of the rules of the social environment. Social development does not occur on its own, but in social environments, in relationships with other people, within the framework of activities and acquaintances with them. The social environment present in the family and society conditions the child's expectations to be met, and they to develop in their own expectations. According to him, the normal social environment is accepted as the mandatory rule of social development in the family and society. So much so that in the normal social development environment, expectations are met one after another and with systematic rules, the child becomes curious about new activities and creates the basis for his/her subsequent development. The concept of "social development environment" has been scientifically processed in L.S. Vigotsky's book "The Zone of Proximal Development". This work is related to the biological and social characteristics of human behavior and its development environment (socialization). According to L.S. Vigotsky; When we say the biological factor of development here, we mean the basic rules that exist without being dependent on social rules. The organism cannot go beyond the limits of this factor. Its conditioned and unconditioned reflexes that regulate its reactions to the dangers around it are established on this system.

After the family, school is the child's first basic socialization institution. With school, the child encounters a richer environment in terms of information, rules that must be followed, and information that must be assimilated. The child learns to develop new attitudes with the concepts he encounters. If the child has reached a sufficient level of school maturity, he will not have difficulty adapting to school. On the contrary, if he is not mature enough to live and work in a group as a result of his personality traits or the wrong attitude of the family, he will have difficulty adapting to school. If a certain level of adaptation has been achieved, school life has begun as a long process. The child's adaptation problems in school mostly manifest themselves in the form of behavioral disorders and school failure (Yavuzer, 1996 p.165).

With the onset of advanced childhood and the continuation of adolescence, failure increases due to sociocultural and psychological factors, low motivation, limited opportunities and certain developmental and psychopathological reasons cause avoidance of learning and problematic environments within the family (Adams, 1976 pp. 359-364). School Success; means the evaluation of the grades received at school and these grades being above a certain average. School failure, on the other hand, is the existence of a difference between grades lower than the mental capacity of the student and the student's actual capacity (Garbarino, 1985 pp. 145-148). It has been understood that the problem of failure at school is complex and multifaceted. It is a wrong approach to evaluate the learning capacity of children at school only with exam results. It is necessary to evaluate exam results by taking into account environmental conditions. The effects of the child's environment on the child from birth until he starts school affect his entire existence in a way that determines his school success. The mental, cultural, economic level and emotional

atmosphere of the home, the attention and love shown to the child by the parents leave effective traces on the child until the age of five.

The reasons for school failure should be examined within a multidimensional structure. Approaching this issue from a system (ecological) perspective will be useful in terms of recognizing the systems in which the individual is located and determining the system that is problematic for the individual. Thus, studies aimed at solving the problem of school failure can be conducted based on the problematic system. Within this framework, the problem of this research is to reveal the effects of the individual's demographic characteristics on the attitudes that cause school failure (Taylor et.al.,2004).

As can be seen, social innovation is explained by all scholars who have experimented on this path as the mutual relationship of man with his environment. To be more precise, if the conversation is going from the child's social innovation, this innovation should be known in the field he shows, in the family and school, or rather in their mutual relationship. The pedagogical graduate of the education that should be adapted to the changes in the psychological age of the social innovation changes according to the age laws. Otherwise, the results of the education may also decrease the opposite side of the side. In contemporary approaches, more innovative and definite approaches are proposed depending on the problems. According to these approaches, education (family members and teachers should first search for the path they choose for the purpose and means in education in the child's nature and should try to create a social environment that is dependent on it. When this is the case, an environment suitable for the purpose can be created for the child's social innovation (Baltash, 1993).

Age, gender, and nationality of the child, which are mentioned among the demographic factors, affect his/her communication with other children in the classroom environment. They act as one of the determining factors of behavior. It should be noted that the formed positive environment can act as a supporting factor. In this case, the child builds better and more effective relationships. He/she masters the lesson, and the learning process is also interesting. However, sometimes negative effects of demographic factors can also be recorded. Thus, being from different ethnic groups can make it difficult for the student to adapt to the classroom environment.

In some cases, the social welfare status, income level, and financial situation of the family determine the student's relationships in the classroom. This impact, especially from a negative aspect, leads to the deterioration of the child's learning level and interpersonal relationships. While one group of children solves this problem through problem-solving, others experience evasive behaviors, use of addictive substances, and destructive behavior patterns. Problematic relationships, and low level of attendance lead to a decline in academic performance and achievement level. The problems experienced are recorded not only in short-term results, but also in long-term results. In the future, they are also recorded in the observation of destructive behaviors, tense relationships, and adaptation problems.

Summarizing what is shown in the dream, continuous meetings should be held in schools with teachers and family members regarding these issues that affect the socialization of the student. Educational work on tolerance among children is very important.

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ТОҒЫЗҚҰМАЛАҚТЫҢ ТҰЛҒАНЫ ДАМУЫ ҚҰРАЛЫ РЕТІНДЕГІ МАҢЫЗЫ

THE SIGNIFICANCE OF TOGUZKUMALAK AS A PERSONALITY DEVELOPMENT TOOL

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Аңдатпа: Бұл мақалада тоғызқұмалақтың тұлға дамуына тигізетін әсерін анықтау арқылы тоғызқұмалақ ойынының жалпы мәні ашылады.

Аннотация: В данной статье будет раскрыт общий смысл игры тогукумалак путем определения влияния тогукумалак на развитие личности.

Кілт сөздер: тоғызқұмалақ, ойын, тұлғаны дамыту, логика.

Тоғызқұмалақ – әлемдегі ең дамыған ақыл ойындарымен бәсекелес болатын логикалық және рухани ойын. Бұл ойынның басты артықшылығы – адам ойлауының ерекше дамуы және ақыл-ойдың жетілдірілуі. Ал ойынның өзі түркі халықтарының жас ұрпақ тәрбиесіне жауапты екендігінің дәлелі. Дене күшінен басқа жас ұрпақтың ақыл-ойы да дамыған болуы керек, ол үшін біздің ата-бабаларымыз бұл ойынды жасаған. Тоғызқұмалақтың денсаулыққа, ақыл-ойға, әлеуметтік қарым-қатынасқа әсері өте зор. Бұл ойын тек физикалық күшті емес, сонымен қатар, ойыншының ақыл-ойы мен зейінін дамытуға мүмкіндік береді. Ойында тек сәттілікке ғана емес, математикалық логика мен стратегияларға да үлкен мән беріледі. Ойыншылар әр қадамын жоспарлап, қарсыласының қателіктерін тауып, оны пайдалана білуі керек. Бұл олардың ойлау қабілетін, аналитикалық тұрғыда шешім қабылдау дағдыларын жақсартады.

Тоғызқұмалақ ойынының тұлғаның логикалық ойлау қабілетін дамытуға зор әсері бар. Бұл ойында ойнау барысында балалар есепті жақсы меңгеріп, математикалық дағдыларын жетілдіреді. Сонымен қатар, стратегиялық ойлауды дамыту да маңызды рөл атқарады, өйткені әр ойыншының әрекеті келесі қадамдарға әсер етеді. Ойыншының табандылығы, шыдамдылығы және кең ойлау қабілеті дамиды. Мұның барлығы адамдардың өміріндегі басқа салаларда да пайдалы болуы мүмкін.

Тоғызқұмалақ ойнау адамдардың зейінін, ойлау қабілетін, есептеу дағдыларын дамытады, сонымен қатар, ұлттық мәдениетті сақтап, дамытуға ықпал етеді. Тоғызқұмалақтың дене тәрбиесі мен ақыл-ойды жетілдіруге арналған көптеген пайдасы бар.

Тоғызқұмалақ ойынының маңызы:

- Ойлау жүйесін дамыту. Тоғызқұмалақ ойыны – математикалық есеп ойыны. Жүрістерді алдын-ала ойлау, есептеу, қиялдау – оның негізгі өзегі. Сондықтан ойынды үйрену барысында оның бойында стратегиялық және жүйелі ойлау қабілеті қалыптасады. Бұл кез-келген салада болашақта керек болады. Өйткені өмірде де болашақ істеріңді алдын-ала ойлау – негізгі мәнге ие.
- Дербестікке үйрету. Тоғызқұмалақ жас ұрпақтың тек өз ақыл-ой күшіне ғана сене алатынын тәжірибе жүзінде көрсетеді. Адам ойын барысында тек өзі ғана ойланады, өзі ғана шешім қабылдайды. Сондай-ақ, оңаша кезде есеп шығарса да, ойын барысына талдау жасаса да, жарысқа қатысса да тек өзінің сана-сезімімен ғана жүзеге асырады. Яғни ойын тұжырымдамасы тек өзіне ғана сенуге үйретеді.

- Жеңілісті дұрыс қабылдауға үйрету. Жеңіс қуаныш, ал жеңіліс өкініш сезімін тудырады. Осы сәтте қатемен жұмыс істеу арқылы, спортшы бойында жігері шыңдалады. Жеңілген партияларды талдау арқылы келесі жолы қатені болдырмау керек. Мұның барлығы еңбекқорлық арқылы кедергілерді еңсеру болып табылады.
- Назарды шоғырландыру. Тоғызқұмалақ тұлға ойын жинақтап, барлық назарды тек бір іс-әрекетке аударуды жақсартып, ыждахатты, шыдамды, төзімді етіп тәрбиелеп қояды.
- Жоспарлау және бас тартуды үйрету. Есептеу техникасы кезінде дұрыс жүрістерді қабылдап, нашар және жалған жүрістерден бас тарту керек. Тиімді жүрістерді ойша жоспарлаумен қатар, сіз оған баға бересіз. Тек өз жан-дүниенің ғана осы жүрістің тиімді не нашар екенін болжай аласыз. Нашар болса бірден бас тартып, келесі жүрістерді зерделей бастайсыз.

Тоғызқұмалақтың шығу тарихы өте терең әрі бай. Бұл ойын мыңдаған жылдар бойы қазақ халқының мәдениетінде және тұрмыстық өмірінде ерекше орын алған. Тоғызқұмалақтың түпнұсқасы туралы нақты деректер жоқ, бірақ оның ерте дәуірлерде ойнағаны туралы археологиялық табылған белгілер мен жазбалар осы ойынды әлемнің әртүрлі бөліктерінде білгенін көрсетеді. Тоғызқұмалақ өзінің шығу тегі жағынан түркі халықтарының ортақ мұрасы болып табылады, әсіресе Қазақстан, Қырғызстан, Өзбекстан және Тәжікстан елдерінде кең таралған.

Зерттеуші Т.Сұлтанбеков деген сөзінде: «Тоғызқұмалақ – қазақтың ең ірі спорт түрлерінің бірі. Бұл ойынды қазақтардан басқа қырғыздар, қарақалпақтар, алтайлықтар және басқа халықтар ойнайды». Сонымен бірге, Түркияның, Түркіменстанның және Өзбекстанның кейбір аймақтарында олардың бірдей ұлттық ойындарды ойнайтындығы, олардың айырмашылығы тек атауы екендігі туралы мәліметтер бар.

Қырғыздар арасында тоғызқұмалақ «тоғызқоргоол», Жерорта теңізі жағалауындағы кейбір көшпелі халықтар арасында «тоғызташ» сияқты естіледі. Бұл фразада кейбір фонетикалық айырмашылықтарды қоспағанда, бірінші бөлік өте ұқсас және түсінікті. «Қоргоол» моңғол тілінен аударғанда «құмалақ» дегенді білдіреді, «таш» тасты білдіреді және сонымен бірге қозғалыс жасалатын құралды білдіреді. Тоғызқұмалақтың мыңжылдық тарихы бар өте ежелгі ойын екенін және түркі әлемінде ғана сақталған түркі халықтары мен ерекшеліктерінің түбірі ортақ екенін ескерсек, ойынның бір аты болды деген ой туындайды[1].

Түркі тілдерінде әр сөз тікелей мағынасымен бірге астарлы мағынаға ие. Осы күнге дейін жарық көрген кейбір жұмыстарда тоғызқұмалақ атауын материалды, күнделікті деңгейде түсіндіру ойынның құндылықтары мен барлық артықшылықтарын көрсетпейді. Сөз өнерінің құдіретін жете түсінген ата-бабаларымыз жас ұрпақ саналы, тәуелсіз болып өсуі үшін көп тер төкті. Бұл шығармашылық көрегендіктің немесе логикалық ойлаудың нәтижесі болды ма, ойын атауы ерекше мәнге ие.

Ойынның атауы мен мағынасын толық түсіну үшін «тоғызқұмалақ» сөзіне талдау жасау керек. «Тоғыз» фигурасы (тоғыз) – ежелгі түркілер арасында көптік ұғымы болды. Біздің ата-бабаларымыз бұл сан шексіздікті, шексіздікті бейнелейді деп сенген. «Тоғыз жолдың қиылысы» деген сөз тоғыз жолды білдірмейді, ол көптеген жолдарды білдіреді. Басқа сөз тіркестерінде тоғыз саны дәл осындай мағынаны білдіреді.

Қой өсірушілер мен қойшылардан шыққан «құмалақ» (доп немесе түйіршіктер) сөзі ойынмен қатар таралып, ойын атауының айрықша белгісі болды. Доптарды

қолдануды бастамас бұрын олар дәндермен, сүйектермен немесе ұсақ тастармен ойнады. Жерорта теңізі жағалауындағы көшпелі халықтар арасындағы ойын атауы олар ойналған материалдан шыққан. Ал «қоргоол» сөзінің қырғыз тіліне енуі Қырғызстандағы ұзақ моңғол билігінің нәтижесі және жергілікті тілдік ерекшелік болып табылады[2].

Құмалақтың тағы бір артықшылығы – оның қабілеттілігі, қимыл-қозғалысқа бейімділігі. Егер сіз оны ұстасаңыз, ол қозғала бастайды, яғни ол қозғала бастайды. Демек, құмалақ – бұл ең алдымен қимылдың белгісі, сондықтан ойын атауының мағынасын зерттегенде көшпелі халықтардың дүниетанымдық ерекшеліктерін ескеру керектігін ұмытпаған жөн. Егер тоғызқұмалақты осы тұрғыдан қарастырсақ, онда оны 162 құмалақ барлық бағытта шексіз қозғалатын шексіз қозғалыс ойыны ретінде сипаттауға болады. Шындығында, құмалақшылардың барлық қимылдарын есте сақтау, талдау және реакция жасау үшін бұл ойынды мықты логикамен, есте сақтау қабілетімен, тапқырлығымен және қиялымен бай адам ойнай алады. Тоғызқұмалақ ойынын әдетте екі қарсылас ойнайды. Әр тараптан адамдар тобы да қатыса алады – мұндай тараптар кеңес беруші тараптар деп аталады. Тоғызқұмалақ ойыны бірнеше сериядан тұрады. Ақпен бірінші жүру құқығы жеребе арқылы анықталады.

Тоғызқұмалақ ойынының мәні мынада: ойыншы өзінің барлық теориялық шеберліктерін, психологиялық қасиеттерін, ақыл-ой қабілеттерін, шығармашылық қабілетін, қиялын, ойының өткірлігін, тапқырлығы мен тапқырлығын пайдаланып, өзінің қазанына 82 құмалақ жинауға тырысады, сол арқылы қарсыласын жеңеді.

Көрнекті түркітанушы С.Аманжолов: "қазақ халқының ең көне мұраларының бірі – тоғызқұмалақ ойыны қашан пайда болғаны туралы нақты деректер жоқ. Бұл ойын қазақ және Қырғыз халқында өте кең таралған. Қазақ халық ойындарының ішінде бұл ең қиын, бірақ ол ақыл – ойды жұмыс істеуге, санау қабілеті мен тапқырлықты дамытуға мәжбүр етеді".

Зерттеуші Т.Сұлтанбеков: "тоғызқұмалақ шахмат пен дойбы сияқты тапқырлық пен бай қиялды талап етеді. Алайда, бұл ойын ерекше орын алады, басқа ойындармен салыстырғанда бұл әлдеқайда күрделі. Мұның басты себебі-бұл ойынды немесе оның жеке позицияларын, тақтаға қарамастан, дерексіз түрде ойлау өте қиын"[3].

Зерттеуші М.Танекеев: "Тоғызқұмалақ – өте қызықты және пайдалы үстел үсті спорттық ойыны. Ол ерік-жігерді, шыдамдылықты тәрбиелеуге ықпал етеді, ойлаудың өткірлігін, тапқырлықты, тез тапқырлықты дамытады, логикалық ойлауға үйретеді. Тоғызқұмалақ көптеген ұлттық спорт ойындары сияқты математикалық негізге ие". "Тоғызқұмалақтың қайда және қашан пайда болғаны туралы мәліметтер өте аз. Алайда, тоғызқұмалақтың бізде бұрыннан пайда болғандығы, тастарға, төбелер мен жартастарға тікелей соғылған тақталарды дәлелдейді. Мысалы, Қаратау тауларында Ақшұқыр жартасында тастардың бірінде тесіктер мен қазандар ойылған. Бұл тақтаны кім және қашан ойнағаны белгісіз, бірақ оның не үшін жасалғаны белгілі".

ҚР еңбек сіңірген жаттықтырушысы, 6 дүркін чемпион, спорт шебері А.Ақшораев: "Спорт өнер ретінде іріктеуді талап етеді. Бір түрі физикалық күш – жігерді, екіншісі жылдамдықты, үшіншісі айқындық пен табандылықты қажет етеді. Ал, төртінші спорт түрі адамға қиын жағдайларда тез шешім қабылдауға және дұрыс қорытынды жасауға үйретеді. Мұндай спорт түрлеріне шахмат, дойбы және бір қатарда тоғызқұмалақ жатады"[3] [4].

Қорыта келе, қарабайыр қоғам жағдайында мәдениеттің синкретикалық сипаты орын алды, бұл материалдық және рухани өндірістің бөлінбеуін білдірді.

Дене шынықтыру синкретикалық сипатта болды, яғни ол әлі де қоғамның өндірістік қызметімен біріктірілді. Үстел ойынының пайда болуы, тоғызқұмалақ сияқты, саралау процесі туралы айтады, "оның барысында ақыл – ойдың тікелей тәжірибе туралы көптеген деректерді сыни тұрғыдан талдау қабілеті бастапқыда олардың пайдалылығына,

кейінірек олардың эстетикалық қасиеттеріне байланысты идеяларды, әсерлерді, қабылдауды таңдау және одан да күрделі біріктіру үшін өте маңызды болды.

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ШЕТ ТІЛІН ОҚЫТУДА ЖОҒАРЫ СЫНЫП ОҚУШЫЛАРЫНЫҢ. ӘЛЕУМЕТТІК- МӘДЕНИ ҚҰЗЫРЕТТІЛІГІН АРТТЫРУДА АҒЫЛШЫН ӘНДЕРІНІҢ РӨЛІН ЗЕРТТЕУ

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Аннотация. Мақаланың басты мақсаты әлеуметтік-мәдени құзыреттілігін арттыру үшін музыкалық ресурстарды қалай пайдалануға болатыны туралы баяндалады. Оқушылардың танымдық базасына жаңа ұғымдар мен мәдени шындықты енгізуге арналған әдістемелік тапсырмаларды жүзеге асыру үшін, ән шығармаларын іріктеудің формальды және мазмұнды критерийлерінен басқа, әлеуметтік-мәдени құзыреттілік құрылымы да ескеріледі. Мақаланың негізгі мәні - әндер адамдардың әлеуметтік-мәдени тұрғыдан сауатты болуына көмектеседі. Авторлар ән материалдарымен (рецептивтік, репродуктивті, шығармашылық және т.б.) айналысу тәсілдері туралы ойлануды ұсынады және американдық және британдық әртістердің әндерінің үлгілерін қамтиды.

Кілт сөздер: әлеуметтік-мәдени құзыреттілік, мәдениетаралық қарым-қатынас, лингвистикалық және мәдени құзыреттілік, ән дискурс, шынайы материалдар, мәдени шындық.

Бүгінгі қоғамда болып жатқан өзгерістерге байланысты қоғамға жасампаз әрекет пен шығармашыл тұлға қажет екенін күнделікті өмірдің өзі дәлелдеп отыр, осыған байланысты бүгінгі таңда білім беру мекемелері мен ұстаздарға үлкен талаптар қойылып отыр. Қоғамдағы жаңа тәсілдердің дамуы шет тілін оқыту мен дамытуға ықпал етеді.

Ағылшын тілін оқытудың негізгі мақсаты - студенттердің шынайы өмірде ағылшын тілінде сөйлесу қабілетінің негіздерін қалыптастыру. Оқушылардың жан-жақты дамуы, сапалы білім алуы және өмірде жақсы жетістіктерге жетуі үшін ағылшын тілін жақсы білудің маңызы зор. Осыған байланысты қазіргі заманғы ағылшын тілін тиімді оқытуға, сондай-ақ әртүрлі құзыреттерді дамытуға мүмкіндік беретін көптеген әдістер пайда болды. Солардың бірі ретінде шет тілі сабағында әндердің қолданылуын жатқызуға болады.

Әндерді ағылшын тілі сабағында оқушылардың есту қабілетін, айтылуын, грамматикасын, сөздік қорын молайту, сөйлеу тәжірибесін жетілдіру және оларды мақсатты елдің мәдениетінің аспектілерімен таныстыру сияқты бірқатар мақсаттар үшін пайдалануға болады.

Дегенмен, музыканы осылай пайдалану оның пайдалы әсер етуі үшін белгілі бір жаттығуды орындауды талап етеді. Бірінші, әнді мұқият таңдауды бастау керек. Бұл жерде бірнеше ережелерді сақтау керек: ән шынайы және оқушылардың жасы мен

қызығушылықтарына сәйкес болуы керек. Әнді оқушылардың тіл деңгейіне сәйкестендірумен қатар, оның әдістемелік құндылығы да, оқу бағдарламасына сәйкестігі де болуы керек. Әнді таңдау, егер ол осы нұсқауларға сәйкес келсе, өте пайдалы болуы мүмкін [1].

Көптеген зерттеулер ән мазмұнын лингводидактикалық үдеріске енгізу оқушының оқу нәтижелерін жақсартатынын, тереңірек ассимиляцияға көмектесетінін, оқу ынтасын арттыратынын, оқушыларды мәдениетарасындағы өнімді әңгімелесуге дайындайтынын, студенттердің сыртта оқып жатқан тілмен өзара әрекеттесуге жұмсайтын уақытын көбейтетінін көрсетті. Оқушылардың өздік жұмысын ұйымдастыру мәселесін шешеді, бұл олардың академиялық дербестігін арттырудың қазіргі заманғы стандарттарына сәйкес келеді. Қазіргі уақытта орта мектепте шет тілдерін оқыту контекстінде оқытуды дамыту қажеттілігіне көбірек көңіл бөлінуде. Шет тілі сабағында студенттер мәдениеттер диалогы аясында, яғни мәдениетаралық қарым-қатынас тұрғысынан өздерінің тілдік мүмкіндіктерін жүзеге асыру жолдарын үйренуі қажет. Шетел тілі сабағында мұндай жағдай жасау үшін әлеуметтік-мәдени әлеуеті бар шынайы дереккөздерді, сонымен қатар оқушылардың тілді меңгеру деңгейіне сәйкес келетін лингвистикалық компонентті пайдалану қажет. Орта мектептегі ағылшын тілі сабағы аясындағы мұндай әлеуметтік-мәдени ақпараттың қайнар көзі ағылшын тіліндегі ән дискурсы болуы мүмкін [2].

Алғышартты дұрыс қолдау үшін «әлеуметтік-мәдени құзыреттілік» анықтамасы ашылуы керек. Әдістемелік терминдер мен ұғымдар сөздігінде әлеуметтік-мәдени құзыреттілік дегеніміз- тіл зерттелетін ұлт туралы білімдер жиынтығы, сонымен қатар ана тілінде сөйлейтіндердің сөйлеу және әлеуметтік мінез-құлқының ұлттық мәдени ерекшеліктері. Сондай-ақ бұл білімді қарым-қатынас процесінде әлеуметтік нормаларды, жүріс-тұрыс ережелерін, этикет нормаларын және ана тілінде сөйлейтіндерге қатысты стереотиптерді ұстану үшін қолдана білу қабілетіне жатады [3].

С.С. Құнанбаеваның пікірінше, мәдениетаралық коммуникативті құзыреттілікке келесі қосалқы құзыреттер кіреді:

- тілдік мәдениет;
- әлеуметтік, әлеуметтік-мәдени;
- тұжырымдамалық;
- жеке орталықтандырылған;
- когнитивтік;
- коммуникативті.

Әлеуметтік құзыреттілік- адамның қоғамда тұрақты жұмыс істеуіне кепілдік береді және кәсіби білімнің қажетті қосымша өнімі болып табылады. Әлеуметтік құзыреттілік - адамның «табиғи» немесе маңызды дағдылары; олар өмірлік стратегияларды қолдану, мәселелерді шешу және жеке және кәсіби жауапкершіліктерді орындау арқылы әзірленеді. Қазіргі заманғы ғылыми әдебиеттерге сәйкес, әлеуметтік-мәдени құзыреттілік әлеуметтену кезінде қалыптасатын және белгіленген әлеуметтік рөлдердің сәтті орындалуына кепілдік беретін адам мінез-құлқымен интеграцияланған білім мен тәжірибенің белгілі бір дәрежесін білдіретін тұлғаның қасиеті ретінде анықталады. Сондай-ақ тұлғаның бағыттылығын және оның қоршаған ортамен өнімді қарым-қатынасқа дайындығын белгілейді [4].

Біз өз мақаламызда ағылшын тіліндегі ән курсын орта мектепте ағылшын тілі сабағында оқудың әдістемелік әлеуеті жоғары әлеуметтік-мәдени ерекшеліктердің шынайы көзі ретінде қарастыруды ұсынамыз. Сәйкесінше, әртүрлі ағылшын тіліндегі музыкалық шығармалардың көмегімен студенттер әлеуметтік-мәдени таңбалы лексикамен, менталитет ерекшеліктерімен және ана тілінде сөйлейтіндердің ойлау тәсілін көрсететін баяндау ерекшеліктерімен таныса алады. Ән дискурс қоғамның әлеуметтік-мәдени құзыреттілігін зерттеу процесінде белсенді қолданылады, өйткені ән, түпнұсқалық материалдардың басқа

түрлеріне қарағанда, салыстырмалы түрде формасы мен мазмұны жағынан қарапайым, әлеуметтік ауытқуларға тез жауап береді және мәдени құндылықтардың өзгеруін айқын көрсетеді.

Зерттеу нәтижелерін сараптау барысында №32 жалпы білім беретін мектептің 8-сынып оқушыларына сауалнама жүргізілді. Сауалнама нәтижелері бойынша бірінші «сіз ағылшын әндерін жиі тыңдайсыз ба? Мағынасын түсінесіз бе?»- сұрағына 90%- «иә», 10%- «жоқ» деп жауап берді. «Сіз ағылшын тілі сабағында ағылшын әндерін тыңдайсыз ба?»- оқушылардың 10%-ы «иә», 90%-ы «жоқ» деп жауап берді. Келесі сұраққа «ағылшын тіліндегі әндер ағылшын тілді елдердің мәдениетімен танысуға ықпал ете ме?»- 51% «иә», 49% «жоқ»деп жауап берді. «Ағылшын тіліндегі әндерді тыңдау арқылы сіз тыңдау және түсіну дағдыларыңызды жетілдіре аласыз ба?» - 95% «иә», 5% «жоқ» деп жауап берді. Соңғы сұраққа «ағылшын әндері сіздің әлеуметтік-мәдени құзыреттілігіңізді арттыруға көмектесе ме?» - 80% «иә», 20% «жоқ» деп жауап берді. Сауалнама нәтижесі бойынша екі мәселе анықталды: ағылшын тілі сабақтарында әндерді қолданбау және әндерді оқушылардың мәдени аспект ретінде қабылдамауы (1-сурет).



1-сурет. Сауалнама нәтижесі

Жоғарыда анықталған мәселелер бойынша біз өз ұсыныстарымызды атап өтеміз. Ең алдымен, сабақ барысында 8-сыныптың оқу жоспары мен оқулық бөлімдеріндегі тақырыптарға сәйкес келетін әндерді қолданамыз. Әндер оқу үдерісіне енгізілгеннен кейін біз әндер арқылы оқушылардың әлеуметтік-мәдени құзыреттілігін арттыратын тапсырмаларды ұсынамыз.

Жоғары сынып оқушыларының әлеуметтік-мәдени құзыреттілігін дамыту мақсатында музыкалық шығармалармен жұмыс формасының нақты нұсқаларын көрсету үшін біз әр түрлі кезеңдерде жұмыс нұсқаларын жасадық. Аудио материалдармен жұмыс істеудің стандартты ережесіне сүйене отырып, жұмыс үш кезеңге бөлінеді: алдын ала тыңдау, тыңдау кезінде және тыңдаудан кейін. Осы кезеңдердің әрқайсысында жұмыс формаларының әртүрлі нұсқалары бар. Біз олардың кейбірін қарастырдық:

Сынып: 8

Оқулық: «English plus»

Бөлім: «Music and film»

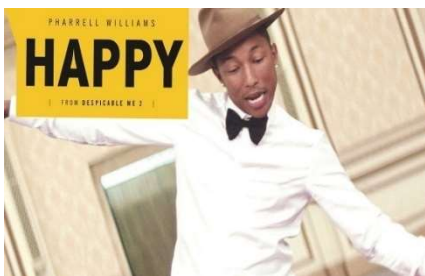
Тақырыбы: «Music and film images»

Ән: Happy by Pharrell Williams

Pre-listening task. Алдын ала тыңдау тапсырмасы

Task-1 «Picture said» (суреттер сөйлейді)

Мұғалім оқушыларға мультфильмнің суретін және әннің тақырыбын көрсетіп, келесі сұрақтарды қояды: Суреттерге қараңызшы (2-сурет), екеуінің арасында қандай байланыс бар деп ойлайсыз? Бұл мультфильм мен ән туралы не білесіз?

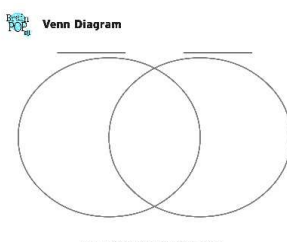


2-сурет. Суреттер арасында қандай байланыс

While-listening task. Тыңдалым барысындағы тапсырма

Task-2 «Venn diagram» (Венн диаграммасы)

Мұғалім оқушылардан осы ән мен осы тақырыптағы қазақ әндерін салыстыруды сұрайды. Салыстыру кезінде оқушылар әуендерге, мазмұнға, берілетін әсерлерге назар аударуы керек (3-сурет).



3-сурет. Венн диаграммасы

Post-listening task. Тыңдалымнан кейінгі тапсырма

Task-3 «Pair, share» (Жұптас, бөліс)

Ән орындалғаннан кейін мұғалім оқушылардан әннің шыққан жылына назар аударуды сұрайды. Өткен достық пен қазіргі достықты салыстырыңыз. Сіз қандай айырмашылықтарды айта аласыз?

Сонымен, зерттеуімізді қорытындылай келе, ән материалы мәдени ақпарат көзі ретінде маңызды рөл атқаратынын атап өткен жөн. Әнге енгізілген ақпаратты беру тәсілі сенімдер мен өмірлік құндылықтарды жүзеге асыру әдістерін ұсынады, сонымен қатар ойлау мен мінез-құлықтың көрінісі болып табылады, шындықты барынша толық, жан-жақты және эмоционалды түрде қамтиды. Демек, біз орта мектепте ағылшын тілі сабағына арналған әдістемелік материалдарды таңдау мұғалімнің ерекше назарын қажет ететінін атап өткіміз келеді, өйткені ол мәдениеттер диалогы аясында оқушының жеке басын толыққанды қалыптастыру үшін көптеген талаптарға сай болуы керек. Ән белгілі бір ел туралы ақпарат көзі ретінде оқу процесін жүзеге асырудың тамаша құралы болып табылады, оқушылардың жеке басының жан-жақты және тұтас дамуына, олардың мәдени қабылдауы мен дамуына ықпал етеді.

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DIGITAL STORYTELLING AS A METHOD FOR ENHANCING ORAL COMMUNICATION SKILLS IN FOREIGN LANGUAGE TEACHING

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ABSTRACT

This article examines the impact of digital storytelling on enhancing oral communication skills in foreign language teaching. With the increasing demand for more effective language acquisition methods, digital storytelling has emerged as a powerful tool for improving speaking proficiency. Combining multimedia elements—text, images, audio, and video—this approach offers students an interactive and creative learning experience that enhances vocabulary, pronunciation. The study explores how digital storytelling promotes collaboration, allowing students to share their stories, receive feedback, and actively engage in their learning process. Digital storytelling connects students with real-world narratives, fostering critical thinking, cultural understanding, and engagement. Surveys reveal improved creativity but highlight challenges like technical barriers and teacher support. Despite these issues, it holds great potential for enhancing speaking skills in language education, with solutions proposed for better implementation.

Key words: Digital storytelling, speaking skills, collaboration, foreign language teaching, student engagement.

INTRODUCTION

The landscape of education is undergoing significant transformations, with new technologies reshaping how students engage with learning. Among these advancements, digital storytelling (DST) has gained prominence as an innovative method that merges traditional storytelling with digital tools such as videos, images, and audio. This integration of storytelling and technology creates an engaging and interactive learning environment, allowing students to connect with the material in meaningful ways (Amaliah et al., 2022). Digital storytelling not only enhances creativity but also helps students develop essential communication and critical thinking skills (Arroba & Acosta, 2021).

Digital storytelling is especially significant in language learning because it brings together multiple forms of media to engage students on a deeper level. In Foreign language teaching (FLT), it transforms a traditional language class by encouraging active participation and immersive learning experiences. By using various digital media such as images, sound, and video, DST creates an environment where students are not passive receivers of information but active creators and communicators. This unique approach allows learners to gain a more comprehensive understanding of the language and culture they are studying.

The significance of digital storytelling in language learning lies in its ability to create an engaging, personalized learning experience. Traditional language instruction often focuses on grammar, vocabulary, and sentence structures, however DST provides students with an opportunity to create stories that reflect their personal experiences, interests, and cultural backgrounds. This

approach is especially powerful because it allows students to express themselves in the target language, leading to a deeper emotional connection to the language. Students become more invested in their language learning journey when they can share their own stories and incorporate aspects of their lives into their narratives (Ahmad & Yamat, 2020).

When students create stories about their own lives, they can incorporate personal experiences, emotions, and ideas into their narratives. This process fosters empathy, as students share their experiences with peers who may come from different cultural backgrounds. By hearing each other's stories, learners gain a better understanding of diverse perspectives, which can help build cultural awareness and broaden their worldview. Furthermore, storytelling encourages exploration of different cultural elements, which is critical in language learning. As Dharma and Meo (2023) emphasize, incorporating culturally relevant content into digital storytelling not only makes the learning process more relatable but also enriches the students' experiences, leading to a deeper understanding of the target language and its cultural contexts.

Despite its benefits, implementing digital storytelling is not without challenges. McNair (2018) points out that while DST enhances student engagement, its long-term impact on language retention remains under-researched. Similarly, Zatorin (2019) stresses the need to adapt DST to diverse cultural and educational contexts, an area that still requires significant exploration. On a practical level, Mukanova (2021) identifies barriers such as limited resources and insufficient teacher training, which often hinder the effective integration of DST in classrooms. Addressing these challenges is crucial to fully realize the potential of digital storytelling in education.

Digital storytelling helps improve a wide range of speaking and listening skills. In traditional classroom settings, students may have limited opportunities to practice speaking and listening, especially in larger classes. However, DST encourages students to speak and listen in real-world contexts by using the target language to create and narrate stories. The process of narrating a story in the target language helps students improve their pronunciation, vocabulary, and fluency. The use of multimedia elements such as video, images, and sound also provides students with visual and auditory cues, which support their understanding and help them practice the language in a more immersive way (Nair & Yunus, 2021).

The primary aim of this study is to investigate the role of digital storytelling in enhancing communication skills among language learners. The objectives include analyzing how DST improves vocabulary, pronunciation, and intonation, examining its impact on student engagement and critical thinking; and evaluating how it fosters collaboration and confidence in speaking while addressing diverse learning needs. By exploring these aspects, this study seeks to highlight the transformative potential of digital storytelling in modern language education.

To guide this exploration, the study is framed by the following research questions:

1. What methods were used to integrate digital storytelling into language education, and how were these methods designed to enhance speaking skills such as vocabulary acquisition, pronunciation, and intonation?
2. What were the observed results of using digital storytelling on student engagement, creativity, and confidence in speaking?
3. How do the findings contribute to the discussion on the effectiveness of DST in fostering collaboration and addressing individual learning needs?

METHODS

This study utilized a quantitative method to assess the impact of digital storytelling on speaking skills. The primary data collection tool was a Google Forms survey. The survey included metrics on vocabulary development, pronunciation accuracy, fluency, and overall confidence in speaking. Participants' responses were analyzed statistically to determine the effectiveness of digital storytelling in enhancing these skills.

The data collected was mainly descriptive data. The research approach to the survey was utilised to collect data from the participant population. The study was sampled in a standard way. With a sample of 30 students, the survey format provided an organized way to gather responses quickly and effectively. The 25-question survey included structured questions that focused on specific aspects of speaking skills development, such as fluency, vocabulary usage, and confidence during presentations.

The survey involved 16 females and 14 males. This reflects a slightly higher proportion of female participants. This distribution ensures diverse perspectives while maintaining a relatively balanced demographic representation (see Table 1).

Data analysis and findings

Table 1

Distribution of gender

Gender	Number of Participants	Percentage (%)
Female	16	52.5
Male	14	47.5
Total	30	100

Among the participants, a significant portion were 3rd- and 4th-year university students, highlighting their advanced exposure to educational tools and strategies (see Table 2).

Table 2

Distribution of academic year

Academic year	Frequency (%)
1st year	12.5%
2st year	20.0%
3rd year	32.5%
4th year	35.0%

The participants' ages are distributed as follows: 17-19 years – 17.5%, 20-22 years – 57.5%, and 22-24 years – 25% (see Table 3). This breakdown suggests that participants from different age groups may bring varied levels of experience and perspectives on the use of digital storytelling in language learning, with older participants potentially having more exposure to advanced learning techniques.

Table 3

Distribution of age groups

Age group (Years)	Frequency	Percentage (%)
17-19	6	17.5
20-22	17	57.5
22-24	7	25.0

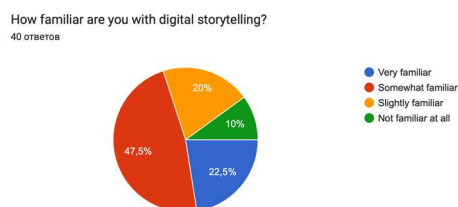
The survey received 40 responses instead of the expected 30, indicating active participation, possibly from other interested individuals. This unexpected engagement might reflect the widespread interest in digital storytelling and its relevance in education. The data collected provided clear insights into how digital storytelling can support speaking skills, showcasing its effectiveness in areas such as confidence-building, creativity, and fluency enhancement. These findings underline the significance of digital tools in modern language education and emphasize the importance of integrating such methods in higher education curricula to foster engagement and skill development. Responses were analyzed using descriptive statistics to identify trends, such as the most common perceptions of digital storytelling's effectiveness and its impact on specific speaking skills (vocabulary, pronunciation, and fluency). Most students are either very familiar or somewhat familiar with digital storytelling, although some have minimal or no familiarity. Regular use of digital storytelling is more common among students who find it very effective, with those less familiar with the method rarely or never using it. Students who are very familiar with digital storytelling tend to rate it as highly effective, especially in improving speaking skills, boosting confidence, and engaging learners. It is often viewed as very engaging, while traditional methods or group discussions are seen as less so.

RESULTS

Regarding familiarity with digital storytelling techniques, 22.5% of participants reported being very familiar, while 47.5% were somewhat familiar, 20% were slightly familiar, and 10% were not familiar at all (see Figure 1). These results suggest that while nearly half of the participants have moderate familiarity with digital storytelling, there remains a significant portion with limited or no exposure to this method, highlighting the need for further training and awareness in this area.

Figure 1

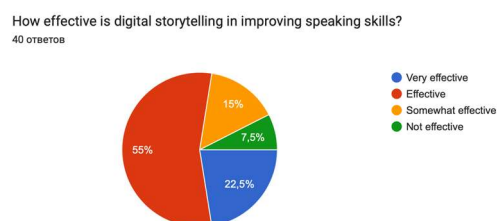
Frequencies of participant responses on familiarity with digital storytelling



In terms of effectiveness in improving speaking skills, 22.5% of participants rated digital storytelling as very effective, 55% as effective, 15% as somewhat effective, and 7.5% as not effective (see Figure 2). This indicates that the majority of participants perceive digital storytelling as a valuable tool for enhancing speaking skills, though a small percentage expressed doubts about its effectiveness, possibly due to their unfamiliarity or limited experience with the method.

Figure 2

Effectiveness of digital storytelling in improving speaking skills



The survey indicates that digital storytelling is moderately used and valued for its effectiveness in improving speaking skills, building confidence, and fostering creativity, with participants showing a preference for a mix of methods, including videos, presentations, and group discussions (see Table 4).

Table 4

Frequency of digital storytelling usage, engagement with teaching methods, and perceived benefits in language learning

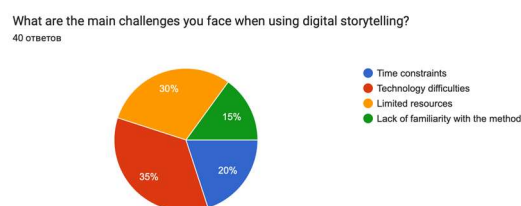
Usage of DST in learning	Percentage %	The most engaging method for students	Percentage %	Benefits of DST in language learning	Percentage %
Regularly	20	Videos and presentations	30	Improves speaking skills	30
Sometimes	45	Group discussions	30	Increases creativity	25
Rarely	25	Traditional methods	12.5	Builds confidence in communication	30
Never	10	Digital storytelling	27.5	Encourages teamwork	15

Note. This table shows how often digital storytelling (DST) is used, the most engaging teaching methods, and the benefits students perceive from DST in language learning.

When examining the challenges faced by participants when using digital storytelling, technology difficulties were reported by 35%, followed by limited resources at 30%, time constraints at 20%, and lack of familiarity with the method at 15% (see Figure 3). These results indicate that the primary challenge for most participants is related to technical issues, suggesting that difficulties with technology may hinder the effective use of digital storytelling. Limited resources also appear to be a significant barrier, while time constraints and unfamiliarity with the method seem to be less commonly reported challenges.

Figure 3

Challenges faced in using digital storytelling



Regarding sharing digital storytelling projects, students share them at least rarely or more frequently, indicating a moderate level of engagement in collaborative activities (see Figure 4).

Figure 4

Sharing digital storytelling projects with students or peers



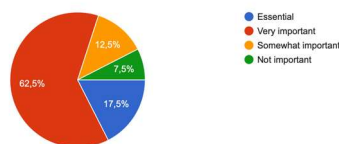
In terms of improving speaking skills through digital storytelling, teacher feedback was regarded as very important by most participants, while others found it somewhat important. This highlights the significant value placed on guidance and support from educators in this context (see Figure 5).

Figure 5

Importance of teacher feedback

How important is teacher feedback for improving speaking skills through digital storytelling?

40 ответов



DISCUSSION

McLellan (2006) notes that familiarity with digital storytelling is essential for effective classroom integration. Our study revealed that 22.5% of participants were very familiar with digital storytelling, while 47.5% reported little to no familiarity. This supports McLellan's argument, emphasizing that familiarity plays a critical role in successful implementation.

Lambert (2017) argues that digital storytelling enhances speaking skills through creativity and engagement. Our findings showed that 55% of participants found it effective, while 15% rated it somewhat effective. This aligns with Lambert's claims, though individual experiences and variations in implementation likely influence outcomes.

Robin (2008) emphasizes that consistent use of digital storytelling improves engagement and learning outcomes. However, our study indicated that 45% of participants never used it, and only 20% applied it regularly. This limited use suggests barriers such as time constraints and insufficient training hinder broader application.

Banas (2014) suggests digital storytelling is an engaging tool for students, yet our results showed that only 12.5% of participants found it engaging, compared to 30% who preferred group discussions or videos. This indicates that while digital storytelling has value, other methods may be perceived as more effective.

Green (2015) highlights that digital storytelling fosters creativity, confidence, and communication. Our findings supported this, with 30% of participants agreeing it boosted creativity and 25% noting increased confidence. However, its impact on communication varied, suggesting that individual experiences play a role.

Mills (2016) claims that digital storytelling enhances speaking confidence. In our study, 22.5% of participants reported a significant boost, while 47.5% noted no impact. This disparity indicates that the method's effectiveness depends on factors such as initial confidence levels and implementation strategies.

McNair (2018) identifies time constraints, technology issues, and lack of training as challenges to digital storytelling. Our findings align, as 35% of participants cited unfamiliarity with the method, and 20% mentioned time constraints, demonstrating that these obstacles continue to affect its adoption.

McLellan (2006) also highlights digital storytelling's potential for engagement and creativity. However, 52.5% of participants in our study had neutral perceptions of the method, suggesting mixed opinions likely influenced by barriers such as limited exposure or training.

Banas (2014) emphasizes the importance of teacher feedback in digital storytelling. Contrasting this, 62.5% of participants in our study did not view feedback as important, reflecting differing opinions on its significance in improving outcomes.

Robin (2008) stresses the necessity of training for maximizing the benefits of digital storytelling. Our findings showed that 65% of participants rarely felt the need for training, while 12.5% valued it. This indicates varying levels of competence and confidence among educators, which affect their ability to effectively use this method.

CONCLUSION

In conclusion, this study highlights the significant role that digital storytelling plays in enhancing language education, particularly in developing communication skills among learners. By combining multimedia elements such as text, images, audio, and video, digital storytelling offers an engaging and interactive method of language acquisition. The findings suggest that digital storytelling not only improves speaking skills, including vocabulary acquisition, pronunciation, and intonation, but also fosters greater student engagement, creativity, and collaboration. Moreover, the practice promotes a deeper connection with cultural diversity, enabling students to share their experiences and learn from different perspectives. Despite its potential, the study also identifies challenges, including technological limitations and the need for adequate teacher training, which can hinder the effective implementation of this method in some educational settings.

By drawing on the work of scholars such as McNair, Zasorin, and Mukanova, this study reinforces the importance of adapting digital storytelling to diverse cultural contexts and addressing practical barriers like resource constraints and insufficient training. The findings support the idea that, with the right resources and support, digital storytelling can become a transformative tool in the classroom, enhancing not only language skills but also student motivation and confidence. However, the study also emphasizes the need for further research on long-term retention of language skills and strategies for overcoming challenges in rural and underfunded educational settings. It is clear that the integration of digital storytelling in language teaching requires a balanced approach that considers both its pedagogical benefits and the obstacles to its widespread adoption. For digital storytelling to realize its full potential, educators must be equipped with the necessary tools, training, and cultural awareness to effectively use this method in diverse classrooms. Educational systems must prioritize investments in technology and professional development to ensure that teachers can fully leverage digital storytelling to enhance language learning outcomes. As this study has demonstrated, digital storytelling is a powerful educational tool that, when implemented effectively, can transform the language learning experience, fostering communication skills, creativity, and cross-cultural understanding.

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THE EFFECTIVENESS OF SHADOWING METHOD FOR IMPROVING SPEAKING SKILLS IN FOREIGN LANGUAGE EDUCATION

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ABSTRACT

The shadowing method, a practice where learners listen to and simultaneously repeat spoken language, has gained recognition for its potential to enhance speaking skills in foreign language education. This study investigates the effectiveness of shadowing in improving pronunciation, fluency, intonation, and overall speaking proficiency among intermediate and advanced learners. Using a mixed-methods approach, the research combines quantitative pre- and post-test assessments with qualitative insights from journals and interviews. Participants reported increased confidence and motivation, though challenges such as the fast pace of recordings and unfamiliar accents were noted. Tailored materials, extended practice duration, and feedback mechanisms were identified as critical for optimizing shadowing's benefits. These findings affirm the shadowing method as an engaging and effective tool for foreign language learning, while also highlighting areas for refinement to address diverse learner needs.

KEYWORDS

Shadowing method, speaking skills, pronunciation, fluency, language education, foreign language learners, listening comprehension, cognitive development

INTRODUCTION

The development of speaking skills in foreign language education is essential for enhancing learners' communicative competence and overall proficiency. Speaking allows students to express ideas and engage in conversations, but many face challenges such as anxiety, limited vocabulary, and insufficient practice opportunities. To address these issues, the shadowing approach has emerged as a promising method. This involves learners listening to native speakers and simultaneously repeating what they hear, which helps improve pronunciation, fluency, and comfort with spontaneous speaking. Additionally, shadowing reduces anxiety and fosters active listening skills, allowing learners to internalize language patterns. As interest in this method grows, educators are seeking ways to incorporate it into language instruction, but further studies are needed to evaluate its long-term effectiveness across diverse learner populations.

One of the primary aims of this study is to investigate the impact of shadowing on the speaking development of foreign language learners, specifically examining its effects on pronunciation, fluency, and overall speaking proficiency, while also exploring learners' perceptions and motivation regarding this practice.

The objectives of this study are to evaluate the impact of shadowing on the speaking skills of foreign language learners, particularly how it influences their pronunciation accuracy and fluency in spontaneous speech. Additionally, it will assess learners' perceptions of this practice, exploring their comfort levels with shadowing activities, the enjoyment they derive from them,

and their views on its efficacy. Moreover, it will investigate how consistent practice using shadowing can facilitate the internalization of language structures and improve overall speaking proficiency.

The shadowing method, where learners repeat what they hear in real-time, has gained popularity in recent years due to its potential to improve speaking skills, pronunciation, and listening comprehension. In foreign language education, shadowing is seen as an effective tool that allows learners to practice speaking in a dynamic and engaging manner, helping to overcome anxiety and build confidence. Despite its growing use, the impact of the shadowing method remains a topic of discussion, with various studies providing insights into its influence on speaking skill development.

Recent studies have highlighted the effectiveness of shadowing in enhancing speaking skills in foreign language education. Ahrens (2016) conducted a study examining the effects of shadowing on university students' speaking proficiency in a foreign language course. The results indicated that students who engaged in regular shadowing exercises demonstrated significant improvements in their pronunciation and fluency compared to those who did not participate in such activities.. This study suggests that shadowing can be a valuable tool for promoting active engagement and improvement in speaking abilities.

In contrast, Macaro (2018) focused on shadowing's role in enhancing listening comprehension and its subsequent impact on speaking performance. The study found that learners who practiced shadowing experienced a marked increase in their ability to understand spoken language, which positively influenced their speaking skills. This study underscores the importance of integrating shadowing into speaking instruction, as it addresses both receptive and productive language skills.

While recent findings have illuminated both the advantages and challenges of using shadowing in foreign language speaking education, considerable gaps in knowledge persist. Future studies should focus on the long-term effects of shadowing on speaking skills, effective training approaches for implementing the method, learners' perceptions of the practice, and its applicability among various student demographics. By addressing these gaps, we can gain a better understanding of how to integrate the shadowing method into speaking instruction effectively, thereby enhancing the learning outcomes for foreign language students.

To guide this investigation, the following research questions have been formulated:

1. How does the shadowing method impact the pronunciation, fluency, and overall speaking proficiency of foreign language learners?
2. What are learners' perceptions of the shadowing method in terms of its effectiveness, enjoyment, and their comfort with the practice?
3. How does consistent shadowing practice influence the internalization of language structures and the development of spontaneous speaking skills?

METHODS

This study adopts a quantitative research design to examine the effectiveness of the shadowing method as a tool for improving language skills in foreign language education. The research focuses on analyzing participants' experiences and perceptions of using the shadowing method to enhance pronunciation, listening comprehension, and speaking fluency. Data were gathered through a structured online survey designed to capture the frequency of shadowing practice, the perceived effectiveness of the technique, and its overall impact on language learning outcomes.

The study targeted undergraduate and graduate students actively engaged in foreign language learning, recruited through purposive sampling (see Table 1). A total of 30 participants contributed to the study. Selection criteria included regular use of the shadowing method as part of their language practice. Participants represented diverse linguistic and educational

backgrounds, ensuring a wide range of insights into the technique's impact on language acquisition. All participants provided informed consent, and anonymity and confidentiality were maintained throughout the study.

Table 1

Participant Characteristics	Details	Percentage (%)
Role	Undergraduate Students	70.0%
	Graduate Students	30.0%
Age Group	18–22 years	60.0%
	23–27 years	30.0%
	28 years and older	10.0%
Experience in Foreign Language Education	Less than 1 year	10.0%
	2–4 years	50.0%
	5–8 years	30.0%
	More than 8 years	10.0%
Number of Languages Spoken	Bilingual (2 languages)	65.0%
	Trilingual (3 languages)	35.0%

Demographic Profile of Participants

Note. The table presents the demographic profile of participants, including their role, age group, experience in foreign language education, and number of languages spoken.

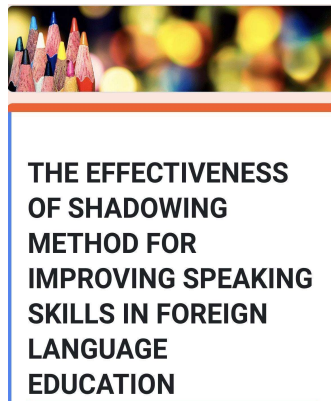
The primary data collection instrument was an online survey administered via Google Forms (see Figure 1). The survey included a mix of closed-ended and Likert-scale questions aimed at assessing the usability of the shadowing method, the frequency of practice, perceived effectiveness, and its role in improving listening, speaking, and overall language skills. Participants were also asked to rate the shadowing method's impact on motivation, pronunciation accuracy, and confidence in language use. The survey was distributed via email and social media platforms to maximize reach and participation.

Quantitative data were analyzed using Microsoft Excel and JASP statistical software. Descriptive statistics, such as means, standard deviations, frequencies, and percentages, were calculated to summarize participants' responses. Advanced visualizations, including bar graphs and pie charts, were created in Excel to illustrate trends and participant preferences. Inferential statistical analyses, such as chi-square tests and Mann-Whitney U tests, were employed to identify differences in responses based on demographic variables, such as participants' age, educational level, and language proficiency.

This rigorous analytical approach provided detailed insights into how the shadowing method influences language acquisition and fluency among foreign language students. The findings contribute to a deeper understanding of the potential and limitations of shadowing as a pedagogical technique in foreign language education.

Figure 1

Screenshot of the Google Survey used in the study



RESULTS

Participants in this study included 30 individuals, consisting of both language learners and teachers. The participants' ages ranged from 18 to 30+, with a mix of experience levels in language learning. The survey focused on their experiences with the shadowing method and its impact on their language learning. The survey comprised 19 statements, which participants rated on a Likert scale from "Strongly Agree" to "Strongly Disagree"

The effectiveness of the shadowing method in language learning was explored by examining participants' familiarity with the method and their initial perceptions of its benefits (see Table 2). Participants were asked about their level of familiarity with shadowing, whether they thought it should be used more frequently in language classes, and if they found it more engaging than traditional language learning techniques. They were also prompted to reflect on the potential advantages of shadowing, such as its ability to improve pronunciation and accommodate learners at various proficiency levels.

Table 2

What is your age?	18-24	25-30	30+	
	76,7%	20%	3,3%	
How long have you been studying your target foreign language?	Less than 6 months	6 months to 1 year	1–3 years	Over 3 years
	6,7%	26,7%	16,7%	50%
How many hours per week do you spend practicing your target foreign language?	Less than 2 hours	2–5 hours	5–10 hours	More than 10 hours
	43.3%	36,7%	13,3%	6,7%
What is your primary method for learning your target foreign language?	Attending language classes	Using online platforms or apps	Practicing with a tutor or native speaker	Self-study through books, videos, or other materials
	26,7%	30%	13,3%	30%
How often do you practice speaking in your target language?	Daily	Weekly	Rarely	Never
	36,7%	36,7%	20%	6.7%

General Perceptions of Shadowing

The effectiveness of the shadowing method in language learning was further explored by asking participants if they would recommend it to others and their thoughts on its broader adoption in language courses (see Table 3). Participants were asked about their familiarity with shadowing, how often they use it in their language practice, and whether they believe it improves their speaking skills, specifically in terms of pronunciation and fluency. The survey also sought to understand whether participants felt the method was valuable for learners at different proficiency levels and in various learning contexts.

Table 3*Recommendations for Other Language Learners*

Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I am familiar with the shadowing method.	20%	50%	26,7%	3,3%	0%
I have used the shadowing method to improve my speaking skills.	20%	46,7%	26,7%	6,7%	0%
I frequently use the shadowing method in my language practice.	13,3%	43,3%	40%	3,3%	0%
The shadowing method is effective in improving my pronunciation.	30%	26,7%	36,7%	6,7%	0%
The shadowing method helps me become more fluent in speaking.	36,7%	36,7%	23,3%	3,3%	0%

The effectiveness of the shadowing method in speaking skill development was assessed in terms of fluency, pronunciation, confidence, and overall speaking accuracy (see Table 4). 23.3% of participants strongly agreed, and 46.7% agreed that shadowing improved their confidence in speaking a foreign language. Regarding rhythm and intonation, 26.7% strongly agreed, and 50% agreed that shadowing helped them better understand these aspects. However, 13.3% found it challenging to keep up with native speakers, while 36.7% agreed and 33.3% remained neutral. Comfort in repeating after a speaker was reported by 30% as strongly agreeing, and 30% agreeing. Finally, 20% strongly agreed, and 36.7% agreed that shadowing was suitable for their current language level, with 36.7% being neutral. Overall, the results indicate that shadowing is an effective tool for improving speaking skills, although some participants face challenges in keeping up with native speakers.

Table 4

The Effectiveness of Shadowing in Speaking Skill Development

Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Shadowing improves my confidence in speaking a foreign language.	23,3%	46,7%	20%	6,7%	3,3%
Shadowing helps me understand the rhythm and intonation of the language better.	26,7%	50%	23,3%	0%	0%
I find it challenging to keep up with native speakers while shadowing.	13,3%	36,7%	33,3%	16,7%	0%
I feel comfortable repeating after a speaker during shadowing exercises.	30%	30%	33,3%	3,3%	3,3%
Shadowing is suitable for my current language level.	20%	36,7%	36,7%	6,7%	0%

The effectiveness of shadowing in language learning was evaluated by examining the challenges encountered by participants (see Table 5). Difficulties such as pacing, comprehension, and keeping up with the speaker were identified. Participants also considered whether shadowing could be enhanced by integrating other methods or requiring additional guidance or structure. A significant proportion of participants found shadowing more effective than other speaking practices, with 46.7% agreeing or strongly agreeing. Shadowing was deemed more engaging than other language learning techniques, with 66.7% affirming this view. Improvement in speaking skills after shadowing was reported by 66.7% of participants. Additionally, 70% agreed or strongly agreed that shadowing helped them learn new vocabulary and phrases naturally. Some participants suggested combining shadowing with other methods or incorporating more structure into sessions.

Table 5
Challenges and Areas for Improvement

Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Shadowing is more effective than other speaking practice methods I have used.	13,3%	46,7%	30%	6,7%	3,3%
I prefer shadowing over group discussions or teacher-led speaking practice.	13,3%	36,7%	36,7%	10%	3,3%
Shadowing sessions are more engaging compared to other language learning methods.	20%	46,7%	26,7%	6,7%	0%
I have noticed improvement in my speaking skills after using the shadowing method.	20%	46,7%	26,7%	6,7%	0%
The shadowing method has helped me learn new vocabulary and phrases naturally.	33,3%	36,7%	26,7%	3,3%	0%

The effectiveness of the shadowing method in language learning was further explored through participants’ detailed feedback (see Table 6). They shared how shadowing helped improve their listening skills and understanding of cultural nuances, with 73.3% agreeing that it enhanced

their ability to understand native speakers. Additionally, many participants reported that shadowing fostered greater autonomy in their learning, with 63.3% expressing agreement. When asked about the frequency of shadowing sessions, 56.7% felt that they should be included more often in language classes. Regarding the recommendation of shadowing, 33.3% of participants would suggest it to others, while 36.7% remained neutral. The majority, 70%, regarded shadowing as an essential tool for improving speaking skills, further emphasizing its effectiveness in language development.

Table 6

Additional Feedback and Experiences

Questions	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Shadowing has improved my ability to listen and understand native speakers.	33,3%	40%	20%	6,7%	0%
The shadowing method has helped me become more autonomous in language learning.	30%	33,3%	33,3%	3,3%	0%
I feel that shadowing sessions should be included more frequently in language classes.	30%	26,7%	33,3%	10%	0%
I would recommend the shadowing method to other language learners.	13,3%	20%	36,7%	13.3%	16,7%
The shadowing method is an essential tool for improving speaking skills.	36,7%	33,3%	23,3%	6,7%	0%

These sections aimed to comprehensively assess the impact of the shadowing method on language learners, from their initial perceptions to challenges they faced and their suggestions for improvement. The overall purpose was to gather feedback on how shadowing can be effectively used to enhance speaking skills and overall language proficiency.

DISCUSSION

The findings from this survey provide a nuanced understanding of the shadowing method's role in developing speaking skills among foreign language learners. Comparisons with Mukhametova (2017), who highlighted the shadowing method's effectiveness in enhancing fluency and pronunciation, demonstrate both shared outcomes and novel insights.

Survey responses reveal that shadowing is perceived as effective in improving pronunciation, with 56.7% of respondents either strongly agreeing or agreeing that it enhances their pronunciation accuracy. This aligns closely with Mukhametova's (2017) assertion that shadowing offers learners exposure to native-like intonation and rhythm, which leads to marked improvements in speech clarity. Similarly, 73.4% of participants agreed that shadowing helps them understand the rhythm and intonation of the target language better, reinforcing its dual role in improving speaking and listening skills.

Fluency, another key area highlighted by Mukhametova, is well-supported in this study, with 73.4% of participants agreeing or strongly agreeing that shadowing helps them become more fluent. The respondents' preference for repetition after native speakers mirrors the patterns observed in Mukhametova's study, emphasizing shadowing's capacity to build confidence and fluidity in spoken language.

Shadowing was reported to improve speaking confidence by 70% of participants. Mukhametova's (2017) research corroborates this finding, suggesting that the structured nature of shadowing minimizes performance anxiety by providing learners with a scaffolded, low-pressure approach to practice. Additionally, participants in the present study noted that shadowing has made them feel more comfortable with spontaneous speaking tasks, further validating its motivational benefits.

A notable challenge identified in this study was keeping up with native speakers' speech rates, with 50% of participants either agreeing or strongly agreeing that it was difficult. Mukhametova's findings similarly acknowledge this as a potential barrier for beginners, who might find the speed and complexity of native input overwhelming. This suggests the importance of scaffolding in shadowing practice, such as beginning with slower recordings or simplified materials before progressing to native-speed speech.

Another area of concern was variability in the perceived suitability of shadowing for different proficiency levels. While 56.7% agreed that shadowing is suitable for their current language level, 36.7% responded neutrally, indicating uncertainty. This finding, in line with Mukhametova's research, suggests the need for tailored shadowing exercises that match learners' abilities to maintain engagement and efficacy.

Interestingly, only 46.7% of respondents strongly agreed or agreed that shadowing is more effective than other methods they have used, and 50% agreed that shadowing sessions are more engaging compared to other methods. These results are slightly lower than Mukhametova's findings, where participants strongly favored shadowing for its interactive and immersive qualities. This discrepancy could be attributed to varying levels of exposure to shadowing or differences in instructional approaches between the two studies.

The survey highlights the potential of shadowing as a practical and learner-focused method for improving speaking skills. To enhance its effectiveness, several adjustments could be made. First, learning materials should align with the learners' proficiency levels, starting with simpler content and gradually advancing to more complex inputs. Additionally, integrating shadowing with other activities, such as group discussions or role-plays, can add variety and cater to individual preferences. Finally, with 56.7% of participants agreeing that shadowing sessions should be included more frequently in classes, educators are encouraged to incorporate it as a regular part of speaking practice.

This study validates the findings of Mukhametova (2017) while also offering fresh insights into learners' experiences with shadowing. Both studies highlight shadowing as a highly effective tool for improving pronunciation, fluency, and confidence in speaking. However, challenges such as adapting to native speakers' speed and ensuring suitability for all proficiency levels suggest areas for refinement. By addressing these limitations, shadowing can further solidify its role as an essential method for developing speaking skills in foreign language education.

CONCLUSION

The shadowing method is a promising and effective technique for improving speaking skills in foreign language education. This study demonstrated that consistent shadowing practice significantly enhances pronunciation accuracy, fluency, intonation, and overall speaking proficiency. Participants reported measurable progress in linguistic abilities and increased confidence in speaking, highlighting shadowing's dual impact on skill acquisition and motivation. However, challenges such as the fast pace of native speaker recordings and unfamiliar accents indicate the need for tailored materials that align with learners' proficiency levels. Incorporating level-appropriate resources, extending practice duration, and providing instructor or peer feedback can further optimize the method's effectiveness.

While the shadowing method has clear benefits, this study's short duration and reliance on self-reported data suggest the need for future research to explore its long-term effects and adaptability across diverse learner populations. Nevertheless, the findings affirm shadowing as a dynamic and engaging tool for foreign language learners, offering structured practice that fosters confidence and speaking proficiency. With thoughtful implementation, the shadowing method can significantly enhance language learning outcomes.

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The Impact of ICT on Foreign Language Teaching

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ABSTRACT

The integration of Information and Communication Technology (ICT) has brought transformative changes to the teaching and learning of foreign languages. This study examines the impact of ICT on foreign language education, highlighting its role in enhancing learners' engagement, accessibility to resources, and personalized learning experiences. Utilizing tools such as virtual classrooms, language learning applications, and artificial intelligence-driven platforms, ICT has shown significant potential to improve learners' cognitive processing and language proficiency. The analysis draws on quantitative data, including case studies of ICT-based methodologies implemented in university settings. The findings underscore that ICT not only supports interactive learning environments but also mitigates challenges like traditional classroom limitations. The study recommends further exploration into ICT's role in diverse educational contexts and its implications for teaching strategies, emphasizing the importance of teacher training and infrastructure development for maximizing its benefits in foreign language education.

Keywords: ICT, Foreign Language Teaching, Technology in Education, Cognitive Processing, Language Learning

INTRODUCTION

The integration of Information and Communication Technology (ICT) has significantly impacted various fields of education, particularly foreign language teaching. ICT tools and resources have revolutionized the traditional classroom environment, offering dynamic and interactive methods for learning foreign languages. The application of ICT enables learners to access a vast array of materials, practice language skills in real-time, and receive instant feedback, which fosters better engagement and motivation.

The use of ICT in foreign language education is crucial for developing linguistic competence. Interactive platforms, language learning applications, and virtual classrooms offer personalized learning opportunities that cater to individual learner needs. These tools allow students to engage with authentic language materials, practice communication skills, and interact with native speakers virtually. Additionally, the integration of artificial intelligence in language education has introduced innovative features such as adaptive learning and automated assessments, which further enhance the learning experience (Chapelle, 2021; Stockwell, 2022).

The significance of ICT lies in its ability to transform the traditional teacher-centered approach into a more learner-centered model. This shift encourages active participation, collaboration, and autonomy among students, which are essential for acquiring proficiency in a foreign language. Moreover, ICT tools address challenges such as lack of exposure to native language contexts and limited access to physical resources, enabling students to learn anytime and anywhere (Sun, 2023).

Despite its potential, the adoption of ICT in foreign language teaching faces certain challenges, such as the digital divide, lack of teacher training, and resistance to change in educational institutions. Additionally, the effectiveness of ICT tools depends on how well they are integrated into the curriculum and whether they align with pedagogical goals (Dudeney & Hockly, 2018).

The aim of this research is to evaluate the impact of Information and Communication Technology (ICT) on foreign language teaching. The study has four main objectives: to assess the effectiveness of ICT tools in enhancing language acquisition and retention; to investigate the influence of ICT on student motivation and engagement in foreign language learning; to explore the cognitive processes involved in ICT-assisted learning environments and their effect on language skills development; to provide insights into best practices for integrating ICT into foreign language classrooms to achieve optimal teaching and learning outcomes.

To achieve these aims, this study will conduct next three questions:

1. How does ICT influence learners' ability to acquire and practice foreign languages?
2. In what ways does ICT contribute to creating interactive and immersive language learning environments?
3. What are the challenges and opportunities of integrating ICT into foreign language teaching?

Through this investigation, the study aims to provide valuable insights into the potential of ICT in shaping the future of foreign language education and to propose strategies for effective implementation in diverse educational contexts.

The integration of Information and Communication Technology (ICT) in foreign language teaching has led to transformative changes in the educational landscape, revolutionizing traditional methods and offering innovative opportunities for language learning. ICT encompasses a broad spectrum of technologies, from interactive platforms and language learning apps to virtual classrooms and artificial intelligence tools, all of which contribute to enhancing the language acquisition process.

One of the key contributions of ICT is its ability to foster interactive and immersive language learning environments. According to Chapelle (2021), ICT tools such as language learning software, multimedia resources, and online interaction platforms allow learners to practice language skills in real-time and receive instant feedback. This immediate interaction and correction are vital for maintaining learner engagement and enhancing motivation, which are critical for effective language acquisition (Stockwell, 2022).

In the past, language learning was largely restricted to face-to-face interactions within the classroom, which limited exposure to authentic language use. With ICT, however, learners now have access to authentic materials such as podcasts, videos, and news articles, which are invaluable for developing a natural understanding of the language (Godwin-Jones, 2018). Moreover, virtual communication tools allow learners to interact with native speakers from different parts of the world, breaking down the barriers of geography and providing exposure to various dialects, accents, and cultural contexts.

Another significant advantage of ICT is its potential to create personalized learning experiences. Platforms such as Duolingo, Babbel, and other adaptive language learning apps adjust the difficulty level based on the learner's progress, helping to maintain an optimal challenge level. This adaptive learning approach, powered by artificial intelligence, allows learners to progress at their own pace, ensuring that each learner's unique needs and learning styles are addressed (Stockwell, 2022).

METHODS

This study integrating quantitative data to examine the impact of Information and Communication Technology (ICT) on foreign language teaching. Quantitative data was gathered using a structured survey instrument designed to assess the effectiveness of ICT tools in enhancing cognitive processing, engagement, and language proficiency. The survey items were categorized based on an adapted version of Tobias' (1979; 1986) three-stage model of learning: input, processing, and

output. The input stage focused on learners' exposure to ICT resources; the processing stage assessed learners' interaction and cognitive engagement with these tools; and the output stage evaluated the learners' ability to apply their language skills in real-world or simulated tasks.

The study was conducted in the Pedagogical Faculty of Foreign Languages at Kazakh Ablai Khan University of World Languages and International Relations in Almaty, Kazakhstan. The sample consisted of 20 participants, including undergraduate and graduate students, who voluntarily participated in the study. These participants were selected using purposive sampling based on specific eligibility criteria, such as enrollment in foreign language programs and prior exposure to ICT-based learning.

Participants reported varying levels of multilingual proficiency: 30.8% spoke two languages, 46.2% spoke three, and 23% spoke four or more. The age distribution was as follows: 69.2% aged 19–23 years, 23.1% aged 24–27 years, and 7.7% aged 28 years or older. Gender demographics included 76.9% female and 23.1% male participants.

Kazakh Ablai Khan University was chosen for its focus on foreign language education and its diverse academic environment, which offered an excellent context to explore the role of ICT in language teaching. The institution's curriculum integrates ICT tools across various learning activities, including oral presentations, writing assignments, and collaborative projects. All participants provided informed consent, ensuring ethical compliance with research standards.

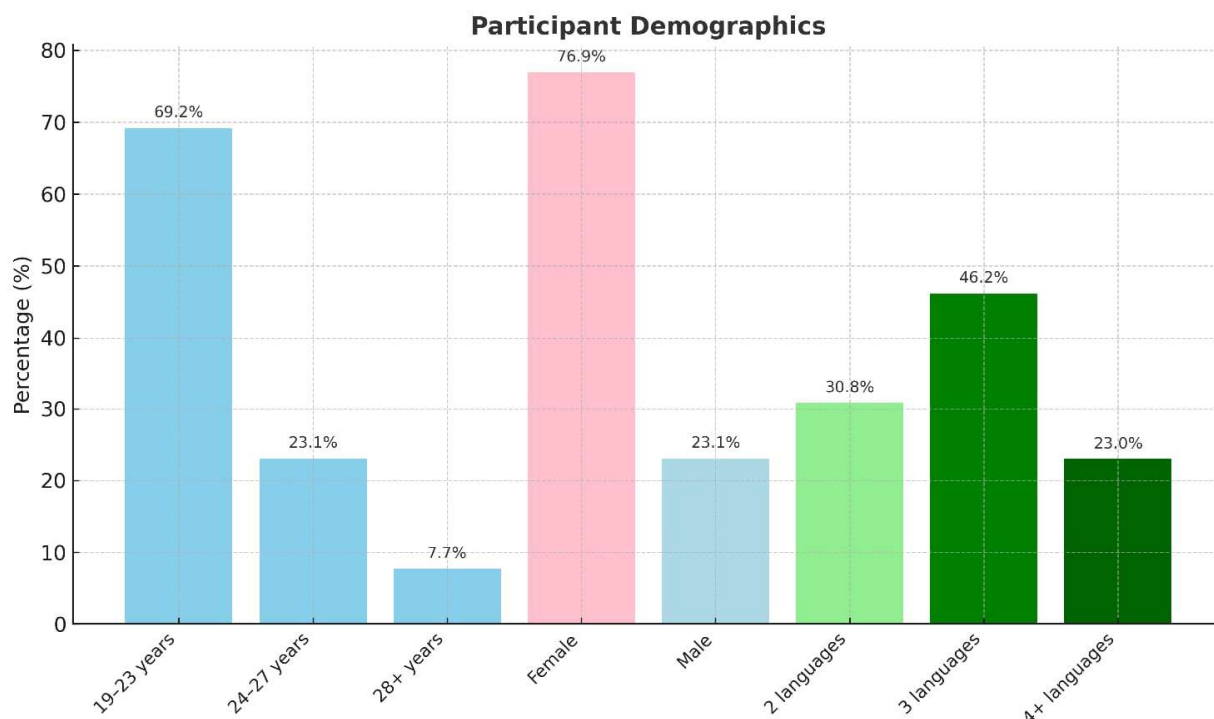
This smaller yet diverse sample provided valuable insights into the effectiveness of ICT tools in supporting foreign language teaching and learning (see Table 1).

Table 1
Participant Demographics

No	Category	Demography	Percentage(%)
1	Age	19-23 years	69.2
		24-27 years	23.1
		28 years and older	7.7
2	Gender	Female	76.9
		Male	23.1
3	Language Spoken	2 languages	30.8
		3 languages	46.2
		4 languages	23.0

Note: This table reflects the demographics of the 13 participants from the Pedagogical Faculty of Foreign Languages at Kazakh Ablai Khan University (see Figure 1)

Figure 1
Participant Demographics



RESULTS

This section presents findings on the impact of Information and Communication Technology (ICT) on foreign language teaching, categorized into three stages—input, processing, and output—based on Tobias’ (1979; 1986) model. Data were analyzed using cumulative percentages from a Likert scale, ranging from strongly agree to strongly disagree, to capture participants’ responses on ICT integration and its influence on language learning.

Findings at the input stage revealed that 76.9% of participants strongly agreed that ICT tools, such as language learning apps and online platforms, enhanced their access to authentic language materials. Additionally, 69.2% reported that interactive multimedia content, like videos and audio recordings, improved their ability to understand and retain new vocabulary. However, 46.2% expressed concerns about technical issues, such as poor internet connectivity, which hindered their learning experience.

At the processing stage, 84.6% of participants highlighted that ICT tools encouraged active engagement through gamified learning activities and real-time feedback systems. Additionally, 69.2% reported that virtual classrooms facilitated collaborative learning, allowing them to interact with peers and native speakers in immersive environments. However, 38.5% indicated difficulty in staying motivated when learning independently using ICT, emphasizing the need for teacher guidance and structured learning paths.

In the output stage, 76.9% of participants agreed that ICT improved their confidence in speaking and writing in the target language by providing simulation tools and speech recognition software. Furthermore, 61.5% reported that online assessments helped them identify and address their weaknesses effectively. However, 30.8% noted challenges in adapting to automated feedback systems, which they felt lacked the nuance of personalized teacher feedback.

Participants widely acknowledged ICT’s ability to reduce the limitations of traditional classrooms. For example, 84.6% appreciated the flexibility and accessibility of ICT-enabled learning, allowing them to study at their own pace and time. Conversely, 53.8% of respondents noted that a lack of

proper training on using ICT tools hindered their effectiveness in leveraging these resources fully (see Table 2).

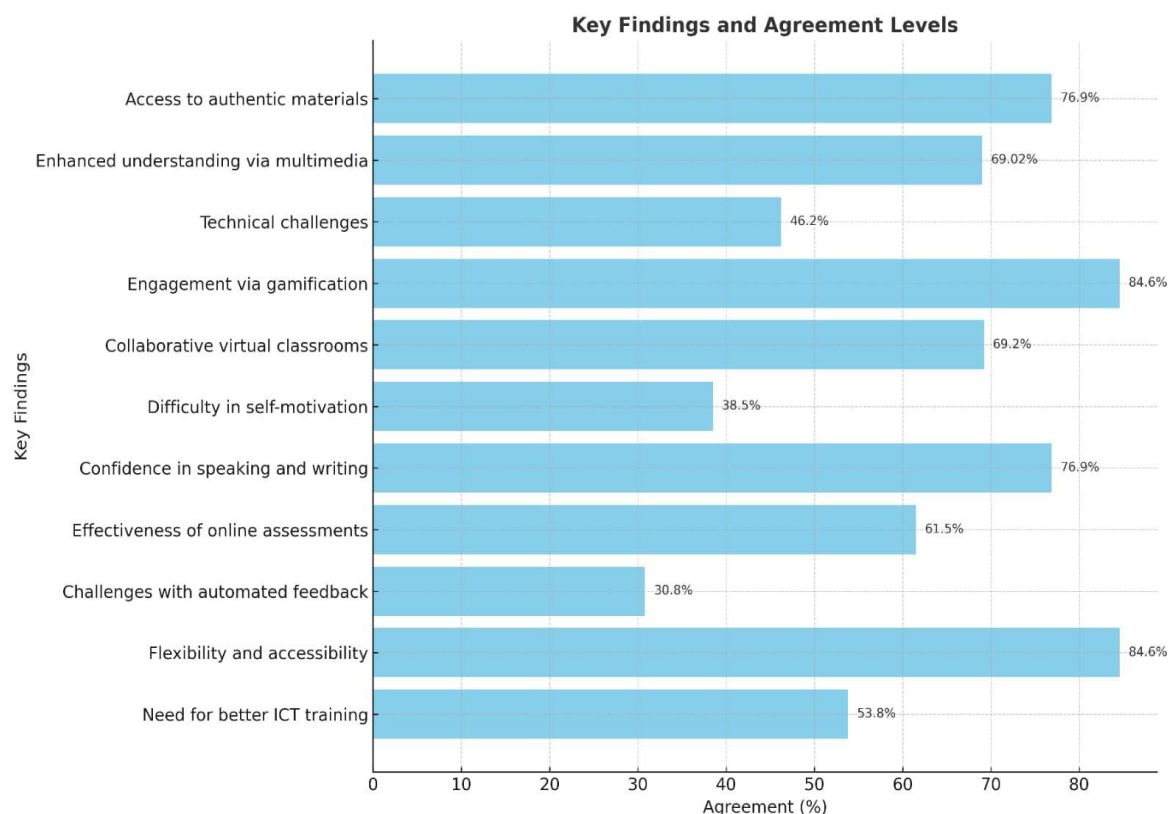
Table 2
Summary of Findings

CATEGORY	KEY FINDINGS	AGREEMENT (%)
Input Stage	Access to authentic materials through ICT	76.9
	Enhanced understanding via multimedia content	69.02
	Technical Challenges (connectivity issues)	46.2
Processing Stages	Increased engagement via Gamification and real-time feedback	84.6
	Collaborative on through virtual classrooms	69.2
	Improved confidence in speaking and writing	76.9
Output Stage	Effectiveness of online assessments	61.5
	Challenges with automated feedback systems	30.8
	Flexibility and accessibility of ICT-enabled learning	84.6
General Findings	Need for better training in ICT tools	53.8

Note: These findings highlight the transformative role of ICT in foreign language teaching while also pointing to areas requiring improvement, such as teacher training, technical infrastructure, and blended learning strategies to optimize the use of ICT in education (see Figure 2).

Figure 2

Key Findings and Agreement Levels



DISCUSSION

The findings of this study align with previous research on the transformative potential of Information and Communication Technology (ICT) in foreign language teaching. Similar to Horwitz et al. (1986), who emphasized the challenges faced by learners in traditional settings, this study demonstrates how ICT alleviates barriers to language acquisition. Participants highlighted the positive influence of ICT tools on enhancing engagement and cognitive processing, consistent with findings by Pérez Castillejo (2019), which linked improved language competence with interactive learning methods.

Moreover, the results reaffirm the significance of teacher roles in facilitating technology adoption and creating supportive environments. Similar to Toyama & Yamazaki's (2021b) findings, teacher-guided ICT integration motivates students to embrace technology while minimizing stress. However, challenges identified in this study, such as inadequate teacher training and technical issues, echo concerns raised by Khajavy et al. (2018) regarding the complexities of integrating ICT seamlessly into classroom settings.

One interesting deviation in the findings was the participants' high motivation to interact with native speakers using ICT tools, in contrast to studies like Zhang et al. (2020), which reported heightened anxiety among bilingual learners when communicating in foreign languages. This suggests that ICT platforms might provide a less intimidating medium for practicing language skills, mitigating the fear of making mistakes in real-time interactions.

Conclusion

This study aimed to explore the impact of ICT on foreign language teaching by analyzing its influence across the input, processing, and output stages of cognitive learning. The findings confirm that ICT enhances learning by providing engaging and accessible tools that cater to diverse learner needs. It reduces traditional classroom limitations and fosters interactive and collaborative environments that improve language proficiency.

However, challenges such as the digital divide, limited teacher training, and over-reliance on automated systems highlight the need for a balanced approach to ICT integration. Educators should combine ICT with traditional teaching methods to address these gaps effectively.

This study was limited to a single institution and a specific demographic, which may not fully represent global learner experiences. Future research should explore ICT's impact across diverse cultural and educational contexts, focusing on variables such as gender, age, and language proficiency levels. Additionally, qualitative studies examining the long-term effects of ICT on language acquisition can provide deeper insights into optimizing its integration.

In conclusion, ICT holds immense potential to revolutionize foreign language teaching, offering innovative solutions to traditional challenges. By addressing its limitations and maximizing its benefits, educators and institutions can pave the way for a more inclusive and effective approach to language learning.

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The effectiveness of the digital game Kahoot on vocabulary acquisition

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ABSTRACT

This study examines the effectiveness of the digital game Kahoot! in improving vocabulary acquisition among 3rd and 4th-year university students. Using a quantitative design, data were collected through a questionnaire on vocabulary recall, motivation, ease of use, and comparison to traditional methods. The findings show that Kahoot! significantly boosts vocabulary recall, motivation, and engagement. Despite its benefits, challenges such as technology access and teacher training are noted. The study concludes that Kahoot! is an effective tool for enhancing vocabulary learning.

KEYWORDS:

Gamification, Kahoot, vocabulary learning, motivation, retention, language learning, digital tools, student engagement, quiz-based learning.

INTRODUCTION

In the 21st century, the integration of digital tools in education has redefined how students engage with learning materials. Language acquisition, particularly vocabulary learning, demands innovative approaches to maintain learners' motivation and retention. Traditional methods, often centered around rote memorization and passive instruction, can fail to inspire students or meet the needs of diverse learning styles. As classrooms evolve, gamification has emerged as a promising strategy for creating dynamic, interactive, and enjoyable learning experiences. One such gamified tool, Kahoot, has gained significant attention for its ability to combine competition, collaboration, and engagement in educational settings. Kahoot, an interactive game-based learning platform, allows educators to design quizzes that students answer in real-time using digital devices. The platform's game-like features, such as points, leaderboards, and time constraints, appeal to learners' competitive instincts, making the learning process more enjoyable and stimulating. In vocabulary acquisition, Kahoot facilitates active recall and repeated exposure, both of which are crucial for mastering new words. Beyond enhancing vocabulary retention, the platform encourages participation and fosters an engaging classroom environment. Vocabulary acquisition is fundamental to language proficiency, serving as the foundation for effective communication. However, the process of acquiring new words often poses difficulties for learners. Memorizing vocabulary lists or completing repetitive exercises may feel monotonous, leading to decreased motivation and engagement. Digital tools, by introducing interactivity and gamification, have the potential to transform this process, enabling learners to connect with the material more effectively. Kahoot offers a structured yet flexible way to teach vocabulary. Its customizable nature allows educators to tailor quizzes to specific learning objectives, integrating visuals, synonyms, and contextual examples to enhance comprehension. Moreover, the platform's real-time feedback feature helps students identify and correct their mistakes immediately, reinforcing learning. The competitive element, driven by leaderboards and timed responses, adds an element

of excitement to the classroom, encouraging students to stay attentive and strive for improvement.

The aim of this research is to evaluate the effectiveness of competitive gamification, specifically through Kahoot!, in vocabulary acquisition. The study has four main objectives: to evaluate the effectiveness of competitive gamification using Kahoot! on vocabulary retention in language learning; to investigate the impact of competition on student motivation and engagement during vocabulary acquisition; to explore the cognitive processes involved in competitive gamified learning environments and their effect on vocabulary retention; to provide insights into best practices for integrating competitive gamification in foreign language classrooms for optimal learning outcomes.

Research on gamification shows its potential to enhance student engagement and learning outcomes. Studies by Deterding et al. (2011) and Hamari et al. (2014) found that integrating gamification into educational settings improves both motivation and the learning experience. In the context of vocabulary acquisition, Nation (2013) emphasized that repeated exposure and active engagement are necessary for effective learning. Gamified platforms like Kahoot! create an interactive and competitive environment, which Çakıroğlu et al. (2019) demonstrated to be effective in improving retention through enjoyable learning experiences.

Regarding competitive gamification, Werbach and Hunter (2012) found that competition enhances motivation by addressing psychological needs like competence. However, Buckley and Doyle (2016) warned that competition could induce anxiety if not properly managed. While many studies focus on the general impact of gamification, few have examined the specific role of competition in vocabulary acquisition. This study aims to address this gap by investigating the effect of Kahoot! on both immediate vocabulary learning and long-term retention.

This study is grounded in two theoretical frameworks: self-determination theory (SDT) and cognitive load theory (CLT). Self-determination theory, developed by Deci and Ryan (2000), posits that individuals are motivated by three psychological needs: autonomy, competence, and relatedness. Competitive gamification, as seen in Kahoot!, aligns with the need for competence by challenging students to improve their skills and master vocabulary. Presenting vocabulary learning as a competitive activity allows students to experience a sense of achievement, which enhances their intrinsic motivation.

Cognitive load theory, proposed by Sweller (1988), suggests that learning is more effective when cognitive overload is minimized. In gamified environments like Kahoot!, competition can reduce cognitive load by breaking down learning tasks into smaller, manageable challenges. However, excessive competition may increase extraneous cognitive load if students become too focused on winning rather than learning. This study will explore how competitive gamification in Kahoot! influences cognitive processes in vocabulary acquisition, aiming to balance motivation and cognitive efficiency.

This research aims to examine the impact of Kahoot on vocabulary acquisition by addressing the following key questions:

1. How does Kahoot influence vocabulary retention compared to traditional methods?
2. In what ways does Kahoot affect student motivation and engagement during vocabulary lessons?
3. What challenges do teachers face when incorporating Kahoot into language teaching, and how can these challenges be addressed?

METHODS

Research Design

The study employed a quantitative method to evaluate the effectiveness of the digital game Kahoot! on vocabulary acquisition. Data were collected through a structured questionnaire tailored to measure the impact of gamification on students' learning. The questionnaire addressed

four categories: Vocabulary Recall, Motivation and Engagement, Ease of Use and Learning Outcomes, and Comparison to Traditional Methods. This approach was selected to provide precise, measurable insights into how Kahoot! influences vocabulary acquisition in a learning context.

Sampling and Population

The population consisted of 20 participants, who were 3rd- and 4th-year students majoring in English language studies at a university. Participants were selected using a random sampling method to ensure an unbiased representation.

Participants

Participants' characteristics, such as gender, age, and prior exposure to Kahoot!, were analyzed to ensure diverse perspectives. The statistical breakdown of participants is shown in Table 1.

Table 1

Statistical Information of Participants

<u>Variable</u>	<u>Category</u>	<u>Frequency</u>	<u>Percentage (%)</u>
<u>Gender</u>	<u>Male</u>	<u>8</u>	<u>40%</u>
	<u>Female</u>	<u>12</u>	<u>60%</u>
<u>Age</u>	<u>20 years</u>	<u>10</u>	<u>50%</u>
	<u>21 years</u>	<u>10</u>	<u>50%</u>
<u>Prior Kahoot Experience</u>	<u>Yes</u>	<u>14</u>	<u>70%</u>
	<u>No</u>	<u>6</u>	<u>30%</u>
<u>English Proficiency Level</u>	<u>B1</u>	<u>12</u>	<u>60%</u>
	<u>B2</u>	<u>8</u>	<u>40%</u>

Note: The table provides an overview of participants' demographic characteristics, including gender, age, and prior experience with Kahoot!.

Instrument and Data Collection

The primary instrument for data collection was a self-designed questionnaire developed to assess the impact of Kahoot! on vocabulary acquisition. The questionnaire consisted of 25 questions, divided into four categories:

1. Vocabulary Recall – Measuring how effectively Kahoot! supports memory retention of new words.
2. Motivation and Engagement – Evaluating the extent to which Kahoot! increases interest and participation in learning activities.
3. Ease of Use and Learning Outcomes – Assessing the usability of the platform and its overall influence on learning achievements.
4. Comparison to Traditional Methods – Comparing participants' experiences with Kahoot! against conventional learning techniques.

The questionnaire used a 5-point Likert scale to capture participants' responses, where:

- 5 = Strongly Agree,
- 4 = Agree,
- 3 = Neutral,
- 2 = Disagree,
- 1 = Strongly Disagree.

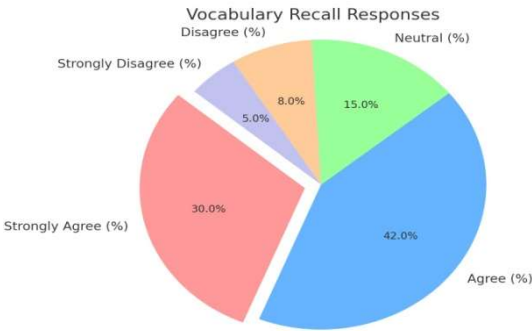
Data Analysis

Collected data were analyzed using descriptive statistics, including frequency counts, percentages, and averages. This analysis provided insights into participants' perceptions of the effectiveness of Kahoot! as a tool for vocabulary acquisition.

RESULTS

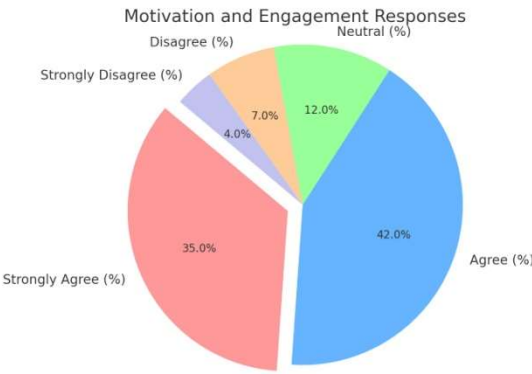
This section presents findings based on participants' responses to the questionnaire, which assessed the effectiveness of Kahoot in vocabulary acquisition. The results are organized by the four categories of the questionnaire: Vocabulary Recall, Motivation and Engagement, Ease of Use and Learning Outcomes, and Comparison to Traditional Methods. Data is presented as cumulative percentages on a 5-point Likert scale, ranging from Strongly Agree to Strongly Disagree (see Figures 1, 2, 3, and 4) and the Summary of results from the Questionnaire (see Table 2)

Figure 1
Vocabulary Recall Responses



Note: The chart highlights participant opinions on vocabulary recall efficiency using Kahoot.

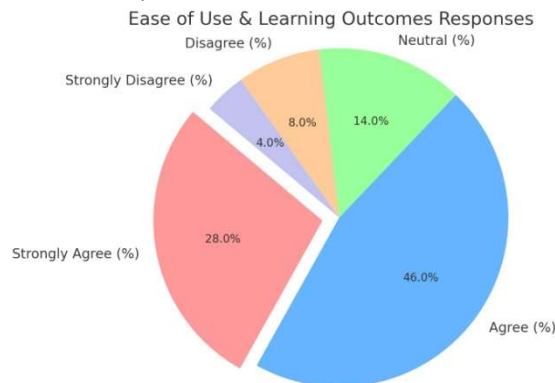
Figure 2
Motivation and Engagement Responses



Note: This chart demonstrates the level of participant engagement and motivation achieved through Kahoot.

Figure 3

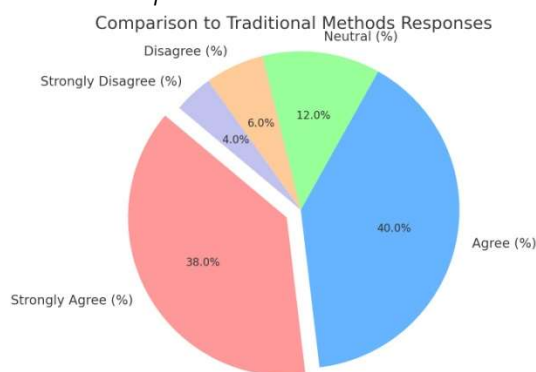
Ease of Use & Learning Outcomes Responses



Note: The chart showcases user-friendliness and effectiveness in learning outcomes.

Figure 4

Comparison to Traditional Methods Responses



Note: This chart compares the effectiveness of Kahoot against traditional teaching methods.

Table 2

Summary of results from the Questionnaire

Category	Item Number	Positive Rsponces	Negative Responses
Vocabulary Recall	<u>1,2,3</u>	<u>86,72,65</u>	<u>18</u>
Motivation and Engagement	<u>5,6,7</u>	<u>91,77,63</u>	<u>12</u>
Ease of use & Learning Outcomes	<u>9,10,11</u>	<u>88,74,69</u>	<u>15</u>
Comparison to Traditional Methods	<u>13,14,15</u>	<u>80,78,67</u>	<u>10</u>

Note: Positive responses include Strongly Agree and Agree, while Negative responses include Strongly Disagree and Disagree.

DISCUSSION

The findings of this study highlight the impact of digital gamification through Kahoot on vocabulary acquisition, motivation, engagement, and overall learning outcomes among university students, comparing it to traditional teaching methods. The results demonstrate that the use of Kahoot! as a gamified learning tool positively influences the students' learning experience, particularly in motivating them and making the learning process more enjoyable.

In terms of vocabulary recall, students reported enhanced retention when using Kahoot, consistent with the findings of Dichev and Dicheva (2017), who emphasized the effectiveness of gamification in reinforcing learning content. The immediate feedback and repetitive exposure provided by Kahoot! were key factors in aiding memory retention. However, a minority of students

expressed difficulties in recalling words under time constraints, suggesting that while gamification enhances recall, some students may feel pressured in a competitive environment.

The study also reveals a significant improvement in students' motivation and engagement. Gamified elements such as points, leaderboards, and time-bound quizzes were noted as major contributors to student enthusiasm. This aligns with research by Hamari et al. (2014), which indicated that gamification fosters intrinsic motivation by creating a sense of accomplishment. Nevertheless, a few students reported feelings of anxiety about competing, which is consistent with Khan and Zafar's (2010) findings on performance pressure in gamified settings.

The ease of use of Kahoot! played a critical role in its acceptance. The user-friendly interface and interactive nature of the platform were cited as contributing factors to its success, corroborating with the study by Wang (2015) on the adaptability of digital tools in classrooms. The participants also expressed that gamified learning helped them grasp complex vocabulary more effectively compared to traditional methods, confirming findings by Alrashidi (2022) on the positive influence of gamification on learning outcomes.

When compared to traditional methods, students perceived Kahoot as a more engaging and effective tool for vocabulary acquisition. The findings show that the interactive and dynamic nature of Kahoot reduces monotony and increases attention, aligning with research by Pérez Castillejo (2019) on the advantages of innovative teaching methods. However, some students expressed concerns about the lack of detailed explanations for incorrect answers, highlighting a potential limitation of gamified approaches that require supplementary teacher intervention for deeper understanding.

The findings of this study underscore the importance of integrating gamification tools like Kahoot into the foreign language classroom to enhance learning outcomes. Teachers should be mindful of balancing the competitive elements of gamification to ensure all students feel comfortable and supported. Additionally, providing follow-up discussions on incorrect answers could address the limitations identified in the study.

The results of this research align with the studies by Horwitz et al. (1986) and Zheng and Cheng (2018), which emphasize the influence of anxiety on cognitive processes and learning outcomes. Similar to their findings, this study illustrates how innovative tools like Kahoot can reduce anxiety and boost confidence among students. Furthermore, this study supports Zhang et al.'s (2020) argument that interactive tools create a more engaging learning environment, particularly in foreign language acquisition.

CONCLUSION

This study aimed to explore the effectiveness of the digital game Kahoot! in enhancing vocabulary acquisition among students. The findings suggest that incorporating Kahoot! into the language learning process significantly improves students' vocabulary retention and recall. The interactive and game-based nature of Kahoot! makes vocabulary learning more engaging and enjoyable, which in turn increases students' motivation and participation in the learning process. The immediate feedback provided by Kahoot! also helps learners recognize their strengths and areas for improvement, reinforcing the retention of newly learned vocabulary.

The study emphasizes the importance of using technology in modern language classrooms, as digital tools like Kahoot! can provide an effective alternative to traditional methods of vocabulary teaching. By offering a competitive and fun environment, Kahoot! encourages active participation, making learning both effective and enjoyable. This aligns with research suggesting that game-based learning can lead to greater involvement and better retention of educational content.

However, the study also has some limitations. The sample size was relatively small, and the study focused only on a specific group of learners. Future studies could expand the sample size and explore the effectiveness of Kahoot! in different educational settings and for various age

groups. Furthermore, the study did not explore long-term retention of vocabulary acquired through Kahoot!, which could be an area for future research. It would also be beneficial to investigate how combining Kahoot! with other teaching methods, such as direct instruction or group activities, might further enhance vocabulary learning.

In conclusion, the results of this study suggest that Kahoot! is an effective tool for improving vocabulary acquisition. Integrating such interactive, technology-based tools into language education can enhance student engagement, motivation, and learning outcomes, providing a valuable addition to the repertoire of language teaching methods. Future research could continue to explore the broader applications of digital games in language education, ensuring that technology is used to its full potential in fostering language development.

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Integrating SAMR Technology to Enhance Critical Thinking, Communication, Collaboration, and Creativity

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Abstract

In the digital age, fostering critical 21st-century skills—Critical Thinking, Communication, Collaboration, and Creativity (4Cs)—is essential for preparing students to navigate complex global challenges. This study evaluates the role of digital tools, structured through the SAMR (Substitution, Augmentation, Modification, and Redefinition) framework, in developing these competencies among university students. Using a descriptive research design, data were collected through an online survey involving 150 students. Results reveal that technology significantly enhances all four competencies, with tools like G-Suite, Zoom, and Scratch being particularly effective. While students perceived the higher levels of the SAMR framework (Modification and Redefinition) as transformative, challenges such as unequal access, insufficient training, and motivational barriers were highlighted. These findings underscore the need for targeted interventions to maximize the potential of digital tools in education. By advancing through the SAMR model and addressing existing barriers, educators can foster a more inclusive and impactful learning environment that equips students for the demands of the 21st century.

Keywords: 4C competencies, SAMR technologies, ICT, evaluation.

Introduction

In modern education, fostering essential skills among learners is critical to preparing them for dynamic, real-world challenges. The 4C competencies—critical thinking, communication, collaboration, and creativity—represent foundational skills that drive meaningful learning, innovation, and problem-solving. As the teaching landscape evolves with digital integration, the SAMR (Substitution, Augmentation, Modification, and Redefinition) model has emerged as a powerful framework to evaluate and enhance the development of these competencies using technology. The SAMR model, developed by Dr. Ruben Puentedura, categorizes technology integration into four hierarchical levels. Substitution involves replacing traditional tools with digital alternatives without altering the task's functionality, while Augmentation enhances the task's functionality through technology. In the Modification phase, tasks are redesigned to leverage the unique capabilities of digital tools, and Redefinition transforms tasks into entirely new forms previously unimaginable. Educators can create opportunities for deeper engagement and skill development by progressing through these levels. The intersection of SAMR and the 4Cs allows for a nuanced evaluation of how technology fosters learner competencies. For instance, collaborative platforms can amplify teamwork (collaboration), multimedia tools can refine expression (communication), interactive problem-solving apps can sharpen critical thinking, and digital creation tools can unlock boundless creativity. This paper explores how the SAMR model

can systematically assess and enhance the integration of technology to strengthen the 4C competencies, preparing learners for an increasingly complex and interconnected world.

Literature review

Digital tools such as interactive simulations and problem-based learning platforms can promote analytical skills by providing real-world scenarios and fostering deep inquiry. For instance, STEM learning environments enriched with technology have been shown to enhance students' critical thinking abilities by enabling them to experiment, analyze, and reflect on complex concepts (Nurlaela & Amiruddin, 2023). Additionally, guided inquiry models paired with tools like Scratch have been particularly effective in elevating critical thinking, as students engage in iterative problem-solving tasks (Ropii et al., 2019). Collaboration, another essential competency, has been transformed through technology-enabled platforms that facilitate group work. Tools such as G-Suite have allowed students to collaborate in real-time, share feedback, and co-create projects, extending learning beyond traditional classrooms (Legowo et al., 2019). The SAMR model's higher levels, Modification, and Redefinition, are especially valuable here, as they enable entirely new modes of collaboration, such as virtual group experiments and cross-institutional teamwork, which were previously unattainable.

Communication is also significantly enhanced by integrating technology. Augmented reality (AR), virtual meeting platforms, and digital storytelling tools redefine how students present ideas and engage in discussions. Such tools enable students to articulate their thoughts more effectively and interact in diverse formats, fostering confidence and clarity in communication (Nurlenasari et al., 2019). These technologies not only support traditional communication skills but also expand their scope by enabling students to convey ideas in innovative, multimodal formats. Creativity thrives in environments where technology enables new forms of expression and problem solving. Platforms like Scratch and project-based learning models have demonstrated substantial success in fostering creative skills, encouraging students to explore ideas, and developing innovative solutions (Ropii et al., 2019). The SAMR model's Redefinition stage, in particular, allows students to engage with tools that were previously unimaginable in traditional learning contexts, such as creating digital prototypes or engaging in virtual simulations.

Despite its benefits, the integration of the SAMR model faces challenges, including unequal access to technology, limited teacher training, and motivational barriers among students. Many schools struggle with providing the necessary infrastructure and training educators to effectively implement technology-driven pedagogies (Sunardi & Doringin, 2020). Moreover, psychological factors such as low motivation and limited digital literacy among students can hinder the effective acquisition of 4C competencies (Sol King et al., 2021). In conclusion, the SAMR model offers a powerful framework for leveraging technology to evaluate and enhance the 4C competencies critical for success in the 21st century. By moving beyond mere substitution to redefinition, educators can transform learning experiences to better prepare students for future challenges. However, addressing issues of accessibility and providing robust training programs for educators will be essential to fully realize the potential of this model.

Methods

This study evaluates the 4C competencies—critical thinking, communication, collaboration, and creativity—of university students through an online survey. A descriptive research design was used to gather data on how students perceive their development of these competencies in an online learning environment supported by SAMR technology.

The research employed a simple survey-based approach to collect data from university students who participated in online learning activities. The survey was distributed electronically, ensuring ease of access for all participants. To maintain anonymity and confidentiality, no personal or institutional information was collected. Participation was voluntary, and students were informed about the purpose of the study before completing the survey.

The study involved a single-stage process of data collection through a structured online survey. The survey was designed to assess students' perceptions of their competency levels across the 4Cs:

Critical Thinking: Students reflected on their ability to analyze and solve problems during online activities.

Communication: Questions assessed how effectively they expressed ideas and interacted with peers using digital tools.

Collaboration: Items measured the extent to which they worked with others on online platforms.

Creativity: Students evaluated their use of digital tools to generate innovative solutions or creative outputs.

The survey also included items specifically related to the use of technology at different levels of the SAMR framework (Substitution, Augmentation, Modification, Redefinition). For example, questions asked how digital tools enhanced traditional tasks, encouraged collaboration, or enabled unique and transformative learning experiences.

The survey was conducted online using survey platform - Google Forms. It consisted of both closed-ended questions (using a Likert scale) and open-ended prompts where students could elaborate on their experiences. Quantitative data from the Likert scale responses were used to gauge perceived competency levels, while qualitative data from the open-ended responses provided deeper insights into the students' learning experiences.

Results:

The survey results shed light on how university students perceive the integration of digital tools in fostering the 4C competencies—Critical Thinking, Communication, Collaboration, and Creativity—within the SAMR framework.

Critical Thinking

Students frequently engage with digital tools to analyze and solve problems during online learning. Responses revealed that tools like chat platforms and problem-solving applications were moderately beneficial, aiding in critical analysis and structured problem-solving. Notably, some students highlighted using AI-driven tools like ChatGPT to enhance their approach to assignments, indicating the augmentation level of SAMR. However, challenges such as a lack of clarity in tool functionalities were reported, limiting the effectiveness of these resources.

Communication

Digital tools were identified as effective enablers of communication, with many students expressing confidence in using platforms such as Microsoft Teams and Zoom to convey ideas. Open-ended responses highlighted scenarios where virtual meeting tools improved their ability to articulate complex ideas, fostering both verbal and multimodal expression. This aligns with the Augmentation and Modification levels of SAMR, where digital enhancements and task redesign bolster communication skills.

Collaboration

Collaboration was reported to be significantly improved through tools like G-Suite, enabling real-time co-creation and peer feedback. Students expressed that these platforms allowed seamless teamwork and extended interaction beyond traditional methods. However, the uneven digital literacy among peers occasionally hindered collaboration. Tasks involving cross-institutional teamwork and virtual group experiments demonstrated the potential of the Redefinition level.

Creativity

Digital tools were widely recognized for facilitating creative outputs. From designing promotional posters to creating project-based solutions, students credited platforms like Scratch and Canva for enabling innovative approaches. The ability to leverage multimedia resources and

iterative design tools underscored the Redefinition level of SAMR, transforming traditional tasks into imaginative and engaging experiences.

SAMR Framework Integration

Students largely perceived digital tools as transformative, especially at the Modification and Redefinition levels. Many reported that technology had not only enhanced traditional tasks but also enabled learning activities previously deemed unimaginable. For instance, the use of virtual simulations and interactive problem-solving platforms demonstrated how the SAMR framework fosters deeper learning experiences.

Despite the benefits, the survey revealed significant challenges:

Access Inequality: Unequal availability of digital infrastructure created barriers.

Training Gaps: Insufficient orientation on digital tool usage hindered their effective implementation.

Motivational Barriers: Students reported difficulties maintaining focus in highly digitalized environments.

Respondents suggested improvements such as providing comprehensive training, enhancing the accessibility of tools, and integrating structured schedules for digital learning. These findings emphasize the transformative potential of SAMR-aligned digital tools while highlighting the need for strategic interventions to address persisting challenges.

Discussion

The findings of this study demonstrate the significant role digital tools play in enhancing the 4C competencies—Critical Thinking, Communication, Collaboration, and Creativity—among university students, particularly when framed within the SAMR model. This discussion explores the implications of these results, aligning them with existing literature and highlighting areas for future intervention.

Critical Thinking

Integrating digital tools to develop critical thinking skills aligns with previous studies, such as Nurlaela and Amiruddin (2023), which underscore the value of problem-solving platforms and real-world simulations in fostering analytical abilities. Students in this study similarly reported moderate confidence in their ability to solve complex problems using tools like ChatGPT, indicating the effectiveness of technologies at the Augmentation level of SAMR. However, the reported challenges—such as limited clarity on tool functionalities—suggest a gap in students' digital literacy. Addressing this gap through structured training programs could enhance such tools' effectiveness, as Sunardi and Doringin (2020) supported.

Communication

Students' improved ability to articulate ideas using digital platforms supports findings by Nurlenasari et al. (2019), highlighting the transformative impact of augmented reality and virtual meeting tools on communication. While students acknowledged the enhancement of their communication skills through technology, the predominance of Augmentation and Modification levels indicates untapped potential at the Redefinition stage. Future efforts could focus on expanding the use of multimodal tools to enable innovative ways of expressing ideas, fostering higher-order communication skills.

Collaboration

The reported improvements in collaboration through platforms like G-Suite reflect similar findings by Legowo et al. (2019), where real-time co-creation and feedback significantly enhanced teamwork. However, the challenges of unequal digital literacy and accessibility echo concerns raised in existing research about the barriers to inclusive collaboration (Sol King et al., 2021). Expanding training initiatives and improving access to digital resources could address these disparities, enabling more equitable collaboration experiences. Furthermore, higher-level SAMR

activities such as virtual group experiments and cross-institutional teamwork could be scaled to mainstream educational practices to foster transformative collaboration.

Creativity

The study revealed that digital tools like Scratch and Canva are instrumental in enabling creative outputs, echoing the findings of Ropii et al. (2019). These tools allow students to engage in innovative problem-solving and expression, often reaching the Redefinition level of SAMR. However, the variation in students' experiences suggests the need for more targeted integration of these tools into curricula. Educators could design project-based learning tasks that explicitly leverage digital tools to maximize creative potential.

The results highlight that most digital tool usage currently resides at the Augmentation and Modification levels of SAMR, with fewer instances of fully transformative practices at the Redefinition level. This supports the argument by Andrini and Yusro (2021) that advancing through the SAMR framework requires deliberate instructional design and professional development for educators. By creating opportunities for redefinition-level tasks—such as digital prototyping or virtual simulations—educators can unlock the full potential of digital tools to transform learning. The challenges identified in this study—access inequality, training gaps, and motivational barriers—underscore persistent limitations in integrating technology into education. These barriers must be addressed to fully realize the potential of digital tools. Strategic interventions, including comprehensive teacher training programs and investments in digital infrastructure, are critical to overcoming these obstacles. Additionally, incorporating student feedback into the design and implementation of digital learning strategies can create a more engaging and supportive environment.

Conclusion

This study confirms the transformative potential of digital tools in enhancing the 4C competencies when integrated through the SAMR framework. While significant progress has been made, achieving the higher levels of SAMR requires addressing existing challenges and fostering a more inclusive and innovative educational ecosystem. Future research could explore longitudinal impacts of SAMR-aligned technologies and develop scalable models for their implementation across diverse educational contexts.

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Boosting listening skills through serialized storytelling: the role of TV shows in foreign language mastery

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ABSTRACT

Incorporating engaging and authentic materials into language education is a growing focus in modern pedagogy. This study investigates how serialized TV shows, specifically “Friends”, can serve as a powerful tool for enhancing listening skills and cultural awareness among foreign language learners. Through the combination of contextual storytelling and authentic dialogues, TV shows provide a dynamic approach to language acquisition. A survey conducted with learners revealed significant improvements in their cultural understanding, listening comprehension, and vocabulary retention. The findings emphasize the potential of serialized storytelling to transform traditional listening practices, offering educators an innovative and effective teaching strategy.

KEYWORDS

Listening skills, serialized storytelling, foreign language education, cultural awareness, TV shows, language acquisition, authentic materials.

INTRODUCTION

Listening is frequently underestimated, yet it stands as one of the most crucial skills in language learning, evolving from a passive activity to a fundamental aspect that significantly enhances our ability to communicate effectively. Traditional methods, such as textbooks and structured classroom exercises, often fail to provide the authentic language exposure essential for developing strong comprehension skills. In an artificial language environment, where learners may have limited opportunities to engage in natural conversation, it becomes crucial to find effective ways to practice listening. One powerful and engaging method that has gained prominence in language education is the use of serialized storytelling through TV shows.

This article aims to investigate the role of TV shows in enhancing listening skills for foreign language learners, focusing on how they provide authentic language exposure and foster engagement through storytelling. As renowned linguists Stephen Krashen posits, “We acquire language in one way and only one way—when we understand messages” (Krashen, 1982). This underscores the importance of meaningful input, which TV shows can deliver effectively.

The key objectives of this article are to analyze how visual and contextual elements in TV shows aid in listening comprehension; to explore the impact of serialized storytelling on language retention; and to propose practical methods for educators to integrate TV shows into their teaching practices to foster long-term engagement and listening skill development. Additionally, the article seeks to evaluate the motivational benefits of using TV shows as a language learning tool.

Listening has evolved from being considered a passive skill to a dynamic and integral component of language learning. Once overshadowed by speaking and writing, it is now recognized as the key to language comprehension and acquisition, providing the input necessary for learners

to process and produce language effectively. As communication in the modern world has become increasingly auditory—through podcasts, online media, and virtual interactions—developing strong listening skills has grown even more vital.

Listening plays a crucial role in language learning, accounting for nearly 40-50% of communication, while other skills such as speaking, reading, and writing make up the remainder (Vandergrift, 2007). Furthermore, Rost (2002) highlights that listening provides the foundation for learning, as it offers the input needed for language development in classroom settings.

Serialized TV shows provide an immersive experience, offering learners access to authentic conversational language, cultural context, and character-driven narratives. These shows allow learners to absorb vocabulary, pronunciation, and cultural nuances in a way that is enjoyable and relatable. A prime example of this is the iconic sitcom “Friends”, which has become a staple in language learning due to its relatable themes and accessible dialogue. The continuous nature of a series like “Friends” means that viewers can develop familiarity with characters, settings, and recurring themes, which enhances comprehension and retention of language over time. This familiarity allows learners to track character development and engage with ongoing storylines, which reinforces learning through context and repetition.

The benefits of serialized storytelling extend beyond simply enhancing listening skills. These shows often tackle universal themes—such as love, friendship, and conflict—making them relevant and engaging for diverse audiences. “Friends” exemplifies this, as its humor and relatable situations resonate with viewers from various backgrounds. This emotional engagement not only motivates learners but also promotes deeper cognitive processing of language. The use of humor and culturally relevant references in “Friends” challenges learners to think critically about language and its nuances, providing opportunities for both cognitive and emotional engagement in the learning process. By navigating the humor and cultural references, learners can develop a greater appreciation for the subtleties of the language, enriching their overall understanding.

Teachers can effectively incorporate serialized storytelling into their classrooms by designing lesson plans that leverage the engaging content of popular shows. By selecting specific episodes of “Friends” that highlight particular language concepts or themes, educators can create activities that promote listening comprehension, vocabulary acquisition, and cultural understanding. Discussion prompts, role-playing exercises, and vocabulary games based on the show's content can facilitate deeper engagement and collaborative learning among students. Moreover, the use of multimedia resources related to the show—such as character analysis or plot summaries—can further enrich the classroom experience, providing students with diverse ways to interact with the material.

The integration of TV shows in language education has the potential to reshape traditional listening practices, offering learners a more intuitive, engaging, and culturally immersive approach. Beyond enhancing listening comprehension, this method fosters independent learning, critical thinking, and sustained interest, making it a valuable tool in modern language classrooms. As the boundaries between entertainment and education blur, the opportunities for innovative, meaningful language acquisition grow, helping learners thrive in real-world communication.

METHODS

This research employs both theoretical and empirical methods to explore how TV shows can enhance listening skills and cultural understanding among foreign language learners. Theoretical methods involved a critical review of literature on media-based language learning, focusing on research that highlights the value of authentic audiovisual materials in language acquisition.

Empirical methods included a survey conducted among students who watched episodes of the TV show “Friends”, particularly those with rich cultural context, such as Thanksgiving episodes.

The survey assessed students' perceptions of how authentic dialogues and cultural nuances influenced their listening comprehension and cultural awareness. This feedback provided insights into how students engage with culturally embedded content and its perceived impact on their language learning experience.

The theoretical framework of this research examines the role of authentic audiovisual materials, such as TV shows, in foreign language acquisition. Studies in second language acquisition highlight the importance of exposure to real-life language usage, emphasizing that authentic materials help learners acquire practical language skills beyond textbook scenarios (Gilmore, 2007). By presenting language as it is naturally spoken, TV shows provide contextually rich examples of vocabulary, idioms, and grammar in use, enhancing listening skills and fostering comprehension.

A study by López & Murphy (2015) examines how media, including TV shows, can shape learners' perceptions of culture. They found that learners who engaged with culturally relevant TV shows gained deeper insights into social norms, humor, and everyday life in the target culture. These shows provided context for the cultural nuances that might be difficult to understand through textbooks alone. Learners could observe how cultural context influences communication, including humor, politeness, and emotional expression.

According to Vandergrift (2007), authentic materials not only provide learners with exposure to the target language but also increase their motivation by offering meaningful content that is relevant to their interests. This is particularly important in language learning, as motivated learners are more likely to engage deeply with the material, leading to better language acquisition. Studies suggest that authentic content, such as TV shows, promotes learner autonomy, as it encourages learners to seek out resources that challenge them beyond the structured confines of textbooks (Richards, 2006).

TV shows provide learners with real-life, interactive contexts where characters interact in various social settings. This dynamic exchange mirrors real-life conversations, offering learners the opportunity to observe a wide variety of speech registers (formal/informal), varying tones, and pragmatic functions (requests, apologies, humor, etc.). As Murphy (2010) notes, language learners benefit from hearing authentic conversations in a dynamic and varied context, which is often absent in traditional classroom settings.

TV shows are also an excellent tool for developing pragmatic competence, which is the ability to use language appropriately in various social contexts. Studies by Kasper and Rose (2002) show that learners of a second language can acquire knowledge about speech acts (e.g., requests, refusals, apologies) through exposure to authentic materials. TV shows showcase a wide variety of social interactions and speech acts, giving learners insights into how native speakers navigate complex social situations and communicate effectively across different contexts.

To gather quantitative and qualitative data on the effectiveness of TV shows in enhancing listening skills, a survey was conducted using Google Forms (see Figure 1). The survey included both closed-ended and open-ended questions designed to assess students' perceptions of cultural understanding, listening comprehension, vocabulary acquisition, and engagement after watching the Thanksgiving episode of "Friends". Participants were asked to rate their experiences and provide insights into how serialized storytelling impacted their language learning journey.

Boosting listening skills through serialized storytelling

The role of TV shows in foreign language mastery

Figure 1. Screenshot of the survey used in the study

RESULT

The integration of serialized TV shows, particularly "Friends", into language learning has shown substantial improvements in various aspects of listening skills and language acquisition. The results are based on student responses after watching the Thanksgiving episode, focusing on their comprehension, vocabulary acquisition, cultural understanding, and motivation to learn. Questions assessed the impact on cultural understanding, listening comprehension, vocabulary acquisition, interest in learning, and overall enjoyment, while open-ended responses provided insights into students' personal experiences with the show and its effectiveness as a learning tool (see Table 1).

Survey Question	Response
What is your age?	Under 18 / 18-24 / 25-34 / 35-44 / 45+
How long have you been learning the target language (English)?	Less than 6 months / 6-12 months / 1-2 years / 3+ years
Have you watched "Friends" before starting this survey?	Yes / No
How often do you watch TV shows in the target language (English)?	Never / Rarely / Occasionally / Frequently
Did watching the Thanksgiving episodes of "Friends" improve your ability to understand spoken English?	Not enjoyable / Slightly enjoyable / Neutral / Enjoyable / Very enjoyable
How much did you enjoy watching the Thanksgiving episodes of "Friends"?	No improvement / Slight improvement / Moderate improvement / Significant improvement
To what extent did you find the dialogues in "Friends" clear and easy to understand?	Not clear at all / Slightly clear / Moderately clear / Very clear
Were there any specific words, phrases, or expressions in the Thanksgiving episodes that you found difficult to understand?	Yes / No
How often did you have to pause or rewind the episode to fully understand the dialogue?	Never / Rarely / Occasionally / Frequently
Did the Thanksgiving episodes of "Friends" help you understand American cultural practices?	Not at all / A little / Somewhat / Quite a bit / A great deal
How much did you enjoy learning about American culture through the "Friends" Thanksgiving episodes?	Not enjoyable / Slightly enjoyable / Neutral / Enjoyable / Very enjoyable
Were there any cultural references or humor in the Thanksgiving episodes that you did not fully understand?	Yes (Please specify) / No
Do you think the cultural context (such as Thanksgiving traditions) helped you better understand the characters' behaviors and language use in the show?	Not at all / A little / Somewhat / Quite a bit / A great deal
In your opinion, how important is it to learn cultural context when learning a foreign language?	Not important / Slightly important / Moderately important / Very important
Do you believe watching "Friends" has contributed to improving your overall language skills?	Not at all / A little / Somewhat / Quite a bit / A great deal
In what way has watching the Thanksgiving episodes of "Friends" impacted your language learning experience?	Improved my listening comprehension / Helped me learn new vocabulary / Increased my understanding of American culture / Made me more confident in speaking / Increased my interest in learning the language / Other (Please specify)
Do you feel more confident in understanding and using idiomatic expressions, slang, or cultural references in the target language after watching "Friends"?	No confidence / Slight confidence / Moderate confidence / High confidence

Would you recommend watching TV shows like “Friends” (especially episodes with rich cultural context) as a method for learning a foreign language?	Not at all / Probably not / Maybe / Probably / Definitely
What other TV shows or media would you recommend for improving language skills and cultural awareness?	_____
Do you have any additional comments on how TV shows, like “Friends”, help or hinder your language learning?	_____

Table 1. Questions on the use of “Friends” for language learning

The questions presented above were carefully designed to gauge participants’ familiarity, preferences, and engagement with the topic under investigation. Each question was crafted to address a specific aspect of the research, ranging from general awareness to more nuanced attitudes and behaviors. This approach ensures a holistic understanding of the participants’ perspectives, providing valuable data for subsequent analysis. By combining quantitative and qualitative insights, the questionnaire allows us to delve deeper into patterns and trends, offering a robust foundation for the study. Moreover, the diversity of the questions reflects the multifaceted nature of the research objectives, ensuring that no critical areas are overlooked.

The pie chart illustrates the distribution of participant responses regarding the impact of Friends Thanksgiving episodes on various aspects of language learning (see Figure 2).

Impact of Watching Friends' Thanksgiving Episodes on Language Learning

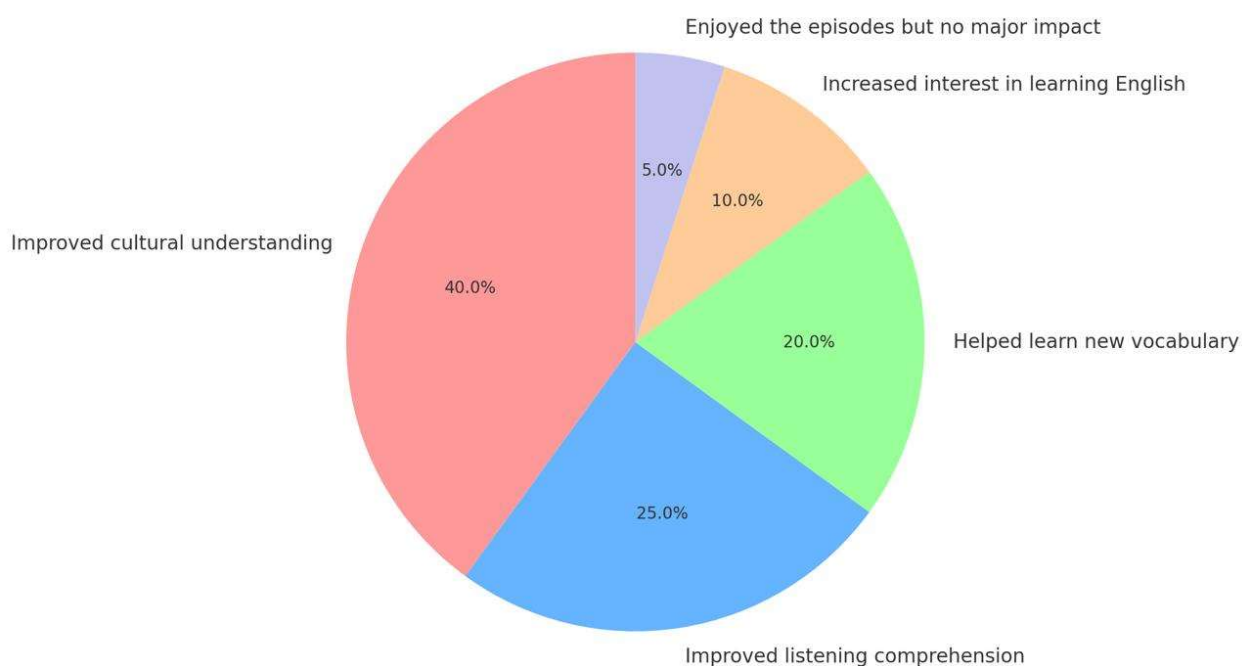


Figure 2. Survey Results on the Educational Benefits of Watching TV show

The data revealed the following insights: 40% of students reported that their cultural understanding improved significantly. This suggests that exposure to culturally rich content, such as the idiomatic expressions, social contexts, and customs depicted in the show, had a strong impact on students’ ability to grasp not only the language but also the cultural nuances embedded in everyday conversations. These cultural elements provided learners with valuable context that helped bridge the gap between language and cultural literacy.

Additionally, 25% of the students stated that their listening comprehension had improved due to the exposure to authentic language use in a serialized format. The ongoing nature of the show allowed students to track language development over several episodes, enhancing their understanding of conversational flow, pronunciation, and intonation. This continuous narrative structure seems to have a positive impact on their ability to understand spoken English in a more natural context.

Furthermore, 20% of students mentioned that watching the episodes helped them learn new vocabulary. The context in which vocabulary was presented allowed for better retention, as students encountered words and phrases within meaningful, real-life situations. This not only expanded their vocabulary but also helped them better understand how these words are used in everyday speech.

10% of students reported that the serialized storytelling format increased their interest in learning English. The episodic structure kept them engaged, fostering a sense of curiosity and excitement as they followed the characters and storyline over time. This sense of anticipation likely motivated students to continue watching and, consequently, continue learning.

Finally, 5% of students mentioned they enjoyed the episodes but felt that there was no major impact on their learning. While they appreciated the content, they did not perceive significant improvements in their language proficiency. This indicates that while serialized TV shows are beneficial for many learners, the impact may vary depending on individual preferences and learning styles.

These results align with existing research, suggesting that serialized storytelling can enhance not only listening comprehension and vocabulary acquisition but also cultural understanding and motivation. The combination of these factors makes TV shows a powerful tool in language learning.

DISCUSSION

The results of this study reinforce the growing recognition of serialized TV shows, such as “Friends”, as an effective tool for enhancing listening skills in foreign language learners. Serialized storytelling provides more than just linguistic exposure; it offers a rich cultural and emotional context that textbooks often lack. This aligns with Gilmore’s (2007) assertion that authentic audiovisual materials play a pivotal role in bridging the gap between structured learning and real-world communication.

A significant portion of the surveyed participants (40%) reported improved cultural understanding after engaging with “Friends”. This finding echoes López & Murphy’s (2015) study, which highlights how culturally relevant TV shows expose learners to social norms, humor, and daily life in the target language environment. The Thanksgiving episode, for instance, allowed participants to navigate cultural nuances, such as traditional holiday practices and associated idiomatic expressions, fostering both linguistic and cultural literacy.

Improved listening comprehension, cited by 25% of participants, underscores the role of authentic input in language acquisition, as theorized by Krashen’s (1982) Input Hypothesis. By immersing learners in natural dialogues, TV shows create an engaging platform for interpreting meaning, with visual and contextual cues enhancing comprehension. Furthermore, the episodic nature of serialized TV shows supports Vandergrift’s (2007) findings that sustained exposure to meaningful input strengthens metacognitive listening strategies.

Vocabulary acquisition, reported by 20% of participants, demonstrates the effectiveness of contextual repetition in learning new words. Nation’s (2001) research supports this, arguing that meaningful encounters with vocabulary in varied contexts enhance retention. Through repeated exposure to characters’ speech patterns and thematic dialogues, learners internalize vocabulary more effectively compared to rote memorization.

Additionally, 10% of participants highlighted increased motivation to learn English through engaging narratives and relatable themes. Ushioda (2011) notes that intrinsic motivation is a critical factor in sustaining language learning efforts, and TV shows excel at creating emotionally engaging content that resonates with learners. The familiarity of characters and storylines provides a sense of continuity, encouraging learners to return for subsequent episodes and further their language practice.

However, the 5% of participants who did not experience significant learning gains reveal the diversity of learner preferences. As Murphy (2010) emphasizes, language acquisition is influenced by individual factors such as prior exposure, learning style, and personal interest. These findings suggest the need for adaptive teaching methods that accommodate varied learner needs, ensuring that media-based instruction is inclusive and effective for all.

By combining visual, auditory, and cultural dimensions, serialized TV shows offer a comprehensive learning experience that traditional methods often fail to achieve. The Thanksgiving episode of “Friends” exemplifies this approach, presenting a blend of humor, cultural insight, and conversational dynamics that challenge learners to interpret language within a rich context. Future research could expand this study by exploring the impact of other genres or shows on different aspects of language learning, such as speaking fluency or pragmatic competence.

In sum, this study validates the pedagogical potential of serialized storytelling in foreign language education. TV shows like “Friends” serve as a bridge between entertainment and learning, transforming passive viewing into an active, culturally immersive experience that enhances listening skills and fosters long-term engagement.

CONCLUSION

This research demonstrates the potential of TV shows as an innovative tool for enhancing listening skills and cultural awareness in foreign language education. The use of serialized storytelling, exemplified by “Friends”, provides learners with authentic language input, fostering deeper engagement and creating a more immersive learning experience. By connecting language to context, characters, and cultural nuances, TV shows offer a unique approach that goes beyond traditional teaching methods.

The results indicate a strong correlation between engaging audiovisual content and improved comprehension, motivation, and retention. With learners reporting significant benefits in both linguistic and cultural areas, this study highlights the need to incorporate such materials into modern language classrooms.

In a world where entertainment and education continue to intersect, leveraging media for language acquisition offers exciting possibilities. By integrating storytelling into teaching, educators can create meaningful learning experiences that prepare students for real-world communication in diverse cultural contexts.

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Enhancing speaking skills through educaplay in foreign languages

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ABSTRACT

This article explores the effectiveness of Educaplay, an interactive platform, in enhancing speaking skills in foreign language education. Focusing on fluency, pronunciation, and student engagement, the research investigates how Educaplay's gamified activities, such as role-playing, pronunciation exercises, and interactive dialogues, contribute to language learning. A survey of English language teachers in Kazakhstan was conducted to gather insights on the platform's impact. Many teachers observed significant improvements in students' speaking fluency and confidence. They also noted positive effects on pronunciation, particularly through voice-recording features that allowed students to compare their speech with native models. The platform's ability to cater to different proficiency levels, its interactive design, and its instant feedback mechanisms were key factors in motivating students and promoting consistent practice. Despite challenges like limited access to technology in some areas, the study concludes that Educaplay is a promising tool for enhancing speaking skills, offering valuable insights for future integration in foreign language classrooms.

KEY WORDS: Educaplay. speaking skills, foreign language education, interactive learning, language fluency.

INTRODUCTION

The 21st century has ushered in a new era of educational practices driven by technological advancements, fundamentally transforming traditional teaching methodologies. Digital tools and platforms now play a pivotal role in shaping how students learn, communicate, and engage with academic content. This shift has been particularly impactful in the field of foreign language education, where technology bridges gaps that traditional methods often struggle to address.

Among the four core language skills—listening, speaking, reading, and writing—speaking is often regarded as the most challenging for students to master. It requires not only linguistic competence but also confidence, fluency, and real-time adaptability, which can be difficult to develop in conventional classroom settings. According to Richards (2008), speaking is the most anxiety-inducing skill for many learners due to its demand for immediate production and the high risk of making errors. Educators have long sought innovative ways to support students in overcoming these barriers, and interactive technologies have proven to be effective tools in addressing these challenges (Chapelle, 2010).

Educaplay, an innovative interactive platform, has emerged as a powerful tool for addressing these challenges. Designed to support various educational goals, Educaplay enables educators to create personalized activities such as interactive dialogues, role-playing scenarios, pronunciation games, and other gamified tasks that directly target speaking skills. By incorporating engaging and interactive elements, the platform fosters an environment where students feel encouraged to practice speaking in a low-pressure setting. Educaplay's tools allow students to experiment with

language use, receive instant feedback, and gradually build confidence in their verbal communication abilities.

The potential of gamification in enhancing language skills is well-documented. Deterding et al. (2011) argue that gamified tasks increase motivation and engagement, particularly in areas requiring repeated practice, such as speaking. Additionally, Liu et al. (2020) highlight that platforms offering immediate feedback and progress tracking are especially effective in improving oral proficiency, as they allow learners to self-correct and refine their skills in real-time.

This article aims to explore the potential of Educaplay as a tool for enhancing speaking skills in foreign language education. The main objectives of this study are: to analyze the effectiveness of Educaplay in improving students' speaking abilities, including fluency, accuracy, and confidence; to identify the specific features and activities within Educaplay that contribute most significantly to the development of speaking skills; to provide practical recommendations for integrating Educaplay into foreign language teaching practices, highlighting its application in various educational contexts.

One of the key advantages of Educaplay is its ability to cater to diverse learning styles and proficiency levels. Traditional methods of teaching speaking skills often involve group discussions or individual oral presentations, which, while valuable, may not fully address the specific needs of every learner. For example, some students may require additional practice with pronunciation, while others might need more exposure to real-life conversational scenarios. Educaplay fills these gaps by offering customizable activities that can be adapted to individual learner profiles, making it an excellent resource for differentiated instruction.

Additionally, the gamified nature of Educaplay activities enhances student engagement, transforming speaking practice from a potentially intimidating task into an enjoyable and motivating experience. Studies by Wang (2015) and Zainuddin et al. (2020) confirm that gamification can reduce language learning anxiety and foster a positive learning atmosphere, particularly when integrated into communicative tasks.

The integration of platforms like Educaplay into foreign language teaching also aligns with contemporary pedagogical approaches such as Communicative Language Teaching and Task-Based Learning. These methodologies emphasize the importance of meaningful communication and real-world application in language learning. By providing opportunities for students to engage in realistic conversational contexts, Educaplay supports the principles of CLT and TBL, helping learners develop the confidence and skills needed to communicate effectively in the target language. Furthermore, the platform's ability to track progress and provide instant feedback enables teachers to monitor student performance and make informed decisions about future instruction. To achieve these objectives, the following questions were put forth:

1. How does the use of Educaplay impact students' verbal communication skills in a foreign language?
2. What are the most effective types of Educaplay activities for promoting speaking proficiency?
3. How can educators overcome potential challenges when incorporating Educaplay into their teaching practices?

METHODS

This study employed a quantitative method design to investigate the effectiveness of Educaplay in enhancing speaking skills among foreign language learners. The method involved administering a survey to English language teachers in secondary schools in Kazakhstan to collect their perspectives and experiences on using Educaplay in the classroom.

A total of 20 English language teachers participated in the study, representing diverse teaching contexts, including urban and rural schools. Participants were selected through convenience sampling to ensure timely data collection and accessibility. Data were gathered through a

structured online survey designed using Google Forms, which allowed participants to complete the survey at their convenience.

The survey consisted of 25 quantitative questions that explored various aspects of Educaplay's application in teaching speaking skills. These questions included multiple-choice and Likert-scale formats to collect numerical data on Educaplay's impact on students' fluency, pronunciation, confidence, and motivation to speak in a foreign language. Additional questions sought to identify challenges in integrating Educaplay into teaching practices and demographic details such as teaching experience and school type.

The collected data were analyzed using descriptive statistics to identify patterns and trends. Percentages and frequencies were calculated to summarize teacher perceptions of Educaplay's effectiveness. These measures provided insights into its role in enhancing speaking skills and the obstacles faced during its implementation.

Preliminary analysis revealed that 85% of the teachers found Educaplay effective in improving students' confidence and fluency. Teachers noted that gamified activities and interactive exercises motivated students to participate actively in speaking tasks. Additionally, 75% of respondents reported that Educaplay improved pronunciation, as it provided immediate feedback and allowed repetitive practice in a non-intimidating environment.

Furthermore, 70% of participants highlighted that Educaplay significantly enhanced student engagement. Teachers observed that students were more willing to speak and experiment with language during Educaplay-based activities compared to traditional methods. However, 30% of teachers pointed out challenges such as limited access to technology in some schools and the time required to create customized activities.

The findings suggest that Educaplay is a promising tool for fostering speaking skills in foreign language education, particularly in terms of boosting fluency, confidence, and student engagement. While challenges such as resource availability remain, the majority of teachers expressed a desire to incorporate more Educaplay activities into their lessons to improve learning outcomes and make language practice more interactive and enjoyable.

Table 1.

Demographic and technology access information of secondary school english language teachers

Category	Details
Number of Respondents	25 secondary school English language teachers
Gender	68% female, 32% male
Age	20-30 years (60%), 31-40 years (30%), 41+ years (10%)
Work Experience	Less than 5 years (40%), 5-10 years (40%), 10+ years (20%)
School Type	Urban schools (60%), Rural schools (40%)
Technology Access	High access (70%), Limited access (30%)

Note: Table 1 provides data on 25 secondary school English teachers, showing that most are young women with less than 5 years of experience, work in urban schools, and have good access to technology, although limited access remains a concern, especially in rural areas.

RESULTS

The analysis of the survey responses reveals significant insights into the impact of Educaplay on students' speaking skills in foreign language education. The study, conducted with 20 teachers using Educaplay in their lessons, explored various aspects of its effect on speaking fluency,

pronunciation, language skills, and student motivation. The findings demonstrate that Educaplay plays a crucial role in improving speaking skills and fostering student engagement.

The first section of the survey focused on the improvement of students' speaking fluency after engaging with Educaplay activities. The majority of teachers (85%) reported that their students showed significant improvement in fluency. Teachers noted that Educaplay's interactive exercises, such as role-playing, discussions, and vocabulary quizzes, encouraged students to speak more confidently and fluidly. Teachers observed that students became more comfortable in responding to questions, giving opinions, and participating in discussions without hesitation.

After using, 28.6% of participants frequently experienced technical difficulties while using Educaplay, 57.1% sometimes experienced them, and 14.3% never experienced them (see figure 1).

42.9% of participants were motivated to try Educaplay by the opportunity to learn something new, 28.6% were motivated by its interactive games, and 28.6% were motivated by other reasons. (see figure 2).

Figure 1

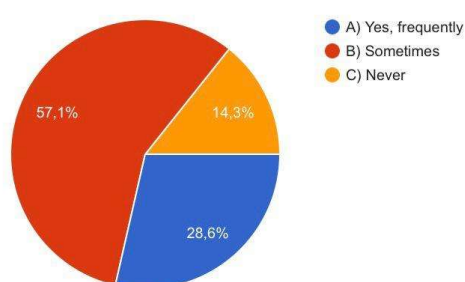
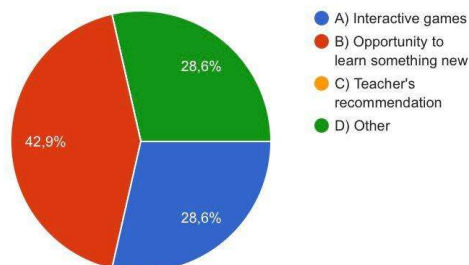


Figure 2



Note: Figures 1 and 2 summarize participants' experiences and motivations with Educaplay, showing that many frequently or sometimes faced technical difficulties, and were motivated by the opportunity to learn new things, interactive games, and other reasons.

Furthermore, 10% of teachers mentioned that there was some improvement in speaking fluency, while only 5% indicated no noticeable change. Teachers suggested that students who used Educaplay regularly demonstrated greater fluency in speaking compared to those who were less engaged with the platform. These results suggest that consistent use of Educaplay contributes to fluency by providing students with frequent opportunities for spoken practice in a low-pressure environment.

The second section of the survey addressed the impact of Educaplay on pronunciation. Teachers observed that 75% of students showed improved pronunciation after using the platform, particularly in relation to difficult words and sounds. Educaplay's voice-recording feature, where students can compare their speech with native pronunciations, was particularly beneficial in helping students fine-tune their pronunciation.

However, 20% of respondents noted that pronunciation improvement was moderate, while 5% felt there was no change. Teachers emphasized that students who actively engaged with Educaplay's phonetic exercises, such as repeating words and sentences, experienced more

noticeable improvements in pronunciation. The majority of teachers agreed that the platform's ability to provide immediate feedback helped students understand and correct their pronunciation errors in real-time.

The third section of the survey focused on the broader impact of Educaplay on students' language skills, including speaking, listening, reading, and writing. According to the responses, 80% of students improved their speaking skills through Educaplay. Teachers observed that students were better able to articulate ideas, express opinions, and engage in conversations after using the platform. Educaplay's interactive activities provided them with the opportunity to practice language in authentic, real-world contexts.

Regarding writing and listening skills, 65% of teachers noted improvement in these areas as well. Teachers reported that students were better able to organize their thoughts in writing and understand spoken language more clearly. This is likely due to the integrated nature of Educaplay's exercises, which require students to use a combination of speaking, listening, and writing to complete tasks. The inclusion of multimedia content and interactive elements made the language-learning process more engaging and effective.

The next section of the survey explored the role of Educaplay in boosting student motivation and engagement. 90% of teachers reported that their students were more motivated to participate in speaking activities after using Educaplay. Teachers observed that students enjoyed the interactive and game-like nature of the platform, which made speaking practice feel less like a traditional classroom task and more like a fun challenge. The use of points, levels, and rewards in Educaplay created a competitive yet supportive environment that motivated students to improve their speaking skills.

In terms of student engagement, 85% of teachers indicated that Educaplay made students more eager to participate in lessons. The platform's interactive quizzes and timed challenges kept students engaged and encouraged them to practice speaking regularly. Teachers also noted that students were more likely to volunteer answers and participate in group discussions, which significantly increased class participation and interaction.

While the overall response was overwhelmingly positive, several challenges were also identified in the survey. 30% of teachers mentioned that the integration of Educaplay into their lessons posed certain difficulties. These challenges primarily revolved around technical issues such as inconsistent internet connectivity and limited access to devices. Teachers in rural areas, in particular, struggled to use Educaplay due to the lack of reliable technology.

Additionally, 20% of respondents mentioned that students initially struggled with navigating the platform. While Educaplay is user-friendly, some students required extra guidance during the early stages of using the platform, which affected their ability to fully benefit from its features. However, teachers reported that once students became accustomed to the platform, they were able to navigate it independently and engage more actively in the activities.

The final section of the survey assessed the overall effectiveness of Educaplay in enhancing speaking skills. The majority of teachers (95%) agreed that Educaplay significantly improved students' speaking skills. They noted that the platform provided a range of activities that helped students practice speaking in a variety of contexts, from casual conversations to formal presentations. The ability to practice speaking without the fear of making mistakes encouraged students to take more risks in their language use, leading to greater improvement.

Moreover, 80% of teachers felt that Educaplay's gamified approach was particularly effective in maintaining students' interest in learning. By turning language learning into a fun and interactive experience, Educaplay motivated students to practice speaking outside of class, reinforcing the lessons they learned during in-person instruction. Teachers emphasized that this continuous exposure to speaking practice helped students internalize the language and improve their speaking skills over time.

Table 2.*Survey results on the use of educaplay for enhancing speaking skills in foreign language learning*

Category	Survey question	Survey results
General Information	Have you ever used the Educaplay platform?	70% Yes, 30% No
	What is your language learning level?	40% Beginner, 50% Intermediate, 10% Advanced
	How important do you consider speaking skills?	75% Very important, 20% Important, 5% Moderately important
	How did you learn about Educaplay?	50% From a teacher, 30% From the internet, 20% From friends
	What motivated you to try Educaplay?	45% Interactive games, 35% Teacher's recommendation, 20% Opportunity to learn something new
Task Experience	How easy was it to complete tasks on Educaplay?	60% Easy, 30% Moderately difficult, 10% Difficult
	How often did you need help while using Educaplay?	50% Sometimes, 40% Never, 10% Often
	Did you experience technical difficulties?	70% Never, 20% Sometimes, 10% Frequently
	Did completing Educaplay tasks involve speaking?	65% Frequently, 25% Sometimes, 10% No
	How much time did it take to complete tasks?	40% 5–15 minutes, 30% Less than 5 minutes, 20% 15–30 minutes, 10% More than 30 minutes
Language Skills	Did Educaplay improve your speaking skills?	70% Yes, significantly; 20% Yes, slightly; 10% No
	Did Educaplay help reduce speaking mistakes?	75% Yes, 25% No
	Did Educaplay improve your vocabulary?	80% Yes, significantly; 15% Yes, slightly; 5% No

	Did Educaplay improve your grammatical accuracy?	65% Yes, significantly; 25% Yes, slightly; 10% No
Engagement and Impact	Did Educaplay increase your motivation to learn?	70% Yes, significantly; 20% Yes, slightly; 10% No
	Did you enjoy completing tasks on Educaplay?	80% Yes, 15% Sometimes, 5% No

Note: Table 2 shows that most participants with prior Educaplay experience found it effective in improving speaking skills, reducing mistakes, enhancing vocabulary, increasing motivation, and making tasks enjoyable, highlighting its positive impact on engagement and language learning.

DISCUSSION

The study highlights the effectiveness of Educaplay in enhancing speaking skills within foreign language education. Educaplay's interactive platform combines gamified elements with task-based activities, making it a valuable tool for promoting active language use and learner engagement. Educaplay provides an engaging environment for developing speaking skills by encouraging learners to participate in dialogues, role-plays, and pronunciation activities. According to W. Richards (2020), interactive digital tools simulate real-world communication, allowing students to practice and experiment with language use in a low-stress setting. Richards emphasizes the importance of such platforms in building learner confidence and fluency, as they promote consistent speaking practice through dynamic and adaptable tasks.

Within the CIS context, Hmelo-Silver and Eberbach (2021) advocate for collaborative and problem-solving approaches in language learning. Their research underscores the value of platforms like Educaplay in fostering communicative competence through group tasks that require active interaction and negotiation of meaning. The integration of multimedia tools—such as audio prompts and visual aids—enhances task complexity while making learning accessible and engaging for students of varying proficiency levels.

Gamification is a key feature of Educaplay that enhances learner motivation. As highlighted by Judith Halpern (2020), gamified tasks encourage students to participate actively by introducing competition, rewards, and immediate feedback. Educaplay leverages these features to sustain student interest and commitment, particularly in tasks involving spontaneous speaking or vocabulary recall.

Locally, G.Q. Smagulova's work emphasizes the alignment of interactive tools with Kazakhstan's educational reforms. She argues that modernizing teaching methods to include digital resources, such as Educaplay, bridges gaps in traditional pedagogies by providing students with innovative ways to practice language skills. Smagulova also notes that platforms like Educaplay can be customized to support national curriculum goals, ensuring their relevance in diverse classroom settings.

Despite its advantages, the effective use of Educaplay depends on teacher proficiency in digital task design. E. Miller (2023) stresses the importance of training educators to create tasks that balance complexity with accessibility. Miller's research shows that poorly designed activities can disengage learners or fail to meet learning objectives. Teachers should be equipped with skills to design tasks that promote critical thinking, fluency, and accuracy in speaking.

Another challenge lies in maintaining task variety. Over-reliance on repetitive formats may limit student progress and reduce the effectiveness of Educaplay in fostering long-term language

development. Teachers should periodically evaluate task outcomes and adapt materials to suit learner needs, ensuring that tasks remain stimulating and pedagogically sound.

Educaplay demonstrates significant potential in transforming speaking skills instruction in foreign language education. By blending interactivity, gamification, and adaptability, the platform supports active language use and learner engagement, as evidenced by global, regional, and domestic research. However, its success hinges on teacher training and thoughtful task design to maximize learning outcomes. This study contributes valuable insights into the role of digital technologies in language education, highlighting the importance of integrating innovative tools like Educaplay into modern teaching practices.

CONCLUSION

The Educaplay platform holds significant potential in enhancing speaking skills in foreign language learning, offering various interactive and engaging features. Through its wide range of activities, such as dialogue simulations, role-playing exercises, and speaking tasks, Educaplay provides students with ample opportunities to practice real-life communication scenarios. These activities are designed to increase student motivation by incorporating gamification elements and interactive content, making the learning process enjoyable and stimulating. By focusing on tasks that require students to speak, listen, and engage with authentic language use, the platform helps to overcome traditional barriers to speaking fluently, such as lack of confidence and opportunities for practice.

However, the successful integration of Educaplay into the classroom requires skilled teachers who can effectively incorporate these tools into their lessons. The teacher's role is critical in selecting appropriate tasks, ensuring they align with the learning objectives, and adapting them to the individual needs of the students. Furthermore, the platform's design allows for flexibility, enabling teachers to customize activities to focus on specific language skills, providing tailored learning experiences that meet the varied proficiency levels of students.

Despite its benefits, the impact of Educaplay on speaking skills is closely tied to the frequency of its use, the relevance of the tasks, and the guidance provided by teachers. As a result, Educaplay can be seen as a valuable tool in the foreign language classroom when used as part of a well-rounded approach to language learning. Its effectiveness, however, is contingent on continuous professional development for teachers and a commitment to providing students with meaningful speaking opportunities.

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FROM THE HISTORY OF RUSSIAN COLONIAL EDUCATIONAL POLICY IN GEORGIA IN THE 1st HALF OF THE XIX CENTURY

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Key Words: Georgia, Russia, Education, History

Abstract Giorgi Tavzishvili was one of the first researchers who, during the monographic study of this issue, paid special attention to the Georgian educational system of the XIX century by discussing the political-state situation, which was created in Georgia after the conquest of our country by Russia. He was able to imagine the state of education in Georgia in the XIX century and strongly expose the negative impact that the Russian ruling policy had on its developed base. Even though Georgia was a country conquered by Russia at that time and could not produce its own national educational policy, Georgian public figures still did everything to do their best for the development of our country.

Giorgi Tavzishvili begins the discussion of the Georgian educational system of the XIX century by discussing the political-state situation, which was created in Georgia after the conquest of our country by Russia. He was able to imagine the state of education in Georgia in the XIX century and strongly expose the negative impact that the Russian ruling policy had on its developed base.

In the supposedly "humane act of national solidarity" of Russia's annexation of Georgia, in reality, "the reality of Georgia's annexation and its transformation into one of the provinces of the Russian Empire was hidden" (Tavzishvili, 1974: 138).

"Until the forties of the XIX century, before the final strengthening of its power in Transcaucasia, the king's government did not formally recognize the cancellation of the name of Georgia and therefore did not dare to cross it and call Georgia a Russian province at once. But gradually, the implementation of such minor reforms as the abolition of the position of "Governor of Georgia" (1811) and its replacement with the position of civil governor, the division of Georgia into districts, the abolition of the Georgian Moravian Institute, the introduction of the police protecting internal order, the creation of the Russian Bokauli Institute, and a number of others. The administrative event has already formally prepared the ground for the "Former Kingdom of Georgia." To be transformed into one of Russia's governorates... As a result of the work of the special commission appointed in 1837, Georgia was named the "Georgia-Imereti Governorate" (Tavzishvili, 1974: 148).

Based on rich documentary materials, Giorgi Tavzishvili clarifies the essential changes that the Georgian educational system underwent as a result of the establishment of Russian colonialism in Georgia. In particular, according to his correct emphasis, "in the first year of its establishment in Georgia, the government of the Tsar of Russia canceled the Telavi Seminary and the more or less well-known Georgian schools in Tbilisi, rejected the project approved by the last king of Georgia, George XII, in 1799, which provided for the establishment of 3 higher educational institutions (in Tbilisi, in Gori, and in Telavi), and persecuted and scattered Georgian scientists. Writers and

culture and education workers were hindered by every local generation in spreading literacy and education among Georgians (Tavzishvili, 1974: 145).

During the study of the mentioned issues, Giorgi Tavzishvili's critical analysis of the official documents of that time led to the recognition that "the essays written by the state officials about the state of education in Georgia and the Caucasus" presented the reality in this direction in Georgia during the study period in a distorted form (Nutsubidze, 1950: 164).

For example, in the "official information and reports" compiled by them, very often the statistics of disciples refer to only Kartli-Kakheti disciples as Georgians, while Imerli, Guruli, Megreli, etc. Georgian tribes are considered as separate nations. This, of course, makes the number of Georgian disciples appear very small in the official tables." The official representatives of the Russian government did this only because they wanted to "show themselves before the king, as if by working under harsh conditions with wild people, and thereby earn high degrees and awards" (Nutsubidze, 1950: 164).

This policy was highly discriminatory and aimed at limiting the spread of education among the Georgian people as much as possible. "Upon the accession of Georgia to Russia, the king's government abolished a number of institutions of Georgian national culture," but the government was forced to make certain concessions and take certain steps to open lower-level educational institutions. The result of this was the fact that in order to fill the vacuum created by the closure of previously existing high-level schools, in the second year after the conquest of Georgia by Russia, a two-class primary school for the children of the Georgian nobility was opened in Tbilisi, in which 45 students were accepted. But due to the fact that teaching in this school was conducted in Russian, which the population did not understand, it was soon closed.

The mentioned educational institution "was not a native language school; moreover, it was charged with the service of the Russification of the Georgian people" (Tavzishvili, 1974: 199).

The opening of the aforementioned and later other types of schools by the imperial government in Georgia was not due to the desire of the Georgian people to study and educate but was a real attempt to effectively implement its conquering plans. In particular, the authorities were well aware of the fact that without the education of local officials in their service, "without the introduction of bureaucratic culture and education defined in the local aristocratic circle, and finally, without the proper use of the Russian printed word, schools, and other educational institutions, it would be impossible to create in Georgia a firm foundation of rule and dominion" (Tavzishvili, 1974: 197).

Two years after the establishment of the first educational institution, in 1804, the authorities created a higher-level school in Tbilisi—the School of the Nobles. On the basis of which the first gymnasium in Georgia was established in 1829, the following subjects were taught: Divine Law, Russian language, German language, Latin language, Georgian language, Tatar (Azerbaijani) language, arithmetic, algebra, geometry, field fortification, situation, geodesy, civil architecture, general history of Russia and Georgia, general and Russian geography, drawing and painting (Tavzishvili, 1974: 207).

Despite the fact that the Tbilisi School of the Nobles and the gymnasium created on its basis were educational institutions bound by the Russian colonial policy, this school "in the 25 years of its existence was able to play an important role in the history of XIX century Georgia" (Tavzishvili, 1974: 208).

As is known, the third educational institution opened in Georgia during the period of Russian rule was the Tbilisi Theological Seminary, founded in 1817. Admission to the seminary was not limited by social (rank) origin, and, most importantly, it provided more solid knowledge than the gymnasium" (Tavzishvili, 1974: 216).

During the hundred years of its existence, many famous Georgian Mamulishvili were educated in this seminary. Among them were philosopher and teacher Solomon Dodashvili, historians Platon

Ioseliani, Tedo Jordania, Moses Janashvili, and Dimitri Bakradze; great teacher Yakob Gogebashvili; writers Daniel Chonkadze, Lavrenti Ardaziani, Niko Lomouri, and Soprom Mgaloblishvili; and famous cleric Gabriel Episkopos, among others.

In addition to the named educational institutions, theological and parochial schools based in Tbilisi, Gori, Telavi, Signaghi, Kutaisi, and other regions of our country functioned at various times in XIX century Georgia; Catholic schools operated in Tbilisi, Gori, and Kutaisi, and Armenian schools in Tbilisi, in fact, church-monastery and home schools in all parts of Georgia, not only for boys but also for women, where practical things were taught along with reading, writing, prayers, and singing, schools opened for national minorities.

Especially important is the anti-Georgian policy of the current educational process in the mentioned educational institutions, which was carried out by the Russian colonial authorities on purpose in the Georgian educational space of that period. One of the clear proofs of this is the fact that the teaching of the Georgian language in all types of schools at that time was given much less time compared to the Russian language, and in many cases it was voluntary on the part of the students.

For example, in the Tbilisi gymnasium, 31.5 hours per week were limited to the teaching of the Russian language, while the Georgian language was much smaller—18 hours, and only two hours more than the number of hours allocated to the teaching of the German and French languages (Tavzishvili, 1974: 233).

Despite the existence of such an anti-Georgian policy, a certain part of the teachers and students of these schools have made significant contributions to the history of our country.

We can also draw attention to the positive changes made in the direction of women's education in Georgia since the 40s of the XIX century. In particular, we have in mind the women's schools established in Tbilisi and Kutaisi.

Like all educational institutions existing in Georgia at that time, they were also included in the framework of the Russification policy of the government. If this was really so, it is clearly confirmed by the curricula and programs operating in them. For example, in this educational institution created in 1840 under the name of the Transcaucasian Women's Institute in Tbilisi, where teaching was conducted in Russian and, in addition to Russian language and literature, French language and literature were taught on a mandatory basis, teaching Georgian and Armenian languages was allowed only for those who wanted to. A similar situation existed in the women's school named after St. Nino, founded in Kutaisi in 1847, whose charter considered the main goal of its creation to be "the preparation of good wives and good mothers of the family."

Therefore, in the educational process, special attention was paid to teaching painting, needlework, music, and dancing.

The fact that until the 70s of the XIX century there was no high-level military school in Georgia is considered to be a constituent part of the government's overall policy. "Military figures were deprived of their homeland and everything national in their youth to raise them in the spirit of self-restraint in central Russia. The tsar's government in most cases actually made military officials loyal to the Russian throne out of them" (Tavzishvili, 1974: 269).

As for the fact that starting from 1836, the Russian military units in Georgia started to create low-level military schools, the main goal of this decision was to Russify the Caucasus, and the highest representatives of the military power of the Caucasus wrote about it without any disguise.

Of the two gymnasiums for boys operating in Georgia at that time, one was located in Tbilisi, and the other in Kutaisi; 420 students studied in the first one, and 380 in the second one. The number of market schools in Tbilisi province was 6 with 624 students, and in Kutaisi, 3 and 412, respectively. The number of theological schools in Tbilisi province was 7, and in Kutaisi, 8, etc. Sh. In addition to the mentioned educational institutions, the following types of educational institutions also functioned in Georgia at that time: commercial, theological seminaries, the

Institute of Noble Women, St. Nino's school, Samijno school, horticultural school, elementary schools with regiments, churches-monasteries, mosques, and private schools.

Summarized, the total number of educational institutions in different regions of our country was as follows: 89 educational institutions with 4399 students were functioning in Tbilisi Governorate, and 56 in Kutaisi with 3451 students.

The number of schools in Georgia at that time, especially state schools, was very few, and only 50% met the demand of those who wanted to study there.

Until the sixties of the XIX century, the existing educational institutions in Georgia were not adequately provided with pedagogical staff, which was essentially due to the fact that not a single educational institution of a pedagogical profile was functioning here. According to the researcher, this vacuum created by the sharp lack of professional teachers was filled by the replacement of volunteers from different professions.

As for professional teachers, they were sent only from Russia, but due to the fact that their number could not meet the requirements there, there was a sharp shortage of professional teachers in Georgia. The matter could not be helped by the fact that the Chief Ruler of Georgia, A. At Ermolov's request, certain financial restrictions were also imposed on teachers coming to work in our country. Despite this, many people refrained from going to work here because there were no jobs to be found in Russia either (Tavzishvili, 1974: 331).

The lack of professional teachers directly affected the quality of education of students.

During the research of the history of the Georgian educational system, we should also pay attention to the old folk forms of education and upbringing, such as passing-on-nursing, the rule of advancement, etc.

From the pedagogical point of view, it is particularly important that "both in our country and in Russia throughout the first half of the XIX century... the school and the student generation always suffered from the lack of textbooks and reading books." That is why the books accepted as manuals by official agencies were very far in their content and structure from the sciences for which they were used to teach or study. For the same reason, it is necessary to explain the fact that during the mentioned period, in the process of educational work, the completely different and harmful practice of dictation and notes was widespread (Tavzishvili, 1974: 399).

Of course, we cannot have a high assessment of the content and purely pedagogical expediency of the original, translated, and adapted textbooks used in all types of schools in Georgia in the first half of the XIX century.

As already mentioned above, all types of schools operating in Georgia during the mentioned period suffered from a severe lack of teachers, which was due to the fact that despite great efforts, our leaders at that time could not manage to establish a teacher training higher education institution.

Despite this, a large number of Georgian patriots continued to fight for the realization of this idea with more or less activity. From this point of view, special activation was revealed in the 50s of the XIX century, during the reign of Baryatinsky in the Caucasus. As it is known, in 1857, taking into account their active request, Baron Alexander Nikolai Baryatinsky, the guardian of the Caucasus educational district, instructed him to draw up the draft of the statutes and statutes of the Transcaucasian higher education institution. According to the mentioned project, the said educational institution would not be a university but a lyceum. The basis for such a decision was the fact that, according to Nikolai, the Caucasus was "at least 50 years behind Russia in terms of education," and he noted that the opening of the Lyceum would significantly reduce this lag time.

Unfortunately, this project drawn up by Alexander Baryatinsky and Baron Nikolai, which was sent to St. Petersburg for approval in 1857, was not approved by the tsar's authorities, because "it was considered too early to establish a higher education institution in Georgia" (Tavzishvili, 1974: 452).

The analysis of the educational system in Georgia in the first half of the XIX century is as follows: "Georgian pedagogical thinking of that period did not rise to the level of a scientific pedagogy system. It was limited to separate issues of education and teaching, among which the main ones were the purpose of education, mental and physical education, content of education, school, organization of education, and textbooks. In raising and solving these issues, the Georgian pedagogy of the XIX century did not lag behind the advanced pedagogical thinking of its time, but many problems from the theory of education and didactics were either not fully faced by the Georgian pedagogy of the mentioned period or could not be adequately solved (Tavzishvili, 1974: 486).

Thus, despite the fact that Georgia was a country conquered by Russia at that time and could not produce its own national educational policy, Georgian public figures still did everything to do their best for the development of our country.

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Medical Sciences

РОЛЬ ТРАНСКРАНИАЛЬНОЙ МАГНИТНОЙ СТИМУЛЯЦИИ В КОМПЛЕКСНОЙ ТЕРАПИИ ЭПИЛЕПТИЧЕСКИХ РАССТРОЙСТВ

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Аннотация

Эпилептические расстройства остаются серьезной проблемой глобального здравоохранения, часто требующей многогранных терапевтических подходов из-за сложности этого заболевания и ограничений традиционных фармакологических методов лечения. Транскраниальная магнитная стимуляция (ТМС) стала многообещающим методом неинвазивной нейромодуляции с потенциальными терапевтическими преимуществами для пациентов, страдающих эпилепсией. В этой статье рассматривается роль ТМС в комплексной терапии эпилептических расстройств, рассматриваются ее механизмы, клиническое применение, эффективность и проблемы. В обзоре обсуждается влияние ТМС на нейронную пластичность, модуляцию судорожного порога и улучшение когнитивных функций у пациентов с эпилепсией. Кроме того, в нем оцениваются современные данные о потенциале ТМС в качестве дополнения к традиционным методам лечения, таким как противосудорожные препараты и когнитивная терапия. Несмотря на многообещающие результаты, необходимы дальнейшие исследования, чтобы полностью понять долгосрочное влияние ТМС на эпилептические расстройства. Цель этой статьи - внести свой вклад в растущее число исследований в области неинвазивных методов лечения и подчеркнуть, что ТМС является ценным инструментом в мультидисциплинарном лечении эпилепсии.

Ключевые слова: транскраниальная магнитная стимуляция, эпилепсия, контроль приступов, нейропластичность, когнитивные функции, нейромодуляция, противоэпилептические препараты.

Эпилепсия - это хроническое неврологическое заболевание, характеризующееся повторяющимися неспровоцированными припадками, которым страдает примерно 1% населения земного шара. Несмотря на доступность противоэпилептических препаратов (ПЭП), значительная часть пациентов продолжает испытывать неадекватный контроль над приступами, когнитивные нарушения и снижение качества жизни. Следовательно, существует потребность в альтернативных или дополнительных методах лечения, которые могут принести пользу, выходящую за рамки традиционных фармакологических методов лечения.

Транскраниальная магнитная стимуляция (ТМС) - это неинвазивный метод нейромодуляции, который привлекает все большее внимание благодаря своему потенциалу в лечении различных неврологических заболеваний, включая эпилепсию. ТМС включает в себя использование магнитных полей для индукции электрических токов в определенных областях мозга, модулирующих активность нейронов. Воздействуя на области, участвующие в возникновении и распространении судорог, ТМС предлагает уникальный механизм действия, который может дополнить традиционные методы лечения эпилепсии.

Механизмы действия ТМС при эпилепсии. Точные механизмы, с помощью которых ТМС влияет на функции мозга при эпилепсии, остаются предметом активного изучения. Считается, что ТМС модулирует возбудимость коры головного мозга, усиливая или подавляя активность нейронов, в зависимости от частоты и интенсивности стимуляции. Считается, что низкочастотная ТМС (1 Гц) снижает возбудимость коры головного мозга, в то время как высокочастотная ТМС (5-20 Гц) повышает возбудимость. Этот двойной механизм действия позволяет ТМС потенциально модулировать судорожный порог, снижать частоту приступов и улучшать общую функцию мозга у пациентов с эпилепсией.

В дополнение к своему влиянию на контроль над припадками, ТМС может способствовать повышению нейропластичности, способствуя восстановлению в областях мозга, которые были затронуты повторными припадками. Исследования показывают, что ТМС может повышать синаптическую пластичность, которая имеет решающее значение для обучения, памяти и когнитивных функций, тем самым устраняя некоторые когнитивные нарушения, часто наблюдаемые у пациентов с эпилепсией.

Клиническое применение и эффективность. В многочисленных клинических испытаниях изучалось применение ТМС при эпилепсии с различными результатами. Исследования показали, что ТМС может снижать частоту приступов у пациентов с лекарственно-устойчивой эпилепсией, особенно при использовании в сочетании с традиционными методами лечения. В некоторых случаях было показано, что ТМС оказывает длительное влияние на контроль над приступами, даже после окончания сеансов стимуляции.

ТМС также был исследован на предмет его способности улучшать когнитивные функции у пациентов с эпилепсией. Когнитивные нарушения, включая проблемы с памятью и вниманием, часто встречаются у людей с эпилепсией, особенно у тех, у кого длительные или плохо контролируемые приступы. Предварительные данные свидетельствуют о том, что ТМС может помочь улучшить когнитивные способности, способствуя пластичности мозга в областях, участвующих в когнитивной обработке данных.

Хотя результаты этих исследований являются многообещающими, общая эффективность ТМС в лечении эпилепсии остается неубедительной, а некоторые исследования показывают ограниченную пользу или ее отсутствие. На результаты лечения ТМС могут влиять такие факторы, как параметры стимуляции, местоположение головного мозга, на который воздействуют, и конкретный тип эпилепсии пациента.

Проблемы и направления на будущее. Несмотря на его потенциал, существует ряд проблем, связанных с использованием ТМС в лечении эпилепсии. Вариабельность реакции пациентов, необходимость в индивидуальных протоколах лечения и отсутствие долгосрочных данных о безопасности и эффективности ТМС - все это создает значительные препятствия для широкого внедрения в клиническую практику. Кроме того, хотя ТМС, как правило, хорошо переносится, некоторые пациенты могут испытывать побочные эффекты, такие как головные боли или кратковременный дискомфорт в месте стимуляции.

Будущие исследования должны быть сосредоточены на оптимизации параметров стимуляции, определении наиболее эффективных областей мозга для воздействия и определении долгосрочного воздействия ТМС на контроль над приступами и когнитивные

функции. Кроме того, изучение комбинации ТМС с другими методами лечения, такими как когнитивная реабилитация или ПЭП, могло бы повысить общую терапевтическую эффективность для пациентов с эпилепсией.

Вывод. Транскраниальная магнитная стимуляция перспективна в качестве дополнительной терапии для пациентов с эпилепсией, особенно для пациентов с лекарственно-устойчивыми формами этого заболевания. Несмотря на то, что современная доказательная база все еще находится в стадии разработки, ТМС обладает потенциалом для улучшения контроля над приступами, повышения нейропластичности и улучшения когнитивных функций у пациентов с эпилепсией. Необходимы дальнейшие исследования для разработки оптимальных протоколов лечения и лучшего понимания долгосрочных эффектов ТМС в контексте лечения эпилепсии. Как неинвазивный и относительно безопасный метод лечения, ТМС представляет собой захватывающую область исследований в комплексной терапии эпилептических расстройств.

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Assessment of the functional capabilities of the heart and the severity of the stress response in women 30-49 years old who are starting to engage in fitness

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Abstract. In this article, based on the results of scientific publications, the current state of the fitness industry development in Kazakhstan in terms of the volume of fitness services and the number of people involved is studied. The results of our own research are presented using modern technologies: in particular, using the method of cardioscanning of cardiovascular system indicators, assessing the fitness level and cardiostress index, as well as based on bioimpedance analysis, the body mass index of untrained women (30-49 years old) of the Royal Club Bukhar Zhyrau fitness club in Almaty in a state of relative rest was determined. The bicycle ergometry method was used to assess the response of hemodynamic indicators of the surveyed contingent to standard physical activity of subthreshold intensity. The obtained data were processed using the methods of mathematical statistics and correlation analysis, analyzed, summarized and formulated in the research results.

Keywords: fitness, cardiovascular system, BMI, fitness level, cardiostress index.

The extensive development of the fitness industry in Kazakhstan over the past 20 years is characterized by the high demand among citizens for physical activity and health improvement, which determine their competitiveness in the labor market and overall well-being. This is particularly relevant for women aged 30-49, who constitute the gene pool of the nation and make up a significant part of the working population. Health and fitness programs for this demographic, utilizing innovative fitness technologies, have practically not been developed within a scientifically and methodologically justified framework and require comprehensive research

Introduction. Currently, a number of legislative documents aimed at developing mass health-promoting physical culture and sports have been published in our country. The Concept for the Development of Physical Culture and Sports of the Republic of Kazakhstan for 2023–2029 outlines the principles, approaches, and strategic directions of state policy in this area [1]. The Law on Physical Culture and Sports of the Republic of Kazakhstan also emphasizes the need to create conditions for the widespread use of physical culture and sports to strengthen the social, physical, and reproductive health of women in the country [2].

The modern socio-economic conditions of our country's development, characterized by high psycho-emotional stress, the acceleration of the pace of life, the increase in information volume, and the scarcity of time for everyday, educational, and productive tasks, as well as the ecological problems of megacities, impose high demands on labor resources, particularly regarding the psycho-physical health of individuals. According to research conducted by medical specialists, the ecological issues negatively impacting the health of residents in Almaty require a comprehensive solution at the state level, involving not only the Ministry of Natural Resources and Environmental Protection but also the Ministry of Health and the Ministry of Education [3].

Thus, it can be said that the integration of fitness industry methods into the daily lives of the population improves the quality of life indicators for citizens and is one of the priority directions of state policy in the sphere of mass physical culture, aimed at addressing health-related issues concerning the population of the Republic.

At the same time, the decrease in the levels of physical activity among the global population, and Kazakhstan in particular, observed since the late 1970s, currently exhibits a negative trend [4]. The widespread epidemic of hypodynamia, leading to a deterioration in the functional state of vital body systems, physical development indicators, and physical and functional fitness, contributes to the emergence of negative changes in overall health. A survey conducted by the center for applied research 'TALAP' showed that 29% of Kazakh respondents under the age of 30 rate their health as 'excellent,' while in the age category of 30 to 50 years, this number sharply drops to 12-13%, and after 50 years, it falls to 7% [5].

Currently, there is a sharp increase in morbidity associated with low physical activity among the population. Physical culture, as one of the factors in health promotion, can become an effective means in the fight against hypodynamia. According to data from the World Health Organization, insufficient physical activity is one of the four significant risk factors for global mortality. Additionally, research by E. Uteuliyev and B. Kurbanov [6] indicates that physical inactivity is responsible for approximately 23% of breast cancer cases, 27% of type II diabetes cases, and more than 30% of cardiovascular diseases.

"Thus, the contradiction between the physical condition of the population and the demands of the modern market economy on the quality of human resources has contributed to the growing interest of the country's citizens in fitness activities and the rapid development of the fitness industry. Fitness, as one of the popular avenues of mass sports, has gained increasing popularity in recent years. There is a rising public demand for engaging in health-focused physical culture aimed at improving the wellbeing of the population in the Republic.

Since the beginning of the 21st century, Kazakhstan has witnessed intense growth in the fitness industry, which offers paid services for organizing various types of health-oriented physical activities for the population. According to marketing research by the republican agency 'Kursiv.media,' the volume of fitness services in the country reaches 198 billion tenge per year and continues to grow. The number of individuals engaging in fitness has increased from 220,000 to 500,000 people over the past 10 years, which is a growth of 127.3% [7].

On one hand, the rapid increase in the number of fitness clubs and participants; on the other hand, the insufficient development of scientifically-based methodologies for applying fitness as a health-promoting tool highlights this issue. Most studies by domestic scholars focus on general issues of physical activity among youth and its impact on health, such as the state of the cardiovascular system, sedentary lifestyles, and excess weight [8,9]. However, there is still a lack of data on the effects of fitness on the body and the health of practitioners in Kazakhstani sources."

The purpose of the study is to evaluate the changes in the initial state of cardiovascular system indicators, fitness levels, and body mass index (BMI) of women aged 30 to 49 who are beginning to engage in health-oriented fitness activities.

Methods and Organization of the Study. The study, which involved practically healthy untrained women aged 30 to 49 (n=91) from the 'Royal Club' fitness center in Almaty, was conducted from September to December 2023. The indicators of the cardiovascular system—including heart rate (HR), blood pressure (BP), endurance coefficient (EC) according to Kvas, as well as the cardio-stress index (CSI) and fitness level (FL)—were assessed in a state of relative rest and during light (sub-threshold) physical activity.

To measure blood pressure (BP), an automatic electronic sphygmomanometer 'OMRON M3' (Japan) was used. The heart rate, as well as the parameters of the cardio-stress index (CSI) and fitness level (FL), were determined using the 'Cardioscan' device (ENERGY-LAB Technologies GmbH, Hamburg, Germany). The 'Cardioscan' device measures the individual's cardio-stress index values from 1.0% to 100.0% in the context of modern life, characterized by the presence of stress factors. A lower CSI indicates a lesser negative impact of stress on the functional state of the heart. The CSI level is assessed based on a sampled evaluation and summation of heart rate variability parameters. If the cardio-stress index exceeds 25.0%, it is recommended to avoid stressful situations and include a greater number of relaxation exercises in the training program [10]. If the CSI value exceeds 50.0%, consultation with a cardiologist is required.

The endurance coefficient (EC), which characterizes the functional state of the cardiovascular system, was determined using Kvas's formula; a normal EC value is 16. An increase in values above the norm indicates a decrease in heart function, while a decrease below the norm suggests an improvement in the heart's functional capabilities [11].

The body mass index (BMI) was automatically calculated using the 'Tanita' device, which assesses the relationship between body weight and height, categorizing it as underweight, normal weight, or overweight [12].

The fitness level (FL) is a composite indicator that encompasses data on heart condition, cardio-stress index values, and body mass index. A rating from 1 to 4 indicates a low fitness level, from 5 to 7 indicates an average fitness level, and from 8 to 10 indicates a high fitness level [13].

The physiological response of the cardiovascular system of the examined group of women to a controlled single-session low-intensity cycle ergometric load (with a cadence of 60-70 rpm) for 10 minutes was assessed using a 'Precor' cycle ergometer (USA). The results of the study were processed using statistical methods with the assistance of Excel software. The significance of differences in the studied indicators was determined using Student's t-test with a significance level of $p < 0.05$, and the strength of the relationships among the studied variables was established through correlation analysis.

Results of the Study and Discussion. Table 1 presents the normative values for the assessment methods used in the study. Tables 2 and 3 provide data on the changes in the resting state measurements of heart rate (HR), blood pressure (BP), cardio-stress index (CSI), and fitness level (FL), as well as endurance coefficient (EC) and body mass index (BMI) among practically healthy but untrained women (n=91) aged 30 to 49 years, before and after a 4-month period of training at the "Royal Club" fitness center.

Table 1 – Assessment standards of the research methods used

Method	Parameter	Evaluation		
Cardioscanning	HR, bpm	bradycardia < 60	normal 60-80	tachycardia > 80
Oscillography	BP, mmHg	–	120/80	–
Kvas Method	EC, arbitrary units	unsatisfactory > 16	normal 16	excellent < 16
Cardioscanning	FL, arbitrary units	unsatisfactory 1-4	normal 5-6	excellent 7-9
	CSI, %	unsatisfactory > 50	normal 26-50	excellent 1-25
	BMI, arbitrary units	underweight < 18	normal 18-25	overweight >25

Table 2 – Initial average indicators and correlation coefficients of hemodynamics at rest in women aged 30-49 years, starting workouts at the “Royal Club” fitness club.

Age Group	Coun, n	Indicator	Average data			Correlation coefficient, r
			X ± S	V, %		
30-39	n=50	heart rate, bpm	73,3 ± 9,5	13,0	heart rate / systolic blood pressure	0,54
		systolic blood pressure, mmHg	118,4 ± 11,1	15,0		
		diastolic blood pressure, mmHg	79,2 ± 6,6	9,0	heart rate / diastolic blood pressure	0,57
		endurance coefficient, arbitrary units	22,5 ± 6,1	27,1	heart rate / endurance coefficient	0,65
40-49	n=41	heart rate, bpm	76,1 ± 9,1	11,9	heart rate / systolic blood pressure	0,68
		systolic blood pressure, mmHg	122,0 ± 13,4	15,1		
		diastolic blood pressure, mmHg	82,0 ± 8,0	10,4	heart rate / diastolic blood pressure	0,67
		endurance coefficient, arbitrary units	24,2 ± 3,8	15,9	heart rate / endurance coefficient	0,42

Analyzing the hemodynamic indicators of women aged 30-49 years at relative rest, the following can be noted:

– The heart rate (HR) of the examined group is within age and gender norms, equaling 73.3±9.5 bpm for the 30-39 age category, and 76.1±9.1 bpm for the 40-49 age category. The coefficient of variation of pulse indicators ranges from 11.9% to 13.0%, which characterizes the heterogeneity of the examined groups.

- The indicators of systolic (SBP) and diastolic (DBP) blood pressure correspond to the normative values for age and gender. The coefficients of variation for systolic blood pressure, amounting to 15.0-15.1%, indicate heterogeneity in the examined cohort regarding systolic pressure, while the values for diastolic blood pressure at 9.0-10.4% show homogeneity, lying at the upper limits of the norm. Our data on HR can be compared to the results of S. Reland (2003) [14]. According to his findings, a higher level of physical fitness induces signs of bradycardia without any changes in the HR index. In his opinion, evaluating this index is more reasonable under the influence of physical load. The blood pressure data we obtained are comparable to the findings of J. Kelly [15], which state that regular physical activity stabilizes the changes in HR with increasing age. A similar opinion is expressed by M. Gulati (2010) [16]. According to S. Sharma [17], the increase in blood pressure in individuals with low physical activity is due to a decrease in the elasticity of the left ventricle and vessel walls. Similar data are presented in the work of S. Moreira (2014) [18].
- The endurance coefficient in the examined population of women, ranging from 22.5 to 24.2 arbitrary units, is above the norm by 40.0% and 51.0%, respectively, which indicates a deterioration in cardiovascular system function. In this regard, the information from I. Meriano [19, 20] is noteworthy, stating that aerobic loads decrease the reaction of blood pressure, which is a key condition for increasing the endurance coefficient.
- The correlation between heart rate, blood pressure, and endurance coefficient is moderate, indicating a significant relationship between these indicators. Similar data are presented by N. Syudo (2014) [21], who believes that with age and increased functional capacity, HR decreases linearly in individuals.

Table 3 – Fitness level indicators, cardiostress index, and body mass index at rest in women aged 30-49 years starting workouts at the “Royal Club” fitness club.

Age, years	Count, n	Indicator	Average data			Correlation coefficient, r
			X ± S	V, %		
30-39	n=50	cardiostress index (CSI), %	18,8±12,9	68,0	heart rate / CSI	0,73
		body mass index (BMI)	23,7±4,5	18,9	BMI/CSI	0,85
40-49	n=41	cardiostress index (CSI), %	21,3 ± 9,2	43,2	heart rate / CSI	0,79
		body mass index (BMI)	26,4±3,9	14,8	BMI/CSI	0,65

Analysis of the data in Table 3 shows the following:

- The average cardiostress index (CSI), reflecting the cardiovascular system's response to stress typical of modern living conditions, in the examined women ranges from 18.8% to 21.3%, which corresponds to physiological norms. However, in women of the second age category (40-49 years), the indicators are worse, indicating age-related changes in health status.
- The coefficient of variation for CSI is 68.0% and 43.2%, demonstrating significant dispersion of values, indicating a wide range of scores across different age groups.
- The body mass index (BMI) for women aged 30-39 years is 23.7, which is within the normal range but closer to its upper limits. For women aged 40-49 years, the BMI is 26.4, exceeding the norm by 6.5% and indicating the presence of excess weight. The coefficient of variation for BMI,

at 18.9% and 14.8%, indicates diversity in weight measurements among women in these age groups.

- Correlation indicators between the cardiostress index, fitness level, and body mass index show a close relationship among these parameters.

- The fitness level of both groups, averaging 4.5 ± 1.45 , represents a combined measure of CSI and BMI and falls below age- and gender-specific norms. The literature notes that the functional state of the cardiovascular system largely depends on BMI, as confirmed by many studies [22, 23, 24]. There is a dependency between health status and the functioning of various body systems relative to the ratio of muscle and fat mass, which determines the selection of physical activity means, according to O. Zhervana (2022) [25].

Table 4 presents the indicators of physiological response of the cardiovascular system in women to a standardized single-session cycle ergometric load (at a pace of 60-70 rpm) over a period of 10 minutes. It should be noted that compared to baseline data, the cardiovascular system's response to standard physical load (below threshold) differs between both age groups, reflecting age-related changes in physical fitness and health status.

Table 4 – Results of the cardiovascular system response in women aged 30-49 years, who are starting health fitness activities at the "Royal Club" fitness club, to standardized physical load.

Age, years	Count, n	Indicator	Average data			Recovery time, s
			$X \pm S$	V, %	P	
30-39	n=50	HR, bpm	$100,8 \pm 17,5$	16,7	< 0,05	126
		systolic blood pressure (SBP), mmHg	$135,0 \pm 13,0$	11,0	< 0,05	
		diastolic blood pressure (DBP), mmHg	$85,0 \pm 5,5$	7,0	> 0,05	
40-49	n=41	HR, bpm	$110,8 \pm 18,0$	11,9	< 0,05	150
		systolic blood pressure (SBP), mmHg	$136,0 \pm 12,0$	10,0	< 0,05	
		diastolic blood pressure (DBP), mmHg	$93,0 \pm 8,0$	7,1	> 0,05	

In general, it can be noted that there is a trend of deterioration in the functional state of the heart's contractile ability, as well as hemodynamic indicators of untrained women in the studied population under minimal intensity of the testing load, which indicates the presence of initial shifts due to a lack of physical activity:

The heart rate increases by 36.0% and 45.0% respectively, which indicates that enhanced circulation, even during low-intensity load, is achieved at the expense of increased pulse frequency rather than stroke volume (SV), which is not efficient for ensuring optimal cardiovascular system function.

Systolic blood pressure (SBP) increases slightly, by only 14.0% and 11.0% respectively, which is 2-3 times below the required norms, characterizing a weakness in the strength of contraction (systole) of the left ventricle, particularly in the second age group.

Diastolic blood pressure (DBP) shows an increase of 7.3% and 13.4%, indicating an increase in arteriolar tone, which reflects reduced oxygen access to peripheral tissues, also a negative factor.

Similar data is presented in the work of J. Vogetti (2017) [26], who suggests that the functional state of the body and BMI are closely related to the volume and direction of physical activity programs. This view is also shared by J. Antonio (2018) [27], who believes that BMI has a strong correlation with body fat mass and blood pressure indicators. Furthermore, A. Gordon and V. Mendes (2021) [28] recommend paying attention to blood pressure status during physical activity. This point is also emphasized by N. Kukuler [29] and N. Kokorilo [30].

Conclusions. A comprehensive assessment of the initial average hemodynamic indicators, as well as the main functional and anthropometric parameters of the studied population, shows the following:

The heart rate (HR) and blood pressure (BP) indicators in a state of relative rest correspond to age and gender norms; however, the high coefficient of variation indicates significant heterogeneity within the examined group.

The endurance coefficient is 2.9 times above the norm, indicating a significant deterioration in the functional capabilities of the cardiovascular system.

The cardiostress index (CSI), as an indicator of the cardiovascular system's response to stress, corresponds to physiological norms, indicating an adequate response of the body to stress factors.

The body mass index (BMI) for women aged 30-39 years is within normal limits, while for women aged 40-49 years it exceeds the norm by 6.0%, indicating an issue with excess weight in this age group.

The fitness level (FL), as a combined indicator of CSI and BMI, is at a low level, indicating a decrease in the overall physical fitness of the examined population.

There is a correlation between the hemodynamic indicators of moderate intensity, and a close connection is observed between fitness level, CSI, and BMI, highlighting the interdependence of these indicators.

The response to standard low-intensity physical load is characterized by a weak increase in systolic blood pressure (SBP), indicating a weakening of the left ventricle's contraction strength, and an increase in diastolic blood pressure (DBP), which points to an increased arteriolar tone and reduced oxygen access to tissues. This is a negative factor for improving training levels in the body.

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Компетентностная Модель врача офтальмохирурга, как инструмент профессионального развития

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Аннотация

Целью данной публикации является представить компетентностную модель врача офтальмохирурга как эффективный инструмент профессионального развития и управления качеством медицинской помощи. Методы исследования включали анализ современных требований к профессиональным компетенциям в области офтальмохирургии, изучение международных стандартов (ВОЗ, WCO), а также адаптацию компетентностного подхода к реалиям медицинской практики. Результаты работы демонстрируют, что компетентностная модель врача офтальмохирурга, основанная на ключевых доменах (практика, профессионализм, лидерство, коммуникация, образование и наставничество, научные исследования), позволяет структурировать процесс профессионального развития, оценивать уровень квалификации специалистов и разрабатывать программы повышения квалификации. Практическая значимость модели заключается в её применении для планирования карьерного роста, оценки эффективности обучения и повышения качества хирургической помощи пациентам.

Статья предназначена для специалистов в области офтальмологии, медицинского образования и управления здравоохранением.

Ключевые слова: компетентностная модель, офтальмохирургия, профессиональное развитие, медицинская компетенция, качество хирургической помощи.

Актуальность темы

Современная офтальмохирургия требует высокой степени профессионализма и постоянного совершенствования компетенций врачей, принимающую особую важность в условиях быстро развивающихся технологий. Развитие технологий, появление новых хирургических методов и протоколов лечения обуславливают необходимость пересмотра подходов к профессиональной подготовке офтальмохирургов и развития в течение профессиональной жизни. Компетентностная Модель выступает универсальным инструментом, позволяющим структурировать процесс профессионального развития и обеспечить соответствие квалификации специалистов современным требованиям. Для медицинского специалиста важно всестороннее развитие, включающее как общие, так и клинические компетенции.

Цель исследования: содействовать улучшению качества офтальмологической помощи через создание и апробацию Компетентностной Модели врача-офтальмохирурга, включающей ключевые профессиональные домены и уровни развития.

Материалы и методы исследования

Для разработки Компетентностной Модели офтальмохирурга нами был проведен анализ международных стандартов (ВОЗ, WCO) и лучших практик подготовки офтальмологов, а также использован для интеграции подходов действующий офтальмологический стандарт Республики Казахстан. Проведена экспертная оценка профессиональных требований к офтальмохирургам, которая позволила провести адаптацию компетентностного подхода к условиям медицинской практики в Казахстане. Модель протестирована в деятельности персонала офтальмологической клиники Astana Vision области Абай. Оценка эффективности Компетентностной Модели врача-офтальмохирурга, как инструмента профессионального роста и повышения качества офтальмохирургической помощи была важна для подтверждения состоятельности Модели.

Результаты

В результате проведенного анализа и экспертных оценок ведущими специалистами в области офтальмологической практики Республики Казахстан нами была разработана компетентностная Модель, состоящая из 6 основных Доменов (Рисунок 1).

1) Домен «Практика», включающий навыки диагностики и выполнения хирургических вмешательств.

2) Домен «Профессионализм» включил соблюдение этических норм, обеспечение безопасности пациента.

3) Домен «Лидерство» основывается на организации командной работы, принятии решений в сложных ситуациях.

4) Домен «Коммуникация» - как основополагающий фактор пациентоцентрированности, содержит требования к взаимодействию с пациентами, коллегами и медицинским персоналом.

5) Домен «Образование и наставничество» охватил передачу опыта, самообучение и обучение и передачу опыта молодым специалистам.

6) Домен «Научные исследования», как квинтэссенция опыта и развития, отражает участие в разработке новых методов лечения, внедрение инноваций.



Рисунок 1 – Домены Компетентностной Модели

Для дифференциации подходов каждый домен разбит на три уровня профессионального развития: базовый, средний и продвинутый, что позволяет адаптировать модель для специалистов разного уровня подготовки.

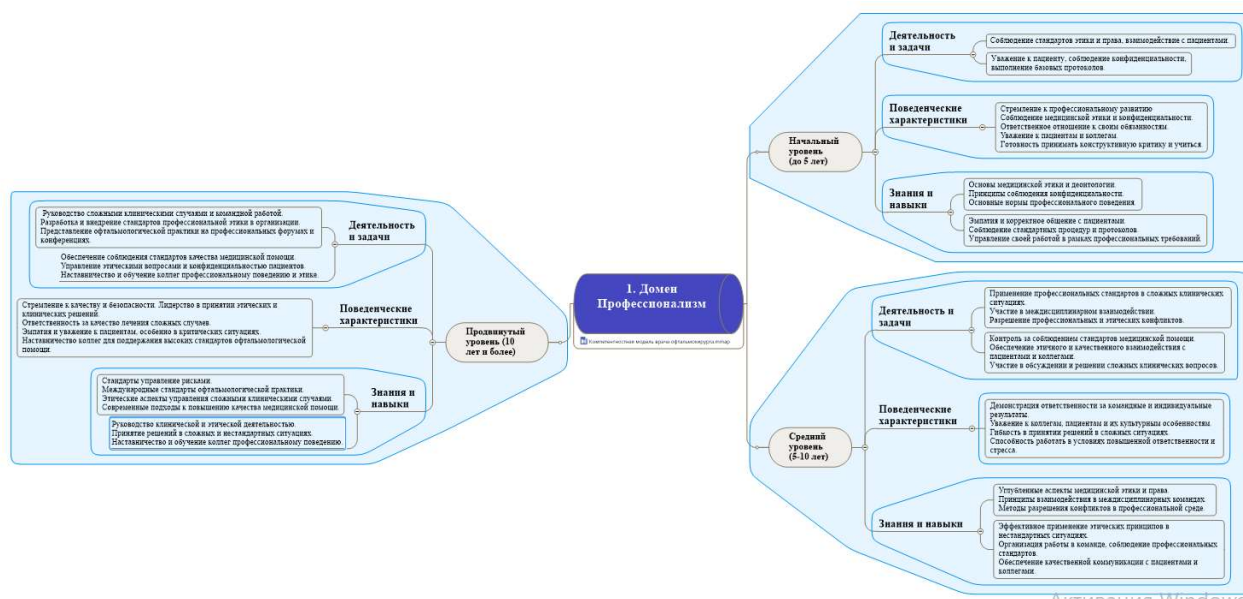


Рисунок 2. Пример Домена, включающего три уровня профессионального развития: базовый, средний и продвинутый

После разработки Компетентностной Модели нами была проведена апробация модели на сплошной выборке офтальмохирургов Astana Vision области Абай, что выявило точки роста и потребность в повышении уровня квалификации по вопросам, повышающим удовлетворенность пациентов и организационно личностные характеристики компетенций офтальмохирургов.

На рисунке 3 представлена оценка по Доменам Компетентностной Модели

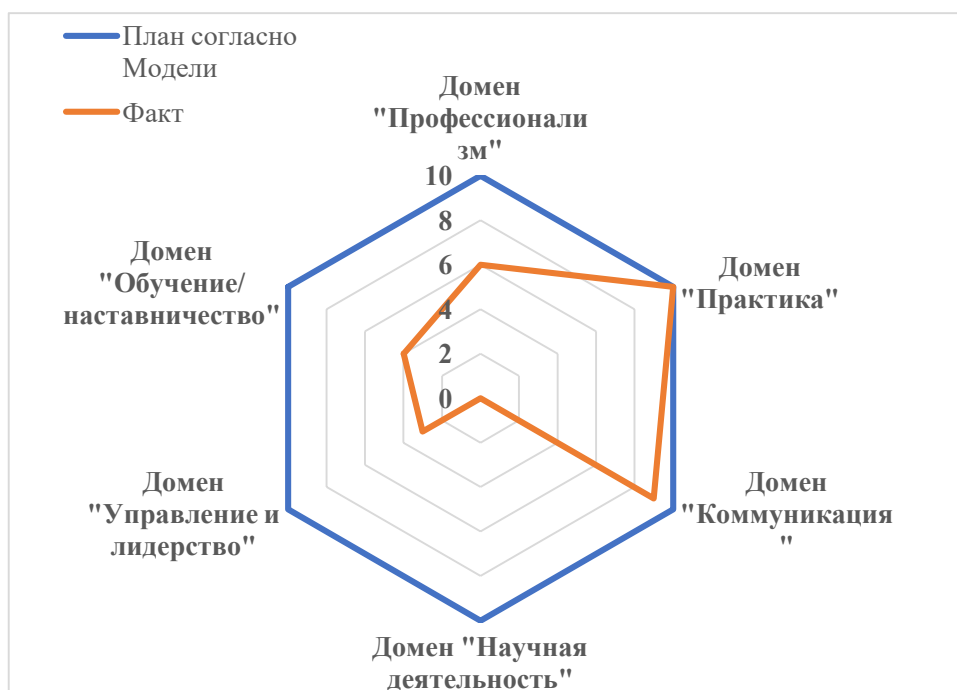


Рисунок 3. Пример оценки Модели – врач офтальмохирург со стажем 2 года

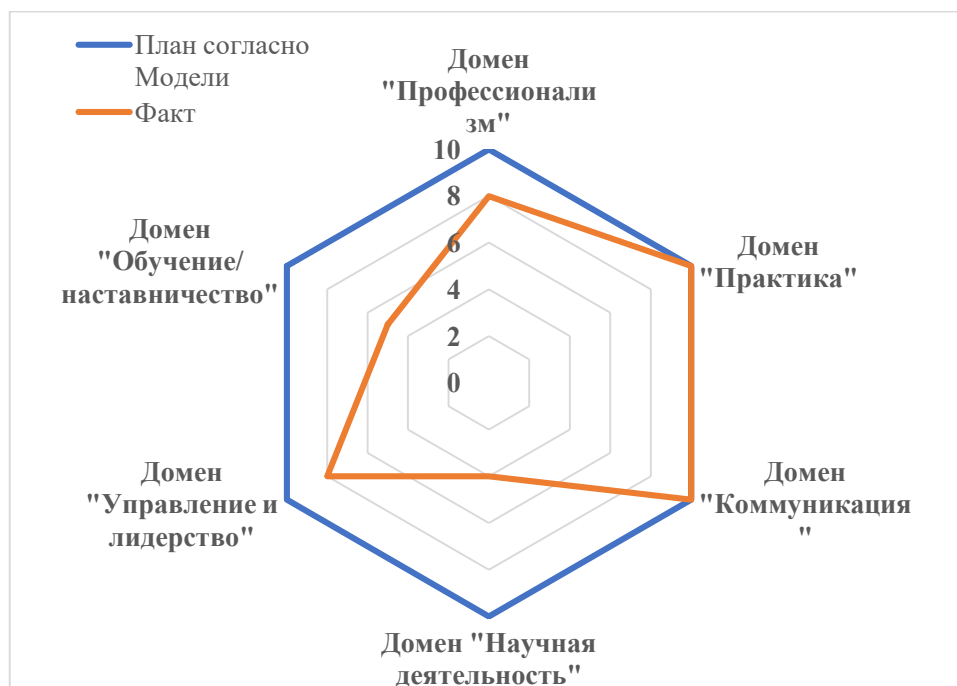


Рисунок 4 – Пример оценки – врач офтальмохирург со стажем 8 лет

В результате оценки выявлено и подтверждено, что использование разработанной Компетентностной Модели способствует более точной оценке компетенций специалистов и разработке персонализированных программ повышения квалификации.

Практическая значимость Компетентностной Модели состоит в том, что модель может служить основой для разработки образовательных программ в области офтальмохирургии, позволяя работодателям оценивать квалификацию специалистов и планировать их карьерное развитие. Также данная Модель способствует повышению качества хирургической помощи, снижению медицинских рисков и улучшению здоровья пациентов.

Выводы:

Компетентностная модель врача-офтальмохирурга представляет собой эффективный инструмент, интегрирующий требования международных стандартов и специфику локальной медицинской практики. Её внедрение обеспечивает систематизацию профессионального роста, повышение уровня квалификации специалистов и улучшение результатов лечения в офтальмохирургии.

Within the framework of the educational process, the study "Level of Awareness Among Medical College Students About Cardiovascular Disease Risk Factors"

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Abstract

The aim of this article is to study the level of awareness among medical college students about the risk factors for cardiovascular diseases (CVD). The study utilized a survey method to assess students' knowledge of key risk factors, such as poor nutrition, lack of physical activity, smoking, and stress. The collected data will be analyzed to develop recommendations for improving awareness about CVD.

The research findings can be used to design educational initiatives aimed at preventing CVD among young people.

Keywords: cardiovascular diseases, prevention, awareness, students, risk factors.

Research Objective:

To study the level of knowledge among students about the risk factors and prevention of cardiovascular diseases (CVD).

Tasks:

- Assess students' basic knowledge about CVD.
- Identify how risk factors (smoking, physical activity, nutrition, stress) are perceived by students.
- Develop recommendations to improve awareness.

Introduction

Cardiovascular diseases, including heart attack, stroke, heart failure, ischemic heart disease, and several other conditions, are the leading cause of mortality worldwide and significantly reduce the quality of life. According to the World Health Organization, millions of people die from

these diseases every year. Some studies predict that by 2030, the number of deaths from stroke and other heart diseases will exceed 24 million. [\[1\]](#) [\[2\]](#)

Cardiovascular diseases, like other illnesses, have their own risk factors. These include elevated total cholesterol levels, high blood pressure, smoking, obesity, unhealthy diet, poor nutritional status, age, family history, and male gender. [\[3\]](#)

Health literacy among young people plays a crucial role in the prevention of cardiovascular diseases (CVD) in the future. [\[4\]](#) There is a general consensus that the risk of CVD is significantly affecting younger populations. Therefore, children and adolescents should be the focus when aiming to improve health indicators. [\[5\]](#)

Awareness of cardiovascular diseases (CVD) and their risk factors can help reduce the population's exposure to modifiable risk factors. Basic awareness is a key component in planning effective preventive measures.

With the rapid rise of CVD among youth, health officials must monitor awareness levels about CVD and the health habits of children and adolescents to better plan and transform health promotion programs aimed at preventing CVD. [\[6\]](#)

RESULTS

Sample Characteristics:

1. Gender: 79.6% of the participants are female, while the remaining 20.4% are male.
2. Age: The majority of respondents are aged 17–19 years (70.4%), followed by the age group 20–22 years (20.4%), and those aged 23 and older (9.3%).
3. Year of Study: Most respondents are in their 3rd year (38.9%), while only 13% are 1st-year students, making them the smallest group. Additionally, 27.8% and 20.4% of respondents are 4th-year and 2nd-year students, respectively.

Level of Awareness

1. Percentage of students who correctly identified the main risk factors for CVD:
 - Smoking: 22% of students across all years identified this factor.
 - Obesity: Correctly identified by 14.8% of all respondents.
 - Physical inactivity and poor nutrition: Mentioned by 13% and 16.7% of respondents, respectively.
2. Comparison of awareness across study years:
 - Students in their 4th and 3rd years demonstrated the highest levels of knowledge.
 - Students in the 1st and 2nd years showed gaps in awareness regarding CVD risk factors.

Sources of Information

1. College lectures are the most popular source among students, with 40.7% relying on them.
2. The internet ranks second as a source of knowledge about CVD risks, accounting for 29.6%.
3. Social media is mentioned by 20.4%.
4. However, informational activities with doctors account for only 9.3%, which is significantly lower compared to other sources.

Relationship Between Knowledge and Personal Habits

1. Awareness and Harmful Habits: Smoking and alcohol use were most frequently mentioned among students, but their awareness of the impact on CVD is low.
2. Nutrition and Physical Activity: Only 16.7% of respondents have a healthy diet, while 38.9% of students engage in physical activity regularly.

Discussion

Key Findings:

1. Students in their 3rd and 4th years demonstrated a high level of knowledge about CVD risks, while the knowledge of 1st and 2nd-year students is insufficient.
2. Students are more aware mainly through lectures and social media.
3. Senior students (3rd and 4th years) have more detailed knowledge of CVD risk factors, although overall awareness remains low.

Problematic Aspects

1. The lack of knowledge about risk factors among 26% of respondents is a significant issue.
2. The educational program in the college is the main source of information about CVD risks, although it is not sufficiently covered among the respondents.

Practical Significance

1. Improve educational programs by including thematic modules on CVD prevention in the curriculum.
2. Involve practicing doctors to conduct informational lectures and seminars.
3. Create online applications, websites, and materials for students.

Limitations of the Study:

The study is limited by the sample size, as it only includes students from one college.

Conclusions:

The study assessed the level of awareness among medical college students about the risk factors for cardiovascular diseases. The results showed that students' knowledge varies depending on their year of study.

- **Junior years (1st-2nd year):** Focus mainly on widely known basic risk factors such as smoking and alcohol use, with a high proportion of unclear responses to questions.
- **Senior years (3rd-4th year):** Demonstrate more in-depth knowledge and provide detailed responses. They are aware of less obvious factors, such as genetics.

Recommendations for Students:

- Actively participate in preventive and educational activities.
- Regularly check your blood pressure and aim for a healthy lifestyle.
- Use reliable sources of information, such as lectures and consultations with doctors.

Recommendations for College Instructors and Administration:

- Integrate thematic modules into established programs.
- Create individual courses on the prevention of cardiovascular diseases.
- Implement interactive methods (e.g., case studies, discussions).
- Develop informational materials:
 - Provide informational brochures and key information.
 - Organize seminars and lectures with specialists in cardiology.
 - Regularly organize events promoting a healthy lifestyle (e.g., physical activity days, smoking cessation campaigns).

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Advancements and Challenges in Breast Cancer and Benign Breast Disorders: Focus on Fibrocystic Mastopathy in Kazakhstan

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General characteristics of the work

Significance of the Topic. Despite significant advancements in the diagnosis and treatment of breast cancer, it remains one of the most urgent issues in the field of oncology (Novikova E.G., Smetnik V.P., 1999; Mitelman Yu.M., 2006).

In Kazakhstan, breast cancer is the most common malignant tumor among women. Its high societal impact has made it a focal point of modern oncological research. Recent studies and concentrated efforts in this area have greatly improved knowledge of breast cancer biology and various forms of dyshormonal hyperplasia (Goryushina O.G., 2002).

One of the most prevalent breast disorders is fibrocystic mastopathy. This term refers to a category of benign breast dysplasias that are non-cancerous in nature, characterized by different levels of tissue proliferation and regression. These changes can either affect the entire gland or manifest as distinct nodules.

The Enigmatic Breast: Deciphering the Complexities of Mammary Dysplasia

The mammary gland, a marvel of biological engineering, presents a unique challenge to medical professionals: the often-blurred line between physiological fluctuation and pathological change. This ambiguity, as highlighted by Burdina (1998), stems from the gland's inherent morphofunctional instability. Constantly responding to a complex hormonal orchestra—a symphony conducted by the ovaries, pituitary, adrenal cortex, and thyroid—the breast is exquisitely sensitive to even subtle shifts in this endocrine equilibrium. This inherent volatility, further exacerbated by somatic ailments, psychoemotional stress, and even lifestyle factors like diet and exercise (a point often overlooked), creates fertile ground for a myriad of dysplastic processes.

Kira et al. (2000) emphasize the multifactorial nature of these conditions, rendering a simplistic etiological explanation inadequate. While the influence of adrenal, pituitary, and thyroid hormones is undeniable, the spotlight remains firmly on the estrogen-progesterone axis. An imbalance, often manifesting as relative or absolute hyperestrogenism (Andreeva et al., 2002; Auege et al., 1983), is widely considered the primary driver of mammary dysplasia. This hormonal imbalance can be influenced by a variety of factors, including genetic predisposition, environmental toxins (such as certain pesticides and plastics containing endocrine disruptors), and even the timing and duration of pregnancies and breastfeeding.

The peak incidence of benign mammary hyperplasia, predominantly affecting women aged 25 to 45 (Gabunia, 2001), underscores the hormonal interplay during this reproductive lifespan. Prevalence rates, varying between 29.4% and 42.6% in this age group (Samoylova, 1996), highlight the widespread nature of these conditions. The concern, however, transcends mere benign hyperplasia. The potential link between dyshormonal hyperplasias and the subsequent development of breast cancer fuels ongoing research and necessitates increased vigilance. Early

detection and management strategies, incorporating lifestyle modifications alongside medical interventions, are crucial in mitigating risks and improving patient outcomes.

Further research is needed to fully unravel the intricate web of factors contributing to mammary dysplasia. A more comprehensive understanding of the interplay between genetic predisposition, hormonal fluctuations, environmental factors, and lifestyle choices is crucial for developing targeted preventative and therapeutic strategies. This complex interplay emphasizes the need for a holistic approach to breast health, one that considers the individual's unique circumstances and promotes proactive health management. Simply put, understanding the breast's inherent complexities is the first step towards ensuring its long-term well-being.

The Shifting Sands of Breast Cancer Risk: Dyshormonal Hyperplasias and Modern Challenges

The relationship between dyshormonal hyperplasias and breast cancer risk remains a crucial area of research, constantly evolving with new data and refined understanding. While established research, such as that by Lipnitsky et al. (2001), highlights the correlation between the degree of epithelial proliferative activity in dyshormonal hyperplasias and breast cancer risk, the nuances are far more complex than a simple linear relationship.

Semiglazov (2000) correctly emphasizes the heightened risk associated with atypical proliferation within dysplasias. This 1.5-3% subset represents a significant concern, particularly when interacting with other established risk factors. Burdina (1998) provides a comprehensive list of these co-factors, including familial history, early menarche, late menopause, endometriosis, uterine fibroids, endometrial hyperplasia, and polyps. The impact of late childbirth (after 35) further complicates the risk profile.

The bimodal incidence pattern of breast cancer, peaking around 40-50 and after 55-60, as noted by Li and Sobolev (2001), is now challenged by the concerning trend highlighted by Dymarsky (1999) – a rise in diagnoses among 35-40-year-olds. This shift necessitates a reassessment of risk factors and preventative strategies, potentially pointing to influences not yet fully understood. Environmental factors, lifestyle choices, and genetic predispositions beyond family history warrant further investigation.

The shared etiology hinted at by the frequent co-occurrence of dyshormonal hyperplasias and breast cancer underscores the need for a deeper understanding of the underlying molecular mechanisms. While light microscopy remains the cornerstone of diagnosis, the challenges in differentiating atypical ductal and lobular hyperplasias from non-invasive cancers, as acknowledged in the original text, remain a significant hurdle. This highlights the need for advanced diagnostic tools, such as immunohistochemistry and molecular profiling, to enhance accuracy and allow for earlier, more targeted interventions.

Furthermore, future research must focus on:

Identifying specific genetic markers: Pinpointing genetic mutations and polymorphisms associated with both dyshormonal hyperplasias and increased breast cancer risk.

Investigating hormonal imbalances: A more precise understanding of the specific hormonal dysregulations driving hyperplasia and their contribution to carcinogenesis.

Developing improved diagnostic techniques: Moving beyond light microscopy to implement sophisticated techniques for earlier and more accurate detection of precancerous lesions.

Personalized risk assessment: Creating models that incorporate individual risk factors beyond those currently recognized to provide a more accurate prediction of breast cancer likelihood.

In conclusion, while the connection between dyshormonal hyperplasias and breast cancer risk is well-established, ongoing research is crucial to unravel the complexities of this relationship, leading to more effective preventative measures and improved diagnostic tools for early detection

and intervention. The changing incidence patterns and the diagnostic challenges underscore the dynamic nature of this field and the necessity for continued investigation.

In contrast to benign tumors, malignant growths are defined by significant disturbances in the basement membrane's structure, often leading to its complete disappearance in areas affected by invasive processes. The basement membrane is intrinsically linked with a layer of myoepithelial cells, whose presence during hyperplastic conditions in breast tissue serves as a key marker for identifying benign formations.

Currently, the dynamics of myoepithelial cell proliferation in glands of ectodermal origin, along with the sources contributing to the expansion of their population, remain insufficiently clarified. These ectoderm-derived cells, containing specialized contractile filaments, demonstrate a high degree of responsiveness to volumetric changes in ducts and alveoli. Together with epithelial cells, they actively contribute to the creation of cellular growths within breast tissue.

Myoepithelial cells and their cytoplasmic projections work in coordination with the basement membrane, forming a protective layer around epithelial cells that are perpendicularly aligned to this structure (Archer F.L., 1971). A groundbreaking exploration of this topic was performed by Hamperl H.P. in 1970, where he utilized advanced staining techniques to devise a system categorizing the various types of myoepithelial hyperplasia found in both benign and malignant tumors of the breast, as well as sweat and salivary glands in humans.

Despite these advancements, conventional histological staining methods often fall short in reliably distinguishing myoepithelial cells. A more accurate alternative involves histochemical analysis based on the detection of alkaline phosphatase, an enzyme abundantly present in the micropinocytotic vesicles of functioning myoepithelial cells (Garret J.R., Radnor C.J., 1977).

In recent years, immunohistochemical techniques have become increasingly prevalent for identifying myoepithelial cells, enabling the detection of contractile proteins within the myofibrillar apparatus (Karelina T.V., Ermilova V.D., 1983). The application of monoclonal antibodies, which specifically target certain unique cytokeratins (Ageev A.K., 1969; Bloch M.Y., 1969; Bazhenova A.P. et al., 1985; Berezkin D.P., 1988; Akimov A.B., 1996; Bershtein J.I.M., 2000), myoepithelium, and components of the basement membrane, allows for the precise labeling of distinct cellular subpopulations and extracellular matrix elements in breast tissue (Jarasch E.D., Nagle R.B., Kaufmann M., 1988).

It is well-established that myoepithelial cells, alongside secretory epithelial cells, actively contribute to the formation of cellular proliferations within breast tissue (Gelypteyn V.I. et al., 1990). Pathologies of the breast frequently present benign dysplastic processes and malignant neoplasms, which often pose substantial challenges in differential diagnosis when examined on histological sections (Papotti M., Gugliota P., Eusebi V., 1983).

In light of these complexities, our research focuses on the state of myoepithelial cells in benign proliferative lesions that morphologically resemble both infiltrating and non-infiltrating forms of breast cancer.

Objective of the Study: To perform immunohistochemical analysis of breast cancer using the markers ER, PR, Ki-67, and Her2/neu.

Tasks of the work:

1. Provide a histological and immunohistochemical characterization of epithelial cells.
2. Conduct a comparative analysis of breast proliferates using antibodies against ER, PR, Ki-67, and Her2/neu.
3. Provide a pathological characterization of the histological picture of breast cancer.

Scientific novelty:

Cell division is accompanied by the appearance of specific proteins, one of which is Ki-67. This protein is not produced in cells in a resting state, making it a useful marker for assessing the proliferative activity of tumors. The level of Ki-67 is of significant prognostic value, as tumors composed of less mature and differentiated cells show the highest proliferative activity.

Practical significance of the work:

The data obtained in this study confirm and refine the understanding of the role of myoepithelial cells in the differential diagnosis of morphologically similar benign and malignant proliferations in the breast. The research allows for the identification of early, microinvasive forms of breast cancer and helps to avoid false-positive carcinoma diagnoses in benign hyperplastic processes. The findings can be used by pathologists and oncologists in making decisions regarding treatment strategies and patient management, as well as in the development of prevention methods and prognosis assessment. The results can be recommended for inclusion in relevant lectures on pathological anatomy and oncology for students of medical universities and physicians undergoing advanced training.

EPIDEMIOLOGY OF BREAST CANCER.

Recent statistical data shows that breast diseases affect between 13.5% and 30% of the female population, with the incidence rate increasing annually by 4% to 4.8% over the last few decades (Parkin D.M., Bray F., 2000). Breast cancer represents nearly 30% of all malignant cancers and accounts for 16-18% of cancer-related deaths, making it one of the leading types of cancer in women (Kliwer E.W., Smith K.R., 1995). Additionally, more than half of women of reproductive age are diagnosed with dysregulated breast conditions, with estimates ranging from 40% to 80% (Haagensen C.D., 1989).

Dysregulatory hyperplastic changes in the breast are clearly pathological conditions that can, in certain cases, elevate the risk of developing breast cancer, as they share similar pathophysiological mechanisms, which can complicate the diagnosis of existing carcinomas.

Besides their reproductive role, breasts also serve important cosmetic and aesthetic functions. Consequently, breast diseases, along with the effects of delayed diagnosis or improper treatment, can cause significant physical and psychological distress, leading to neurosis and, often, social isolation.

According to the World Health Organization (WHO), over 660,000 new breast cancer cases are diagnosed globally each year, with more than 60,000 of those cases occurring in the CIS countries. Breast cancer is the most common type of cancer among women in the United States, where it develops in one out of every eight women, and in European countries, where one in ten women is affected.

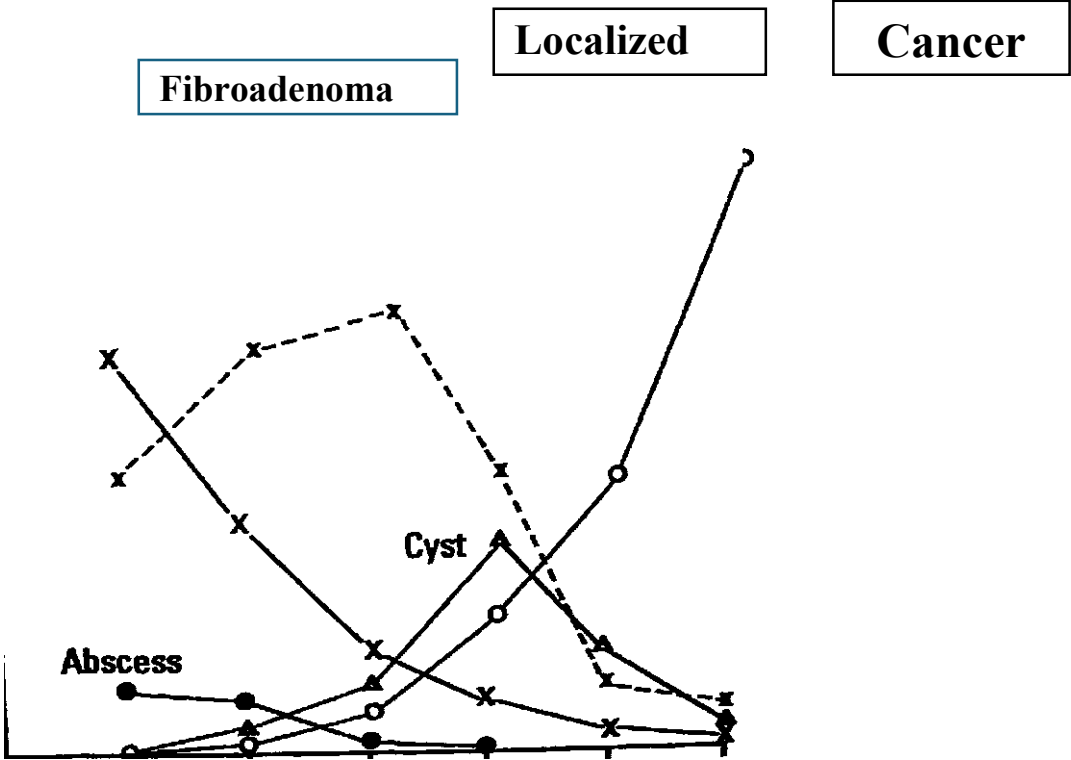


Fig. 1. Distribution of breast pathology by age.

According to Dixon and Sainsbury (1999), since 1995, breast cancer has remained the leading cause of cancer among women, with a continuous rise in incidence. In 1978, the incidence was 29.6 per 100,000 women, and by 1998, it had increased to 63.2 per 100,000, more than doubling over 20 years. A similar pattern is observed in breast cancer mortality rates, though the increase is less pronounced. In 1999, the mortality rate was 24.4 per 100,000, compared to 28.8 per 100,000 in 1997 (Albertini A., 1999).

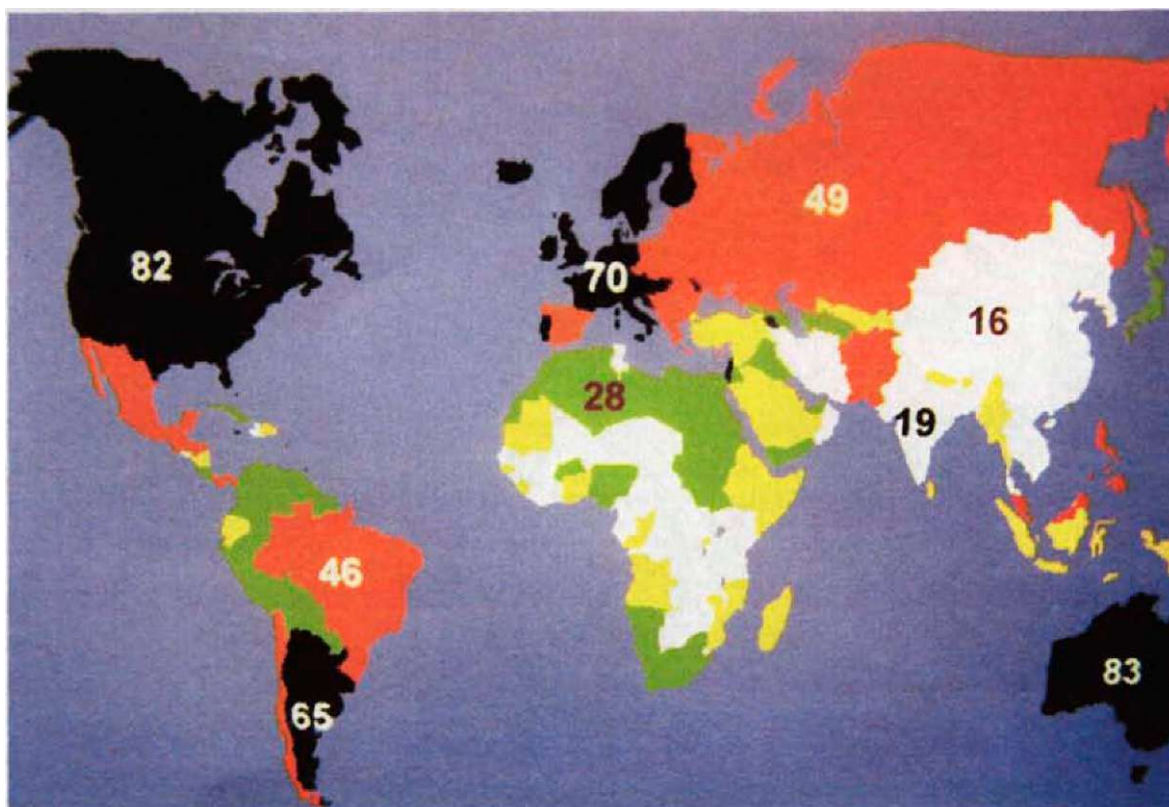


Fig. 2. Standardized breast cancer incidence rate per 100,000 population. Globocan 2000. Cancer Incidence.

According to these statistics, a new case of breast cancer is diagnosed in our country approximately every 35-37 minutes, and one woman succumbs to this disease every hour (A.S. Zotov, E.O. Velik, 2005).

Breast disorders arise due to the combined influence of numerous factors (over 80 have been identified), including genetic, constitutional, socio-economic, psychological, environmental, and occupational causes. The effects of most of these factors are ultimately mediated through disruptions in the hormonal balance of the female body..

The relative risk of developing invasive breast cancer in precancerous diseases (according to Nelyubina L.F., 2003).

Table 1.

Cancer risk	The nature of the pathology
Not promoted	Non-proliferative diseases: metaplasia, duct ectasia, mastitis
Increased by 1.5-3 times	Proliferative diseases without atypia: sclerosing adenosis, fibroadenoma (1.7 times), ductal epithelial hyperplasia, intracurrent papilloma, pronounced fibrocystic changes
Increased 4-5 times	Hyperplasia with atypia - ductal, lobular; ductal epithelial hyperplasia + burdened history of breast cancer
Increased 8-10 times	Lobular and ductal carcinoma in situ, ductal hyperplasia with atypia + burdened family history of breast cancer

Advances in genetics have significantly deepened our understanding of malignant diseases, particularly highlighting the influence of genetic and familial predispositions in breast cancer. Women with immediate relatives (e.g., mothers, sisters, or daughters) diagnosed with breast cancer are at a three- to fivefold increased risk of developing the disease. This risk escalates to ninefold if those relatives have bilateral breast cancer (Bonadonna G., 1988).

Although genetic factors play a crucial role in breast cancer risk, hereditary forms account for less than 5% of all cases (Kelsey J.L., 1993). Environmental exposures such as frequent chest X-rays and moderate radiotherapy doses (1–3 Gy) for conditions like scoliosis, ankylosing spondylitis, or Hodgkin’s lymphoma further elevate risk, particularly in women under 40 or with a strong familial history (Little M.R., 1999).

The relationship between smoking and breast cancer remains unclear, with some studies indicating a potential protective effect due to the anti-estrogenic properties of tobacco (Baron J.A., 1984). Additionally, dietary choices, particularly high animal fat consumption, have been linked to increased risks of pre-cancerous and cancerous changes in breast tissue (Lubin J., 1990). A diet rich in animal fats and meat products can influence hormonal balance by reducing androgen levels in blood plasma while increasing estrogens, which are excreted in urine as estriol (Simopoulos A., 1995). This hormonal imbalance may promote epithelial hyperplasia in target organs, including the uterus, mammary glands, and ovaries.

Research by Genug F. et al., 1983, suggests that an excess of animal fats in the diet affects membrane receptors for prolactin, accelerating tumor growth and size. The prevalence of dishormonal hyperplasia in the mammary glands varies due to subjective diagnostic criteria. However, clinical studies report rates of 20-60% among women over 30 years old (Schnitt S., Connolly J., 1984).

There is a recognized association between the extent of epithelial proliferation in benign breast hyperplasia and the likelihood of developing carcinoma (Beck J., 1985; Pozharissky K.M., 1989). Proliferation can occur in ducts, cysts, or lobules but is most commonly observed in ducts and cysts. Based on the degree of proliferation, three types are identified:

- 1. Mild proliferation:** No increased risk of infiltrating carcinoma compared to the general population.
- 2. Moderate proliferation:** Risk of invasive breast cancer is 1.5–2 times higher than the population average.
- 3. Atypical proliferation:** Risk increases fivefold compared to the population baseline.

Atypical proliferation is detected in approximately 3% of women with dishormonal hyperplasia (Rosai J., 1989), predominantly localized in ducts and cysts, and less frequently in lobules. Since epithelial proliferations can mimic intralobular or intraductal carcinomas, differential diagnosis is crucial.

Morphology of breast cancer.

The biological nature of non-infiltrating breast carcinoma (carcinoma in situ, or CIS), including non-invasive breast cancer, remains a topic of debate. Most clinical pathologists classify CIS as a malignant tumor whose cells, at least temporarily, lack invasive potential (Koss L., 1975; Pozharissky K.M., 1989). Conversely, another school of thought suggests that the term "cancer" should be reserved for cases exhibiting infiltrative growth, with CIS instead considered a precursor or pre-cancerous condition (Haagensen S. et al., 1983; Hamperl H., 1974).

Despite these differing perspectives, CIS is classified under the TNM system for breast cancer staging, designated as Tis, reflecting its initial, confined spread observable only microscopically. Similarly, the International Histological Classification underscores its malignant nature while recognizing its limited extent.

Microscopic evaluation of breast carcinoma identifies two critical prognostic features essential for tailoring comprehensive treatment strategies:

1. Tumor Growth Pattern: Whether the carcinoma's growth is restricted to the lumina of glandular lobules, ducts, or cysts (non-invasive) or has extended beyond these structures into the stroma (invasive).
2. Structural Origin: Determining the carcinoma's origin as either ductal or lobular, which influences the biological behavior and treatment response.

This dual consideration of invasiveness and structural classification aids in the precise characterization and management of breast cancer.

Thus, breast cancer is primarily classified into four microscopic types:

- Lobular non-infiltrating carcinoma
- Lobular infiltrating carcinoma
- Ductal non-infiltrating carcinoma
- Ductal infiltrating carcinoma

The prevalence of intraepithelial breast cancer ranges from 1% to 10% (Harris J., Holland R., 1991). Ductal carcinoma in situ (DCIS) accounts for 5–8% of all breast cancers, with multicentric growth observed in 31–42% of cases and bilateral involvement in 3.4%. Lobular carcinoma in situ (LCIS) constitutes 1–6% of breast cancers and 30–50% of all non-invasive carcinomas.

The frequency of multicentric growth in LCIS is the highest, reaching 60–85%, while bilateral involvement ranges from 30% to 67%, commonly around 30–40% (Cady B., 1991; Lagios M., 1995). Within 15 years of diagnosing non-invasive carcinoma, cancer develops in the same breast in 17.4–22% of cases and in the opposite breast in 9.7–23% (Andersen J., Nielsen M., 1984).

Metastases in regional lymph nodes are detected in 2–20% of intraepithelial breast cancer cases, and invasive growth is identified in 21% upon serial section analysis (Swain S., 1989). These findings likely explain the occurrence of distant metastases in intraepithelial cancer, with a reported frequency of up to 9% (Golbert Z.V., 1981; Rosai J., 1991).

It is essential to emphasize that the first morphological criterion (infiltrating versus non-infiltrating carcinoma) holds critical prognostic significance and determines the treatment approach. The second criterion (ductal versus lobular carcinoma) also plays a vital prognostic role (Semiglazov V.F., 1992).

The International Histological Classification of Breast Tumors includes tumor-like processes, which are crucial for differential diagnosis.

MATERIALS AND METHODS OF RESEARCH

The object of the study.

A prospective study was conducted with 88 breast cancer patients (stages T1-3N0-3M0), who received treatment and examination at the Almaty Oncology Center, specifically within the immunohistochemical (IHC) laboratory. The study was led by Elvira Bolatovna Satbayeva, a Candidate of Medical Sciences, physician of the highest category, and head of the IHC and Molecular Diagnostics Laboratory at the AOC. She is also the Chair of the Public Association "Community of Oncomorphologists of Almaty" (SOMA). The research took place between January and September 2022.

All participants underwent molecular-genetic analysis of surgical specimens, focusing on the primary tumor node. The study adhered to strict confidentiality protocols, following the "Fundamentals of Health Legislation of the Republic of Kazakhstan on the Protection of Citizens' Health."



Molecular subtypes of breast cancer

In 45 cases, breast cancer was diagnosed based on pathological examination, while 43 cases involved various forms of benign hormonal hyperplasias. When analyzing the clinical data, several factors were taken into account, including the patients' age, gynecological history, family medical history, hormonal background, occupational factors, social status, and the duration of the disease prior to surgery. Particular attention was paid to the time of growth of nodular formations in the breast, their association with cyclical changes, and the condition of regional lymph nodes.

General characteristics of the clinical material

The study predominantly included women aged 45-50 and older, comprising 308 (86%) participants, with 277 (77%) of them in menopause. The average age of the patients was 61.22 ± 10.4 years (ranging from 34 to 81 years).

According to the histological analysis of breast tumors, invasive carcinoma of no specific type was the most common, found in 174 (48.6%) cases, followed by ductal carcinoma – 78 (21.8%), mixed (ductal-lobular) carcinoma – 77 (21.5%), and rare forms – 29 (8.1%). Of the patients, 38 (10.6%) had tumors classified as grade I malignancy, 218 (60.9%) had grade II malignancy, and 102 (28.5%) had grade III malignancy (Table 7).

Table 1 – Distribution of breast cancer patients by age, menstrual function status, histological type of the tumor, and degree of malignancy.

<i>Evaluation criteria</i>	<i>Number of patients</i>	
	<i>Abs. num.</i>	<i>%</i>
Age of the patient		
under 50 years of age	50	14,1
50 years and older	308	85,9
Total	358	100
Average age	61,22 ±10,4 лет	
The state of menstrual function is preserved		
menopause	95	26,5
	291	83,5
Total	358	100
Histological type of tumor		
Invasive carcinoma of a non-specific type		
Lobular cancer	174	48,6
Mixed (ductal-lobular)	78	21,8
	77	21,5
	29	8,1

Rare forms		
Total	358	100
The degree of malignancy		
I	38	10,6
II	218	60,9
III	102	28,5
Total	358	100

The study predominantly included patients with lymph node metastases – 194 (54.2%) – and those with stage IIA of the tumor process – 127 (35.5%) (Table 8).

Table 2 – The condition of regional lymph nodes and the stage of the tumor process in breast cancer patients.

Evaluation criteria	Number of patients	
	Abs. Num.	%
The condition of the lymph nodes		
N0		
N1	164	45,8
N2	84	23,5
N3	79	22,1
	31	8,6
Total	358	100
The stage of the tumor process		
I (T1N0M0)	76	21,2
IIA (T1-2N0-1M0)	127	35,5
IIB (T2-3N0-1M0)	63	17,6
IIIA (T1-4N0-3M0)	18	5,0
	52	14,5
IIIB (T1-4N0-3M0)	22	6,1
IIIC (T1-4N0-3M0)		
Total	358	100

All patients underwent surgical treatment, including radical mastectomy for 175 patients (49%), breast-conserving surgeries for 121 (34%), and subcutaneous mastectomy with axillary lymphadenectomy and simultaneous breast reconstruction for 62 (17%).

In the adjuvant setting, patients with breast cancer received chemotherapy, hormonal and targeted therapy, as well as radiation therapy based on clinical indications.

Molecular typing of breast cancer based on the results of IHC and RT-PCR studies

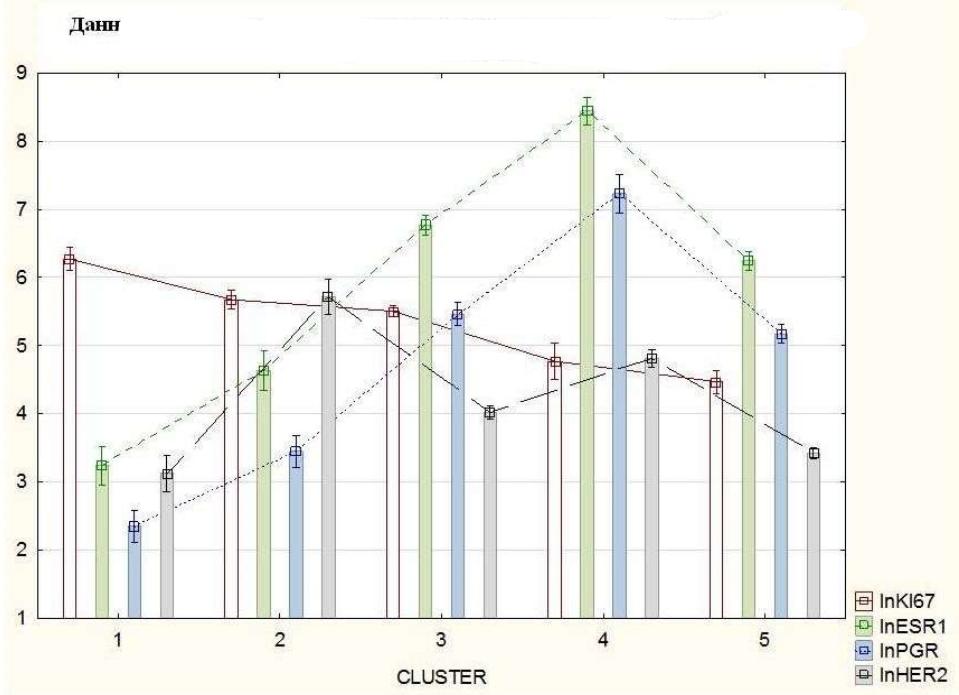
Based on the results of the immunohistochemical analysis, molecular typing of malignant breast tumors was performed, identifying five subtypes. Luminal A type was found in 129 (36%) patients; luminal B (Her2-negative) in 110 (30.7%); luminal B (Her2-positive) in 49 (13.7%); triple-negative in 54 (15.1%); and Her2-positive in 16 (4.5%) (Table 13).

Table 13 – Distribution of breast cancer patients by molecular subtypes based on immunohistochemical study data.

Evaluation criteria	Number of patients	
	Abs. num.	%
Luminal type A	129	36,0
Luminal B (Her2-negative)	110	30,7
Luminal B (Her2-positive)	49	13,7
Her2-positive cancer	16	4,5
Thrice negative cancer	54	15,1
Total	358	100

The belonging of clusters to the classical phenotype can be determined by the average level of expression of 4 genes (Ki67, ESR, PGR, Her2) used in determining the phenotype by the IHC method (Figure 8).

Data from the results of canonical analysis in clustering into phenotypes
Figure 8 – Expression level of Ki67, ESR, PGR, Her2 indices in 5 tumor phenotypes isolated



by the K-mean classification method in breast cancer patients

Based on the analysis of the expression levels of these four genes, the following associations can be made between class numbers and "classical" molecular phenotypes:

- 1 – Triple-negative
- 2 – Her2-positive
- 3 – Luminal B Her2-positive
- 4 – Luminal A
- 5 – Luminal B Her2-negative

For example, class #1 corresponds to the triple-negative phenotype due to minimal expression of estrogen receptors, progesterone receptors, and Her2neu, combined with the highest Ki67 expression levels. Class #4 can be attributed to the Luminal A phenotype, characterized by the maximum expression of estrogen and progesterone receptors and low Ki67 expression. Class #2 corresponds to the Her2-positive phenotype, based on the maximum expression of the Her2 receptor and high Ki67 expression levels.

We also analyzed the significance (weight) of the studied genes for classification. The importance of variables in the model was evaluated based on the F-statistic value. The higher the F-statistic, the greater the contribution to classification.

From Table 14, it is notable that Ki67 did not make a significant contribution to the discriminant model. In contrast, genes such as BIRC5, ESR1, PGR, HER2, GRB7, MGB1, MMP11, and TERT, as well as BCL2, MYBL2, MYC, and STK15, made the most substantial contributions..

Table 14 – Data with the results of canonical analysis during clustering by phenotypes using discriminant analysis method.

N =358	Wilks' Lambda: ,03155 approx. F (84,1238) = 20,629 p<0,0000					
	Wilks' Lambda	Partial Lambda	-remove(4,313)	p-value	Toler.	1-Toler. (R-Sqr.)
lnKI67	0,031768	0,993242	0,53240	0,712016	0,719036	0,280964
lnSTK15	0,032876	0,959749	3,28170	0,011776	0,608173	0,391827
lnCCNB1	0,031845	0,990830	0,72422	0,575933	0,627925	0,372075
lnCCND1	0,032451	0,972333	2,22659	0,066030	0,712822	0,287178
lnMYC	0,032753	0,963373	2,97501	0,019588	0,680500	0,319500
lnMYBL2	0,032649	0,966429	2,71816	0,029872	0,533874	0,466126
lnP16INK4a	0,032320	0,976276	1,90155	0,109995	0,850018	0,149982
lnPTEN	0,032377	0,974546	2,04377	0,088131	0,817666	0,182334
lnBIRC5	0,033576	0,939761	5,01582	0,000624	0,712487	0,287513
lnBCL2	0,032749	0,963477	2,96628	0,019873	0,689965	0,310036

lnBAG1	0,031809	0,991969	0,63355	0,638909	0,746579	0,253421
lnESR1	0,036973	0,853418	13,44018	0,000000	0,639076	0,360924
lnPGR	0,033729	0,935499	5,39517	0,000326	0,788054	0,211946
lnHER2	0,033807	0,933322	5,59031	0,000233	0,633044	0,366956
lnGRB7	0,034152	0,923911	6,44431	0,000054	0,749497	0,250503
lnMGB1	0,048828	0,646211	42,84053	0,000000	0,871980	0,128020
lnMMP11	0,039561	0,797583	19,85892	0,000000	0,818982	0,181018
lnCTSL2	0,031819	0,991652	0,65871	0,621137	0,716590	0,283410
lnCD68	0,032084	0,983451	1,31677	0,263558	0,766683	0,233317
lnTERT	0,070631	0,446735	96,90978	0,000000	0,927349	0,072651
lnNDRG1	0,032346	0,975502	1,96514	0,099653	0,862804	0,137196

Thus, the genes STK15, MYC, MYBL2, BIRC5, BCL2, TERT, and MMP11 demonstrated the greatest statistical significance in breast cancer typing.

Analysis of Molecular Phenotype in the Primary Tumor Node and Affected Regional Lymph Nodes

The results of immunohistochemical studies of surgical specimens, detailing the distribution of patients based on the molecular subtype of the tumor and the involvement of regional lymph nodes, are presented in Table 15. According to the findings, patients with Luminal A and Luminal B Her2-negative subtypes predominated, accounting for 46.8% and 23.4%, respectively.

Table 15 – Distribution of Molecular Subtypes of Breast Cancer in Examined Regional Lymph Nodes

<i>The molecular subtype</i>	<i>Total (abs.num/%)</i>
Luminal A	30 (46,8%)
Luminal B Her2-negative	15 (23,4%)
Luminal In Her2-positive	4 (6,3%)
Thrice negative	11 (17,2%)
Thrice negative Her2-positive	4 (6,3%)
Total	64 (100%)

A study was conducted to compare the molecular phenotypes of the primary tumor and the affected regional lymph nodes. The results showed that in 59% of cases, the molecular phenotype of the affected lymph node corresponded to the phenotype of the primary tumor. However, in 40.6% of cases (26 out of the 64 lymph nodes examined), the molecular phenotype of the lymph node differed from that of the primary tumor (Table 16). The most frequent discrepancies were observed in the Luminal A and Luminal B subtypes.

Table 16 – Comparison of Molecular Phenotypes in Breast Cancer Determined by PCR in Primary Tumors and Metastatic Regional Lymph Nodes

<i>Phenotype change in metastasis</i>		
Total analyzed	64	100%
An increase in malignancy	19	29,7%
Reduction of malignancy	7	10,9%
Total modified phenotypes	26	40,6%

The observed changes in molecular phenotypes within metastatic lymph nodes were as follows:

- **Primary tumor (Luminal A)** → Metastatic lymph node (Luminal B Her2-negative subtype): 23.4% (56.1% of all altered lymph node phenotypes).
- **Primary tumor (Luminal B Her2-negative)** → Metastatic lymph node (Triple-negative): 4.7% (12.2% of all altered lymph node phenotypes).
- **Primary tumor (Luminal B Her2-negative)** → Metastatic lymph node (Luminal A): 6.25% (14.6% of all altered lymph node phenotypes).
- **Primary tumor (Her2-positive)** → Metastatic lymph node (Luminal B Her2-positive): 4.7% (12.2% of all altered lymph node phenotypes).

Molecular phenotype changes in metastases compared to the primary tumor were observed in **13 of 64 analyzed cases (20.3%)** based on immunohistochemical (IHC) studies. These changes primarily affected luminal phenotypes:

- **Luminal A** changed to Luminal B in 7 cases (53.8% of all altered phenotypes).
- **Luminal B Her2-negative** changed to Luminal A in 4 cases (30.8% of all altered phenotypes).
- **Luminal B Her2-negative** changed to Luminal B Her2-positive in 1 case (7.7% of all altered phenotypes).
- **Luminal A** changed to Triple-negative in 1 case (7.7% of all altered phenotypes).

The analysis revealed an increase in malignancy in 12.5% of all studied tumors using the IHC method.

Molecular-genetic studies demonstrated a high discrepancy (41%) between the molecular characteristics of primary tumor nodes and regional lymph nodes. In contrast, changes were observed in only 20.3% of cases when evaluated exclusively by IHC.

If special studies, such as IHC or preferably a combination of IHC and molecular-genetic methods, are not conducted on affected lymph nodes, therapy programs may rely solely on the primary tumor's data.

- In 11% of cases, where the molecular-genetic phenotype change indicates reduced malignancy, the absence of metastatic node subtype data may not significantly impact treatment decisions.

- However, in **28%** of cases, where the metastatic node exhibits higher malignancy, the lack of molecular phenotype data for affected lymph nodes can lead to inadequate treatment, posing critical risks.

These findings underscore the necessity of additional studies on molecular phenotypes in metastases using molecular-genetic methods to optimize systemic treatment strategies for breast cancer patients.

COCLUSION

When the expression levels of estrogen and progesterone receptors are low (less than 4 points) and the epidermal growth factor receptor Her2/neu shows values of 0 and 1+ as determined by the immunohistochemical method, it is recommended to conduct additional studies using quantitative molecular genetic methods to reduce the risk of false-negative results in breast cancer patients. Differentiating the Luminal A and B subtypes of breast cancer based on the Ki67 expression level assessed by the IHC method introduces significant errors in determining the true molecular phenotype, which necessitates the implementation of additional molecular genetic assessment methods based on tumor expression profile analysis. The term "immunohistochemistry" is derived from three components, reflecting three biomedical disciplines—immunology, histology, and chemistry—that formed the basis for this new scientific field. Immunohistochemistry (IHC), or immunocytochemistry (ICC), is a field of biological and medical science that encompasses the theoretical foundation, development, and practical application of modern histological examination and microscopic diagnostic methods based on the antigen-antibody reaction for the selective detection of proteins (and other molecules with antigenic properties) in histological sections and cytological preparations.

The terms "immunohistochemistry" and "immunocytochemistry" can essentially be considered synonyms, but in practice, immunohistochemistry is more often used for detecting antigens in tissue sections, while immunocytochemistry refers to reactions involving antigens in cytological preparations. It should be noted that there are no fundamental differences in the theoretical foundations and practical application of these methods. In the future, the term "immunohistochemistry" will be used in this book, with "immunocytochemistry" used only when contextually necessary.

Modern methods of immunohistochemistry and immunocytochemistry have been developed based on advancements in immunology and molecular biology and are continuously improving to meet the demands of pathohistological diagnostics, remaining an essential tool in scientific research. The earliest methods of staining histological specimens were based on the selective binding of dyes to cell components. A specialized area of histological technique involved the impregnation of biological objects with metal salts. Until the mid-20th century, the development of new staining methods was mostly based on empirical approaches. The rapid advancement of biochemistry allowed the creation of selective methods for detecting various intracellular substances and intercellular components. Due to the well-understood mechanisms of the chemical reactions involved in these techniques, they were referred to as "histochemical reactions." However, histochemical methods generally lack high sensitivity, do not always precisely identify specific substances, and often require specialized material processing, complicating histological examination. As a result of the limitations of existing staining methods, a new scientific field was created, called "immunohistochemistry." The initial immunohistochemical methods were not highly sensitive, but due to their high specificity, they were quickly adopted for diagnostic purposes.

Currently, the main tasks of immunohistochemistry include the development and theoretical justification of new methods for molecular analysis of intracellular structures, the study of gene expression products, the study of cell proliferation and apoptosis, tumor histotyping (a part of molecular and cellular diagnostics), and providing methodological support for

immunomorphology, which is a field of histology using immunohistochemical methods to study tissue organization, tissue development, and cellular differentiation.

Antibodies are soluble glycoproteins from the globulin fraction of blood serum and other biological fluids that are formed in response to the introduction or penetration of an antigen (foreign substances, including bacteria, viruses, toxins) into the body of warm-blooded animals (Roitt A. et al., 2000). Today, antibodies are among the most important reagents used in both fundamental and applied research due to their ability to specifically bind to the antigen that triggered their formation.

By applying certain methodological techniques, antibodies can be produced against virtually any antigen. However, it is important to note that the cost of commercial antibodies and the expenses involved in their production in a laboratory setting can differ significantly, depending on the required purity, specificity, and application. Therefore, particular attention should be given to selecting the right antibodies during the planning stage of an experiment. This guide can assist in that process.

The interaction between the antibody and antigen is the basis of any immunological reaction, leading to the formation of an "antigen-antibody" complex. Antigens are typically high-molecular proteins and polysaccharides, and less commonly, they are polypeptides, lipids, or nucleic acids. Small molecules, or haptens, can also trigger an immune response if they are attached to high-molecular carriers (proteins, polysaccharides). Haptens can include drugs, monoand polysaccharides, small polypeptides, phospholipids, triglycerides, and monoamines.

The specific region of the antigen that binds with an antibody is known as an epitope. Typically, an epitope consists of one to six molecules of monosaccharides or amino acids located on the antigen's surface. Antibodies recognize not individual chemical groups within the antigen, but rather the three-dimensional structure of the epitope. They can detect subtle differences in the distribution of charges, optical isomerism, and even slight variations in the primary structure. As a result, the majority of antibodies bind only to the native form of the antigen.

Why is antigen unmasking necessary? During tissue fixation, antigens undergo conformational changes due to protein coagulation and the formation of cross-links when exposed to aldehydes, such as formaldehyde and glutaraldehyde (Fraenkel-Conrat H. et al., 1947; 1948). These changes often result in the masking of antigenic determinants that are supposed to interact with the corresponding antibodies. As a consequence, when immunohistochemical reactions are performed on fixed tissue, some antibodies exhibit reduced activity, and the staining of the final product is either faint or absent altogether. The degree of antigen damage depends on the fixation conditions and the concentration of aldehydes used. It is generally believed that coagulant fixatives (e.g., alcohol, acetic acid, and metal salts) cause less loss of antigenic properties than formaldehyde. Immunocytochemical reactions are particularly challenging with materials fixed in glutaraldehyde.

This issue posed a significant challenge in immunohistochemical diagnostics, particularly for paraffin-embedded material, which is commonly used in pathology. To perform immunohistochemical analysis, researchers had to resort to using frozen unprocessed tissue or employ milder fixation methods, such as cold acetone. However, a solution has now been found. High-temperature treatment of tissue sections in aqueous buffers can often restore antigenic determinants altered by formaldehyde (Shi S. R. et al., 1991). This technique is known as "heat-induced epitope retrieval" (HIER). While the theoretical principles behind this method are still not fully understood, it is unclear why heating the tissue above 100°C restores the antigenic properties of proteins rather than denaturing them. Nevertheless, numerous studies have demonstrated its effectiveness (Taylor C. R. et al., 1996; Evers P. et al., 1998; Korzhevsky D. E. et al., 2005; Sukhorukova E. G. et al., 2012). This method works not only for

paraffin-embedded sections but also for celloidin-embedded materials (Shi S. R. et al., 1992a; 1992b; 1993) and even sections from epoxy resin-embedded blocks. Many modifications of this heat-induced epitope retrieval method have been developed, with the common principle being the heating of sections affixed to slides in aqueous solutions to temperatures of 95–100°C, and in some cases, up to 120°C under increased pressure.

The error rate in cancer diagnosis is striking: between 5% and 50% of all oncology diagnoses worldwide are incorrect. Half of these errors are not fatal—various types of cancer may respond similarly to a specific treatment approach. However, a significant portion of inaccuracies leads to inadequate cancer treatment, potentially contributing to disease progression.

Among the objective causes of diagnostic errors related to morphological analysis, the inability to obtain a tissue sample for examination due to difficult access or the patient's critical condition is the leading factor.

Subjective causes of errors in morphological diagnostics most commonly include:

- Mistakes in sample collection (for example, in prostate cancer, multiple samples should be taken as the tumor may have a complex spatial form);
- The inability of certain medical facilities to conduct the required morphological diagnostics (a dedicated morphological laboratory is a complex and expensive institution);
- Violations of protocols, both in terms of the refusal to collect and study samples and in following standards for morphological tumor diagnostics (including outdated methods, lack of necessary equipment, and insufficiently trained specialists, with no funding allocated for their further education).

Only morphological diagnostics conducted in compliance with all material collection, preparation, and examination standards can provide a definitive answer regarding the tumor's type and characteristics.

Violations of international breast cancer treatment protocols. However, the most significant and irreversible errors, which not only increase the likelihood of metastasis and recurrence in breast cancer but also complicate subsequent therapy, reducing its effectiveness, occur during the treatment of the primary tumor.

At first glance, breast cancer treatment in Kazakhstan should not lag behind that of other countries: the methods, equipment, and medications are the same. This is easily explained: adhering to modern breast cancer treatment protocols requires expertise in comprehensive oncology care. Current standards necessitate combining various approaches, including surgery, radiation therapy, targeted and immunotherapy, and chemotherapy. The integration and order of these treatments are determined by the specifics of each individual case.

Therefore, the insufficient competence of the chosen oncology center in a comprehensive, personalized approach may be the reason why breast cancer treatment is not as effective as it could be. For instance, not all necessary methods may be used, but only the technologies available in the particular medical institution (e.g., a surgical clinic may lack a radiation therapy department) and equipment (e.g., outdated radiation therapy machines that do not allow for the safe irradiation of the required area).

As practice shows, this issue is not only relevant in Kazakhstan but also in other countries, including nearby ones (Latvia, Lithuania, Belarus, Ukraine), as well as more distant ones (the United Kingdom, Spain, Israel).

Modern principles and strategies for treating breast cancer are based, in part, on the results of evaluating receptor status and the proliferative potential of tumor cells. Tumor cells have the ability to produce and display specific proteins—receptors—on their surface. The stimulation of these receptors triggers cell division and tumor growth. These receptors can bind with substances that are normally present in the body and not initially linked to the development of malignant

neoplasms. According to current clinical guidelines, the presence of the following receptors on tumor cells is significant for breast cancer, with various combinations referred to as receptor status:

Hormone receptors—estrogen and progesterone (ER, PR). A significant portion of breast tumors are hormone-dependent, meaning their growth is supported and stimulated by estrogens and progesterone. Tumors with a positive hormonal receptor status respond well to therapy with hormone analogs (e.g., tamoxifen), which block the respective receptors—binding to them but not activating intracellular processes and preventing the receptor from binding to the hormone. Therefore, investigating the production of ER and PR by the tumor helps determine its sensitivity to these drugs.

human epidermal growth factor receptor (HER2/neu), which is a receptor protein. It starts the tumor's cell division process when it attaches itself to the natural growth factor. About 15–25% of cases of breast cancer are HER2-positive. Determining HER2/neu status is not only clinically relevant because it aids in evaluating the potential use of targeted therapies, such as monoclonal antibodies against HER2, such as trastuzumab (Herceptin), lapatinib, and pertuzumab, but it is also important for prognostic purposes because these tumors tend to progress more quickly and are clinically more aggressive. Moreover, tamoxifen does not work in HER2-positive cancers. The ability of tumor cells to divide uncontrolled is known as proliferative activity, and it is a major contributing component to the biological aggression of the tumor. This division is accompanied by the production of specific proteins, one of which is Ki-67. This protein is absent in resting cells, making it a useful marker for proliferative activity in tumors. Assessing the Ki-67 level is of significant prognostic value, as tumors with the highest proliferative activity tend to consist of less mature and poorly differentiated cells.

All these markers can be detected using immunohistochemical analysis of tumor biopsy or surgical samples. Thin sections are cut from paraffin blocks using a special microtome, attached to glass slides, and stained with routine dyes to distinguish the cells from the intercellular substance. The slides are then stained with antibody solutions tagged with fluorescent markers, specific to the receptor being studied. If the target receptor is present in the tumor cells, the antibodies bind to it, and fluorescence can be observed under a special microscope, indicating a positive test result. Additionally, pathologists can observe where the stained marker is located—whether in the nucleus, cytoplasm, or cell membrane of the tumor cells. The number of antibody solutions used corresponds to the number of markers being studied in the sample. The degree of fluorescence and the percentage of cells exhibiting it are crucial for interpreting the results of the immunohistochemical analysis, which is detailed in the appropriate section.

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CLINICAL PRINCIPLES OF REHABILITATION OF ONCOLOGICAL PATIENTS

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Annotation: The article describes modern directions of rehabilitation of cancer patients with various localization of the tumor process. The currently available methods of rehabilitation treatment and scientific directions that require further research to improve the quality of life of this contingent of patients are described. The use of a comprehensive program of medical rehabilitation in cancer patients will restore their vital conditions as much as possible and will optimize the processes of physical, psychological and social adaptation of these patients, which is the main task of oncology and rehabilitation today.

Key words: rehabilitation, oncology, quality of life.

Today, high rates of incidence of malignant tumors and a priori aggressive treatment methods and, often, the prevalence of the oncological process itself lead to disability, requiring rehabilitation measures. In this regard, such a section of clinical oncology as the rehabilitation of

cancer patients must be on the same level with modern treatment, diagnosis and prevention of cancer [1,2].

It is important to especially emphasize that rehabilitation measures begin not after the patient develops various kinds of physical and psycho-emotional dysfunctions as a result of specialized treatment and (or) complications of the tumor process, but already from the moment the diagnosis of a malignant neoplasm is made. At the same time, patients registered with an oncologist often experience various kinds of functional disorders that affect their quality of life and ability to work. For example, physical disorders may include fatigue, decreased muscle strength, cognitive dysfunction, paraesthesia, or eating problems, while mental symptoms may include anxiety, depression, fear of relapse, or insomnia. In this regard, the role of rehabilitation doctors and the importance of specialists with the skills of professional assessment and therapy in oncology services in this situation can hardly be overestimated [3].

One of the important aspects of complex rehabilitation of cancer patients is the use of drug correction of the psycho-emotional state of cancer patients, which previously received little attention. It is clear that oncologists and rehabilitation specialists take on this difficult role, but in some, quite common cases, additional drug support for the patient's psyche is required [4,5].

Thus, Taiwanese researchers Cheng-Hsu Wang et al. [6] not only analyzed, but also proved that the need for psychotropic drugs depends on the nosological form of the tumor. They analyzed data from 35,137 cancer patients from Taiwan's National Health Insurance database over 2.5 years. Among those patients who survived for at least 6 months, every fifth (20.9%) used psychotropic drugs: patients were most often prescribed sedatives (14.3%), then antidepressants (5.5%), anxiolytics (3.6%) and antipsychotics (2.7%). Lung cancer, prostate cancer and oral cancer showed a statistically significant association with regular drug use during the first six months after diagnosis. And among patients who survived for at least 2.5 years, 4.8% still use psychotropic medications on a regular basis.

Catherine L. Granger et al. [7] found through a systematic review of articles using the electronic databases Medline, Cinahl, Embase, Scopus and Cochrane that despite evidence and existing guidelines for physical activity in patients with lung cancer, it is hardly implemented in clinical practice. This systematic review of the literature showed that the challenges of adequate physical rehabilitation of patients with lung cancer are multifaceted and involve various factors. These include patient-level factors such as symptoms, comorbidities, sedentary lifestyle, mood and fear, and environmental factors. These factors should be taken into account to determine and develop a treatment and rehabilitation program for these patients.

In addition, very little attention is often paid to the fact that the main moral burden when caring for cancer patients falls, of course, on their loved ones. And, unfortunately, according to Swedish researchers Ji J. et al. [8] spouses of cancer patients who provide care are at increased risk of coronary heart disease and stroke. This is necessary to know for the correct approach to correcting the psychological state of not only the patient himself, but also their relatives (family rehabilitation).

At the same time, Badr H. et al. [9] found a low level of self-efficacy and a high level of distress when independently caring for patients with advanced lung cancer. The authors, based on experimental studies in which 39 patients took part, developed a program to coordinate care and train care skills for such patients. The program was based on self-determination theory. Participants reported significant reductions ($p < 0.0001$) in depression, anxiety, and caregiving burden, increased caregiver competence, and caregiver autonomy to provide care compared to usual care.

Similar results were obtained in their study by Kim Y. et al. [10]. The authors note that the difficulty of psychological adaptation of relatives in families in which there is a cancer patient and the lack of social support are the main predictors of the development of major depressive

disorders, even 3 years after diagnosis. At the same time, programs for adaptation to long-term care are crucial for the possibility of long-term (5-year results were taken into account) active care for the patient.

In addition, El-Jawahri A. et al. [11] found that patients' inadequate perception of their prognosis regarding cancer affects many of their decisions about medical care. However, the relationships between prognostic perception, quality of life, and patient mood itself are not yet fully understood. They stated the fact that, although patients wanted to know detailed information about their illness, half incorrectly perceived the fact that the prognosis in their situation was favorable. Of the 50 patients included in the study, 38 (76%) wanted to know as many details as possible about their diagnostic procedures and treatments. However, 25 of 50 patients (50%) stated that their goal was to "cure cancer," and only 10 of 49 patients (20%) reported that they had completely "put their fate in the hands of their oncologist." Patients who accepted their illness as a death sentence reported lower quality of life ($p=0.005$) and higher levels of anxiety ($p=0.003$) compared to those who did not perceive themselves as terminally ill. The authors established a direct connection between accurate prognostic perception and the quality of life of patients. Therefore, interventions aimed at improving understanding of disease prognosis provide adequate psychosocial support for these people.

Any methods, as we all understand perfectly well, should be used to alleviate the condition of cancer patients and restore their well-being. Such methods include art therapy, which, of course, belongs to non-traditional methods of influence, but with a comprehensive program of restorative treatment it shows its effectiveness.

Lee J. et al. [12] decided to evaluate the effect of art therapy using paintings by famous artists on the manifestation of long-term chronic stress (distress) in cancer patients receiving radiation therapy. The level of anxiety, depression and symptoms associated with the manifestation of the cancer itself were assessed. The authors conducted a prospective study that included 24 cancer patients with various forms of malignant neoplasms who received radiation therapy. Art therapy took place in two parts, including 4 sessions of a famous painting course and 4 sessions of works of art of the creative generation; these sessions were held twice a week for four weeks. Distress was assessed using the Hospital Anxiety and Depression Scale (HADS), the Hamilton Depression Rating Scale (HDRS), and the Edmonton Symptom Assessment Scale (ESAS) at three assessment points: before the start of art therapy, after the fourth session, and then after the eighth session. art therapy. It was found that of the 24 patients included in the study, 20 patients (83%) completed all eight sessions. At the same time, the authors note a significant and even significantly significant decrease in indicators of depression and anxiety on all scales used in the study.

It should be noted that a number of nosological forms of malignant tumors and crippling surgical interventions used in these diseases, such as enucleation of the eye, removal of the obturator apparatus of the rectum, breast extirpation lead to the deepest physical, psychological and social disability of patients. Laryngeal cancer is one of these localizations of the oncological process.

A very interesting and important study on this subject was carried out by Millgård M., Tuomi L. [13]. The study aimed to investigate the short-term and long-term effects of voice rehabilitation in patients treated with radiotherapy for laryngeal cancer as measured by both the acoustic measure smoothed cepstral peak prominence (CPPS) and perceptual measures. A secondary aim was to investigate the relationship between acoustic and perceptual measures. In total, 37 patients received voice rehabilitation post-radiotherapy and 37 patients constituted the irradiated control group. Outcome measures were mean CPPS for connected speech and ratings with the auditory-perceptual Grade, Roughness, Breathiness, Asthenia and Strain (GRBAS) scale. Outcome measures were analyzed 1 (baseline), 6, 12, and 24 months post-radiotherapy, where

voice rehabilitation was conducted between the first two time-points. Additional recordings were acquired from vocally healthy participants for comparison. As a result, CPPS values of the voice rehabilitation group and vocally healthy group were not significantly different at 24 months post-radiotherapy. Ten out of 19 patients who received voice rehabilitation yielded a CPPS value above the threshold for normal voice 24 months post-radiotherapy, compared to 11 out of 26 in the irradiated control group. No statistically significant correlations were found between CPPS and perceptual parameters of GRBAS. Based on the results obtained, the authors conclude that voice rehabilitation for irradiated laryngeal cancer patients may have positive effects on voice quality up to 24 months post-radiotherapy. The relationship between CPPS and GRBAS as well as the applicability of CPPS for evaluation over several points of measurement needs to be studied further.

In their paper, Zhu X. et al. [14] emphasize that dysphagia is a common complication in patients with laryngeal cancer after surgery and radiotherapy. The aim of the study was to study the impact of swallowing training administered in combination with nutritional intervention on the nutritional status and quality of life of laryngeal cancer patients with dysphagia after surgery and radiotherapy. Sixty-six patients with laryngeal cancer who developed dysphagia were randomly divided into control group and intervention group ($n = 33$ in each group). Patients in both groups received total laryngectomy and prophylactic radiotherapy and were provided routine health counseling and swallowing training. Patients in the intervention group were additionally provided with nutritional intervention. All patients were evaluated using video fluoroscopic swallowing examination (VFSE), Patient-Generated Subjective Global Assessment on nutritional status (PG-SGA) score, and Quality of Life Questionnaire-core 30 (QLQ-c30) score immediately after radiotherapy and 3 months later. The results were as follows: prior to swallowing training, there was no significant between-group difference with respect to VFSE evaluation, PG-SGA score, or QLQ-c30 score. Both groups showed improvement in these measures at 3 months after radiotherapy; however, the improvement in the intervention group was significantly better than that in the control group. The researchers conclude that swallowing training combined with nutritional intervention can improve swallowing function, nutritional status and the quality of life of laryngeal cancer patients with dysphagia after operation and radiotherapy.

As noted by Salerno G. et al. [15], total laryngectomy represents the surgical procedure necessary for the treatment of some advanced neoplasms of the hypopharyngeal-laryngeal district and involves strong functional, physical and emotional repercussions. In their study, our colleagues examined how rehabilitation techniques used to improve the communication needs of patients who have undergone laryngectomy affect their perception of quality of life. The questionnaires "V-RQoL" and "SECEL" were administered to 45 patients divided into four groups on the basis of the type of vicarious voice: group TE (27 patients), group E (7 patients), group EL (2 patients), group NV (9 patients). Patients using electrical or tracheo-esophageal prostheses reported a better quality of life than patients with an erythromophonic voice. Regarding postoperative satisfaction, the group with esophageal voice was the most satisfied. The authors emphasize the importance of preoperative counseling to make the patient as aware as possible of his future condition.

Retinoblastoma is an intraocular cancer of infancy and childhood, which has been treated with radiation therapy and chemotherapy. Radiation on growing patients can cause deterioration in maxillofacial growth and development that leads to severe skeletal discrepancies between the maxilla and mandible, and dental problems such as crossbite, openbite, and hypodontia. Kim S.H. et al. [16] presented a case of a 19-year-old Korean man with chewing disability and dentofacial deformities. He had undergone enucleation of the right eye and radiation therapy of the left eye due to retinoblastoma 100 days after birth. Subsequently, he received cancer therapy for the

secondary nasopharyngeal cancer at the age of 11 years. He was diagnosed with severe skeletal deformity including sagittal, transverse, and vertical growth deficiency of the maxilla and midface, and with class III malocclusion, severe anterior and posterior crossbite, posterior openbite, multiple missing upper incisors, right premolars, and second molars, and impaction of the lower right second molars. To restore impaired functions and esthetics of the jaw and dentition, the orthodontic treatment combined with two jaw surgery was performed. At the end of surgical orthodontics, dental implants were placed for prosthetic treatment of missing teeth. Additional plastic surgery for zygoma elevation was done with calvarial bone graft followed by fat graft. Facial esthetics and occlusal functions of patient were favorably enhanced with the improvement of skeletal discrepancy and the rehabilitation of maxillary dentition by prosthetic work. At the 2-year follow-up, the skeletal and dental relationships and implant prosthetics were well maintained. The authors conclude as follows: in an adult patient with dentofacial deformities caused by early cancer therapy in the head and neck area, interdisciplinary interventions including additional plastic surgery of zygoma depression and prosthetic work of missing teeth as well as surgical-orthodontic treatment could establish favorable facial esthetics and oral rehabilitation.

The case of eyeball prosthetics was presented in their study by Goiato M.C. et al. [17]. Male patient, 60 years old, sought care at the Oral Oncology Center of the São Paulo State University "Júlio de Mesquita Filho", for the rehabilitation of the orbital cavity with an acrylic eye prosthesis. This prosthesis was made with thermopolymerizable acrylic resin and hand painted iris with oil paint on cardboard. The prosthesis was installed after finishing and polishing and the hygiene and general care instructions were explained. Colleagues focus on the fact that the lack of an eye has an immediate and long-term impact on a patient's life. In the present case, the patient was satisfied with the aesthetics and comfort of the prosthesis, which demonstrates the success of the treatment.

As Rokohl A.C. et al. [18] show, a smooth supply with a visually appealing prosthetic eye after enucleation is not just a cosmetic solution, it is also a key factor in successful social and psychological rehabilitation. The authors submitted an overview of the current state of medical and ocular care regarding prosthetic eyes in Germany. It focuses mainly on the newest clinical results, daily care, complications, and psychological aspects of wearing prosthetic eyes. As a result of the latest clinical data and a current review of the PubMed literature, it was found that in Germany, enucleated patients normally get a double-walled, hollow prosthetic eye made of cryolite glass, and patients with a microphthalmic or phthisic eye receive a thin single-walled prosthesis. Anophthalmic patients wearing cryolite glass prosthetic eyes seem to be more satisfied with their appearance and the look of their prostheses than polymethylmethacrylate (PMMA) prosthetic eye wearers. Cryolite glass prosthetic eyes must be renewed at least each year, while PMMA prostheses need to be polished once a year and renewed after five years of wearing. Among children, the fit of the prosthetic eye must be checked, based on growth, semi-annually. A slightly higher risk of breakage of cryolite glass prostheses is, for most patients, not a great disadvantage in everyday life. Ocularists and ophthalmologists should determine an individual cleaning regime, together with the patient, that is dependent on the material of the ocular prosthesis and other external factors. Complications, such as allergic, giant papillary, viral and bacterial conjunctivitis and blepharoconjunctivitis sicca must be treated at an early stage to allow for a prosthetic eye. In the case of inflammation-caused socket shrinkage or post-enucleation socket syndrome, surgical interventions are needed to re-enable the use of a prosthetic eye. Since the health of the remaining eye is the major psychological burden of prosthetic eye wearers, good ophthalmological care and medical screenings are essential elements. In conclusion, the researchers conclude that a smooth supply with a prosthetic eye, adequate and early treatment of possible complications and attention to psychological aspects is essential for successful long-term rehabilitation of enucleated patients.

As well as patients with previous localizations of the oncological process, patients with colorectal cancer with colostomies need mandatory rehabilitation measures.

Thus, Yang P. et al. [19] set themselves the goal of to systematically evaluate the effect of collaborative nursing on self-care ability of postcolostomy patients with colorectal cancer (CRC). PubMed, Web of Science, Embase, China National Knowledge Infrastructure, and Wanfang databases were searched to collect relevant literatures on randomized controlled trials of postcolostomy patients with CRC. The search period was started from 2010 to 2021. Statistical analysis was performed on the data extracted from the comprehensive meta-analysis with STATA 16.0 analysis software. As a result, it was found that the incidence of adverse reactions in the control group was higher than that in the treatment group. Seven studies included the preintervention self-care concept and preintervention self-care skills. Six studies included preintervention self-care responsibility and preintervention exercise of self-care agency (ESCA) scale. In the comparison among the concept of self-care after intervention, self-care skills, self-care responsibility, and ESCA scale, all of them had higher scores in the treatment group than in the control group ($p < 0.05$). It fully explains that collaborative nursing can significantly improve the evaluation indicators of patients' self-care ability and reduce patient complications. In summary, the authors conclude that the application of collaborative nursing in the nursing work of patients with CRC after colostomy can significantly reduce the incidence of adverse nursing reactions.

The aim of the work is Yu S., Tang Y. [20] to explore the impacts of comprehensive care on psychological emotion, postoperative rehabilitation and complications of colorectal cancer patients after colostomy. From August 2018 to February 2020, a total of sixty colorectal cancer patients undergoing colostomy in our hospital were collected and randomly assigned to a control group to receive conventional care and a research group to receive comprehensive care, with 30 patients in each group. The two groups of patients were compared for postoperative recovery, complications, adverse psychological emotions, self-care ability, quality of life, and nursing satisfaction. The first time of exhaust, food intake and the recovery of bowel sound in the research group were markedly earlier than those in the control group. Besides, the research group had notably lower incidence of postoperative complications, lower self-anxiety scale (SAS) and self-depression scale (SDS) scores at discharge, and higher average self-care ability than the control group, as well as higher quality of life score and nursing satisfaction. At the end of the work, it was concluded that comprehensive care intervention can promote postoperative recovery of colorectal cancer patients after colostomy, relieve their negative emotions, reduce postoperative complications, improve quality of life and nursing satisfaction, which are all important and make this type of care worthy of promotion in clinical practice.

A study by Wang S.Y. et al. [21] examined the effects of a multimedia patient education intervention on improving self-care knowledge and skills in patients with colorectal cancer who underwent colostomy surgery. A quasi-experimental design was adopted to measure the self-care knowledge and skills of patients with colorectal cancer before and after surgery. The experimental group ($n = 33$) received a multimedia patient education intervention, whereas the control group ($n = 30$) was provided conventional instructions. Results were evaluated using analysis of covariance. On the day prior to discharge from hospital, the experimental group exhibited significantly greater improvement in self-care knowledge than did the control group. The experimental group also exhibited significantly greater improvement in self-care skills than did the control group on the day of gas passage, the day prior to discharge from hospital, and during the first clinic visit after discharge from the hospital. In other words, multimedia patient education intervention yielded greater improvement in self-care knowledge and skills than did conventional instruction. The authors state that multimedia patient education is an adequate educational tool for patients with colorectal cancer who have undergone colostomy.

Now, regarding the rehabilitation of patients with breast cancer.

The leading method of treating malignant neoplasms, including breast cancer, is surgical. As Chan K.S. points out. et al. [22], functional results are increasingly important in breast cancer, as survival and prognosis for this pathology improve over the years. Since more than half of diagnosed breast cancer cases occur in middle-aged women between 45 and 64 years of age, it is appropriate to ensure preservation of upper extremity function as this group of patients may be the primary caregivers for their families, lead active lifestyles, and are at the peak of their careers. Additionally, most previous studies have shown that Asians may have higher body fat percentages, lower bone mass, and lower levels of physical activity than Western populations. These factors may influence functional outcomes in patients with breast cancer. The authors conducted a single-center prospective cohort study with a follow-up period of 6 weeks after surgery. The main inclusion criteria were patients over 21 years of age who underwent 44 radical surgical interventions - wide sectoral resection - 16 (36.4%) and mastectomy - 28 (63.6%). The main exclusion criteria were patients with pre-existing neurological or rheumatological comorbidities affecting upper limb function, or previous trauma that resulted in upper limb deformity. Patients who had undergone mastectomy with reconstruction were also excluded. The patients underwent early rehabilitation from the 1st day after surgery, including a standardized set of exercises for the shoulders and upper extremities. Active shoulder flexion and abduction range of motion and disability scores were assessed 1 week before surgery and then at weeks 2 and 6 postoperatively. This pilot study in an Asian cohort showed that patients were able to regain active range of motion of shoulder flexion and abduction at 6 weeks postoperatively, but had a worse disability score, especially in the axillary lymph node dissection subgroup after sentinel lymph node examination. Recommendations include the use of active early rehabilitation methods for breast cancer patients, however, as the authors note, longer follow-up is required to assess long-term functional results.

The modern direction in medical rehabilitation of patients with breast cancer, as well as in their treatment today, is the individualization of the treatment and rehabilitation program. As Olsson Möller U. et al. note in their publication [23], it is well known that women suffer from the negative consequences of breast cancer treatment and that their very important needs during rehabilitation interventions are often not met. At the same time, up to 43% of these women are at risk of developing chronic distress, requiring comprehensive treatment. However, it is unknown how to identify and meet the needs of these women early, leaving them with a low chance of optimal rehabilitation. The authors plan to conduct a three-arm randomized controlled trial and aim to develop a model and evaluate the effect of individualized screening-based rehabilitation after primary treatment for breast cancer. The rehabilitation program will be based on self-reported data, focusing on physical and psychological outcomes, as well as treatment satisfaction at baseline at 2 weeks, 3, 6, 9 and 12 months. The assessment will also include economic aspects of health, based on register data and information from patients and their relatives during the rehabilitation process. In addition, optimal threshold levels of negative behaviors will be explored as an indicator of the need for extended rehabilitation. It is planned to identify potential new problems and rehabilitation needs of patients during the 1-year follow-up period. The researchers note that this study will provide important knowledge regarding the effectiveness of screening to identify needs for individualized, standardized, evidence-based rehabilitation after primary breast cancer treatment.

Much work regarding the development of a rehabilitation program for patients with breast cancer has been carried out by Spanish scientists and clinicians Barnadas A. et al. [24]. As the researchers emphasize, the gradual increase in incidence associated with the aging population and the implementation of screening programs, together with lower mortality rates from breast cancer, has led to an increase in the number of surviving patients with this pathology. The treatment used leaves physical, psychological and psychosocial consequences that can manifest

and persist even years after completion of treatment and can interfere with the well-being of breast cancer patients and their reintegration into normal social and professional activities. Complications of the underlying disease and concomitant pathology require joint monitoring by specialized medical institutions and primary health care services. The authors have compiled guidelines aimed at ensuring joint and coordinated monitoring of these patients by these medical services. The guideline addresses health problems arising from treatment, with recommendations for a therapeutic approach that individualizes treatment, as well as suggestions for coordinated joint monitoring by primary and secondary care. In addition to organizational issues, the guide provides general recommendations for breast cancer patients: 1) avoid excess weight, 2) healthy diet and exercise, 3) quit smoking, 4) moderate alcohol consumption, 5) possible use of additional treatment methods, for example, such as acupuncture, 6) awareness of symptoms indicating a possible relapse or recurrent tumor, 7) adherence to prescribed anti-estrogenic hormone therapy for a long period (5-10 years), 8) return to work.

In addition, one of the modern methods of restorative treatment of cancer patients includes a method such as neuromuscular electrical stimulation (NMES) [25]. It may be a pragmatic short-term alternative to voluntary exercise in patients who are currently undergoing or have recently completed treatment for cancer. In this study, the authors assessed the impact of a personalized and progressive NMES exercise intervention, designed with the early rehabilitation period in mind, on patients' physical performance and quality of life. This manipulation was found to improve performance on the 30-second sitting test (STS), the 6-minute walking test (6 MW), and global quality of life using the EORTC QLQ C-30 questionnaire. Benefits gained included improved muscle strength and greater confidence when walking. The authors recommend further evaluation of this technique in a further controlled prospective study.

In recent years, the term “multimodal” has been increasingly used in clinical research, which means, according to Wiktionary, involving or using several methods or modes of implementation. When analyzing a review of the literature related to multimodal rehabilitation of cancer patients, it should be noted that the overwhelming number of scientific works are devoted to the use of rehabilitation measures at the stage of preparing patients for specialized treatment, be it surgery or courses of drug or radiation therapy.

Guinan E.M. et al. [26] note in their work that the inflammatory changes themselves and the disruption of redox processes after radical surgery for esophageal cancer significantly affect both the quality of life and the survival of patients. In this regard, an integrated approach to the rehabilitation of these patients, including special exercises and a certain diet, can reduce the negative manifestations of the treatment. However, the authors note that the results will be further examined in a larger randomized controlled trial. In addition to the impact of these manifestations on the survival of patients, the economic side of the full rehabilitation of these patients will also be studied.

Bolshinsky V. et al. [27], based on an analysis of studies on multimodal rehabilitation programs before surgery for gastrointestinal tumors, conducted a systematic literature search using Medline, PubMed, Embase, Cinahl, Cochrane and Google Scholar databases. Study quality was assessed using the Cochrane Risk of Bias Tool (randomized trials) and the Newcastle-Ottawa Quality Assessment Scale (cohort studies). Of the 544 studies identified, 20 were included in the qualitative analysis. The authors found that although small studies have found encouraging results, larger prospective studies using uniform objective risk stratification and structured interventions with prespecified clinical and economic endpoints are needed to determine the definitive value of prehabilitation programs.

Summing up the analyzed works on rehabilitation measures in cancer patients with various nosological forms of malignant neoplasms, we can draw a definite conclusion that a multifaceted approach is required when conducting rehabilitation treatment in these patients, aimed at

compensating for impaired body functions, improving the quality of life, reducing the severity of disability and prolonging active life. The process of recreating the vital status of patients is multidimensional and requires an integrated approach to restore the physical, psycho-emotional and social conditions of patients. At the same time, almost all authors agree on one thing: further multicenter randomized studies are needed to develop standardized approaches to conducting rehabilitation measures in cancer patients.

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BREAST CANCER: ACTUAL QUESTIONS AND WAYS OF THEIR IMPLEMENTATION

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Annotation: This scientific and analytical work presents modern global and local-regional data on incidence, mortality and five-year survival rate of such a common oncological pathology as breast cancer. The issues related to risk factors, etiopathogenesis, distribution features and clinical manifestations, as well as measures for the prevention of this formidable disease. The epidemiological characteristics of this nosological form of malignant neoplasms in our republic are given by regions of the country.

Key words: oncology, breast cancer, mammary gland, risk factors, etiopathogenesis, epidemiology, incidence, mortality, five-year survival rate, prevention.

Breast cancer is the most common global malignancy and the leading cause of cancer deaths [1]. There is much evidence showing the influence of life style and environmental factors on the development of mammary gland cancer (high-fat diet, alcohol consumption, lack of physical exercise), the elimination of which (primary prevention) may contribute to a decrease in incidence and mortality. Secondary prevention, comprising diagnostic tests (e.g. mammography, ultrasonography, magnetic resonance imaging, breast self-examination, as well as modern and more precise imaging methods) help the early detection of tumours or lesions predisposing to tumours. It is estimated that nearly 70% of malign tumours are caused by environmental factors, whereas in breast cancer this percentage reaches 90-95%. There are national programmes established in many countries to fight cancer, where both types of prevention are stressed as serving to decrease incidence and mortality due to cancers. Cancer prevention is currently playing a key role in the fight against the disease. Behaviour modification, as well as greater awareness among women regarding breast cancer, may significantly contribute towards reducing the incidence of this cancer [2].

Speaking about the diagnostic criteria for making a diagnosis, women complain about the presence of a formation in the mammary gland; enlarged axillary, supra- and subclavian lymph nodes; the presence of skin changes on the mammary gland; swelling of the mammary gland. The history is noteworthy of the presence of cancer in close relatives; early onset of menstruation; age of first pregnancy and first birth, taking oral contraceptives and/or hormone replacement therapy, gynecological diseases. During a physical examination, attention is paid to the symmetry of the location and shape of the mammary glands; level of position of the nipples and their appearance (retraction, deviation to the side); skin condition (hyperemia, swelling, wrinkling, retractions or protrusions on it, narrowing of the areolar field, etc.); presence/absence of pathological discharge from the nipples (quantity, color, duration); presence of swelling of the arm on the affected side. Palpation of the mammary glands is carried out in the vertical and horizontal positions of the subject; regional and cervico-supraclavicular lymph nodes are usually performed in a vertical position [3].

From laboratory tests, if metastatic breast cancer is suspected, it is recommended to perform detailed clinical and biochemical blood tests, and a study of the blood coagulation system. In case of hormone-dependent breast cancer in women under 50 years of age, to assess ovarian function and plan hormone therapy, it is recommended to study the level of follicle-stimulating hormone in the blood serum and the level of total estradiol in the blood. A cytological study is also carried out (an increase in the size of atypical cells up to giant ones, a change in the shape and number of intracellular elements, an increase in the size of the nucleus, its contours, different degrees of maturity of the nucleus and other cell elements, a change in the number and shape of nucleoli); histological examination: histological type of tumor, degree of differentiation (grade - ability to form tubes, nuclear polymorphism, number of mitoses), presence of necrosis, vascular invasion, tumor of infiltrating lymphocytes, presence of calcifications. Immunohistochemical study for key markers: 1) determination of estrogen and progesterone receptors, HER2, Ki67 - it is recommended to evaluate biological markers again at least once during metastasis, if clinically possible; 2) if the result of IHC analysis of HER2 is controversial, the HER2/neu gene amplification should be determined by in situ hybridization; 3) determination of PD-L1 in triple negative breast cancer to decide on the prescription of immunotherapy; 4) if necessary - Cytokeratin 5/6, Calponin-1, E-Cadherin, GCDFP-15, Mammaglobin, p120 and Topoisomerase IIa.

Molecular genetic testing to determine germline BRCA1/2 mutations is indicated in all patients, regardless of age, family history, or type of breast cancer with mBC and during progression to decide whether to prescribe PARP inhibitors (olaparib1 and talazoparib). In women with a positive germline mutation of the BRCA1 or 2 gene, the incidence of breast cancer development before 70 years of age is 45-65%. More often detected: 1) with a burdened family history (close relatives have breast cancer aged ≤ 50 years, breast cancer in a man, ovarian cancer, metastatic prostate cancer, pancreatic cancer); 2) in patients under 45 years of age; 3) in patients under 60 years of age with a triple negative breast cancer phenotype; 4) with primary multiple breast cancer; 5) in patients with HER2 negative breast cancer phenotype who have a high risk of relapse after surgical treatment and neoadjuvant or adjuvant therapy; 6) for breast cancer in men. Comprehensive genomic profiling is carried out in patients with a severe clinical course, aggressive tumors, with a high risk of progression, lack of effect from traditional methods of antitumor treatment [in advanced breast cancer (triple negative and progressive HER2+)] [3].

Instrumental studies: 1) ultrasound of the mammary glands, regional lymph nodes: the presence of a hypoechoic structure of the formation with large/small microcalcifications in the structure, the contours are uneven, stellate, there may be areas of mixed echogenicity, the structure of the node is heterogeneous, increased vascularization is possible; 2) mammography (mammograms in two projections visualize shapeless heterogeneous compactions with multiple microcalcifications in the structure, pronounced deformation of the stroma, thickening of the skin,

nipple-areolar complex, the nipple can be retracted, the presence of enclosed lymph nodes); 3) contrast spectral mammography (CESM method), which consists of performing mammography with soft and hard images after intravenous administration of an iodinated contrast agent. The CESM method is informative in the diagnosis of early forms of breast cancer, allows you to detect pathology in the dense part of the mammary gland, and is used as a differential diagnosis of benign and malignant neoplasms; before the study, creatinine and urea levels in the blood are assessed, an iodine-containing contrast agent is administered intravenously in an amount of 1.0-1.5 ml per kg of the patient's weight; images are taken in two projections, craniocaudal (CC) and mediolateral (MLO), in a period of time from 2 to 7 minutes after administration of the contrast agent; 4) MRI of the mammary glands to assess the local spread of breast cancer for the following indications: age up to 30 years; the presence of mutations in the BRCA1, BRCA2 genes; high radiological density of the mammary glands; the presence of breast implants when it is impossible to perform a high-quality mammographic examination; presence of lobular carcinoma in situ; 5) ductography (in the presence of an intraductal formation behind the nipple, it is carried out to clarify the size and distance of the formation from the nipple-areolar complex); 6) puncture biopsy of a tumor formation (cytological examination reveals an increase in the size of cells up to giant ones, a change in the shape and number of intracellular elements, an increase in the size of the nucleus and its contours, different degrees of maturity of the nucleus and other cell elements, a change in the number and shape of nucleoli); 7) trephine biopsy or sectoral resection of the mammary gland with express histology (histological verification of the tumor: histological type of tumor, degree of differentiation (grade - ability to form tubes, nuclear polymorphism, number of mitoses), absence of necrosis, vascular invasion, tumor of infiltrating lymphocytes, the presence of calcifications); 8) ultrasound of the abdominal organs and retroperitoneal space/ultrasound of the pelvis (with metastatic lesions of the liver, its structure is heterogeneous, rounded in shape with uneven clear contours, with single or multiple formations with a hypoechoic rim along the periphery); 9) computed tomography or MRI of the abdominal organs with intravenous contrast if the results of ultrasound of the abdominal organs are ambiguous or not very informative; 10) survey X-ray examination of the OGK/computed tomography (in case of metastatic lesions of the lungs across all pulmonary fields or in a segment, multiple/single mid-focal shadows with clear contours, of various sizes are determined); 10) scintigraphy of skeletal bones (hyperfixation of an osteotropic drug in foci of pathological bone formation) if metastatic lesions of skeletal bones are suspected to assess the extent of breast cancer prevalence; 11) PET-positron emission tomography (accumulation of the drug by pathological foci), combined with computed tomography with tumor-tropic radiopharmaceuticals (with or without contrast) (PET-CT) to assess the extent of breast cancer spread in cases where standard methods of staging examinations are ambiguous, especially when locally advanced process, when the detection of metastases fundamentally changes treatment tactics; 12) MRI or CT scan of the brain with IV contrast to exclude metastatic lesions if the presence of metastases in the brain is suspected.

To standardize and simplify the criteria for assessing response to tumor therapy, the international RECIST scale (Response Evaluation Criteria in Solid Tumors) is used. According to RECIST 1.1, the following types of response are distinguished for targeted lesions.

1. Complete response – disappearance of all tumor foci.
2. Partial answer – a decrease in the sum of the largest diameters of each lesion by more than
than 30%.
3. Stabilization of the disease – reduction of the sum of the largest diameters of each lesions from 20 to 30% (for RECIST 1.0 from 25 to 50%).
4. Progression of the disease – an increase in the sum of the largest diameters of each lesion by more than 20% or the appearance of new tumor lesions.

The overall response of solid tumors to treatment is based on a combination of data on measurable lesions, non-measurable lesions and the appearance or absence of new tumor lesions. The duration of overall response is from the date of documentation of the disease until its progression. Relapse-free interval (time to progression) – from the end of treatment to the date of documented disease progression [3].

As part of outpatient drug therapy, it is recommended to use hormone therapy in the adjuvant mode for patients with hormone-positive breast cancer for at least 5 years (tamoxifen, letrozole, anastrozole, goserelin, triptorelin) and with progression or metastatic luminal breast cancer before progression (tamoxifen, letrozole, anastrozole, goserelin, triptorelin, toremifene, fulvestrant, exemestane, everolimus). The use of bisphosphonate therapy when metastatic bone lesions are detected is recommended for two years (zoledronic and pamidronic acid, denosumab). CD 4/6 inhibitors (palbociclib, ribociclib, abemaciclib) are recommended for patients with HER2-negative metastatic luminal breast cancer in combination with an aromatase inhibitor or fulvestrant, until progression or unacceptable toxicity develops; the use of monotherapy with PARP inhibitors (olaparib or talazoparib) is recommended for patients with metastatic breast cancer with germline BRCA1 or BRCA2 mutations, regardless of hormone receptor and HER2 status, as an alternative to chemotherapy. In patients with high-risk BRCA-associated breast cancer, olaparib is prescribed as adjuvant therapy. The use of targeted therapy (trastuzumab 600 mg) is recommended for patients with early and metastatic HER2-positive breast cancer in combination with chemotherapy, targeted therapy or monotherapy (up to completion of 18 cycles). The use of targeted therapy (lapatinib) is recommended for patients with HER2-positive metastatic breast cancer, either alone or in combination with capecitabine and/or trastuzumab, until progression or development of unacceptable toxicity. The use of capecitabine in the adjuvant treatment of chemo-resistant triple negative breast cancer, or in metastatic breast cancer in combination with lapatinib and hormone therapy.

Indications for radiation therapy: 1) morphologically established diagnosis of malignant neoplasm; 2) in case of relapses, continued growth of the tumor or progression of the disease after previously carried out combined or complex treatment. Methods of radiation therapy: 1) continuous radiation therapy; 2) single-fraction radiation therapy for SRS; fractionated radiation therapy for Single Focal Dose from 1.6 Gy to 12.0 Gy 2-5 fractions per week (standard fractionation, hypofractionation, hyperfractionation, accelerated fractionation, multifractionation. In this case, external beam radiation therapy is carried out 2D, 3D, IMRT, RapidArc, IGRT conformal irradiation Single Focal Dose 1.8-2.0-2.66, 2.67, 5.2 Gy 5 fractions per week up to Total Focal Dose 50 Gy, 42.56 Gy, 40.05 Gy, 25 Gy and 60-70 Gy in independent mode, Total Focal Dose 10-16 Gy ("Boost") in the postoperative mode after organ-sparing operations. A continuous course of radiation therapy is used, using γ -therapy devices or linear accelerators. Tomotherapy is used as a standard fractionation technique for administering single and total focal doses. The main advantage is hypofractionation in Single Focal Dose 2.5 Gy. Intraoperative radiation therapy is used in breast-conserving operations for T1-2N0-1M0. The bed of the removed tumor is irradiated with an electron beam at a dose of 10-20 Gy in order to devitalize the remaining malignant cells [3].

Now, regarding chemotherapy. There are several types of chemotherapy that differ in purpose: 1) neoadjuvant chemotherapy of tumors is prescribed before surgery, in order to reduce an inoperable tumor for surgery, as well as to identify the sensitivity of cancer cells to drugs for further use after surgery; 2) adjuvant chemotherapy is prescribed after surgical treatment to prevent metastasis and reduce the risk of relapse; 3) curative chemotherapy is given to shrink metastatic cancers. Depending on the location and type of tumor, chemotherapy is prescribed according to different regimens and has its own characteristics.

Indications for chemotherapy: 1) cytologically and histologically verified breast cancer; 2) in

the treatment of locally advanced tumors; 3) metastases in regional lymph nodes/distant organs - lungs, liver, brain, bone structure; 4) tumor recurrence; 5) a satisfactory blood picture in the patient: normal hemoglobin and hemocrit, the absolute number of granulocytes is more than 200, platelets are more than 100,000; 6) preserved function of the liver, kidneys, respiratory system and cardiovascular system; 7) the possibility of converting an inoperable tumor process into an operable one; 8) patient's refusal to undergo surgery; 9) improvement of long-term treatment results in unfavorable tumor phenotypes (triple negative, HER2-negative cancer).

Contraindications to chemotherapy can be divided into two groups: absolute and relative. Absolute contraindications: hyperthermia >38 degrees; disease in the stage of decompensation (cardiovascular system, respiratory system, liver, kidneys); the presence of acute infectious diseases; mental illness; the ineffectiveness of this type of treatment, confirmed by one or more specialists; tumor decay (threat of bleeding); the patient's serious condition according to the Karnofsky scale is 50% or less. Relative contraindications: pregnancy up to 16-18 weeks; intoxication of the body; active pulmonary tuberculosis; persistent pathological changes in blood composition (anemia, leukopenia, thrombocytopenia); cachexia.

The rationale for prescribing neoadjuvant systemic therapy for breast cancer is: high probability of latent (micrometastatic) spread; the ability to reduce the amount of surgical intervention within the "clean" resection margins; the ability to evaluate the clinical response to therapy in vivo; availability of accurate pathomorphological assessment of the degree of tumor regression; the possibility of special studies of biopsy tumor material before, during and after completion of primary systemic treatment. For medullary carcinoma and adenoid cystic carcinoma, adjuvant chemotherapy may not be required (in the absence of lymph node involvement).

And a very important and decisive aspect when prescribing adjuvant/neoadjuvant systemic therapy is the molecular biological subtype of breast cancer:

1. Luminal type A. In early breast cancer (T1-2N0M0), hormone therapy is carried out only in the presence of severe concomitant diseases and/or there are absolute contraindications to surgical treatment until the maximum effect is achieved, followed by radiation therapy. For T2-4N1-3M0 locally advanced inoperable breast cancer, it is recommended to prescribe hormone therapy with antiestrogens and aromatase inhibitors; it is advisable to carry out treatment until the maximum effect is achieved with clinical and instrumental assessment every 3 months. At the same time, in most cases, the appointment of adjuvant/neoadjuvant chemotherapy (in addition to hormonal therapy) is possible in the presence of at least two parameters: widespread process (≥ 4 regional lymph nodes affected by metastases; $\geq T3$); GIII; young age; presence of pregnancy; increase in initial Ki67 values during repeat biopsy/postoperative material after neoadjuvant hormone therapy.

2. Luminal B (HER2 negative). Hormone therapy + chemotherapy in most cases. For T1a (≤ 5 mm) and N0 - only adjuvant hormonal therapy. In other cases, chemotherapy with anthracycline- and taxane-containing regimens in addition to hormone therapy. Adding platinum drugs to adjuvant chemotherapy only in the presence of a BRCA1/2 gene mutation.

3. Luminal type B (HER2 positive). Chemotherapy + anti-HER2 therapy + hormone therapy. For T1a (≤ 5 mm) and N0: adjuvant hormone therapy only; chemotherapy and trastuzumab are not indicated. For T1b, c (> 5 mm but ≤ 20 mm) and N0: chemotherapy with paclitaxel (without anthracyclines) in combination with trastuzumab (followed by hormone therapy) is possible. For T2-T4 (> 20 mm) or N+: the first step is anthracyclines, then taxanes + trastuzumab $\pm$ pertuzumab (followed by hormone therapy).

4. HER2 positive (non-luminal). Chemotherapy + anti-HER2 therapy. For T1a (≤ 5 mm) and N0: systemic therapy is not indicated. For T1b (> 5 mm but ≤ 10 mm) and N0: taxane chemotherapy (without anthracyclines) in combination with trastuzumab is possible. For T1c-T4 (> 10 mm) or N+:

the first step is anthracyclines, then taxanes + trastuzumab ± pertuzumab.

5. Triple negative (ductal). Chemotherapy including anthracyclines and taxanes. For T1a (≤ 5 mm) and N0, systemic therapy is not indicated. Adding platinum drugs to adjuvant chemotherapy only in the presence of a BRCA gene mutation. There are also features when prescribing adjuvant chemotherapy to patients who have received neoadjuvant chemotherapy in full.

Also, a very important section is the use of hormone therapy in the adjuvant or neoadjuvant mode. In the premenopausal period, hormone therapy is used as follows. After completion of systemic chemotherapy and continued menstrual function, bilateral oophorectomy or ovarian suppression with luteinizing gonadotropin releasing hormone agonists followed by an anti-estrogen for 5 years is indicated. When menstrual function ceases after receiving courses of chemotherapy and the level of estradiol in the blood is determined, an anti-estrogen is prescribed to confirm true menopause. The following regimens with tamoxifen are used: 1) tamoxifen 20 mg/day orally daily for 5 years; 2) tamoxifen 20 mg/day orally daily, for 10 years, in the presence of at least one unfavorable prognosis factor: age ≤ 35 years, preserved ovarian function after adjuvant chemotherapy, T3-4, involvement of ≥ 4 axillary lymph nodes, GIII, positive HER2, high Ki67; 3) tamoxifen 20 mg/day orally daily for 5 years, then aromatase inhibitors (letrozole 2.5 mg/day orally daily, or anastrozole 1 mg/day orally daily, or exemestane 25 mg/day orally daily) for 5 years. For patients who have achieved stable menopause by the time they stop taking tamoxifen, with at least one poor prognostic factor: age ≤ 35 years, preserved ovarian function after adjuvant chemotherapy, T3-4, involvement of ≥ 4 axillary lymph nodes, GIII, HER2 positive, high Ki67; 4) ovarian suppression¹ + tamoxifen 20 mg/day orally daily / aromatase inhibitors (letrozole 2.5 mg/day orally daily, or anastrozole 1 mg/day orally daily, or exemestane 25 mg/day orally daily) for 5 years, and also if there are indications for adjuvant chemotherapy and preserved ovarian function after completion of chemotherapy; 5) blemaciclib 150 mg 2 times a day in combination with endocrine therapy for the adjuvant treatment of hormone receptor positive (HR+) and human epidermal growth factor receptor type 2 (HER2) negative breast cancer in early stages with involvement of regional lymph nodes and a high risk of relapse [3].

In pre- or perimenopausal women, endocrine therapy with aromatase inhibitors should be combined with a luteinizing hormone-releasing hormone agonist. To achieve ovarian suppression, it is possible to use the following methods: 1) surgical castration (bilateral oophorectomy); the most effective method, causes irreversible shutdown of ovarian function; 2) medicinal (analogues of luteinizing gonadotropic hormone: goserelin 3.6 mg intramuscularly once every 28 days or 10.8 mg subcutaneously once every 12 weeks; or buserelin 3.75 mg intramuscularly once every 28 days; or leuporelin 3.75 mg IM 1 time in 28 days): causes reversible suppression of ovarian function; does not always provide complete suppression of ovarian function, especially in young women; to confirm complete ovarian suppression, it is necessary to determine estradiol in the blood serum; determination of follicle-stimulating hormone during treatment with luteinizing gonadotropic hormone analogues is not informative; aromatase inhibitors should be started 6-8 weeks after the first administration of luteinizing gonadotropin hormone analogues; luteinizing gonadotropin hormone analogues are administered monthly; 3) radial; causes irreversible shutdown of ovarian function. The optimal method of ovarian suppression has not been determined; it is usually prescribed for a period of 2-5 years.

Hormone therapy for breast cancer for menopausal patients is carried out in the following variations: 1) tamoxifen 20 mg/day orally daily for 5 years; 2) aromatase inhibitors (letrozole 2.5 mg/day orally daily, or anastrozole 1 mg/day orally daily, or exemestane 25 mg/day orally daily) for 5 years; in the presence of at least one unfavorable prognosis factor: preserved ovarian function after adjuvant chemotherapy, T3-4, involvement of ≥ 4 axillary lymph nodes, GIII, positive HER2, high Ki67; 3) tamoxifen 20 mg/day orally daily for 10 years; in the presence of at least one unfavorable prognosis factor: preserved ovarian function after adjuvant chemotherapy, T3-4,

involvement of ≥ 4 axillary lymph nodes, GIII, positive HER2, high Ki67; 4) tamoxifen 20 mg/day orally daily for 5 years, then aromatase inhibitors (letrozole 2.5 mg/day orally daily, or anastrozole 1 mg/day orally daily, or exemestane 25 mg/day orally daily) for 5 years. For patients who have reached stable menopause by the time they stop taking tamoxifen, in the presence of at least one unfavorable prognosis factor: preserved ovarian function after adjuvant chemotherapy, T3-4, involvement of ≥ 4 axillary lymph nodes, GIII, positive HER2, high Ki67; 5) abemaciclib 150 mg 2 times a day in combination with endocrine therapy for the adjuvant treatment of hormone receptor-positive (HR+) and human epidermal growth factor receptor type 2 receptor-negative (HER2-) breast cancer in the early stages with involvement of regional lymph nodes and a high risk of relapse - continuously for 2 years or until disease relapse or intolerable toxicity develops [3].

And, of course, the surgical method remains one of the leading methods in the treatment of this pathology, and in some cases, it is the only method of treatment (cancer in situ). For breast cancer, the following types of surgical interventions are performed: 1) radical mastectomy according to Halstead - single-block removal of the mammary gland along with the pectoralis major and minor muscles and their fascia, subclavian, axillary and subscapular tissue with lymph nodes within the anatomical cases; 2) extended axillary-thoracic radical mastectomy, single-block removal of the mammary gland with the pectoral muscles, subclavian-axillary and subscapularis tissue, as well as a section of the chest wall with parasternal lymph nodes and internal mammary vessels; 3) functionally sparing operations (modified radical mastectomy - differs from Halstead mastectomy by preserving the pectoralis major muscle; modified Madden mastectomy - differs from Halstead mastectomy by preserving both pectoral muscles; 4) simple mastectomy - removal of the mammary gland with the fascia of the pectoralis major muscle (indications: decaying tumor, advanced age, severe concomitant diseases; 5) radical sectoral resection - removal of the sector along with the tumor, part of the underlying fascia of the pectoralis major and minor muscles, subclavian, axillary, subscapular tissue with lymph nodes in one block; 6) sectoral resection - removal of the breast sector to the underlying fascia (performed only for diagnostic purposes or in combination with radiation therapy for cancer in situ); 7) biopsy of the sentinel lymph node is carried out for diagnostic and therapeutic purposes in the early stages of the disease (1st level lymph nodes are removed with a histological express study to determine the presence of elements of a malignant tumor); detection of sentinel lymph nodes is possible using radioactive colloid and/or blue dye; a combined determination method is preferred.

Indications for performing organ-preserving operations: the presence of a nodular form of cancer up to 2.0 cm in size; absence of multicentricity and multifocality of tumor growth (on mammograms, ultrasound data, clinical examination); slow and moderate growth rate, doubling of tumor size no faster than 3 months (according to medical history); a favorable ratio of the size of the mammary gland and the tumor to obtain a good cosmetic result of the operation; absence of distant metastases; the presence of single metastases in the axillary region is acceptable; the patient's desire to preserve the mammary gland; satisfactory objective tumor response (partial and complete tumor regression) to previous neoadjuvant systemic treatment.

Reconstructive operations can be performed for stages I-III of breast cancer at the request of the patient at any tumor location: 1) reconstruction (primary or delayed) of the mammary gland using an endoprosthesis (implant) (this type of operation involves the installation of a temporary (expander) or permanent prosthesis under the pectoralis major muscle, which allows compensation for the defect due to its volume, after mastectomy); 2) one-stage reconstruction: a skin-skin-sparing mastectomy is performed with the fascia of the pectoralis major muscle (if tumor cells are detected in the tissue behind the nipple during express histological examination, the nipple with the areola is removed); 3) reconstruction (primary or delayed) of the mammary gland using one's own tissues (autoplasty); this type of reconstruction involves replacing the defect using one's own tissues; basically, 2 types of operations are used - breast reconstruction by replacing

with a TRAM flap (using a flap based on the rectus abdominis muscles) and breast reconstruction by replacing with a thoracodorsal flap, which is used in combination with an endoprosthesis.

Types of surgical interventions for metastatic breast cancer: 1) sanitary/simple mastectomy (if there is a threat of bleeding for health reasons); 2) open liver biopsy (diagnostic surgery for suspected liver metastases); 3) other diagnostic manipulations on the liver (liver resection in the presence of single metastatic foci in the liver); 4) excision of the affected area or tissue of the meninges (in the presence of solitary metastatic foci of the meninges); 5) other types of excision or destruction of the damaged area or brain tissue (in the presence of solitary metastatic foci in the brain); 6) precision resection of a segment of the lung (in the presence of solitary metastatic foci in the lungs); 7) laparoscopic salpingo-oophorectomy (prophylactic bilateral removal of appendages for hormone-dependent breast cancer tumors in premenopausal patients); 8) total hysterectomy with appendages (for metastatic lesions of the ovaries, uterine body); 9) electrochemotherapy for intradermal metastatic lesions (combination treatment that uses the administration of chemotherapeutic drugs in association with electroporation of the cell membrane).

Contraindications to surgical treatment for breast cancer: the patient has signs of inoperability and severe concomitant pathology; distant metastases, the presence of a disseminated tumor process; synchronously existing and widespread inoperable tumor process of another localization, for example lung cancer, etc.; chronic decompensated and/or acute functional disorders of the respiratory, cardiovascular, urinary system, gastrointestinal tract; allergy to drugs used in general anesthesia.

Also, a very important point is preventive measures for breast cancer. Primary prevention of breast cancer is the prevention of the disease by studying the etiological and risk factors (normalization of family life, timely implementation of childbearing, breastfeeding the baby, avoiding marriages in cases of mutual cancer). Secondary prevention of breast cancer is the early detection and treatment of precancerous diseases of the mammary glands. Tertiary prevention is prevention, early diagnosis and treatment of relapses and metastases; using a nutritious diet rich in vitamins and proteins, giving up bad habits (smoking, drinking alcohol), preventing viral infections and concomitant diseases, regular preventive examinations with an oncologist, regular diagnostic procedures (radiography of the lungs, ultrasound of the liver, kidneys, neck lymph nodes).

Prophylactic mastectomy - risk-reducing surgeries, such as mastectomy with reconstruction, may be offered to women at risk. The risk of developing breast cancer is reduced by approximately 90-95%, however, absolute guarantees regarding the occurrence of breast cancer in the future are impossible. Indications for performing bilateral prophylactic mastectomy in women who do not currently have breast cancer (in order to reduce the risk of developing primary breast cancer): mutations of the BRCA1 and BRCA2 genes; family history (presence of breast cancer in first- and second-line relatives) without a proven mutation; histological risk factors are atypical ductal or lobular hyperplasia. Indications for performing prophylactic contralateral mastectomy in women with current or past breast cancer: newly diagnosed unilateral breast cancer stage I-II, or a history of stage I-II breast cancer (in order to reduce the risk of developing cancer in the contralateral mammary gland and achieving symmetry with the operated mammary gland); lobular carcinoma in situ. Contraindications for use: age over 70 years; general contraindications to surgical treatment; synchronous and metachronous malignant tumors, with the exception of skin cancer [3].

Next, of course, it is necessary to discuss in detail the issue of breast cancer screening. The key concept of breast cancer screening is the detection of oncological pathology in the early stages, when the prognosis is most favorable and allows you to get the best long-term treatment results. A preventive examination always has advantages over a diagnostic examination when

symptoms of the disease are already present. At the same time, upon receipt of the M2 and M3 indices according to the BI-RADS classification, it is possible to timely additionally examine these patients and, if necessary, take them to the dispensary record by a district mammologist with effective dispensary examinations and treatment of precancerous breast diseases. Along with this, it must be understood that the main conditions for screening for breast cancer are the availability of trained personnel and a standardized approach to identifying the trait under study and evaluating the results. The methods used should be sufficiently simple, reliable and reproducible, and also have sufficient sensitivity and high specificity. Such qualities are fully possessed by modern digital mammography [4,5,6].

Breast cancer ranks first in the structure of the frequency of malignant tumors of both sexes in the population with a share of 14.7% (2021 - 15.4%). This situation has been stable since 2004; in addition, breast cancer ranks first and remains consistently in this position in the structure of female oncopathology.

The incidence of breast cancer in 2022 in the country as a whole increased to 26.5 per 100 thousand (2021 – 26.3). In the structure of cases, breast cancer occupies the 1st ranking place in the vast majority of regions and cities of the country, except for three: Akmola, Kyzylorda and North Kazakhstan regions, where lung cancer takes the 1st ranking place [7].

Above the national average - 26.5 per 100 thousand of us. – incidence of breast cancer in 10 regions of the country: Abay – 33.3, Akmola – 32.7 (2021 – 29.8), East Kazakhstan – 44.7 (39.9) – the highest level, West Kazakhstan – 31.2 (28.4), Karaganda – 40.2 (40.1), Kostanay – 37.5 (35.8), Pavlodar – 43.2 (47.4), North Kazakhstan – 34.7 (38.2) regions and Almaty city – 35.4 (34.5), Astana city – 31.5 (28.4). Below average indicators per 100 thousand of us. in Aktope - 21.6 (24.3), Almaty - 21.9 (17.7), Atyrau - 22.8 (15.7), Zhambyl - 14.2 (15.1), Zhetysu - 22.8, Kyzylorda - 14.6 (14.4), Mangystau - 14.7 (17.3), Turkestan - 11.3 (11.7) regions and Shymkent city - 14.9 (21.9) [7].

Breast cancer ranks third in the structure of causes of death from malignant tumors in the population of both sexes for the thirteenth year in a row, amounting to 8.1% in 2022 (2021 – 8.7%). In the republic as a whole, mortality from breast cancer decreased by 13.0%, from 6.2 to 5.4 per 100 thousand people.

The regions where mortality from breast cancer is higher than the national average include: Abay - 10.1 per 100 thousand people (maximum level), East Kazakhstan - 8.0 (2021 - 8.5), Pavlodar - 7.1 (10.0), North Kazakhstan - 7.0 (11.4), Kostanay - 6.9 (7.5), Akmola region - 6.5 (8.2), West Kazakhstan region - 5.7 (6.9), Zhambyl region - 5.5 (4.8) and Astana city – 6.3 (6.6), Almaty city – 6.6 (9.5). The indicators are significantly lower in Aktope - 4.5 (3.5), Almaty - 4.5 (5.8), Zhetysu - 4.0, Atyrau - 3.7 (3.0), Kyzylorda - 4.4 (4.1), Turkestan - 3.6 (3.6), Mangystau regions - 2.7 (3.6) - the lowest level [7].

Mass screening to identify breast cancer patients should mainly involve healthy women without any signs of the disease or symptoms. Screening not only helps to detect hidden forms of cancer that can be treated, but also has psychological value for women. As a result of screening, women are convinced that they do not have breast cancer, and this is the most important potential success of such programs. While the ultimate goal of screening is to reduce breast cancer mortality, its immediate goal is to detect cancer before clinical manifestation. However, breast cancer is a heterogeneous disease, which can significantly affect the effectiveness of screening. Screening models for breast cancer are usually based on the fact that the majority of detected tumors are invasive cancers in the early stage of progression. In addition, it must be taken into account that the detection of cancer (or its precursors) before clinical manifestation increases the risk of false positive diagnosis [8,9].

Mammography has a sensitivity of 95% and a specificity of 97%. These indicators decrease when examining women with denser mammary glands (young age, use of hormone therapy), with low quality mammography, and also with insufficient qualifications of the radiologist. Detection of

high-grade invasive cancer by screening, when the tumor is not yet detected by clinical examination (palpation), means the possibility of reducing mortality from breast cancer [10].

Preventive screening for early detection of breast cancer in the Republic of Kazakhstan includes [11]:

1) mammography of both mammary glands in two projections - direct and oblique in the mammography room of the city, district polyclinic (mobile medical complex). All digital mammograms in the presence of a system for archiving and transferring medical images are copied to CDs and other electronic media and transferred to the server of the mammography room of the Cancer Center using specialized licensed software integrated between medical organizations; in case of impossibility of digital transmission - they are printed on X-ray film at a scale of 1:1 - 100% (1 patient - 1 set - 2 or 4 mammograms) with subsequent transfer to the mammography room of the Cancer Center;

2) interpretation of mammograms according to the BI-RADS classification (M0t, M0d, M1, M2, M3, M4, M5) by two or more independent radiologists of the same medical organization - double reading or different medical organizations: a radiologist of the mammography room city, district polyclinic (mobile medical complex) - the first reading, and the radiologist of the mammography room of the Cancer Center - the second reading;

3) in-depth diagnostics - targeted mammography, ultrasound examination (hereinafter - ultrasound) of the mammary glands, trepanobiopsy, including under ultrasound or stereotaxic control for histological examination, which is carried out in case of detection of pathological changes on mammograms (M0d) in the mammography room of the Cancer Center.

◆ An average medical worker or a responsible person of the organization of outpatient care sends the patient for mammography to the district, city polyclinic.

◆ The X-ray laboratory assistant of the mammography room of the city, district polyclinic (mobile medical complex) performs mammography, fills out a referral for double reading of mammograms and transmits the referral through information interaction.

◆ Radiologist of the mammography office of the city, district polyclinic (mobile medical complex): fulfills the requirements for the safety and quality of mammographic examinations; evaluates the quality of the images provided and the correctness of the installation; performs repeated mammography in the M0t category (technical errors of mammography); determines the radiological density of the mammary glands on the ACR scale (A, B, C, D) indicating this parameter in the study protocol; conducts the first reading of mammograms with interpretation of the BI-RADS classification results. In the M0d category (undetermined or suspicious radiological changes requiring additional examination), the study protocol indicates the predominant pathology: education, asymmetry, violation of architectonics, microcalcifications; sends mammograms, electronic copies of mammograms through the archiving system and transfer of medical images to the workplace of the mammography office of the Cancer Center together with directions for double reading of mammograms; directs low-dose computed tomographic images through the system of archiving and transferring medical images to the workplace of the computer tomography office of the Cancer Center together with copies of images recorded on CD-ROMs or other electronic media and directions for double reading.

◆ The radiologist of the mammography room of the Cancer Center: evaluates the quality of the provided images and the correctness of the styling. Viewing digital x-ray images transferred to the server or on digital media (CD, DVD) is carried out on a monitor for interpreting digital x-ray images with a resolution of at least 5 megapixels, which has a certified grayscale transmission in accordance with the DICOM standard; conducts a double (second) reading of mammograms with the interpretation of the results according to the BI-RADS classification, using, if necessary, archival images. Organizes the third reading according to indications. With double reading, an independent interpretation of the images is carried out (blinding method - the second radiologist does not know

the results of the first reading); in the M0m category (technical errors in mammography), recommends repeat mammography; in the M0d category (uncertain or suspicious radiographic changes requiring additional examination), the study protocol indicates the predominant pathology: education; asymmetry, violation of architectonics, microcalcifications; recommends that the outpatient care organization, according to indications, invite the patient for in-depth diagnostics (targeted mammography, ultrasound of the mammary glands, trephine biopsy, including under ultrasound or stereotaxic control, followed by histological examination of the material); collects and archives all mammograms (films and electronic media) made as part of the examination. The shelf life of mammograms is at least 3 years after leaving the age subject to a screening study; the results of the double (second) reading are transferred to the outpatient care organizations through information exchange.

◆ Indications for in-depth diagnostics are the conclusions of double reading mammograms M0d (uncertain or suspicious X-ray changes requiring additional examination).

◆ In-depth diagnostics is carried out in two stages. At the first stage, ultrasound is performed, according to indications, targeted mammography, possibly with an increase (with asymmetry, violation of architectonics and the presence of microcalcifications). When visualizing a suspicious pathology (M4 and M5), the second stage is performed - trepanbiopsy, including under ultrasound control and stereotaxic control for histological examination.

◆ Histological examination is carried out in the laboratory of pathomorphology or pathological bureau. Morphological interpretation of the biopsy is carried out in accordance with the recommendations of the World Health Organization.

◆ Physician or responsible person of the outpatient care organization:

1) upon receipt of a mammography result according to the BI-RADS classification:

- in case of M0t (technical errors in mammography) - sends the patient for a second X-ray examination to the mammography room of the city, district polyclinic (mobile medical complex);
- with M0d (undefined or suspicious X-ray changes requiring additional examination) - sends the patient for in-depth diagnostics to the mammography room of the Cancer Center;

- with M1 (no changes detected) - recommends that the patient undergo a follow-up mammography examination after 2 years. With radiological density of the mammary glands, C and D are sent for ultrasound of the mammary glands to exclude a false-negative result of mammography;

- with M2 (benign changes), refer the patient for a consultation with an oncologist (mammologist) of the clinical diagnostic department, followed by a screening mammography examination after 2 years;

- with M3 (probable benign changes) - sends the patient for short-term dynamic radiation observation to the local doctor with the recommendation of control mammography or ultrasound in 6 months;

- with M4 (signs that cause suspicion of malignancy), M5 (practically reliable signs of malignancy) and if it is technically impossible to perform a trepanbiopsy or a biopsy is refused, a referral to an oncologist (mammologist) of the clinical diagnostic department for dynamic observation and decision on the verification of the identified pathology;

2) upon receipt of the result of a histological examination:

- benign education - refers the patient to an oncologist (mammologist) of the clinical diagnostic department for dynamic monitoring, followed by a screening mammography examination after 2 years;

- formation with an indeterminate malignant potential or carcinoma in situ - refers the patient to the Cancer Center for consultation and treatment, followed by dynamic observation by an oncologist (mammologist) of the clinical diagnostic department at the place of her attachment;

- malignant neoplasm - refers the patient to the Cancer Center for treatment and follow-up;

3) communicates the results of the screening examination to the patient in any available way (by telephone, in writing, through electronic means of communication);

4) enters the results of double reading, in-depth diagnostics, histological examination, recommendations of the radiologist of the Cancer Center mammography room into the information system.

Establishing the size of the primary tumor is especially important in screening. Tumor size is an important criterion for evaluating the quality of screening and determining the ability of X-ray mammography to detect non-palpable tumors. Therefore, it is extremely important that pathologists measure tumor diameter as accurately as possible. The smaller the size of the primary tumor, the greater the likelihood of error in determining its size.

Now, regarding the results of breast cancer screening. Mammography screening identified 1,570 cases of breast cancer in 2022 (1,402 in 2021). The cancer detection rate increased from 1.78 to 1.94 per 1000 examined. The best result is in the Karaganda region – 2.63 per 1000 women examined. Low detection rate per 1000 examined, compared to the republican average, in Atyrau (1.72), Zhambyl (0.58), Kyzylorda (1.68), Mangistau (0.42 - worst result), Turkestan (1.22) regions and cities Astana (1.5) and Shymkent (1.58). Compared to 2021, there was an increase in the detection of breast cancer in 9 regions, with the exception of Aktobe (decrease from 2.87 to 2.19 per 1000 women examined), Karaganda (from 2.73 to 2.63), Mangistau (from 1.10 to 0.42), North Kazakhstan (from 3.27 to 2.31), Turkestan (from 1.36 to 1.22) regions and cities Astana (from 1.54 to 1.50), Almaty (from 2.24 to 2.18) and Shymkent (from 2.35 to 1.58) [7].

In 2022, the proportion of patients identified during screening studies with early stages of breast cancer (stage 0-I) was 50.2% during screening (in 2021 - 47.9%),

A high proportion of stages 0-I breast cancer (over 50%) was recorded in 8 regions (in 8 in 2021): Akmola, West Kazakhstan, Karaganda (70.8% - best result), Pavlodar, North Kazakhstan, Turkestan regions, cities Astana city and Shymkent city. Low levels of early detection of breast cancer (below 40%) were noted in Aktobe (19.3% - worst result), Zhambyl (34.8%), Kostanay (39.5%), Mangistau (27.3%) regions and Almaty (37.3%). Localized cancer (0-I and II stages) amounted to 96.2% (2021 - 95.5%), while not a single case was detected in stages III-IV in Atyrau, West Kazakhstan, Zhambyl, Kyzylorda, Mangistau, Pavlodar regions, Astana city and Shymkent city. A total of 46 cases of breast cancer in stage III and 14 in stage IV were identified (52 and 11, respectively) [7].

Summarizing the above, it can be concluded that breast cancer occupies a leading position among all existing malignant tumors of other localizations. Variability and veil of symptoms, its similarity to various non-core processes leads to neglect of the disease. All this requires both oncologists and, first of all, primary health care workers and, of course, mammologists, gynecologists to increase the level of oncological alertness, inform the population about early symptoms that may indicate this pathology or the beginning of proliferative changes and high-tech diagnostic measures, including screening, and, as a result, timely treatment.

An epidemiological assessment of the situation with breast cancer in our country suggests that sometimes there are significant differences between regions not only in morbidity, but also in early diagnosis and mortality from this pathology. In connection with the above, this pathology continues to be a serious problem in modern clinical oncology.

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Economic Sciences

Қазақстандағы киелі туризм: туризмді дамытудағы және мәдени – табиғи мұраны сақтаудағы рухани орындардың рөлі

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Қазақстанның жаһандану жағдайындағы рухани саясатының негізгі басымдықтарының бірі – ұлттық мәдени мұраны сақтау және дамыту болып табылады. Тарихи-мәдени мұраның Қазақстан үшін маңыздылығы тарихи алғышарттармен тығыз байланысты. Бүгінде мемлекет алдында тұрған басты міндеттердің бірі – ұлттық мәдени бірегейлікті сақтау және тарихи сана негізін нығайта отырып, қазақ халқының болашағына қамқорлық жасау.

Жаһандану үдерісіне белсенді қатысатын еліміз екіұдай ықпалды бастан кешуде: бір жағынан, мәдени алмасу арқылы халықтар арасындағы байланыстар күшейсе, екінші жағынан, ұлттық мәдени ерекшелікті жоғалту қаупі туындауда. Ақпараттық технологиялар мен коммуникацияның қарқынды дамуы жағдайында Қазақстандағы рухани ынтымақтастық қоғамды біріктірудің маңызды механизміне айналып, ұлттық рухани сананы дамытуға, сондай-ақ қоғам мәдениетін жаңартуға ықпал етеді. Қазақ халқы өзінің көпғасырлық рухани мұрасын қастерлей отырып, оны сақтауға ерекше көңіл бөледі [1].

«Бүгінгі таңда мемлекеттің негізгі міндеттерінің бірі – өзінің мәдени дәстүрін терең түсінетін, халқымыздың бай тарихына құрметпен қарайтын және ел болашағын сеніп тапсыруға лайықты ұрпақты тәрбиелеу. Қазіргі қазақстандық жастар – бірнеше тілді еркін меңгерген, заманауи ақпараттық технологияларды игерген, белсенді әрі мақсатты ұрпақ. Дегенмен, олар өз халқының тарихын, рухани тамырларын жақсы түсініп, Ұлы Дала мәдениетінің мұрагерлері екенін сезінуі тиіс. Егер бұл байланыс үзілсе, жас буын өз рухани құндылықтарын, ата-баба мұрасының маңызын жоғалтып, жаһандану толқынында бағытынан айрылуы немесе бөтен догматикалық ықпалдарға түсуі мүмкін. Сол себепті жас ұрпақты отансүйгіштікке, өз халқына деген сүйіспеншілікке тәрбиелеу – біздің басты парызымыз» - деп атап өткен тұңғыш президент Н.Ә. Назарбаев [2].

Рухани мұраны сақтау – халықтың ұлылығын көрсететін және оның дүниетанымдық біртұтастығын қалыптастыратын басты факторлардың бірі. Қазақстан – этностық әртүрлілігімен ерекшеленетін көпұлтты мемлекет. Бай рухани мұраға қазіргі заманғы көзқарас дәстүрлі мәдениетке тән оқшаулануды еңсеруге және мәдени кодтардың әртүрлілігін жаңа кеңістік-мәдени өлшемде мойындауға мүмкіндік береді. Қазақ халқының рухани мәдениетін дұрыс түсініп, оның бай әлеуетін анықтау – ұлттық бірегейлікті қалыптастыруда және көпұлтты қоғамды біріктіруде маңызды құрал болып табылады.

Қазақстан Республикасының Тұңғыш Президенті Нұрсұлтан Назарбаевтың «Болашаққа бағдар: рухани жаңғыру» бағдарламалық мақаласы жарияланғаннан кейін елде

ұлттық құндылықтарды жаңғыртуға бағытталған бірқатар жобалар жүзеге асырыла бастады. Атап айтқанда, «Туған жер», «Қазақстанның киелі географиясы», «Қазіргі қазақ мәдениеті жаһандық әлемде», «Қазақстанның 100 жаңа тұлғасы» жобалары ұлттық бірлік пен мәдени жаңғыруды нығайтуға бағытталған. Осы бағдарламалар аясында «Қазақстанның киелі жерлерінің картасы» әзірленіп, ұлттық құндылық ретінде ерекше маңызы бар 185 сакралды нысан анықталды [3].

Бұл киелі нысандар – табиғи ландшафттар, қасиетті таулар, үңгірлер, өзендер мен қорымдар сияқты орындардан бастап, ата-бабаларға арналған кесенелер мен ғибадатханаларға дейінгі ерекше табиғи, мәдени және тарихи мұра ескерткіштері. Олар қазақ халқының рухани дәстүрлерінің іргетасы болып табылады және ұлттық бірлік пен жаңғырудың маңызды символы саналады.

Рухани мәдениет туризмді дамытуға, жаңа туристік бағыттарды қалыптастыруға, саяхатшыларды тартуға және аймақтардың мәдени мұрасын байытуға елеулі үлес қосады. Киелі немесе діни туризм ретінде белгілі бұл бағыт қасиетті жерлерге, ғибадат орындарына, монастырларға бару, сондай-ақ діни рәсімдер мен мерекелерге қатысу секілді әрекеттерді қамтиды. Рухани мәдениеттің туризмге ықпалы бірнеше негізгі аспектілер бойынша қарастырылады:

1. Экономикалық әсер және инфрақұрылым

Рухани туризм жергілікті экономикаға табыс әкелудің маңызды көзі болып табылады. Киелі жерлерге келушілер мейрамханалар, қонақ үйлер, көлік қызметтері мен кәдесый өндірісі сияқты салаларда жаңа жұмыс орындарының ашылуына ықпал етеді. Сонымен қатар, киелі орындар инфрақұрылымын дамыту аймақтың жалпы тартымдылығын арттырып, туризмнің басқа түрлеріне де серпін береді. Қазақстанда бұл бағытта Жамбыл және Түркістан облыстары ерекше назар аудартады. Олардың географиялық жақындығы экономикалық тиімділікті арттырып, аймақаралық дамуға ықпал етеді.

2. Әлеуметтік әсер

Рухани туризм қоғамның бірігуіне және мәдени бірегейліктің нығаюына көмектеседі. Киелі жерлерге сапарлар мен қажылық қатысушыларға ортақ рухани құндылықтармен бөлісетін қоғамдастықтың бір бөлігі болу сезімін береді. Сонымен қатар, туристер мен жергілікті тұрғындар арасындағы мәдени алмасу мәдениеттер арасындағы диалогты нығайтады және әртүрлі дәстүрлерді түсінуге мүмкіндік береді.

3. Мәдени ықпал

Киелі туризм мәдени мұраны сақтауда маңызды рөл атқарады. Рухани ғибадатпен байланысты храмдар, кесенелер және басқа да нысандар басты туристік орындарға айналады. Туристердің келуі осы нысандарды қалпына келтіру мен күтіп ұстауға қажетті қаржыны қамтамасыз етеді, бұл мәдени мұраны болашақ ұрпаққа жеткізуге мүмкіндік береді.

4. Туристік ресурстарды пайдалану

Қазақстан рухани-мәдени ресурстарымен әлемдік деңгейде танымал болуда. ЮНЕСКО-ның есебі бойынша, ел мәдени ресурстар саны бойынша 63-ші орында, ал дүниежүзілік мұра нысандары бойынша 42-ші орында. Бұл әлеуетті дұрыс пайдалану туристік ағындарды көбейтуге мүмкіндік береді.

5. Эмоционалды және жеке даму

Киелі жерлерге бару саяхатшыларға ерекше эмоционалды әсер сыйлап, рухани баюға және тұлғалық дамуға ықпал етеді. Мұндай сапарлар адамдардың өзін-өзі тануына, ішкі үйлесімін табуына, сондай-ақ басқа діндер мен мәдениеттерге толеранттылықты арттыруға жағдай жасайды.

6. Маркетинг және аймақтарды ілгерілету

Рухани туризм аймақтарды жарнамалаудың тиімді құралы болып табылады. Ватикан, Мекке, Варанаси сияқты танымал орындар киелі жерлердің жаһандық туристік орталыққа айналатынын дәлелдейді. Қазақстанның киелі орындарын кеңінен таныстыру елдің мәдени-тарихи мұрасын әлемдік деңгейде насихаттауға мүмкіндік береді [4].

Рухани туризмді дамыта отырып, Қазақстан өзінің мәдени мұрасын сақтап қана қоймай, сонымен бірге ұлттық бірегейлікті нығайтуға және жаһандық туризм нарығындағы орнын айқындауға мүмкіндік алады.

Қазақстанның киелі жерлері еліміздің тарихи-мәдени мұрасының құрамдас бөлігі болып табылады. Олар бай тарихты сақтаумен қатар, халықтың рухани болмысын сақтауда, мәдени дәстүрлерді жеткізуде және Қазақстанда тұратын түрлі этностарды біріктіруде шешуші рөл атқарады. Қожа Ахмет Ясауи кесенесі, Бекет-Ата кешені, Алаша хан кесенесі және басқа да көптеген нысандар ұлттық жады мен руханияттың символына айналды. Қазақстан ежелден мәдениеттер, діндер мен өркениеттердің тоғысқан жері болды. Елімізден өткен Ұлы Жібек жолы рухани және мәдени дәстүрлердің бірегей қоспасының қалыптасуына ықпал етті. Осындай жағдайда киелі орындар адамдарды ортақ құндылықтар төңірегінде біріктіретін бірегей «күш нүктелеріне» айналды. Мәселен, Түркістан қаласындағы Қожа Ахмет Ясауи кесенесі ортағасырлық сәулет өнерінің ең ұлы ескерткіші ғана емес, мыңдаған зияратшыларды рухани тартатын орталық. Көрнекті сопы ақын және философ Қожа Ахмет Йасауидің аймақтағы ислам дінінің дамуына зор ықпалы болды. Оның шыншылдық, Алланы сүю, адамдарды құрметтеу туралы ілімі қазақ халқының көптеген мәдени және діни дәстүрлерінің қалыптасуына негіз болды. Сонымен қатар, киелі орындар жиі салт-дәстүрлер, мерекелер және басқа да қоғамдық шаралардың жиналатын орындарына айналды, бұл біртұтас мәдениетке қатыстылық сезімін нығайтуға көмектесті. Мұндай нысандар ғасырлар бойы қалыптасқан рухани құндылықтарды сақтауға және ұрпаққа беруге көмектеседі.

Қазақстандағы көптеген киелі орындар ел тарихындағы маңызды оқиғалармен, көрнекті тұлғалардың тағдырымен байланысты. Мысалы, Қарағанды облысындағы Алаша хан кесенесі қазақ халқының аты аңызға айналған негізін қалаушының жерленген орны болып саналады. Алаша хан – қазақ жерінің бірлігі мен тәуелсіздігі идеясымен байланысты символдық тұлға. Тағы бір айтулы нысан – Маңғыстау облысындағы Бекет-Ата кесенесі. Бұл киелі кешен 18 ғасырда өлке тұрғындарына үлкен ықпал еткен атақты сопы шейхы, уағызшы және ұстаз Бекет-Атаға арналған. Бекет-Ата даналық пен рухани қолдаудың символына айналды, оның кесенесіне жыл сайын мыңдаған зияратшылар келеді.

Басқа туристік әлеуетті нысандарға мыналар жатады:

- Жамбыл облысындағы Айша бибі кесенесі – махаббат пен адалдықтың романтикалық аңызымен байланысты ескерткіш.
- Қарағанды облысындағы Күмбез Домбауыл – түркі дәуірінен сақталған көне ескерткіштердің бірі.
- Ұлытау – ұлттық тарихтың басты нышаны бола отырып, көнеден келе жатқан салт-дәстүрлер мен рәсімдердің орны болып табылатын киелі тау.

Бұл орындар тек сәулет және мәдени жәдігерлер ғана емес, сонымен қатар елдің өткенін жақсырақ түсінуге көмектесетін маңызды тарихи дереккөздер болып табылады.

Қасиетті нысандар ұрпақтар арасындағы дәнекер қызметін де атқарады. Қоғамдағы ақсақалдармен қатар киелі жерлерге құрмет көрсету қазақ мәдениетінің маңызды бөлігі.

Бүгінде киелі нысандар туристік тартымдылықтың маңызды орталықтарына айналууда. «Рухани жаңғыру» мемлекеттік бағдарламасы аясында киелі жерлермен байланысты туризм дамып келеді. Оның аясында киелі нысандарды танымал ету, ішкі және халықаралық туризмді дамыту мақсаты қойылған «Қазақстанның киелі жерлерінің географиясы» жобасы жүзеге асырылуда [5]. Мысалы:

- Қожа Ахмет Ясауи кесенесі – ЮНЕСКО-ның Бүкіләлемдік мұра нысандарының тізіміне енгізілген және жыл сайын әлемнің түкпір-түкпірінен мыңдаған туристерді тартады.

- Маңғыстау – өзінің Бекет-Ата кешенімен қажылар мен зерттеушілер үшін барған сайын танымал орынға айналууда.

Бұл қызығушылық киелі жерлер төңірегіндегі инфрақұрылымды дамытуға ғана емес, мәдени диалогты нығайтуға да септігін тигізеді. Туристер Қазақстанның дәстүрлері мен тарихы туралы көбірек біледі, бұл ұлттық мәдениетті шетелде насихаттауға көмектеседі.

Қасиетті орындардың маңыздылығына қарамастан, шешуді қажет ететін бірқатар мәселелер бар:

- Нысандарды сақтау. Көптеген киелі орындар қалпына келтіруді және жойылудан қорғауды қажет етеді.

- Инфрақұрылым. Ыңғайлы жолдардың, тұрудың және басқа да туристік жағдайлардың болмауы кейбір объектілерге кіруді шектейді.

- Ақпараттандыру. Қасиетті жерлер мен олардың маңызы туралы тұрғындар мен туристер бәрі бірдей біле бермейді, бұл үшін ағартушылық науқандар қажет.

Бұл проблемаларды шешу үшін мемлекет, бизнес және жергілікті қауымдастықтардың ынтымақтастығын қамтитын кешенді тәсіл қажет. Қазақстандағы киелі жерлерді сақтау және дамыту мәселелерін шешу еліміздің мәдени, экономикалық және әлеуметтік дамуына үлкен әсер етеді. Бұл ең алдымен ұлттық бірегейлікті нығайтып, азаматтардың өз тарихы мен мәдениетіне деген қызығушылығын арттырады. Қасиетті нысандар – ғасырлар бойы қалыптасқан рухани құндылықтар мен дәстүрлерді жеткізуші ұрпақтар арасындағы байланыстырушы буын. Оларды сақтау патриотизмді, ата-бабалар мұрасына құрметпен қарауды және мәдени тамырларды сақтаудағы өз ролін сезінуді нығайтуға көмектеседі.

Киелі жерлерді танымал ету ішкі және халықаралық туристік ағындардың артуына да әкеледі. Туристер, қазақстандықтар да, шетелдіктер де бірегей ескерткіштерді ашады, бұл елге әлемдік аренада қызығушылықтың артуына ықпал етеді. Бұл өз кезегінде өңірлер үшін жаңа экономикалық мүмкіндіктер туғызады: инфрақұрылымды дамыту, жұмыс орындарын ашу, туристік қызметтен түсетін кірісті арттыру. Қасиетті нысандар орналасқан аумақтар саяхатшылар мен зияратшыларды тартатын орталыққа айнала отырып, жылдам дами алады.

Қорытынды

Қазақстандағы киелі орындар – өткеннің жәй ғана ескерткіштері емес, халықты шабыттандырып, біріктіретін мәдениеттің жанды бөлігі. Олар қазақ халқының рухани-мәдени болмысын қалыптастыруда маңызды рөл атқарып, ұлттық бірлікті нығайтуға үлес қосып, туризмді дамытудың маңызды ресурсы болып табылады. Бұл нысандарды сақтау және танымал ету мәдени дәстүрлерді нығайтудың бір жолы ғана емес, Қазақстан үшін киелі жерлерді сақтау және танымал ету – бұл тек туризм саласын дамыту ғана емес, сонымен бірге ұлттық бірегейлікті нығайтудың маңызды құралы. Киелі орындарды халықаралық деңгейде таныстыру арқылы елімізді әлемдік туристік картадағы ерекше бағыт ретінде көрсетуге мүмкіндік бар. Бұл бағытта экотуризм мен этнотуризмді де үйлестіру маңызды. Заманауи туристер табиғи сұлулықты рухани мұрамен ұштастыратын бағыттарға үлкен қызығушылық танытады, ал Қазақстан осы тұрғыда айтарлықтай артықшылықтарға ие. Сонымен қатар, бұл нысандарды сақтап, олардың инфрақұрылымын дамыту арқылы тек туристік ағынды арттырып қоймай, жергілікті тұрғындарға экономикалық тұрғыда жаңа мүмкіндіктер ашуға болады. Бұл – жұмыс орындарын құру, шағын және орта бизнесті дамыту, аймақтық инфрақұрылымды жақсарту деген сөз.

Дегенмен, бұл бағытта бізге бірқатар міндеттерді шешу қажет. Біріншіден, киелі орындарға қолжетімділікті жақсарту үшін жол және көлік инфрақұрылымын дамыту қажет. Екіншіден, туристер үшін сапалы қызмет көрсету жүйесін қалыптастыру маңызды. Үшіншіден, бұл нысандардың тарихи және мәдени маңыздылығын сақтай отырып, оларды шектен тыс коммерцияландырудан қорғау қажет. Қорытындылай келе, Қазақстанның киелі орындары елдің тарихымен, руханиятымен және болашағымен тығыз байланысты. Оларды сақтау мен насихаттау – мәдени дәстүрлерді нығайтудың және елімізді халықаралық деңгейде танымал етудің сенімді жолы. Қазақстанның бұл бай мұрасын дамыту – рухани, мәдени және экономикалық жаңғыруға жасалған маңызды қадам.

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Проблемные экологические ситуации в Казахстане

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На сегодня в Республике Казахстан сложилась непростая экологическая обстановка. Чтобы исправить ситуацию, правительство Казахстана разрабатывает методики оздоровления экосистемы страны, регулирует деятельность предприятий, обращается за помощью к международным и региональным организациям.

На протяжении многих десятилетий в Казахстане складывалась преимущественно сырьевая система природопользования с экстремально высокими техногенными нагрузками на окружающую среду. Это стало причиной не только возникновения, но и постоянного наращивания множества экологических проблем в нашей республике, оставшихся в виде тяжелого наследства. Наиболее остро в Казахстане на сегодняшний день стоят следующие экологические проблемы: промышленное загрязнение воздуха и почв; экологические проблемы водных ресурсов; радиоактивное, бактериологическое и химическое загрязнение; проблемы опустынивания; проблемы накопления промышленных и бытовых отходов.

Экологическая безопасность страны определяется степенью устойчивости экологического равновесия, защищенности общества от последствий чрезмерного стихийного (природного) и антропогенного воздействия на окружающую среду. Промышленное загрязнение вызывает озабоченность в промышленных городах Казахстана, где стареющие заводы перекачивают огромное количество нефilterованных загрязняющих веществ в воздух и грунтовые воды. Загрязнение воздуха происходит от металлургических заводов и предприятий, которые используют низкосортный уголь. Заводы по переработке цинка и свинца, а также заводы по переработке урана загрязнили города в восточном Казахстане. В некоторых крупных городах и промышленных центрах концентрации некоторых токсичных веществ, таких как пыль тяжелых металлов, диоксид серы, оксид углерода и некоторые другие, превышают предельно допустимые концентрации (ПДК) более чем в десятки раз.

Наиболее острые ситуации в городах Тараз, Темиртау, Алматы, Усть-Каменогорск, Шымкент и Балхаш. Концентрации загрязнителей в этих городах в пять-десять раз превышают пределы ПДК. Загрязнение воздушного бассейна так же связано с разработкой старых и освоением новых месторождений углеводородного сырья, что приводит к увеличению загрязнения атмосферы сероводородом и меркаптанами. Сжигание на факелах попутного газа сопровождается выбросами в атмосферу большого количества парниковых газов, оксидов серы и азота, вокруг месторождений формируется тепловой фон.

Воздух в регионах, где добываются полезные ископаемые, значительно загрязнен. Загрязнение также вызвано запуском ракет в космический центр Байконур. Промышленное загрязнение усугубляется масштабным химическим загрязнением, вызванным сельским

хозяйством. Различные химические вещества, используемые для защиты растений, дефолианты, пестициды и удобрения загрязняют окружающую среду и продукты питания.

Все это привело к тому, что сейчас в Казахстане остро стоит экологическая проблема, связанная с загрязнением воздушного пространства. На сегодняшний день большинство городов страны страдают от чрезмерно загрязненной атмосферы: в некоторых населенных пунктах показатель загрязнения воздуха превышает допустимую норму в 8–10 раз. Чистый воздух обнаружен только в Актау и Петропавловске. В городах Астана, Актобе, Усть-Каменогорск, Караганда, Балхаш, Жезказган последние 5 лет наблюдается стабильно высокое загрязнение воздуха. Доля выбросов вредных веществ промышленными предприятиями превышает 85%. Казахстан занимает 64-е место в рейтинге стран с худшим индексом загрязнения воздуха[1].

В 2020 году исследователи установили, что суммарно каждый год в воздух выбрасывается более 2,5 млн тонн отходов. Этот показатель ежегодно в среднем увеличивается на 100 тыс. тонн. Если не предпринимать никаких мер, то к 2030 году количество выбросов составит 3,6 млн тонн в год [2].

Для решения экологической проблемы загрязнения воздуха в Казахстане необходимо: сократить выбросы промышленных производств; установка современных очистительных систем снизит уровень выброса вредных веществ в атмосферу; уменьшить количество транспортных средств с двигателем внутреннего сгорания и улучшить очистку выхлопных газов посредством качественных фильтров; заменить автомобили с двигателем внутреннего сгорания на электромобили, которые не так вредны для атмосферы.

К 2025 году планируется реализация «дорожных карт», которые позволят снизить показатели загрязнения атмосферы в десяти городах с высокого до среднего. В ближайшие годы будет произведен комплекс мер, который позволит улучшить состояние не только воздуха, но и водоемов страны [3].

Одной из наиболее серьезных экологических проблем Казахстана стало истощение водных ресурсов. Большая часть водоснабжения Казахстана загрязнена промышленными и сельскохозяйственными стоками, а в некоторых местах радиоактивностью. На ухудшении экологической обстановки с водой сказались нижеперечисленные факторы.

Забор воды для орошения земель. Ранее население активно использовало речные и озерные воды, чтобы орошать поля хлопчатника. Люди делали это не только в пределах Казахстана, но и за его границами, в соседних странах, откуда начинаются реки.

Увеличение основных загрязняющих веществ в поверхностях воды: тяжелых металлов, фенолов, главных ионов солевого раствора, биогенных и органических соединений, взвешенных веществ.

Устаревшие канализационно-очистные сооружения.

Сегодня в Казахстане 33 водных объекта непригодны для использования.

Расширение масштабов потребления пресной воды привело к засолению и истощению природных водных источников. Одни из самых проблемных водоемов страны - Аральское море, озеро Балхаш и Каспийское море.

Катастрофическим стало обмеление Аральского моря, которое разделено пополам между Казахстаном и Узбекистаном. Аральское море сократилось до половины своего прежнего размера с начала 1960-х годов, когда советское правительство предприняло попытку увеличить урожайность хлопчатника в засушливых землях Центральной Азии. Чрезмерное орошение существенно уменьшило приток к Аралу, и береговая линия Арала начала быстро отступать. Это вызвало серьезные экологические проблемы в бассейне Аральского моря, включая разрушение среды обитания диких животных в результате опустынивания (процесс, в результате которого ранее обитаемая или пахотная земля становится пустыней). Кризис Аральского моря также связан с рядом проблем со здоровьем,

включая респираторные инфекции и паразитарные заболевания. Аральское море сейчас на грани исчезновения из-за возведенных водохранилищ. Их строили для энергетической индустрии, водного транспорта, сельскохозяйственного производства, водоснабжения крупных предприятий и населенных пунктов, организации зон отдыха и туризма. Подобная деятельность привела страну к таким последствиям: развитие оползней; изменение общей биологической продуктивности; неблагоприятные условия для размножения рыб; просадка и разрушение берегов; заболачивание почвы; увеличение в 14 раз концентрации солей; уменьшение площади и объема моря; наполнение водных пространств ядовитыми веществами; снижение уровня грунтовых вод, из-за чего плодородные земли превратились в пустыни; гибель зеленых оазисов, что стало причиной исчезновения некоторых видов птиц и животных[4].

Озеро Балхаш – крупнейшее озеро Казахстана и Центральной Азии – загрязнено медеплавильными заводами. С ним происходят подобные проблемы: оно начало терять свои объемы. Также угрожает озеру Балхаш значительное обмеление, его западная часть может полностью высохнуть, а восточная часть может превратиться в соленую землю. В озерных водах выявлена высокая концентрация солей, обнаружены диоксид серы, тяжелые металлы и ядовитая пыль. Присутствует проблема сильного обмеления и нерационального использования воды.

Каспийское море с каждым годом теряет способность самоочищаться. Ухудшает экологическую обстановку добыча нефтересурсов.

Чтобы решить экологическую проблему загрязнения водных ресурсов Казахстана и достичь желаемых результатов, понадобятся годы слаженной работы правительства и всего народа.

Следует предпринять такие действия: Уменьшить использование воды для орошения, а также перейти на выращивание менее требовательных культур. Наладить сотрудничество с соседними странами для восстановления Аральского моря, озера Балхаш и Каспийского моря. Рационально использовать имеющиеся водные запасы, отдавая часть на восстановления экосистемы. Министерство экологии Казахстана уже начало предпринимать активные действия. До 2025 года построят 8 водохранилищ, нацеленных на управление водными ресурсами. С 2025 по 2030 года планируется еще 31 новое водохранилище.

Огромную проблему экологической безопасности страны представляют радиоактивное загрязнение, его источники подразделяются на пять основных групп:

1. Территории, загрязненные в результате испытаний ядерного оружия;
2. Отходы неработающих предприятий уранодобывающей и перерабатывающей промышленности (урановых рудников, самоизливающиеся скважины);
3. Демонтированное оборудование технологических линий;
4. Отходы нефтедобывающей промышленности и нефтяного оборудования;
5. Отходы, образовавшиеся в результате работы ядерных реакторов, и радиоизотопная продукция (отработанные источники ионизирующего излучения).

Экологическую обстановку ухудшают производственные отходы, захламление мест отдыха и радиоактивное заражение. Последняя проблема связана с испытанием атомного оружия на Семипалатинском полигоне.

Ядерные испытания, проводившиеся сорок лет, с 1949 по 1989 годы, на Семипалатинском ядерном полигоне, привели к заражению огромной территории в Центральном и Восточном Казахстане. Радиационный фон Республики Казахстан повышается также в результате образования озоновых дыр при запуске космических кораблей на космодроме Байконур. Реальную угрозу представляют упавшие и падающие на землю фрагменты ракет, разлив высокотоксичного топлива и другие факторы, оказывающие

негативное воздействие на окружающую среду и проживающие в непосредственной близости население. Поскольку в решении ряда задач космическим средствам нет альтернативы, то снижение воздействия ракетно-космической деятельности на окружающую среду и здоровье населения, обеспечение экологической безопасности ракетно-космических комплексов приобретают все большую актуальность.

В республике имеются 6 крупных ураноносных провинций, множество мелких месторождений и рудопоявлений урана, которые обуславливают повышенный уровень естественной радиоактивности, отходы, накопленные на уранодобывающих предприятиях, и в местах проведения ядерных взрывов. Комплексное решение проблемы радиоактивного загрязнения должно включать создание специализированной организации по переработке и захоронению радиоактивных отходов. Борьба с радиоактивным загрязнением среды может носить лишь предупредительный характер, поскольку не существует никаких способов биологического разложения и других механизмов, позволяющих нейтрализовать этот вид заражения природной среды.

Для того, чтобы решить экологическую проблему загрязнения земельных ресурсов Казахстана следует проводить восстановление и оздоровление земельных почв, увеличить штрафы за выброс мусора в неположенных местах. Необходимы меры по переработке и утилизации мусора. В этом случае поможет строительство мусороперерабатывающего завода.

Необходима рекультивация земель, которая включает такие меры:

Создание зон для отдыха и занятия спортом, турбаз и прочего.

Подготовка земельных участков для засаживания лесов и воссоздания сельских угодий.

Проведение санитарно-гигиенических мероприятий на непригодных к использованию участках.

Правительство Казахстана обратилось к ООН, чтобы разработать Программу реабилитации Семипалатинского региона. В нее входят комплексные меры, которые нацелены на исследование последствий испытаний ядерного оружия и гуманитарную помощь проживающим вблизи радиоактивной зоны. В свою очередь Ассамблея ООН приняла резолюцию по реабилитации Семипалатинского региона. Рекультивация земли касается военных полигонов, космодрома Байконур и пусковых площадок. На местах, где планируются запуски ракетных носителей, наблюдается чрезмерное скопление строительного мусора и захламление топливом всех видов[5].

На сегодняшний день, остро стоит проблема накопления промышленных и бытовых отходов.

В Республике Казахстан отсутствует государственная система управления отходами, включающая мониторинг, хранение, переработку и утилизацию промышленных и бытовых отходов. На сегодняшний день, в Казахстане накоплено более 20 млрд. тонн отходов производства и потребления. При этом идет непрерывная тенденция их увеличения. Промышленные отходы, в том числе и токсичные, раскладываются и хранятся в различных накопителях, зачастую без соблюдения соответствующих экологических норм и требований. В результате этого, почва, а также подземные и поверхностные воды многих регионов подвержены интенсивному загрязнению. Основная масса ТБО без разделения на компоненты вывозится и складировается на открытых свалках, 97% которых не соответствует природоохранному и санитарному законодательству Республики Казахстан. Их размещение и устройство осуществляются без проектов оценки воздействия на окружающую среду. При этом, только около 5 % ТБО в Казахстане подвергаются утилизации и сжиганию[6].

Экология Казахстана требует разрешения наиболее острых вопросов. Выделяют несколько путей их решения. Самостоятельно все вопросы не решить. Необходимо участие

всех сопредельных государств и всего мирового сообщества. Прежде всего решаться вопросы должны на государственном уровне. Это принятие законов, законодательных актов, направленных на охрану среды.

Воду из рек забирают не только в Казахстане, но и в других соседних государствах. Отходы в водоёмы возвращают тоже все страны. И решаться вопрос с очистными сооружениями должен сообща. В целях оздоровления земельных ресурсов нужна рекультивация земель на месте полигона.

Для защиты атмосферы целесообразно использовать современные очистные сооружения.

Подводя итог прошлому и глядя в будущее, признавая достижения цивилизации, человечество не может не осознавать глобальность экологических проблем и не планировать свою деятельность с учетом необходимости их решения и продвижения по пути устойчивого развития. Необходимо и дальше использовать мировой опыт по решению экологических проблем Казахстана, анализировать происходящие изменения и на основании их делать соответствующие выводы.

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ANALYSIS OF THE EXPERIENCE OF FOREIGN COUNTRIES IN FORMING AND MAINTAINING A CORPORATE CULTURE AIMED AT INCREASING EFFICIENCY

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Abstract. The concept of "corporate culture" originated in developed countries and has become deeply embedded in modern company management. Key elements of corporate culture include relationships among people, employee loyalty levels, and established traditions. It encompasses a set of shared views, behaviors, emotions, interactions, and business processes that give a company its unique character. Top management in companies like APPLE, MICROSOFT, INTEL, and DELL adheres to the management concept of "corporation as a community" rather than "corporation as a machine." Communities, rather than mechanical systems, have driven rapid advancements in the electronics and high-tech sectors of American companies. When discussing corporate culture, it is important to highlight HR policies as a management tool that recreates specific approaches to recruiting and selecting personnel, forming qualitative requirements for employees' personal and professional characteristics. The requirements for a sought-after candidate are dictated by the company's corporate culture, value orientations, ethical restrictions, and national mentality characteristics. Strategically oriented top managers of successful companies classify corporate culture as a significant strategic tool that aligns employees and groups with common goals and values, engages the team in effective interaction, and ensures loyalty to the cause and the company.

Keywords: corporate culture, HR policy, values, effective interaction, co-operation, interviewing, responsibility interaction, co-operation, interview, responsibility.

Introduction. Applying this understanding to the experiences in China and Kazakhstan, both countries have seen a growing emphasis on developing corporate cultures that reflect their unique social and cultural contexts. In China, the integration of traditional values with modern business practices has been key, while in Kazakhstan, corporate culture often incorporates elements of the nation's rich heritage and collective ethos, promoting loyalty and effective teamwork among employees. These approaches are helping firms in both countries compete effectively on the global stage. The concept of "corporate culture" has firmly established itself in modern management practices, becoming an essential condition for successful company operations, a foundation for dynamic growth, and a guarantee of striving for improved efficiency. This concept originated in developed countries in the 20th century, driven by the need to regulate internal company relations and understand their role and place in trade, industrial, and economic interactions.

Table 1 presents the most common definitions of corporate culture in the context of its diverse characteristics within companies. Despite the numerous definitions of corporate (organizational) culture, they largely converge. Most interpretations reference the basic beliefs upheld by company personnel. These beliefs relate to the perception of the surrounding environment (groups, the company itself, society, the world) and its influencing variables (nature,

time, work, relationships, etc.). Based on these aspects, corporate culture can be defined as a set of fundamental values, beliefs, agreements, and norms understood and accepted by all company members. Essentially, it follows the formula: shared values – beneficial relationships and cooperation – responsible organizational behavior. The structure of values and assumptions about the internal environment is understood through interaction with external and internal challenges, aiding in survival and success in a competitive landscape. Relationships and cooperation are formed through the interaction of individuals and groups, based on values (or value orientations). Values guide employees and groups towards effective (acceptable) behavior. For instance, in some companies, client behavior is deemed legitimate, hence the client cannot influence the company's operational errors. Accepted values help employees understand how to act in specific situations.

The process of forming corporate culture is interesting for companies due to its ability to regulate employee behavioral relationships within the context of company-specific values, which may not always be prioritized by society at large. By examining the experience of both China and Kazakhstan, we can see that the concept of corporate culture has been adapted and developed to fit their unique socio-cultural landscapes. In China, corporate culture often integrates traditional values with modern business practices, whereas in Kazakhstan, it incorporates elements of the country's rich cultural heritage, promoting employee loyalty and effective teamwork. These approaches contribute to enhancing competitiveness and achieving success in the global market.

Materials and methods.

Table 1 - Definitions of the concept of corporate culture

Type	Description	Author and source
Recurrent Behavior Patterns	Language, respect, and established manners	A.Y. Kibanov, Fundamentals of Personnel Management
Dominant Values	Values strengthened within the organization	T.A. Lapina, Corporate Culture
Group Norms	Group norms	Z.P. Rumyantseva, N.A. Salomatin, Management of Organizations
Organizational Philosophy	Philosophy defining the organization's policy	V.S. Lipatov, Personnel Management of Enterprises and Organizations
Rules and Skills	Rules of the game initiated by the company, skills and methods new employees must learn to fit into the organization	T.N. Persikova, Intercultural Communication and Corporate Culture
Spiritual and Material Values	Complex of spiritual and material values, images inherent to the company, defining its individuality and self-awareness in the social and material environment, reflecting on people's behavior and interactions	T.A. Akimova, Theory of Organization
Note - Compiled by the author on the basis of [1-8]		

Many companies have specific codes or rules that promote their own value orientations. These values are often fixed through real myths, historical facts, and established legends.

Throughout the company's lifecycle, these myths and legends are retold and interpreted, often resonating more with employees than the values described in company brochures. Key aspects of corporate culture are not unknown. For instance, similar to Douglas McGregor's popular "Theory X and Theory Y," William Ouchi developed "Theory Z," which emphasizes symbols, ceremonies, and myths that shape employees' worldviews. Renowned anthropologist Margaret Mead explores corporate culture through understanding behavioral aspects and transmitting them to new organization members [3]. The core elements of corporate culture include interpersonal relationships, employee loyalty levels, and established traditions that embed the company's internal environment. Corporate culture encompasses shared views, behaviors, emotions, interactions, and business process methods that give a company its unique "color." Identification of corporate culture can be achieved through Cameron and Quinn's framework, which categorizes it into four types: clan, adhocracy, hierarchy, and market.

Table 2 - Types of Corporate Culture:

1.	Clan Culture:
○	Essence: Organization as a family. Leaders act as mentors or parents.
○	Foundation: Loyalty, tradition, personal development, cohesion, and a positive moral climate.
○	Relationships: Hospitality towards consumers, respect for people, teamwork, inclusion in business, and compromise.
○	Leadership: People and process-oriented (facilitator); caring and participative (mentor).
2.	Adhocracy Culture:
○	Essence: Dynamic entrepreneurship, creativity, and risk-taking.
○	Foundation: Commitment to experimentation and innovation, focus on acquiring innovative resources, producing unique and new products/services, personal initiative, and freedom.
○	Leadership: Foresight (innovator); forward-thinking (visionary).
3.	Hierarchical (Bureaucratic) Culture:
○	Essence: Formalized and structured organization managed by procedures.
○	Foundation: Written rules, organizational policy, stability, goal-oriented performance, job security, and long-term predictability.
○	Leadership:
▪	Expert (instructor): Detail-oriented and competent. Influence through information management.
▪	Coordinator: Ensures stability, regulation, and control.
4.	Market Culture:
○	Essence: Task-oriented organization.
○	Foundation: High reputation and success, actions that bring benefits, solving complex tasks, achieving goals, penetrating new markets, and capturing new niches.
○	Leadership: Task and goal-oriented (fighter), decision-making (decisive).
Note - Compiled by the author on the basis of [1-8]	

Criteria for organizational values: flexibility, stability, internal focus and integration, external focus and differentiation.

In China and Kazakhstan, corporate culture has been shaped by their unique socio-cultural contexts. In China, the integration of traditional values with modern business practices is key, while in Kazakhstan, corporate culture incorporates elements of the nation's heritage, promoting loyalty and effective teamwork among employees. These approaches help firms in both countries

compete effectively on the global stage. Many researchers note the emergence of a new management culture, replacing the old rigid, hierarchical "mechanistic" organization with a modern approach based on corporate values, where individual human character is key to success. Top management in companies like APPLE, MICROSOFT, INTEL, and DELL embraces the management concept of the "corporation as a community" and avoids the "corporation as a machine" approach. For example, Bill Gates cultivated a type of management culture in his company that he considered the only viable one: "Corporate culture creates a comfortable atmosphere for realizing each employee's potential and creative initiative. Despite Microsoft being a large company with vast resources, it maintains a structure of dynamic small groups where everyone feels significant. Ideas are generated by specific individuals, and the company is focused on bringing creative initiatives to fruition." It is communities, not "mechanism" systems, that have driven rapid advancement in the electronics and high-tech sectors of American companies.

Discussing corporate culture, it's essential to highlight HR policies as a management tool. Interviews with leading recruitment agencies and executives of major foreign companies operating in the Kazakh market reveal much about the role of corporate culture. Specifically, from unique approaches to recruiting and selecting personnel to forming quality requirements for employees' personal and professional characteristics, dictated by the company's distinctive corporate culture, value orientations, ethical constraints, and the national mentality's peculiarities [9]. Drawing on experiences from both China and Kazakhstan, it is evident that the concept of corporate culture has been tailored to fit their unique socio-cultural landscapes. In China, integrating traditional values with modern business practices is key, while in Kazakhstan, corporate culture often incorporates elements of the nation's rich cultural heritage, promoting loyalty and effective teamwork among employees. These approaches are helping firms in both countries to compete effectively on the global stage.

Results and discussion. Recruitment practices also have their own specifics. For instance, European (UK, Germany) and American companies recruit employees through recruitment agencies, job advertisements in newspapers, and by independently reviewing resumes. The interview process in foreign companies is very thorough. In addition to standard requirements such as higher education, foreign language proficiency, and work experience, there are specific requirements for the psychological profile of the candidate and their desire to work for a particular company. Germans typically prefer professional, serious, and meticulous individuals, while the French and Italians favor friendly and sociable employees. Japanese and other Eastern companies value loyalty, manageability, conflict-free behavior, and collectivism, in addition to professionalism. The authors conducted a study of the corporate culture at Danone, which is positioned as the No. 1 company globally in producing and selling fresh dairy products. Danone's brand has existed since 1919 and has a 100-year history. Today, the company operates in 180 countries and employs over 100,000 people. The modern Danone group was founded in 1972 with its headquarters in Paris. Despite having a clear hierarchical structure, major operational decisions are made at the country level. The company encourages the production of products specific to local markets, such as ayran and tan in Kazakhstan. The regional office in Almaty operates not only locally but also covers Kyrgyzstan and Uzbekistan, with plans to expand to Turkmenistan. The management, consisting partly of expatriates, is interested in the tradition of consuming fermented dairy products in the region. However, the 13 kg of consumed fermented dairy products in Kazakhstan, the global average, does not compare to countries like Spain or France, where consumption reaches 30–40 kg per year. Danone's corporate culture is built on the company's values: H.O.P.E., which stands for Humanism, Openness, Proximity, and Enthusiasm. These values are influenced by the company's French roots and international management in Kazakhstan. The "Danonization" program is implemented in every country where the company

operates. Distribution managers in France have the same rights to social benefits, health insurance, and opportunities for training and development as plant operators in Kazakhstan.

Key company values include openness and equality, friendliness, and warmth. Humanism is inherent in the company, evident in social projects directed at children. Each year, social benefits are improved, and new programs are launched, providing employees with a sense of care and fostering high loyalty. Employee training is given significant importance through the "Onelearning a day" principle. The management is keen to develop each employee, increasing productivity by setting specific goals and encouraging their daily achievements. Personal development is also emphasized, including learning English, Excel, and presentation skills, along with cross-functional projects based on networking and coaching. The company has an internal e-learning portal with training materials, video content, and assignments for self-study accessible to all employees. Organizing leisure activities is a crucial part of implementing the corporate culture at Danone. Activities include establishing a cinema club at the central office, holding emotional intelligence development sessions, global Danone Football Competitions, and themed events like New Year, 365 days without accidents, and Milk Day. The primary slogan for Danone employees is to do more than what is required, which is a key to success. This attitude towards work is recognized and appreciated by the management. Research shows that modern companies rarely fit into a specific type of corporate culture identification. There is often a unique blend characteristic of different types. Danone's corporate culture, for example, is viewed as a combination of clan and adhocracy cultures, with elements of hierarchical and market types also present. In the context of China and Kazakhstan, both countries have tailored corporate culture to fit their unique socio-cultural landscapes. In China, traditional values are integrated with modern business practices, while in Kazakhstan, corporate culture incorporates elements of the country's rich heritage, promoting employee loyalty and effective teamwork. These approaches contribute to enhancing competitiveness and achieving success in the global market.

Conclusion. Thus, human resource policies are a fundamental component of corporate culture in Europe, Asia, and America. However, these policies need to be invigorated and "brought to life" by the corporate culture, becoming the emotional spirit of all employees. When staff and top management clearly understand the logic, usefulness, and consistency of HR policies, the company can transform these policies into a key aspect of its corporate culture. Strategically oriented top managers of successful companies classify corporate culture as a significant strategic tool. This tool aligns employees and company groups with shared goals and value settings, engaging the team in effective interaction and ensuring loyalty to the company's mission and goals. In the context of China and Kazakhstan, corporate culture has been adapted to their unique socio-cultural landscapes. In China, the integration of traditional values with modern business practices has been key. The development of creative cultural brands in China is a testament to this approach, reflecting a balance between innovation and cultural heritage. Meanwhile, in Kazakhstan, corporate culture often incorporates elements of the nation's rich cultural heritage, promoting loyalty and effective teamwork among employees. These approaches help firms in both countries to compete effectively on the global stage.

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TECHNOLOGY, METHODOLOGY, AND THE ORGANIZATION'S STRATEGY IMPLEMENTATION PROCESS

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ABSTRACT

The topic "Technology, methodology and the process of implementing an organization's strategy" explores the key aspects of an effective transition from strategic planning to the actual implementation of the strategy.

The foundation for the organization's long-term growth and competitiveness in the current environment of rapidly evolving markets and technical advancements is the effective execution of the plan. The significance of this procedure stems from the reality that without successful execution, even the most ambitious and sensible strategic plans will not provide the intended outcomes.

The necessity for firms to create and execute adaptable and successful strategies that can be adjusted to changes in the external environment and internal issues makes the topic pertinent. Organizations must not only create plans but also make sure they are really implemented at all levels in an environment of intense competition and ongoing innovation.

Deepening understanding of the mechanisms of strategy execution, elucidating conceptual and methodological methods, and examining different models and tools utilized to accomplish strategic goals are all areas in which the research has theoretical relevance. Systematizing theoretical data on how organizational structure, leadership, and corporate culture affect the process of implementing a strategy is a crucial component.

The creation of suggestions and methodological techniques for practitioners to assist businesses in better managing the strategy implementation process is where the work's practical importance resides. This include determining best practices, creating tools to track and assess how strategic initiatives are being carried out, and creating systems for modifying the plan in response to environmental shifts.

As a result, research on this subject enables a substantial addition to strategic management theory and practice, which enhances organizational effectiveness in times of uncertainty and rapid change.

KEYWORDS: strategy implementation technology, strategic management methodology, strategy implementation process, strategic planning, change management, corporate culture, strategy leadership

Modern firms must not only create good strategies but also successfully implement them in the face of globalization, fast technological development, and intense competition. An integrated approach to the implementation and achievement of the established goals is necessary for strategic management, a crucial function that ensures a business's sustainability and

competitiveness. Since many organizations encounter challenges during the implementation stage of strategies, even when they are valid and well-planned, the topic of "Technology, methodology and the process of implementing an organization's strategy" is becoming more and more pertinent in contemporary scientific and practical research. In the scientific literature, there are many works devoted to the implementation of the strategy, which offer various theoretical approaches and practical recommendations. The strategy's execution is the subject of numerous studies in the scientific literature that provide a range of theoretical perspectives and useful suggestions. D. Herhausen focuses on the flexibility and dynamism of strategic management processes, emphasizing the significance of adjusting the strategy to changes in the external environment[1].

P Bubenik., in the study proposes to consider the implementation of the strategy as a continuous process, including both long-term and short-term goals, which must be clearly coordinated and constantly adjusted depending on changes in internal and external factors. An important element of the strategy's implementation is the organization's ability to manage change and resilience to external crisis situations.

Current studies also concentrate on how leadership and company culture contribute to the strategy's effective execution. Leadership, according to R. Awashreh, is one of the decisive factors affecting the ability of an organization to translate strategic goals into reality. Understanding how a leader influences the motivation of staff and their commitment to corporate strategy is essential to improve the effectiveness of implementation[3].

Analysis of methodological methods to strategy implementation is ongoing as well. Numerous writers present a thorough method that makes use of a number of instruments, including risk assessment, SWOT analysis, and PEST analysis. The challenge of integrating technologies into the organization's day-to-day operations and guaranteeing their adaptability in use, however, persists despite their accessibility.

The significance of digitalization and innovation potential in the strategy's execution has also been emphasized by recent studies. Organizational digital transformation models are becoming a crucial component of strategic management. In a world that is changing quickly, you may make quick modifications and boost the organization's level of adaptability by using digital technologies and big data to track how the strategy is being implemented[4].

As a result, the literature evaluation demonstrates that even with the diversity of approaches to strategy implementation, there are still unresolved issues with actual strategy implementation and adaptation in uncertain situations, which call for more study. The issues of flexibility, resilience to change, effective leadership and the use of digital technologies in the implementation of the strategy require further analysis and the development of new methodological solutions, which determines the relevance of the research topic.

Within the framework of the research topic, two main methods can be identified that will allow a deeper understanding of the strategy implementation process and evaluate its effectiveness:

The method of the case stage consists in an in-depth analysis of specific examples (cases) from the practice of the organization that have been subjected to the implementation of strategies. This method allows you to study the process of implementing the strategy in practice, identify key success and failure factors, and analyze the methods and tools used(Table 1). Within the framework of this study, examples of both successful and unsuccessful strategy implementations can be considered in order to identify common patterns and recommendations for improving strategic management practices.

The use of this method allows you to

to study practical examples of strategy implementation in different industries. Analyze strategic decisions and their impact on the organization.

To assess the impact of corporate culture, leadership and external factors on the implementation process.

This method allows for a deeper understanding of the real difficulties and challenges faced by organizations when implementing strategies, as well as identifying successful practices and approaches.

The second Method, the expert interview method, involves collecting qualitative data through conversations with key specialists, managers, consultants and other experts in the field of strategic management. Interviews allow you to identify subjective opinions about the processes of strategy implementation, approaches, tools and methods that are used in organizations to achieve strategic goals. It also helps to understand how various external and internal factors affect the success of the strategy.

This method provides high-quality and valuable data that helps to understand the underlying causes of success or failure in the implementation of the strategy, as well as to identify hidden problems and possible solutions. Both methods together make it possible to comprehensively investigate the process of implementing the strategy and offer recommendations for its improvement, based on practical experience and expert assessments.

Table 1. Famous brands and their strategies

Brand	Strategy	Implementation Process	Conclusions
Apple	Innovation and digital transformation	- Development of products such as iPhone, iPad, Apple Watch. - Creation of a product and service ecosystem (App Store, Apple Music, iCloud). - Use of digital technologies for marketing.	Successful implementation of an innovation strategy and unique user experience to maintain competitiveness.
Kodak	Dominance strategy in the traditional photographic products market	- Investments in traditional film and printing methods. - Late entry into the digital camera market. - Ignoring the rise of digital technologies.	The importance of timely adapting strategies to technological changes, which led to the decline of the brand due to a lack of response to external changes.

Tesla	Sustainable innovation and sustainable development strategy	- Development of electric vehicles with innovations (autopilot, charging stations). - Introduction of models for the mass market. - Development of battery technologies and renewable energy.	Success through combining sustainable innovations and advanced technologies, which allowed Tesla to become a leader in the electric vehicle market.
McDonald's	Globalization strategy with product and marketing localization	- Adapting the menu to cultural preferences in different countries (e.g., vegetarian dishes in India). - Use of digital kiosks and mobile apps. - Self-service restaurant formats.	The "Think global, act local" strategy enables successful competition in international markets while respecting local preferences.

The source was compiled by the author based on the data [5-8]

For the method of expert interviews, examples of well-known specialists whose views and experience have a significant impact in the field of strategic management and strategy implementation were considered:

Jack Ma Is The Founder Of Alibaba Group. Jack Ma is known for his approach to implementing the strategy of digital transformation and globalization. When he created Alibaba, he focused on supporting small and medium-sized businesses through e-commerce technologies. His strategy included:

The development of digital platforms such as Taobao and Tmall.

Investing in financial technology through Alipay.

Expansion into international markets, including the creation of logistics infrastructure. Elon Musk – CEO of Tesla and SpaceX. Elon Musk has implemented successful strategies in high-tech and innovative industries, focusing on sustainable innovation. His key achievements are in the development and production of electric vehicles at Tesla, which have become massively popular. The creation of SpaceX in order to reduce the cost of space travel and promote the idea of interplanetary colonization. Integration of technological solutions such as autopilot and solar panels.

The combined use of these methods made it possible not only to study successful practices and mistakes in the implementation of strategies, but also to obtain extensive information from experts. This approach provides both a theoretical and practical understanding of the strategy implementation process, which is especially important for developing recommendations applicable in various organizational and industry contexts. The case-stage method allows you to deeply analyze specific examples from the practice of companies, identifying patterns, best practices and mistakes. And the expert interview method provides high-quality data based on the experience of leaders and specialists who make key decisions in companies.

A crucial component of strategic management is the study of technology, approaches, and procedures for carrying out an organization's plan. This helps businesses become more competitive and flexible in a changing external environment. You can thoroughly examine many facets of strategy implementation, including real-world instances, obstacles, and best practices, by using techniques like the case stage and expert interviews.

The case-stage method makes it possible to deeply analyze successful and unsuccessful examples of strategic activities of organizations, identify cause-and-effect relationships and form a set of tools applicable in similar situations. In turn, the method of expert interviews allows you to get valuable information firsthand, based on the experience and knowledge of specialists, which is especially important for studying complex or poorly studied aspects.

When these methods are applied together, a holistic picture of the strategy implementation process is created, success factors are identified and implementation recommendations are developed. The results of this study are important from a theoretical and practical point of view, as they can be applied to improve corporate procedures, establish strategic management and train staff on how to solve management issues and implement plans.

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FINANCIAL MANAGEMENT INNOVATIONS: ISSUES WITH MEASUREMENT AND COMPANY INTELLECTUAL CAPITAL

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ABSTRACT

In modern financial management conditions, innovations related to the use of intellectual capital are becoming increasingly important. The problems of measuring and evaluating this resource remain one of the key obstacles to the introduction of innovative financial technologies. The relevance of the topic is due to the need to increase the competitiveness of companies, which requires the use of methods of analysis and evaluation of intangible assets, such as knowledge, competencies and business reputation. The article examines modern approaches to intellectual capital management, as well as the problems that arise when integrating it into the corporate finance system. Special attention is paid to the development of methods for measuring and evaluating the effectiveness of the use of intellectual capital in the context of the digitalization of the economy.

KEYWORDS: innovations in financial management, intellectual capital, measurement of intellectual capital, corporate finance, intangible assets, digitalization of the economy.

Financial management is evolving from a tool for managing cash flows to a crucial component of the company's strategic growth in the face of a fast shifting economic environment and heightened competition in the global market. The conventional method of managing material assets has recently given way to a greater understanding of the worth of intangible resources like intellectual capital. This enables the business to employ internal knowledge and cutting-edge technologies to generate sustainable growth in addition to adapting to shifting environment.

Nevertheless, there are numerous obstacles to measuring and incorporating intellectual capital into a business's financial plan, even when its significance for an organization is evident.

One of the key difficulties is the lack of uniform standards and methodologies for evaluating intellectual assets, which makes it difficult to implement them in the financial decision-making process. In the context of the digitalization of the economy, when data and innovative technologies become the most important sources of competitive advantages, the issues of optimization and analysis of intellectual capital become particularly relevant[1].

With the development of the theory of intellectual capital, several key approaches to its study and evaluation are highlighted in the scientific literature. One of the first in this field was S. Stewart, who defined intellectual capital as a set of knowledge, skills and experience that can be used to create economic value[2]. He identified three main components of intellectual capital: human, structural and client capital[3].

The works of Rehman S. U. consider the role of intellectual capital in strategic management and its impact on the competitiveness of an organization. For the successful functioning of a company in a globalized environment, it is important not only to use intellectual capital, but also

to measure it correctly, which allows you to identify the weaknesses and strengths of the organization[4].

In particular, the famous scientist F. Alvino proposed a system of indicators that allows you to evaluate intellectual capital taking into account its impact on the financial results of the company[5]. However, despite the existence of many models, there is still no single methodology that would effectively measure all components of intellectual capital, including its impact on financial performance.

An important aspect of research is also the impact of digital technologies on intellectual capital management processes. Modern approaches to financial management increasingly include elements of artificial intelligence, big data and blockchain technologies, which, on the one hand, expands the possibilities for optimizing processes, and on the other hand, requires a revision of approaches to the valuation of intangible assets.

Thus, despite significant progress in the theory and practice of intellectual capital management, there are a number of problems related to its measurement and integration into the company's financial strategy. These issues require further research and the development of more accurate and effective methods for assessing intangible assets, which is an important task for modern scientific research in the field of finance and management.

To study the problem of measuring and managing intellectual capital in the context of innovations in financial management, it is assumed to use two methods: qualitative analysis and the method of multi-criteria assessment.

The qualitative method will allow us to explore the conceptual aspects of intellectual capital, as well as identify theoretical and practical problems related to its assessment and use in corporate finance. This method includes an analysis of existing scientific sources, regulatory documents, as well as interviews with experts in the field of finance and intellectual capital management.

The main purpose of the qualitative analysis will be to identify current approaches to intellectual capital management, analyze existing methods and models for evaluating intangible assets, as well as identify factors that make it difficult to integrate intellectual capital into the corporate finance system. This method will be useful for forming a theoretical basis for research, as well as for identifying possible gaps in the practice of financial management of companies. And the Multi-criteria assessment (MCO) method will be used to analyze and evaluate the effectiveness of the use of intellectual capital in various organizations. This method allows you to take into account several factors at the same time, which is important when evaluating intangible assets that can affect financial results, but do not always have explicit quantitative indicators. The use of the ICO will allow the formation of a system of indicators that can serve as the basis for a comprehensive assessment of intellectual capital. To do this, criteria such as innovation activity, the level of knowledge and competencies of the staff, the degree of integration of intellectual assets into the corporate culture and strategy of the company, as well as the impact of these factors on the financial results of the organization will be determined. The MKO method will provide an opportunity for a comprehensive assessment of various components of intellectual capital, which will allow us to identify which aspects of intellectual capital most effectively affect the financial stability and competitiveness of a company in the context of digitalization. Together, both methods will allow for a more complete understanding of the problems of measuring and managing intellectual capital, as well as suggest possible ways to solve them within the framework of an innovative approach to financial management.

Within the framework of the study, using qualitative analysis and the method of multi-criteria assessment (MKO), several well-known companies that successfully use intellectual capital to improve their financial performance and introduce innovations in management were considered. In particular, examples from organizations such as Apple and Siemens were analyzed.

Apple's strategy makes active use of intellectual capital, emphasizing both strong structural capital (brand, innovative products, R&D infrastructure) and human capital (e.g., design and engineering talents). Nevertheless, the business has trouble evaluating intangible assets, such the effect of corporate culture on branding and product perception in the marketplace, even with large investments in R&D[6].

The most crucial factors for Apple, according to the MKO technique, are innovation activity, product distinctiveness, and the company's capacity to safeguard its innovations through patents and trademarks. These elements of Apple's intellectual property give it a long-term competitive edge, which supports its continuously strong financial performance, including more sales and happier customers.

Siemens makes active use of intellectual capital to create innovative technologies in the energy, healthcare, and automation sectors[7]. In contrast to more technologically sophisticated firms like Google, Siemens prioritizes a long-term innovation strategy involving human capital (technical and engineering expertise) and close collaboration with academic and scientific organizations. The assessment of research and development's contribution to long-term financial profit is one of the issues with calculating Siemens' intellectual capital[8].

The degree of innovation activity in the energy and automation sectors, the extent to which intellectual assets are integrated into long-term projects and partnerships, and the influence on financial results through increased profitability from new technologies were all revealed by Siemens' analysis using MKO. Siemens' competitiveness in the global market is bolstered by a high level of intellectual capital, particularly through scientific research and collaboration with academic institutions, as evidenced by steady financial development.

The application of qualitative analysis and MKO methods to these companies has shown that intellectual capital has a significant impact on financial results, although the integration of intangible assets into financial statements and their quantification remain difficult tasks. At Apple, high-quality innovation, supported by strong human and structural capital, ensures sustainable financial development. However, despite this, both companies face the problem of accurately measuring intangible assets and their impact on profits. At Siemens, the key aspects of intellectual capital are long-term scientific developments and industrial innovations, which also have a positive impact on the company's financial results.

The inability to use data for efficient planning and financial decision-making due to the lack of a universal methodology for evaluating intellectual capital and the high costs associated with integrating digital technologies—which are essential for more precise measurement and accounting of intellectual assets—are common challenges faced by all of these businesses.

Companies must therefore create more precise techniques for quantifying and incorporating intangible assets into financial statements, even in the face of successful utilization of intellectual capital.

Several important conclusions can be made from the investigation of the issue of assessing and managing intellectual capital in light of advancements in financial management.

The most crucial strategic resource for contemporary businesses is intellectual capital, which includes customer, structural, and human capital. It significantly affects an organization's financial performance, innovative activity, and competitiveness. The importance of intellectual capital in corporate governance is only increasing in the context of economic globalization and digitization, particularly in industries like technology, manufacturing, and services.

One of the main problems identified in the course of the study is the lack of universal methods for measuring and evaluating intellectual capital. Traditional financial metrics may not always adequately reflect the contribution of intangible assets to the value and results of a company. This creates difficulties for both companies and investors seeking to accurately assess the effectiveness of the use of intellectual capital.

For the effective use of intellectual capital in financial management, it is necessary to develop new approaches and methods of its assessment. This may include the creation of integrated models that take into account both traditional financial indicators and intangible assets such as knowledge, innovation and brand. The application of the multi-criteria assessment (MCO) method shows that it is possible to evaluate various components of intellectual capital through indicators such as the level of innovation activity, employee qualifications and customer engagement, which allows you to more accurately link intellectual assets with financial results.

The introduction of digital technologies such as artificial intelligence, blockchain and big data analytics opens up new opportunities for managing and measuring intellectual capital. However, it also requires significant investments and the availability of highly qualified specialists. Digitalization makes it possible to improve decision-making processes, increase transparency and efficiency in the use of intellectual assets.

For further development of the theory and practice of intellectual capital management, it is necessary to continue researching methods of its integration into financial planning and reporting. It is important to develop new tools for more accurate assessment of intangible assets and their impact on long-term financial results, which will be an important step towards more sustainable and innovative development of organizations.

Thus, intellectual capital is an important but difficult-to-measure resource that has significant potential to improve companies' financial results. However, in order to use it effectively, it is necessary to overcome existing problems with measurement and integration into financial management, which requires further research and the development of new approaches.

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THE ESSENCE AND DEFINITION OF CORPORATE CULTURE IN MODERN ORGANIZATIONAL THEORY

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Abstract. This article delves into the essence and definition of corporate culture within the framework of modern organizational theory. Corporate culture encompasses the shared values, beliefs, and norms that shape organizational behavior and influence decision-making processes. Understanding corporate culture is crucial as it impacts overall business performance, employee satisfaction, and organizational effectiveness. The study explores key theoretical perspectives on corporate culture, including its components, such as artifacts, values, and underlying assumptions. It also examines the functions of corporate culture, such as providing a sense of identity, enhancing social system stability, and fostering commitment among employees. Moreover, the article discusses the role of corporate culture in aligning organizational goals with employee values, creating a cohesive and motivated workforce. By integrating contemporary approaches to corporate culture, the study highlights effective management practices that foster a positive and productive work environment. These practices include promoting open communication, encouraging employee involvement, and developing leadership styles that support the desired culture. The research also addresses the challenges in managing corporate culture, such as cultural resistance and maintaining consistency across different organizational levels. By examining case studies and real-world examples, the article provides practical insights into how organizations can navigate these challenges and leverage corporate culture to achieve strategic objectives. Ultimately, the study underscores the importance of corporate culture as a vital element in modern organizational theory, offering a comprehensive understanding of how it can be effectively managed to enhance organizational performance and employee well-being.

Keywords: corporate culture, organizational theory, organizational behavior, decision-making, business performance, management practices, employee values

Introduction. Corporate culture, as a complex phenomenon, embodies a set of specific characteristics that require distinct approaches and methods for their analysis and formation. Researchers identify two primary approaches to the organization of relationships between a company and its employees: the philosophy of contract and the philosophy of shared destiny. Today, these approaches have achieved the status of traditional methods. The philosophy of contract is based on an agreement between company management and employees, where labor is exchanged for certain compensation. This cooperation continues as long as it remains mutually beneficial. This philosophy is more prevalent in Euro-Atlantic societies and is particularly evident in the business culture of the United States, characterized by the ethics of competitive individualism. In the US, business culture does not typically feature collectivism and dynastic traditions. Americans generally avoid hiring relatives or friends, as trust is built through a professional approach and business interests rather than close personal relationships. Business interactions are marked by pragmatism, a lack of emphasis on tradition, clarity, and the strength

of commitments. Historically, the United States was formed as a nation of individualistic citizens coming together within the framework of a business corporation rather than a traditional union or community. American upbringing focuses on fostering independence, self-reliance, competitiveness, and a drive to win at any cost. Success, culturally influenced by Protestant ethics, is often measured by the amount of profit gained. American companies and their employees strive to succeed, with the corporate system rewarding victories and penalizing failures. All company performance indicators are part of a game with clear responsibilities, punishments, or rewards. This mindset also manifests in the upbringing of children in North America, as noted by G. Morgan: "American practices encourage boasting and assertiveness among children still dependent on adults. These tendencies significantly influence their later lives, creating a foundation for high self-esteem as a basis for independence and strength. This is evident in the 'We're number one' syndrome and, in an organizational context, in opportunities for outstanding achievements by subordinates and expressive rewards by supervisors [1]." While financial motivation is not exclusive to the US, it is notably a significant part of its corporate culture, emphasizing victories and a well-developed reward system. In summary, the primary characteristics of the philosophy of contract include: explicit and implicit agreements between company management and employees; a consciousness of mutual benefit; prioritization of business interests; pragmatic relationships; individualism; independence; competitiveness even within the team; a drive for success measured by profit..

Materials and methods. The philosophy of shared destiny is seen as an alternative approach where relationships are built on mutual interests that promote the growth of both the company and its employees. In this approach, employees feel a sense of connection with the organization and are willing to take on greater responsibilities, while the company bases its actions primarily on moral and ethical principles. This philosophy is more prevalent in Eastern cultures, such as the corporate human resource management strategies in Japanese corporations. These strategies are based on the internalization of human resources, meaning the hiring, training, and promotion of internal workforce (focus on the company's internal labor market). Japanese corporations' human resource management philosophy focuses on special attention to labor resources, paternalism, egalitarianism (universal equality as an organizing principle of life), group work, and a non-class approach to consensus-building. This approach is rooted in the ethical principles inherent in Japanese culture and its characteristic group identity.

In Japanese corporations, it is customary for employees, from assembly line workers to top managers, to wear uniforms. This practice signifies a deep meaning: we all work towards a common goal, belong to one family, each of us has a specific role, but we are all valuable. Researchers have also found that "after retirement, relationships with former colleagues remain paramount for most Japanese [2]." Murray Sayle proposed an interesting "theory of historical factors," which explains the transfer of historically established practices to modern relationships, and the influence of cultural mentality on organizational processes. He used this theory to explain the cohesion of production groups formed within the traditional culture of rice cultivation, which serves as a basis for unity and collective values, and management specifics based on the samurai ethical code [3]. Rice cultivation has always been a risky endeavor in Japan. This cultural attachment to rice is a unique Japanese approach to solving seemingly impossible tasks. Moreover, rice cultivation is always a communal effort. Sayle writes that solitary and independent rice farmers do not exist; teamwork is necessary for successful rice cultivation, especially during challenging times. To achieve the best results, rice farmers must work at the peak of their abilities. The entire system suffers if even one farm fails to maintain its irrigation channels. Similarly, bad weather affects everyone, as it can ruin the crop. There are no leaders or outliers here—there is cohesion and ritual. Such mutual respect and interdependence have been transferred to Japanese corporations. Rice farmers shared their rice with their protectors, such as samurai. Protecting

workers, mutual assistance, and recognizing each person's role are all integral to the philosophy of shared destiny. These principles have also extended to interactions between companies and society. Closed relationships based on hierarchy are characteristic of Japanese communities. Here, a leader's position depends on their place in the hierarchy and their personal relationships within the community. In such groups, social exchange is non-equivalent, relationships are emotionally interdependent, roles are impersonal and weakly differentiated. "Vertical society" is stratified not by classes, social layers, or castes, but by institutions and groups of institutions, leading to numerous vertical splits. Therefore, in Japan, workers do not fight against capitalists as much as one company competes with another [4]. The "theory of historical factors" encompasses a behavior system where workers obey their leaders and achieve necessary results. Although it may seem despotic, employees who prioritize loyalty perceive it differently. Traditional culture creates conditions for self-realization through service within a corporate group, even if some aspects appear negative.

Due to the full extent of loyalty, Japanese corporate culture became popular in management in the 1980s-1990s. At that time, A. Athos and R. Pascale published "The Art of Japanese Management," highlighting that organizations should adopt the Japanese example. Athos and Pascale believed that American management was too rational, while Japanese organizational methods were more harmonious, incorporating intangible elements such as effective use of employees' skills and a focus on shared values (employee dedication to common goals, prioritizing high-quality customer service) [5]. The result was a reduction in internal company conflicts, increased production efficiency, and higher employee motivation and dedication to common goals. These models were implemented in some Western corporations (Rolls-Royce Limited, ITT Corporation, Jaguar Land Rover, etc.) with high effectiveness. The principles of the philosophy of shared destiny include the unconditional value of mutual interests, dominance of moral and ethical norms, paternalistic communication between employees and the organization, focus on internal labor resources, egalitarianism, collective values, cohesion, and ritual.

In Russia, work on corporate culture began in the late 20th century, influenced by Western management practices and the proclaimed importance of increasing production results, work efficiency, and creating harmonious relationships within companies and with the external environment in a market economy. However, interest in different corporate culture models often appeared chaotic rather than consistent and systematic. It is important to note that Russia had its unique organizational system and culture, known as "artel," with a long history. An artel is an egalitarian association for specific work based on a verbal agreement. Income in the artel was distributed according to contribution and work performed. Similar to professional corporations, artels were formed based on similar types of work. The artel philosophy was based on mutual assistance and support. "The artel combined the Russian inclination for independent and even isolated work with collective efforts." A characteristic feature of this form of labor organization was mutual responsibility, where each artel member guaranteed for all, and all together for each member. Trust and the ability to rely on others were foundational. It was not simple equality but the opportunity to realize one's abilities on equal terms. "In the artel, each worker is also an entrepreneur, so the income of artel members is significantly higher than that of hired workers in similar fields. Alongside material well-being, artel members' intellectual and moral development also progressed." To make this system work, strict discipline and faith in the artel's mission were necessary [6].

Decision-making in the artel was based on moral and ethical laws, not profit. Russian populists (N.G. Chernyshevsky, N.K. Mikhailovsky, V.P. Vorontsov, S.N. Yuzhakov, etc.) understood that organizing social life required reliance on Russian identity and consideration of the people's mentality. N.G. Chernyshevsky wrote that collectivism is inherent in Russia due to its unique

economic structure, and the community and artel provide a good foundation for progress. Emphasis was placed on developing individuality (education) as the basis for progress and enhancing morality. Populists viewed the capitalist industry as a system that uses people as mechanisms, ignoring workers' interests and pursuing the interests of specific groups. This, in their view, led to "the narrowing of individual activity, one-sided development, and subsequent degradation of the human type [7]."

Qualitative Analysis

Content Analysis: Texts and Documents: Analyze historical texts, cultural studies, and corporate documents to identify key principles and practices associated with the philosophy of shared destiny. This will involve a detailed examination of texts related to Japanese corporate culture, rice cultivation traditions, and samurai ethics. **Company Policies:** Review and analyze corporate policies and human resource management practices in Japanese corporations to understand how the philosophy of shared destiny is implemented and its impact on organizational behavior.

Interviews: Corporate Managers and Employees: Conduct in-depth interviews with corporate managers and employees in companies that adopt the philosophy of shared destiny. These interviews will provide insights into their experiences, perceptions, and the outcomes of implementing this philosophy in their organizations.

Comparative Analysis

Cross-Cultural Comparison: Japanese vs. Western Corporations: Compare the corporate cultures of Japanese companies with those of Western companies to understand how the philosophy of shared destiny manifests in different cultural contexts. This comparison will highlight the similarities and differences in corporate practices and their impacts on employee engagement and organizational performance. **Philosophy of Contract vs. Shared Destiny:** Compare companies that follow the philosophy of contract with those that follow the philosophy of shared destiny. Evaluate the effects on employee motivation, organizational cohesion, and business performance.

Case Study Analysis: Success Stories and Challenges: Analyze case studies of companies that have successfully implemented the philosophy of shared destiny as well as those that faced challenges. This will involve studying companies like Toyota and Sony, which are known for their unique corporate cultures, and comparing them with Western corporations that have adopted similar practices.

Historical Contextualization

Ethnographic Studies: Traditional Practices: Conduct ethnographic research to understand the cultural and historical roots of the philosophy of shared destiny in Japan. This includes studying rice cultivation practices, samurai ethics, and communal labor traditions that have influenced modern corporate culture. **Cultural Adaptation:** Investigate how these traditional practices have been adapted to fit contemporary corporate environments. This will involve fieldwork and participant observation in Japanese corporations.

Review of Historical Practices: Transfer of Historical Practices: Examine how historical practices have shaped modern corporate culture in Japan and their influence on current management theories and practices. This includes studying the influence of historical factors on organizational behavior and management strategies in Japanese companies.

Data Collection and Analysis

Data Sources: Primary Data: Collect primary data through interviews, ethnographic studies, and participant observation in Japanese corporations. **Secondary Data:** Gather secondary data from historical texts, cultural studies, corporate documents, and existing literature on corporate culture and management practices.

Data Analysis:

Thematic Analysis: Perform thematic analysis on the collected data to identify recurring themes and patterns related to the philosophy of shared destiny. **Comparative Analysis:** Use comparative analysis to identify the key differences and similarities between the corporate cultures of Japanese and Western companies. **Contextual Analysis:** Conduct contextual analysis to understand how historical and cultural factors influence contemporary corporate practices and employee behavior.

Results and discussion. The research on the philosophy of shared destiny reveals its significant impact on corporate culture, particularly in Eastern contexts like Japan. The study finds that the philosophy of shared destiny, which emphasizes mutual interests, moral and ethical principles, and a deep sense of community, fosters a cohesive and responsible workforce. Japanese corporations, such as Toyota and Sony, have successfully implemented this philosophy, demonstrating high levels of employee loyalty, motivation, and productivity. The key findings include: **Employee engagement:** employees in organizations adopting the philosophy of shared destiny exhibit higher engagement levels due to their strong connection with the company's goals and values. This engagement translates into a willingness to take on greater responsibilities and a commitment to the organization's success. **Organizational cohesion:** the sense of belonging and shared purpose among employees leads to enhanced organizational cohesion. The uniform practices, such as wearing uniforms and collective decision-making, contribute to a unified corporate identity and a collaborative work environment. **Cultural Integration:** the integration of traditional cultural practices, such as rice cultivation and samurai ethics, into corporate management strategies has resulted in a unique organizational culture. This cultural integration supports collective values and promotes a harmonious work atmosphere. **Adaptability and innovation:** companies with a philosophy of shared destiny demonstrate greater adaptability and innovation. The collaborative nature of their work environment encourages creativity and the effective implementation of new ideas. **Employee loyalty and retention:** the study highlights that employee loyalty and retention rates are higher in organizations with a shared destiny philosophy. This loyalty is rooted in the mutual respect and interdependence cultivated by the company's management practices.

The findings suggest that the philosophy of shared destiny can be a powerful approach to building a strong corporate culture. The emphasis on mutual interests, ethical principles, and community aligns well with the values of Eastern societies, particularly Japan. This philosophy contrasts sharply with the philosophy of contract, which is more prevalent in Western cultures and focuses on individualism, competition, and transactional relationships. The research underscores the importance of cultural context in shaping corporate culture. While the philosophy of shared destiny has proven effective in Japan, its implementation in Western companies requires careful adaptation to local cultural norms. Companies like Rolls-Royce Limited and Jaguar Land Rover have successfully integrated aspects of this philosophy, resulting in improved employee engagement and organizational performance.

However, there are challenges associated with the philosophy of shared destiny. One significant challenge is managing the balance between collective values and individual aspirations. Ensuring that employees' personal goals align with organizational objectives requires continuous effort and effective communication. Additionally, the dependency on strong interpersonal relationships and a paternalistic management style may not be suitable for all corporate environments, especially in highly competitive and dynamic industries. The study also highlights the potential for blending different philosophies to create a hybrid corporate culture. Combining elements of the philosophy of shared destiny with aspects of the philosophy of contract can lead to a more balanced and adaptable corporate culture. This approach can help organizations leverage the strengths of both philosophies while mitigating their respective weaknesses. In

conclusion, the research demonstrates that the philosophy of shared destiny, rooted in mutual respect, ethical principles, and a sense of community, can significantly enhance corporate culture and organizational performance. Adapting this philosophy to different cultural contexts and blending it with other management approaches can provide organizations with a comprehensive and resilient framework for success.

Conclusion. The research underscores the importance of corporate culture formation and its impact on organizational behavior and performance. We identified three methods for forming corporate culture: natural, artificial, and a blend of both. Historically, there has been a transition from organic organizational culture to more structured corporate culture, reflecting deliberate efforts to align company values and goals. Natural formation occurs spontaneously through daily interactions within the company, creating a unique set of values. However, without guidance, this can lead to misalignment and conflicts. Artificially constructed corporate culture is deliberately shaped by leadership to align with strategic objectives but may lack authenticity. The optimal approach is a hybrid model that combines natural development and intentional construction. This ensures that the culture remains true to the company's values while strategically guiding its evolution. Emphasizing moral and ethical principles fosters a cohesive and motivated workforce, supporting sustainable business practices. The philosophy of shared destiny, rooted in Eastern traditions, demonstrates how mutual respect and community-focused values can drive organizational success. Adapting these principles to different cultural contexts, as seen in some Western corporations, can yield significant benefits. In summary, forming corporate culture requires balancing natural and constructed elements. By understanding historical and cultural factors, organizations can develop effective strategies that enhance employee satisfaction and overall performance. Integrating moral and ethical values is essential for a resilient and adaptive corporate culture.

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Evaluating the financial outcomes of acquisitions and mergers

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ABSTRACT

The topic of evaluating financial results in mergers and acquisitions is becoming particularly relevant in the context of economic globalization and increasing competition. Mergers and acquisitions are a complex strategic tool aimed at increasing market share, optimizing resources, improving efficiency and ensuring long-term growth of companies. However, the success of these deals is often questioned due to the many risks associated with integration, financial costs and cultural differences. The practical significance of the study lies in the development of recommendations for managers and investors to minimize risks and improve the efficiency of transactions. The theoretical value of the work lies in the systematization of approaches to assessing financial results and identifying factors influencing the success of transactions in various industries and regions.

KEY WORDS: Mergers and acquisitions, Financial results, Efficiency assessment, Company integration, Synergy effect, Profitability, Financial analysis, Risks, Discounted cash flow

Mergers and acquisitions (M&A) occupy an important place in modern corporate practice, being a tool for strategic growth of companies. These transactions allow organizations to enter new markets, increase market share, reduce operating costs through synergy and increase competitiveness. However, despite the widespread use of M&A, statistics show that a significant part of transactions do not achieve their financial goals or even lead to losses for participants. This makes the problem of evaluating the financial results of M&A one of the central ones in scientific research and management practice. There are many approaches to analyzing the effectiveness of M&A. In particular, the research focuses on two main aspects: quantitative assessment of financial indicators and qualitative analysis of success factors (corporate culture, integration strategy).

Classical theories, such as the works of M. Jensen and W. Meckling emphasize the importance of agency costs and the role of shareholders in the success of transactions[1].

Modern research, such as the work of V. Dykan focuses on synergistic effects and their impact on business value[2].

In practice, various methods of evaluating efficiency are used: discounted cash flow, multiplier analysis, comparative analysis before and after the transaction.

However, many researchers, including C. Corrado, point out that traditional methods often ignore critical elements such as intangible assets, intellectual property and human capital, which play a key role in the digital age[3].

Thus, the relevance of this topic is determined by the need for a systematic approach to assessing the financial results of M&A, taking into account all factors, both tangible and intangible. This will allow not only to measure the success of transactions more accurately, but also to develop recommendations for minimizing risks and increasing their effectiveness.

The purpose of this study is to study methodological approaches and tools for evaluating the financial results of mergers and acquisitions, as well as to identify factors influencing their success in various industries and conditions.

Within the framework of this study, Methods of analyzing financial indicators were used. This

The financial performance analysis method is one of the most common and objective tools for evaluating the financial results of mergers and acquisitions (M&A). This method includes the calculation and interpretation of key financial indicators such as profit, revenue, return on assets and equity, share price, and others. The main purpose of the method is to determine changes in the company's financial performance before and after a merger or acquisition[4].

This method allows you to objectively assess the economic efficiency of a transaction and identify how well it justified its financial goals, for example, in terms of increasing profitability or increasing the market value of the company. And also, as part of the analysis of this topic, it was applied

The discounted cash flow (DCF) method, which is one of the most accurate and widely used methods for evaluating the financial results of mergers and acquisitions, as it allows you to take into account the time value of money and estimate the future revenue streams of a company. This method is suitable for evaluating transactions, where it is important to take into account not only current indicators, but also projected results that may arise in the future. The DCF method makes it possible not only to assess the current value of the company, but also to predict its future development, which is especially important for long-term investment decisions. This method also allows you to take into account various scenarios of the company's development after the transaction, which increases the accuracy of the assessment[5].

Both methods — financial performance analysis and the discounted cash flow method — are important tools for evaluating the financial results of mergers and acquisitions. They allow you to objectively measure the impact of a transaction on financial performance and assess its long-term attractiveness. The choice of method depends on the objectives of the study and the specifics of a particular transaction, but the combination of both approaches gives the most complete and accurate picture of the financial results of M&A.

For a complete analysis of this topic, two well-known companies that have gone through major mergers and acquisitions in recent decades have been selected: Disney and Amazon. As part of this study, their financial results were compared before and after key transactions using two research methods: financial performance analysis and the discounted cash flow (DCF) method.

Pixar Animation Studios was purchased by The Walt Disney Company for \$7.4 billion in 2006[6]. The strategic agreement sought to increase Disney's market share in the entertainment sector, enhance its animation studios, and increase the company's content.

Evaluation of financial outcomes:

Prior to the transaction:

Disney: The company reported \$31.8 billion in revenue and \$2.5 billion in net profit in 2005.

Pixar: Pixar made \$3.2 billion in revenue and \$0.9 billion in profit in 2005.

Following the transaction (2006–2015): Disney's animation revenue has expanded dramatically as a result of the merger. Disney is now more competitive in the animation business thanks to the growth of its brand and content portfolio, which includes the "Toy Story" and "Cars" franchises.

In 2010, Disney reached revenue of \$38.1 billion, and by 2015 this figure had grown to \$52.5 billion.

Disney's net profit in 2015 was \$8.3 billion, which is a significant improvement over pre-deal figures[7].

Using the DCF method, it is emphasized that the valuation of Disney after the merger with Pixar showed a significant increase in expected cash flows due to an increase in market share and an expansion of the product portfolio. The DCF calculation showed that the synergy from the deal allowed Disney to significantly increase its capitalization. Disney's share price grew by 4-6% annually during the first years after the deal[8].

Whole Foods Market was purchased by Amazon for \$13.7 billion in 2017[9]. The agreement aimed to improve Amazon's physical infrastructure, including stores and logistics, and to increase the company's retail footprint, particularly in the food industry.

Evaluation of financial outcomes:

Prior to the transaction:

Amazon: With \$136 billion in sales, Amazon made \$2.4 billion in profit in 2016.

Whole Foods: The company made a net profit of \$500 million in 2016 after selling \$15.7 billion worth of goods.

Following the agreement (2017–2022):

Amazon continued to thrive in the initial years following the purchase of Whole Foods, particularly in the food and retail sectors. Amazon made \$469.8 billion in revenue and \$33.4 billion in net profit in 2021.

Whole Foods has greatly benefited from integration with the Amazon platform. For example, the grocery delivery process through Amazon Fresh has been improved and online ordering and delivery options have been expanded.

The DSF method shows that cash flow forecasting showed that the purchase of Whole Foods provided Amazon with additional revenue, including retail growth and further expansion in the food field. The expected cash flows from Whole Foods were discounted, taking into account the high growth rate in the first years after the transaction.

Amazon's share price has increased significantly, indicating the successful integration and synergy provided by the deal [10].

Table 1. Comparing the results of two companies

Indicator	Disney + Pixar (2006)	Amazon + Whole Foods (2017)
Deal Size	\$7.4 billion	\$13.7 billion
Revenue Growth (10 years)	65% (from \$31.8 billion to \$52.5 billion)	245% (from \$136 billion to \$469.8 billion)
Net Profit Growth (10 years)	232% (from \$2.5 billion to \$8.3 billion)	1,300% (from \$2.4 billion to \$33.4 billion)
Synergistic Effect	Increased market share, strengthened positions in animation	Integration with the online platform, increased food sales

Disney-Pixar and Amazon-Whole Foods have both shown promising financial outcomes, but their approaches and scales are very different. In terms of synergy and content extension, Disney's partnership with Pixar proved to be highly effective, resulting in steady revenue and profit growth. Amazon's acquisition of Whole Foods, in turn, allowed the corporation to greatly increase its physical and retail capabilities, which helped the grocery and retail industries grow. The comparison demonstrates how the market environment and strategic purpose determine transaction performance: for Amazon, expanding retail infrastructure and streamlining product

delivery were crucial success factors, while for Disney, integration into the entertainment sector was the primary driver.

For big businesses, mergers and acquisitions (M&A) are crucial strategic growth tools, and the accuracy of financial data is a direct factor in their success. You can observe how such agreements impact financial performance, synergies, and long-term profitability of organizations by using the examples of two well-known transactions: the 2006 Disney and Pixar merger and Amazon's 2017 acquisition of Whole Foods.

Although for different reasons, both transactions have had favorable outcomes. The expansion of content and fortifying positions in the animation business were linked to the primary synergistic effect in the case of Disney and Pixar. This allowed Disney to significantly increase revenue and profit. At the same time, the acquisition of Whole Foods by Amazon was an important step in expanding retail infrastructure and developing online food sales, which also led to significant growth in revenue and net profit of the company. Valuation methods such as financial performance analysis and the discounted cash flow (DCF) method have demonstrated their effectiveness in measuring transaction results and identifying success factors. These methods help companies not only quantify the success of a transaction, but also predict future financial flows and synergistic effects that can significantly improve their position in the market. Thus, successful mergers and acquisitions depend on the correct strategic assessment and effective use of financial analysis tools, which allows companies not only to increase their competitiveness, but also to create long-term value for shareholders.

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THE IMPACT OF DIGITILIZATION ON ENTREPRENEURIAL ECOSYSTEMS IN DEVELOPING COUNTRIES

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Abstract. Digital technologies have revolutionized the traditional business model and created a plethora of new opportunities for entrepreneurship on a mass scale. The aim of this paper is to present a comprehensive theoretical framework for understanding the digital entrepreneurial ecosystem. Over the past few years, digital entrepreneurship has become a subject of significant academic and practical interest. This represents a new approach to entrepreneurship in the digital age, involving various actors such as digital platform providers, consumers, infrastructure providers, legal and informal institutions, financial infrastructure providers, and talent pool. The external environment for entrepreneurship has been improved through the implementation of trust-based networking mechanisms, collaborative sharing platforms, and multilateral cooperation frameworks. These measures have fostered stronger interactions among various stakeholders and expanded the geographical reach of the entrepreneurial ecosystem. Furthermore, they have widened the range and depth of entrepreneurship activities, contributing to the long-term viability of the digital entrepreneurship ecosystem on a global scale. In this study, we use a combination of qualitative and quantitative methods to systematically review existing literature on the digital entrepreneurial ecosystem. Findings from a comprehensive quantitative analysis provide a theoretical basis for the ecosystem and elucidate and analyse current research trends. The paper proposes an integrated, iterative research model for the digital entrepreneurship environment, encompassing various components that can be leveraged to foster a thriving digital ecosystem. The study outlines a roadmap for further research in this area. The argument is made that the implementation of these components can allow high-technology businesses to align with societal progress. This approach holds the key to creating a more efficient and robust digital entrepreneurial environment.

Keywords: Digitalization, Entrepreneurship Ecosystems, Developing Countries, Economic Growth, Social Development, Digital Transformation

Introduction. In recent years, digitalization has become a pivotal force reshaping various facets of society, including business landscapes. Developing countries, in particular, have witnessed significant changes driven by the adoption of digital tools and technologies. These advancements are transforming entrepreneurship ecosystems, providing new opportunities for startups and small businesses to thrive despite resource constraints. This article aims to examine the impact of digitalization on entrepreneurship ecosystems in developing countries, exploring the benefits, challenges, and strategic initiatives necessary for sustainable growth and development.

Digitalization encompasses the use of digital technologies to change a business model and provide new revenue and value-producing opportunities. It is the process of moving to a digital business. In developing countries, digitalization presents a unique set of opportunities and challenges. The integration of digital technologies has the potential to drive significant economic

growth, improve social outcomes, and foster innovation. However, the extent to which developing countries can leverage digitalization depends on various factors, including infrastructure, regulatory frameworks, and the availability of digital skills. The digital entrepreneurship ecosystem represents a rapidly evolving and highly competitive environment for entrepreneurship that has developed over recent decades. In today's era of digital transformation, characterized by rapid technological advancement, business operations are undergoing significant changes. This transformation in the business environment is leading to a shift in how businesses are structured and managed. The rise and evolution of digital ecosystems is reshaping how businesses operate, affecting organizations of all sizes and industries, from startups to large corporations. This presents significant opportunities for those able to capitalize on changes occurring in regional and global markets. The concept of an "ecosystem" in the business context was first proposed by American scientist James F. Moore in the early 1990s. This concept emphasizes the importance of strategic planning for businesses, as well as the need to innovate and manage innovation effectively in today's economic landscape. Collaboration is a crucial aspect of innovation-driven businesses, and it has evolved into a global phenomenon. While collaboration and healthy competition are both essential, the traditional approach of "my product versus your product" fails to account for numerous contemporary economic and business factors [1].

In biology, an ecosystem is a community of organisms that interact with each other and their environment. These ecosystems can be found in various forms, such as lakes, forests, meadows, and tundra. Similarly, in the business world, companies interact with other entities to create an economic ecosystem. J. F. Moore defines an economic ecosystem as "an interconnected network of businesses and entrepreneurs that form the basis of an economy." This ecosystem includes consumers, market intermediaries, suppliers, and companies themselves. Unlike natural ecosystems, business ecosystems generate value through exchange of goods and services. A business ecosystem is similar to a corporate network but differs in that it is not shared among multiple participants. It is important for companies to adopt an ESG (Environmental, Social, and Governance) approach when interacting within this ecosystem. The process of establishing a business ecosystem requires a deep understanding of the economic environment and the factors that promote innovation. J.F. Moore, in his analysis of corporate ecosystems, identified four stages in their development: foundation, growth, leadership, and transformation. During the initial stage of foundation or establishment, the ecosystem is formed by establishing a basis and identifying opportunities. This phase involves identifying key products and exploring various possibilities. In the second stage, ecosystem growth, the ecosystem expands and scales through strategic investments. Leadership is the third stage in business ecosystem development. To maintain the credibility of the established ecosystem, it is important to contribute to its growth. The final stage is self-transformation or eventual decline of the ecosystem. When establishing a business ecosystem, it is essential to introduce innovative ideas and embrace change in order to stay competitive with other ecosystems. All business ecosystems are subject to evolution, and the process of building a successful digital company is an ongoing one that requires a thorough understanding of its core components. In order to facilitate this understanding, researchers have developed an integrated model for analyzing the digital entrepreneurial ecosystem based on an examination of current digital platform development trends. This model provides valuable insights into both physical and virtual aspects that are crucial for creating a successful ecosystem. In today's digital landscape, businesses need to thrive. Digital infrastructure and platforms are essential for success. The Digital Entrepreneurship Research Model combines various elements into a comprehensive framework. It has three main pillars: knowledge generation, socio-economic impact, and capital formation. Knowledge generation involves researching relevant materials on technology and marketing, as well as strategic considerations for product development. Capital formation refers to financial resources available to startups, which can be used for project

development, operational expenses, and other purposes. To succeed, businesses need to build relationships within their network.

Representing diverse segments of the society, including entrepreneurs, investors, customers, and suppliers, these networks provide invaluable resources such as mentoring and collective intelligence. These resources can strengthen a project's competitive advantage in terms of pricing, customer service, and product innovation. Moreover, by engaging with stakeholders from various economic sectors, entrepreneurs can expand their network and enhance their chances of establishing strategic partnerships. These collaborations can assist entrepreneurs in developing their businesses through cooperation, enhancing both parties' innovative capabilities. It is essential not to underestimate the importance of sentiment analysis in this regard. Sentiment analysis entails the use of classification models to examine data, offering valuable insights into customer perceptions of products and services based on the brand and manufacturer. This approach allows entrepreneurs to better tailor their offerings to meet market demand and avoid issues such as damage to their brand reputation caused by negative customer feedback. By employing similar methods that rely on analyzing consumer behavior even during the early stages of product development, entrepreneurs can make more informed decisions regarding their products.

Materials and methods. The research methodology adopted for this study includes a combination of qualitative and quantitative approaches. Data was collected through literature reviews, surveys, and interviews with entrepreneurs, policymakers, and industry experts in developing countries. Secondary data sources such as reports from international organizations and government publications were also utilized.

Table 1 - Research Methodology Breakdown

Method	Description
Literature Review	Comprehensive analysis of existing research, academic papers, and industry reports on digitalization.
Surveys	Questionnaires distributed to entrepreneurs to gather data on digital adoption and its impacts.
Interviews	In-depth discussions with policymakers, industry experts, and entrepreneurs to gain qualitative insights.
Secondary Data Analysis	Examination of data from international organizations, government reports, and market research firms.

The analysis focused on identifying key patterns and trends in digital adoption, its effects on entrepreneurial activities, and the broader implications for economic and social development. A comprehensive literature review was conducted to provide a theoretical foundation for understanding the impact of digitalization on entrepreneurship ecosystems in developing countries. The review included academic articles, industry reports, and case studies. Key themes identified include the role of digital platforms, the importance of digital skills, and the challenges of digital infrastructure.

Digital Platforms: Digital platforms such as e-commerce websites, social media, and mobile applications have revolutionized the way businesses operate and engage with customers. These platforms provide entrepreneurs with access to a global market and facilitate the efficient delivery of products and services [2].

Digital Skills: The development of digital skills is critical for the successful adoption and utilization of digital technologies. Training programs and educational initiatives are essential to equip entrepreneurs with the necessary skills to leverage digital tools effectively [3].

Infrastructure Challenges: Inadequate digital infrastructure remains a significant barrier to digitalization in developing countries. Poor internet connectivity, unreliable power supply, and limited access to digital devices impede the growth of digital entrepreneurship [4].

Table 2 - Key Themes from Literature Review

Theme	Description	Source
Digital Platforms	Role of e-commerce, social media, and mobile applications in business operations and customer engagement	Kreiterling, 2023
Digital Skills	Importance of training programs and educational initiatives for effective digital technology utilization	Samara & Terzian, 2020
Infrastructure Challenges	Impact of poor internet connectivity, unreliable power supply, and limited access to digital devices on entrepreneurship	Galindo-Martín, Castaño-Martínez, & Méndez-Picazo, 2023

Results and discussion. The study's findings reveal several key impacts of digitalization on entrepreneurship ecosystems in developing countries: increased access to markets: digital platforms have enabled entrepreneurs to reach wider markets, both locally and globally. This has expanded their customer base and created new revenue streams. Enhanced business operations: adoption of digital tools, such as e-commerce platforms, mobile payment systems, and cloud services, has streamlined business operations, reduced costs, and improved efficiency. Innovation and creativity: digitalization has fostered a culture of innovation and creativity, encouraging the development of new products and services tailored to local needs and preferences. Skills development: digital literacy and skills training programs have equipped entrepreneurs with the necessary capabilities to leverage digital technologies effectively. Socioeconomic benefits: digitalization has contributed to job creation, improved livelihoods, and inclusive growth by providing opportunities for marginalized communities to engage in entrepreneurial activities.

Table 3 - Key Impacts of Digitalization

Impact	Description
Increased Access to Markets	Digital platforms enable entrepreneurs to reach wider markets, expanding customer bases and creating new revenue streams.
Enhanced Business Operations	Digital tools streamline operations, reduce costs, and improve efficiency.
Innovation and Creativity	Fosters innovation and creativity, leading to new products and services tailored to local needs.
Skills Development	Digital literacy programs equip entrepreneurs with necessary digital skills.
Socioeconomic Benefits	Contributes to job creation, improved livelihoods, and inclusive growth.

While the benefits of digitalization are evident, several challenges need to be addressed to maximize its impact on entrepreneurship ecosystems in developing countries. These include:

Digital Divide: There is a significant disparity in access to digital technologies between urban and rural areas, and among different socioeconomic groups. Bridging this gap is crucial for ensuring equitable access to digital opportunities [5].

Infrastructure Deficiencies: Inadequate digital infrastructure, such as poor internet connectivity and lack of reliable power supply, hampers the full potential of digitalization. Investments in infrastructure are necessary to support digital growth [6].

Regulatory and Policy Constraints: Outdated regulatory frameworks and policies can hinder innovation and the adoption of digital technologies. Governments must modernize regulations to create a supportive environment for digital entrepreneurship [7].

Financial Barriers: Limited access to financing and investment for digital startups remains a significant challenge. Financial support mechanisms, such as grants and venture capital, are essential for fostering innovation [8].

Table 4 - Challenges of digitalization

Challenge	Description	Source
Digital Divide	Disparity in access to digital technologies between urban and rural areas, and among different socioeconomic groups.	UNCTAD, 2022
Infrastructure Deficiencies	Inadequate digital infrastructure, such as poor internet connectivity and lack of reliable power supply.	World Bank, 2021
Regulatory and Policy Constraints	Outdated regulatory frameworks and policies that hinder innovation and digital adoption.	OECD, 2021
Financial Barriers	Limited access to financing and investment for digital startups.	Ghosh & Kotwani, 2022

To overcome these challenges, strategic initiatives such as public-private partnerships, investment in digital infrastructure, and supportive regulatory environments are crucial. Policymakers and stakeholders must collaborate to create an enabling environment that supports digital entrepreneurship and addresses the unique needs of developing countries.

Conclusion. Digitalization presents both significant opportunities and challenges for entrepreneurship ecosystems in developing countries. By leveraging digital tools and technologies, entrepreneurs can overcome resource constraints, access new markets, and drive innovation and economic growth. However, addressing the digital divide, infrastructure deficiencies, and regulatory barriers is essential for realizing the full potential of digital transformation. Strategic initiatives and collaborative efforts are necessary to create a conducive environment for digital entrepreneurship, ultimately contributing to sustainable development and inclusive growth. Thus, a company's choice of an innovative development model means staying ahead of the digital curve to gain a competitive advantage, and the ecosystem can help with this, as the innovation being implemented is actually the driving factor and most important outcome from its inception. Increasing the number of participants in digital platforms allows network effects to expand their innovation capabilities, adopt them faster and drive the development of future innovation markets. To summarise, the use of the high-tech components identified in the results can facilitate the adoption of digital technologies in the entrepreneurial environment.

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THE INFLUENCE OF THE DIGITAL ECONOMY ON THE TRANSFORMATION OF BUSINESS PROCESS MANAGEMENT

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Abstract

The transition of business process management is greatly impacted by the digital economy, which encompasses a wide range of activities and alters conventional company models. With the advent of new technologies like blockchain, big data, cloud computing, and artificial intelligence, businesses may enhance consumer engagement, expedite decision-making, and optimize operations. The study focuses on analyzing how business process management has changed in the context of digitalization and identifying the critical elements that help firms successfully adjust to the demands of the market.

The topic's relevance stems from the speed at which digital technologies are developing and how they affect every facet of business administration. Businesses must modernize procedures, boost flexibility, and implement creative solutions in the context of digital transformation in order to gain a competitive edge. For firms to be managed effectively, it is becoming more and more crucial to comprehend how the digital economy is altering commercial procedures.

The research is innovative because it takes a comprehensive approach to examining how digital technologies are changing business process management, with an emphasis on incorporating new tools into established management frameworks. Consideration is given to the particulars of integrating digital technologies into different business domains, including automation, digital analytics, and cloud services, as well as how these technologies affect the speed and precision of managerial decision-making.

Key words: digital economy, business process transformation, digitalization, business management, technology, cloud computing, big data, artificial intelligence

Organizational management procedures are significantly impacted by the digital economy, which is a crucial component of global commercial and economic transformations. Artificial intelligence, big data, cloud computing, and blockchain are just a few of the cutting-edge technologies that are rapidly changing conventional business paradigms and opening up new avenues for process optimization and acceleration. One of the most important elements in boosting an organization competitiveness and market sustainability in the context of digitalization is effective business process management.

The digitization of business processes has grown in importance as a scientific area of study in recent decades. According to M. E. Autio et al authors digitization is bringing about new ways of organizing production and consumption, altering the dynamics and structure of the global economy. According to W. H. Volberda A., businesses must modify their strategies in the digital

age to take use of the opportunities presented by new technology to increase operational effectiveness and make better management choices.

The significance of digital technologies for enhancing customer connection, providing individualized service, and expediting company operations is the subject of several studies, including the work of S. Sutrisno[3]. Conversely, Jones M. D. study highlights the main issues that businesses have when putting digital solutions into practice: reluctance to adapt, a shortage of qualified personnel, and substantial upfront costs[4].

Particular focus is placed on process optimization through the use of automation and data analytics technology. Forecasting, planning, and risk management are all significantly improving for businesses that use big data and machine learning-based solutions, according to research by S. M. Murugan. The necessity to create new management strategies that successfully incorporate digital technologies into conventional business processes and structures is also emphasized in J. Butt T. publications.

The purpose of the study is to analyze the impact of the digital economy on the transformation of business process management in organizations. To do this, the following tasks are required within the framework of the study:

To study the theoretical foundations and modern approaches to business process management in the context of digitalization.

To assess the role of key technologies such as artificial intelligence, big data, blockchain and cloud computing in the transformation of business processes.

To identify the main problems and challenges that companies face when implementing digital technologies in management processes.

Thus, this study is aimed at identifying key aspects of the digital transformation of business process management, which are important for achieving competitive advantages and effective functioning of organizations in the digital economy.

As part of the research, a case method was used, more precisely, an analysis of examples of the above companies.

This method involves studying the practical experience of using digital technologies in business process management using the example of successful organizations. The study will analyze the cases of large companies such as Google, Amazon or Starbucks, which are actively implementing digital technologies to transform their business processes (Table 1). This method allows to identify practical approaches, problem areas and successful strategies for technology implementation, as well as to assess their impact on organizational effectiveness

The second method is Content analysis of scientific publications and reports. Content analysis of publications, articles, industry reports and research by leading experts in the field of digitalization will be used to analyze the theoretical and practical aspects of business process transformation in the digital economy. This method will help to systematize existing approaches, identify current trends and identify problems faced by companies when implementing digital solutions in business process management.

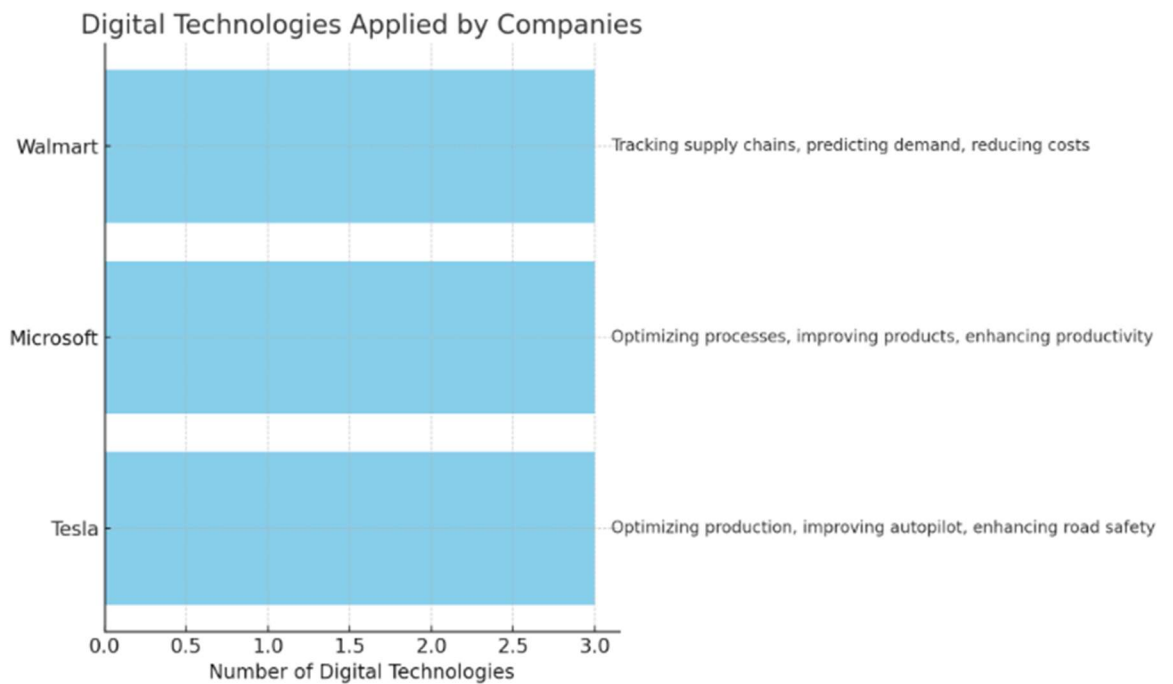
Table 1. Companies and Their Approaches to Implementing Digital Technologies in Business Process Management

Company	Digital Technologies	Application and Effect
Google	Artificial Intelligence, Cloud Computing, Big Data	Use of AI and machine learning to optimize advertising services and improve personalization. Cloud technologies help in scaling services.
Amazon	Blockchain, Robotics, Cloud Computing	Automation of warehouse and logistics processes using robots. Cloud technologies Amazon Web Services are actively used to optimize internal processes and provide cloud services to clients.
Starbucks	Mobile Applications, Big Data, Artificial Intelligence	Use of mobile apps to improve customer service, personalized offers, and loyalty programs. Data analytics helps predict demand and optimize on-site processes.

The Source compiled by the author based on the data [7-9]

This table highlights how different technologies are applied in different companies to improve business processes, increasing their efficiency and competitiveness.

Content analysis in the course of this study allows you to collect data from various sources (for example, industry reports, publications, research) on which digital technologies are used by companies, how they affect their activities and what effects are observed. The diagram below reflects this process by visualizing the number of technologies used by each company and their impact on business processes.



The diagram shows how the use of artificial intelligence at Tesla optimizes production processes, and at Walmart offers to present ask and take off graduates. This approach allows for a deeper understanding of the impact of digitalization on various aspects of business activities. The number of technologies used by each company is indicated by columns, and next to each company is indicated the impact of these technologies on their business processes. This visualization helps to highlight a range of digital technologies that these companies use to optimize their operations.

In the course of the study, using two selected methods — the case method and content analysis - all the tasks were successfully solved.

Through a content analysis of existing scientific publications, industry reports and research, as well as through a case study using the example of real companies (Tesla, Microsoft, Walmart), a wide range of digital technologies used to transform business processes was identified. This allowed us to form a theoretical basis and understand the key trends in the field of digital business transformation.

The case method demonstrated how specific technologies such as artificial intelligence, cloud computing, blockchain, and data analytics are actively being implemented into companies' business processes. In the process of content analysis, it was possible to identify the most popular and effective digital solutions, as well as to understand how they affect the speed and accuracy of decision-making, cost reduction and efficiency improvement.

Using both methods (the case method and content analysis), the main difficulties faced by companies in implementing digital solutions were identified, including high investments, the need for staff training and possible resistance to change. This allows us to develop recommendations on how to overcome these problems and effectively implement technologies.

Thus, both methods provided a comprehensive analysis of the impact of digital technologies on the transformation of business processes and allowed us to solve all the research tasks, confirming the importance of using innovative technologies to increase the competitiveness and efficiency of companies.

Business process management is evolving significantly as a result of the digital economy, which calls on businesses to be adaptable and agile in order to keep up with the quickly shifting market conditions. Based on content analysis and the case approach, the study showed how

industry leaders like Microsoft, Walmart, and Tesla are successfully integrating digital technology to streamline and modernize their company operations. Technologies like blockchain, cloud computing, artificial intelligence, and data analytics are used to boost productivity, cut expenses, and expedite managerial decision-making.

Content analysis and the case study revealed the key benefits of digitalization, such as improved production processes, personalized customer service and improved logistics. However, despite the obvious benefits, companies also face a number of challenges, including high initial investments, the need to train staff and overcome resistance to change. These challenges require the development of effective strategies for the implementation of digital technologies. In general, the results of the study confirm that successful digital transformation of business processes is an important condition for sustainable growth and competitiveness of organizations. Companies that actively use digital technologies gain significant advantages, ensuring long-term success in the global market.

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ASPECTS OF THE ORGANIZATION'S METHODOLOGY FOR RE-ENGINEERING BUSINESS PROCESSES

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Abstract

Business process reengineering is a radical revision and fundamental restructuring of an organization's core processes in order to achieve significant improvements in their efficiency, quality and productivity. The article discusses key aspects of the business process Reengineering methodology, including the stages of analyzing current processes, identifying bottlenecks, designing new processes and their implementation. Special attention is paid to the use of digital technologies and innovative approaches to optimize processes. The study highlights the importance of integrating reengineering into the overall strategy of the organization, as well as adapting the methodology to specific business conditions. The novelty lies in the systematization of approaches to business process reengineering in the context of digital transformation and global competition.

Keywords: business process reengineering, methodology, digital transformation, process optimization, innovation, change management, process analysis, efficiency, quality, competitiveness.

In modern conditions of rapid changes in the economy caused by globalization, digitalization and increasing competition, organizations need to adapt quickly to new challenges. One of the key tools for ensuring sustainability and increasing competitiveness is the reengineering of business processes(RBP). This approach aims to radically revise and fundamentally transform the company's key processes in order to achieve significant improvements in their efficiency, quality and speed.

Business process reengineering has become particularly relevant in the era of digital transformation. Technological innovations such as artificial intelligence, big data analytics, robotics and cloud computing are creating new opportunities to improve productivity and reduce costs. However, their effective implementation requires a revision of traditional approaches to process management, which makes RBP an important tool for strategic development.

M. Hammer and D. Ciampi developed the concept of reengineering in the 1990s, arguing that in order to create ground-breaking outcomes, procedures needed to be drastically revised. Their research highlighted that RBP's primary objective is process transformation, not merely optimization, in order to eradicate inefficiencies and generate competitive advantages[1].

Additional studies in this field, such those by T. Davenport and J. Short, concentrated on the function of IT in reengineering[2]. Modern authors, including J Müller and A. Schmidt, emphasize the importance of integrating reengineering with digital technologies to create value and increase the flexibility of organizations.

Despite the obvious advantages, the RBP implementation process is associated with a

number of challenges: staff resistance to change, high cost of implementation and the need to integrate with existing systems. Therefore, it is important to develop systematic approaches and adapt the reengineering methodology to specific business conditions, taking into account current trends in digitalization.

The purpose of this study is to analyze aspects of the methodology of business process reengineering and identify key success factors in the implementation of this approach.

The results of the study will help to create a methodological basis for the implementation of reengineering in the context of digital transformation, which will contribute to improving the efficiency and competitiveness of organizations.

In research on the measurement of intellectual capital, much attention is paid to various assessment methods and models.

The methodology of this study includes the case-stage method. The case method is a study of specific examples (cases) of successful or unsuccessful business process reengineering implementations in various organizations. This method analyzes the real cases of companies that have gone through the reengineering process in order to identify best practices, mistakes that may have been made, as well as the results that have been achieved. The case method allows for a deeper understanding of how different approaches to RBP affect the effectiveness of business processes in specific conditions and at different stages of digital transformation.

This study will analyze the cases of well-known companies that have successfully implemented business process reengineering, such as Amazon and Siemens. It will be analyzed how they applied innovative approaches in reengineering, which technologies they used (for example, artificial intelligence, robotics, cloud computing), and what results it brought. The role of changes in personnel management, organizational culture and corporate structure in the success of reengineering implementation will also be investigated.

The main purpose of the method is to identify the relationship between technological, organizational and personnel changes in the reengineering process, as well as to evaluate the results that have been achieved in specific examples of companies.

And the next method, this method of documentary analysis, consists in studying and interpreting existing documents related to business process reengineering processes. These are the company's internal reports, strategic plans, documentation on the implementation of changes, reports on results, as well as scientific articles, research and industry publications. The method allows you to identify how organizations structure and implement reengineering, what approaches and tools they use, as well as evaluate the effectiveness of implementing changes based on available documents.

The study will analyze various types of documentation of companies that have undergone business process reengineering. These are strategic and operational plans for reengineering, Reports on the introduction of new technologies and methods, documents related to changes in the organizational structure and processes, external and internal reports on the results of reengineering and its impact on the business. The purpose of the documentary analysis method is to provide a deep understanding of how an organization manages the reengineering process, what methodologies and technologies it uses, as well as to assess the impact of these changes on the business. This method helps to identify information about processes that is not always available through direct observations or interviews, and allows you to explore the dynamics of changes over time.

The documentary analysis method is useful for obtaining structured and factual data on reengineering, as well as for identifying strategies and approaches used by organizations in the process of change.

In this study, two methods were used — the case method and the method of documentary analysis. Each of them made it possible to identify key aspects of the successful implementation

of business process reengineering in various organizations. Let's look at the results for each of the methods using the example of well-known companies such as Amazon and Siemens.

Amazon is a prime example of a company that has successfully implemented business process reengineering using innovative technologies and systems. In particular, the company used the robotization of warehouse processes and the integration of cloud computing to improve logistics[4]. By automating and using IT solutions, Amazon has significantly reduced order processing time and reduced costs. The main stages of reengineering included:

The introduction of an automated warehouse system with robots, which increased productivity by 30%[5].

Integration of cloud technologies for processing big data, which has improved demand forecasting and inventory management.

Using analytics to optimize supply chains and minimize costs.

The result of these changes was not only a reduction in operating costs, but also a significant improvement in the customer experience, which made Amazon the leader in the online trading market.

And Siemens has also successfully reengineered its business processes, especially in the field of digitalization and the introduction of Industry 4.0[6]. One of the key areas was the creation and implementation of digital twins for production processes. The use of such technologies has allowed Siemens to increase the efficiency of its plants, improve product quality and reduce equipment downtime. As a result:

A real-time equipment condition monitoring system has been implemented, which has led to a 20% reduction in maintenance time.

Using data and analytics to optimize production processes has reduced costs by 15%.

The introduction of 3D printing technology has accelerated the development of new products and reduced time to market.

The Siemens reengineering process demonstrates how digital technologies can be integrated into production processes to improve their efficiency and quality[7].

2. The documentary analysis method highlights that the corporation actively employs IT tactics for reengineering, as revealed in the examined Amazon papers[8]. According to the company's internal reports, the order processing procedures were greatly sped by the installation of a warehouse automation system and enhanced logistics via cloud solutions. Amazon is actively investing in artificial intelligence, which has been used to forecast product needs and improve inventory, according to the company's strategic plans[9].

Siemens has used creative techniques to enhance manufacturing processes, as evidenced by its internal reports and strategic plans. Digital technologies, including digital twins, are used to track the state of equipment, according to the study on the company's reengineering of its production processes[10].

Siemens' strategic plan points to significant investments in IoT technologies for communication and data analysis from equipment, which has significantly reduced maintenance costs and improved overall performance.

The Amazon and Siemens cases show how the introduction of new technologies and systems can significantly improve the efficiency of business processes. These examples confirm that successful business process reengineering requires active implementation of innovations such as robotics, cloud computing and big data analytics. In both cases, technology played a key role in the success of reengineering. At Amazon, it's warehouse automation and the use of cloud computing for data processing. At Siemens, it is the introduction of Industry 4.0 technologies such as digital twins and IoT.

Company documents confirm that strategic planning, including the use of advanced

technologies and innovative approaches, is an important factor in successful reengineering. Strategic reports and internal documents of these companies show a systematic approach to implementing changes, which leads to significant efficiency improvements.

Thus, the methods of the case method and documentary analysis made it possible to examine in detail the process of reengineering in leading companies, identify key success factors and evaluate the results of changes, which makes the study useful for organizations planning to reengineer their business processes.

A case-based and documentary analysis study on business process reengineering has demonstrated the significance of implementing cutting-edge technology and tactics to attain long-term success in contemporary business. Reengineering based on cutting-edge digital technologies like robotics, cloud computing, digital twins, and the Internet of Things (IoT) may greatly increase the productivity and efficiency of corporate operations, as shown by examples from firms like Siemens and Amazon.

A deeper comprehension of the effects of reengineering on the organization was made possible by the case method, and the documentary analysis verified that organizational as well as technological improvements are necessary for successful change implementation. According to both approaches, effective strategic planning, proactive technology use, adaptability in personnel management, and the organization's capacity are essential for successful reengineering.

The results of the study emphasize that successful reengineering requires an integrated approach that includes both technological innovations and a change in organizational culture, which helps ensure the long-term competitiveness of the company. Business process reengineering is a powerful tool that can not only optimize current processes, but also create new opportunities for growth and development in the digital economy.

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ANALYSIS OF THE EXPERIENCE OF FOREIGN COUNTRIES IN THE DEVELOPMENT AND ADAPTATION OF BUSINESS MODELS FOR MANAGING ORGANIZATIONAL BEHAVIOUR

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Abstract. A key characteristic of the modern business environment is that the lifespan of companies is shortening, and the pace of change is accelerating. Nowadays, companies are much more intertwined with their external environment than ever before, and neither longevity, connections, nor sales volume guarantee a company's continued existence. The theoretical framework for studying business models is well-developed, with a general consensus on the business model as a managerial tool that explains how and for whom the business creates value, how it distributes and appropriates this value. The relevance of this research is related to the urgent need to operationalize the concept of the business model and develop practical tools for its application in business. The practical significance of this study lies in its provision of valuable information and guidance on the promotion and transformation of business models for company executives. The theoretical and methodological foundation of this article is based on the analysis of domestic and international practices dedicated to the study of business modeling. Additionally, materials from scientific and practical conferences on the subject were utilized.

Keywords: Organizational Behavior Management, Modern Business Models, Business Performance, Strategic Initiatives, Dynamic Business Environments

Introduction. Modern economic activities are defined by several distinctive features, including heightened competition between domestic and international producers, the emergence of new risks for entrepreneurs related to both economic and socio-political factors, fluctuations in financial markets, and the periodic changes in the flow and direction of financial resources. These features are essential for ensuring the effective operation of businesses and are achieved through the development of competitive business models.

The concept of a "business model" is relatively recent, gaining prominence during the internet boom at the start of the new millennium. Research in the Business Source Premier database (a leading electronic resource from EBSCO containing articles in business and economic journals) reveals that the term first appeared in the 1960s and gained significant traction in the early 2000s [1]. By this time, the term was found in various contexts such as "new business models," "electronic business models," and "internet business models." It is frequently used by journalists, business professionals, and academics to refer to e-commerce, startups, and high-tech companies.

Despite its widespread use, many people did not have a clear understanding of the term "business model," often using it to describe anything from revenue generation to organizational structure. In academic research, various scholars have sought to define the concept more precisely, formulating clear definitions and outlining its different aspects. Research on business models explores this topic from multiple angles, including defining the term, describing its components, developing taxonomies and design tools, and establishing methodologies for evaluating implementation outcomes.

Materials and methods. When discussing the most notable works defining the term "business model," it is essential to mention Paul Timmers. He was among the first to provide a specific definition and classification of business models. According to Timmers, business models are a combination of products, services, and information flows, which include descriptions of various business process participants, their roles, potential benefits, and revenue sources. To understand how a company fulfills its business mission, it integrates a marketing model that combines the business model and the marketing strategy of the business in question [2]. Similarly, Peter Weill and Michael Vitale define a business model as a description of roles among customers, partners, and suppliers, as well as the main flows of products, information, cash, or benefits among the participants of the business process [3].

Linder and Cantrell from the Accenture Institute for Strategic Change identify three types of business models: component business models, real business models, and dynamic models. Each defines a business model as the fundamental logic of the organization that generates value [4]. Otto Petrovic and Christian Kittl interpret a business model as the logic for creating value for the business system. They emphasize that this contrasts with the description of complex social systems with all entities, relationships, and processes. These authors propose a hierarchical structure of business logic, suggesting that business models give meaning to various company processes that define the necessary information and communication systems, with all three levels being interrelated. This implies that changes at higher levels always lead to changes at lower levels, and the business model itself can only be successful if the lower levels are consistent [5].

In this context, Jaap Gordijn and Hans Akkermans note that both in academic work and real business practice, the term "business model" is often misunderstood and confused with the term "business process model." This misunderstanding leads to business models being described with activity diagrams in the Unified Modeling Language (UML) or Petri nets. However, they explain that a business model is not about processes but about the exchange of "values" among business process participants. According to them, a failure to understand this distinction leads to poor business decisions and inadequate business requirements [6].

Similar to Petrovic and Kittl, Linda M. Applegate views a business model as a description of a complex business system, enabling the examination of its structure, relationships among structural elements, and how this system will interact with the real world. Patrick Stähler shares this view, reminding us that a model is always a simplification of complex reality. It helps understand the basics of a business or plan what the business should be like. Joan Magretta adds that a business model is like a story explaining how a business works. Like Stähler, he distinguishes between a business model and a strategy. He explains that a business model describes how parts of a business fit together into a single system but does not include performance and competition information, unlike a strategy [7].

Don Tapscott and David Ticoll do not provide a direct definition of a business model but discuss what they call B-networks (business networks). B-networks are internet-based enterprises representing a specific system of consumers, distributors, commercial service providers, infrastructure suppliers, and customers using the internet for primary business communication and transactions [8]. Raphael and Christoph proposed another approach emphasizing tight connections with networks. They describe a business model as the architectural configuration of

operational components designed to realize business opportunities. Their concept reflects possible ways of combining transactions among companies, suppliers, partners, and customers into a single network.

Some authors include a financial element in their definitions. For example, Alan Afuah and Christopher L. Tucci discovered that all companies using the internet must have an internet business model. In this context, measures are needed to enable companies to generate profit both online and offline. Richard Hawkins, on the other hand, describes a business model as the trading relationships between a business and the products and/or services it offers in the market. He explains that this method allows a business organization to structure various cost and revenue streams so that it becomes viable, i.e., capable of surviving on the profit it generates. Michael Rappa's work also defines a business model as a method of conducting business where the company can be self-sustaining, generating revenue. He believes that a business model should describe how the company makes money, specifying its place in the value chain.

One of the most recent works on business models is Alexander Osterwalder's book, where he attempts to provide a comprehensive definition of the term. According to him, a business model describes how a company creates, delivers, and captures value. His concept involves describing the business model through nine blocks that show the logic of how a company makes money. These nine blocks are divided into four business areas: customers, supply (product or service), necessary infrastructure, and financial viability. In other words, according to Osterwalder, a business model is a blueprint for implementing a company's strategy within its internal structures, processes, and systems.

Another crucial aspect is the importance of swiftly adapting, modifying, and adjusting the business model during crisis situations. In times of crisis, the companies that succeed are those that quickly learn from changes in the external environment, analyze their own and others' business models, and rapidly transition from ineffective to effective business models. This highlights the relationship between the process and the effectiveness of transforming or changing a business model. A company's business model must be adapted to changes in the external environment to remain effective and profitable. Furthermore, analyzing not only a company's own business model but also how competitors generate revenue can help management identify potential directions for change, considering business model transformation as a competitive strategy.

Let's outline several fundamental principles:

Business models should be viewed not only in a static state but also dynamically, considering the process of changing revenue generation methods. Transformation (modification, adaptation, adjustment) of a company's business model can be a reaction to changes in both the external and internal environment. The strategic transformation of a business model aims to enhance the efficiency of the enterprise, ultimately increasing profitability.

Results and discussion. Foreign companies have always valued personal contact and preferred the more traditional style of communication and business operations—offline. The pandemic, however, brought changes and helped some clients realize and mentally accept that certain departments can work efficiently and effectively from home. For example, one client was planning to find a new office to accommodate all employees. Now, the company's management has decided that some departments will continue working from home, allowing them to stay in their beloved office without increasing rental expenses.

At the onset of the lockdown, there was a sharp decline in payments at physical retail locations, but a significant interest in online formats emerged. For those international companies traditionally focused on selling goods (and receiving payments) in physical stores, the number of online payments increased approximately fivefold. Some companies, already present online, had to change their usual operation models. For instance, one company developed its online platform

solely through a vendor. The end-consumer interaction was rather complicated, involving pre-orders and email confirmations leading to a separate personal account. During the self-isolation period, they had to switch from the vendor to online acquiring, shortening the payment process by several days.

International companies have shown considerable flexibility, quickly reformatting their business operations. One client, engaged in cosmetics manufacturing, began producing sanitizers to maintain sales. Another client, an online retailer, launched its own delivery service, which later became popular among other companies in the non-food retail sector. Thus, a service initially conceived for more convenient logistics yielded significant benefits during the crisis.

Supporting Employees and Partners, international companies, with their long histories and diverse geographical presence, have extensive experience navigating crises. This is a significant advantage, as they can adapt past experiences—even from different countries—to new scenarios. Generally, foreign companies follow a different behavioral algorithm, not characterized by a "doom and gloom" mindset. They know that crises are not eternal, and the economy is cyclical and will eventually recover. Hence, for many international companies, retaining staff is more important than cutting personnel costs. This HR policy applies to all markets in which they operate. Additionally, many countries have implemented government measures aimed at maintaining employment levels.

Moreover, international companies support not only their employees but also their clients and partners. They consider the entire business chain and devise beneficial solutions for all parties involved. They understand that if they do not support a supplier today, it might not exist tomorrow. Therefore, we see international companies on the Russian market extending payment deadlines and postponing contract fulfillment dates. Sometimes, a company is even willing to act as a guarantor for a partner's loan.

It's often said that a crisis is a time of opportunities, and it seems to me that international companies exemplify how creative thinking, a global perspective, and flexibility allow for a fresh outlook on business. Will we return to the old world? Clearly, most attributes of the new reality are here to stay. Some business processes might revert to offline, but most changes, from remote working to signing deals digitally, will become the norm.

News Corporation is an international media conglomerate headquartered in New York City, USA. The current CEO, chairman, and owner of News Corporation is media mogul Rupert Murdoch. As of December 31, 2014, the total value of the holding's assets was estimated at approximately \$68 billion, and its total annual revenue was about \$35 billion. The company operates in six main segments—cable network programming, film industry, television, direct broadcast satellite, publishing, and new media. News Corporation operates in markets across North and Latin America, Europe, Asia, Australia, the Middle East, and Africa. However, its most focused and targeted approach to audience engagement is in the US market, where News Corporation has a large number of local and specialized media outlets. Generally, the company's development logic can be described as expansionist, aimed at capturing new territorial markets through partnerships and mergers and acquisitions. Broadly, News Corporation's products in the B2C market can be divided into news content, sports content, and entertainment content. News content is more typical for cable networks and publishing; sports content for cable networks and pay-TV, with rights management for sports broadcasts as a separate business process; and entertainment content for the film industry and direct satellite TV.

A classic example of a multimedia project business model within News Corporation is Hulu. Hulu is a joint venture of several companies, including NBC Universal Television Group, Fox Broadcasting Company, and Disney-ABC Television Group. Hulu is a video-on-demand streaming service.

Table 1 – Business model of Hulu

Component	Details
Key Partners	- Content Providers: NBC, Fox, ABC, TBS, etc. - Distributors: AOL, MSN, Myspace, Facebook, Yahoo!, xfinityTV
Key Activities	- Providing access to high-quality multimedia content - Managing the service (promotion) - Actively engaging with partners
Value Propositions	- Free high-quality content - Paid high-quality content - User-friendly platform and service
Customer Relationships	- Personalized approach - Opportunity for interactive engagement
Customer Segments	- American users consuming free content - American subscribers purchasing services
Key Resources	- On-demand service (platform) - High-quality content from professional producers
Channels	- Internet platform - TV platform (via consoles and set-top boxes) - Mobile application - Partner platforms (syndication)
Cost Structure	- Maintenance and development of the platform - Rights management
Revenue Streams	- Subscription fees - Advertising

From the given scheme, it is clear that Hulu combines the freemium and "long tail" business modeling styles on a multi-sided platform. All American users get minimal free access to the service's products and services, while subscription fees are required for special services and the most interesting products. It's important to note that Hulu's value proposition is built in contrast to platforms like YouTube, offering only high-quality content from professional producers. Additionally, it's essential to recognize that this project is a partnership, requiring active collaboration with content providers and distributors for its existence and growth. However, these partnerships also impose certain limitations: complex copyright conditions currently prevent expansion into new geographical markets.

Conclusion. The definitions of "business model" vary, but most agree that it describes how a company creates and captures value. The characteristics of a model define the value proposition for the consumer and the pricing mechanism, specify the organizational structure the company will have and who it will collaborate with to create value, and determine how it will structure its supply chain. A business model is essentially a system whose various functions interact, often in complex ways, to determine the company's success. In any industry, a dominant business model tends to emerge over time. The definitions of "business model" vary, but most agree that it describes how a company creates and captures value. The characteristics of the model determine

the value proposition for the consumer and the pricing mechanism, indicate the organizational structure the company will have and who it will work with to create value, and determine how it will structure its supply chain. A business model is essentially a system whose various functions interact, often in complex ways, to determine the company's success. In any industry, a dominant business model tends to emerge over time. For the most part, the model will reflect the most efficient way to allocate and organize resources. In turn, this means that companies that achieve leading positions will be those with a more comprehensive understanding of the industrial business model.

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Research methods and empirical evaluations of the influence of corporate culture on organizational effectiveness

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ABSTRACT

This essay addresses research methodologies and empirical evaluations of how corporate culture affects an organization's efficacy. In order to sustain the enterprise's competitiveness, boost employee engagement, and create a positive work environment, corporate culture is essential. The study's theoretical section examines current definitions, organizational frameworks, and techniques for evaluating corporate culture. Practically speaking, case studies, interviews, questionnaires, and content analysis are examples of how different research methodologies are used to determine the connection between an organization's corporate culture and its output.

Applying an integrated strategy that blends quantitative and qualitative methodologies for a more thorough evaluation of the influence of company culture on performance metrics is what makes this research interesting. The study also suggests new empirical methods for examining corporate culture in businesses, which advances management theory and business practices in light of global shifts.

The paper has theoretical significance because it advances our understanding of corporate culture's function in strategic management and how it affects an organization's long-term viability. The potential to use the suggested techniques and models to enhance corporate culture, boost worker productivity, and streamline business procedures in organizations is what gives the research its practical value.

KEYWORDS: corporate culture, organizational effectiveness, research methods, empirical assessment, business processes, organizational culture, strategic management

Corporate culture has a direct impact on the effectiveness of the business and is a crucial component of the organizational structure. It is a set of principles, customs, behaviors, and beliefs that influence how employees behave and interact with one another within the company. Corporate culture management is emerging as one of the most important elements for raising productivity, enhancing service quality, and establishing long-term competitive advantages in the context of globalization and a dynamic market.

Modern research confirms that corporate culture affects not only the internal atmosphere in the team, but also the business results of the company. In particular, it can help to increase employee motivation, reduce staff turnover, improve corporate reputation and adapt the organization to changes in the external environment. However, there are a number of unresolved problems in the empirical assessment of the impact of corporate culture on the effectiveness of the organization. Traditionally, research is limited to either theoretical or narrowly empirical approaches, which makes it difficult to create a universal methodology for measuring its impact on performance.

This work's objectives are to examine research methodologies and empirical evaluations of how corporate culture affects an organization's effectiveness and to create a thorough model that considers a variety of corporate culture factors. The article will do this by taking into account a variety of theoretical and empirical research and by suggesting fresh approaches to evaluation.

When its effects on internal operations and organizational performance started to be extensively investigated in the 1980s, corporate culture as a subject of scientific study became apparent. As management theory evolved and it became evident that a company's culture is just as crucial to its success as its strategies and technologies, the problems surrounding corporate culture management became even more pertinent.

One of the most influential theorists exploring the role of corporate culture is Edgar Schein[1]. In his work *Organizational Culture and Leadership*, Schein argues that corporate culture consists of three levels: artifacts, values, and basic assumptions. He emphasizes that understanding and managing corporate culture allows managers to influence employee behavior, creating conditions for innovation and adaptation to change[2].

In parallel with theoretical research, the development of practical methods for assessing corporate culture began. One of the most well-known tools is the method of diagnosing corporate culture proposed by Cameron and Quinn[3]. They distinguish four types of culture (clan, adhocracy, market and hierarchical), each of which has its own characteristics and affects the effectiveness of the organization in different ways[4].

There are several ways to assess the quality of company culture, including surveys, interviews, content analysis, and observations. Graham J. R., for example, found that companies with a strong corporate culture had high levels of employee engagement, which is linked to better performance metrics[5].

Research on how corporate culture affects a company's innovation efforts has gained popularity in recent decades. But even with so many theoretical and empirical research, there are still a lot of unanswered questions about how to quantify and assess how corporate culture affects organizational outcomes. The development of universal models is complicated by the absence of thorough and integrated assessment techniques and the reliance of cultural elements on the particulars of each business.

Within the framework of this study, case analysis involves the study of specific organizations with different levels of corporate culture and the analysis of their performance. In the course of this study, organizations with different types of corporate culture were identified, for example, innovative startups. Internal documents, reports on profits, staff turnover, employee motivation, engagement were examined, and interviews with management and employees were conducted. A comparative analysis of key performance indicators of organizations, including financial results, staff satisfaction and the degree of innovation activity, was carried out.

Based on the analysis, it was established how a specific type of corporate culture affects the company's performance. And the analysis of internal documents and company data is considered one of the great methods of studying corporate culture, which allows you to study its manifestations through objective artifacts: regulations, corporate codes, plans, reports, communication materials and workflow data. This approach made it possible to assess how formally fixed elements of culture affect the behavior of employees and the results of the organization.

The object of research for this topic was Google and the results of the study were based on the example of Google.

Google, a part of Alphabet Corporation, is one of the world's leading technology companies, known for its unique corporate culture focused on innovation, freedom of creativity and a high level of employee engagement[6].

Additionally, Microsoft was used as an example to analyze the company's internal data and papers[7].

One of the biggest software firms in the world, Microsoft, has changed from a historically hierarchical corporate culture to one that is more open and creative. The way that codified aspects of company culture impact employee behavior and organizational outcomes is demonstrated by an examination of its internal papers, policies, and data. Creativity, diversity, focus on the needs of the consumer, compassion, and the drive for expansion.

These principles are reflected in the company's policies, for example, in employee professional development programs (Learning Pathways) and Inclusivity (Diversity & Inclusion Program).

Employees demonstrate high engagement, with an emphasis on collaboration and skill development, which contributes to the successful implementation of new technologies such as Microsoft Azure and Office 365.

Microsoft has formalized a flexible approach to workflows by introducing a hybrid work model (in the office and remotely).

An analysis of internal documents showed that clear regulations regarding flexible working, employee support during the COVID-19 pandemic, and the integration of digital tools (Microsoft Teams) increased staff productivity and satisfaction.

Throughout the investigation, the following were examined:

The significance of adjusting the company's culture to global difficulties is frequently emphasized in internal reports and yearly shareholder meetings, according to the company's communication materials. The Yammer and Teams platforms facilitate open communication between management and staff, which boosts team trust.

Employees are better able to comprehend their involvement in accomplishing strategic objectives when corporate goals are transparently established. Microsoft's engagement rates were 30% higher than the industry average, according to a Gallup research. The company's revenue increase in the cloud segment was 17% thanks to flexibility in workflow management and client attention (figures for 2023).

Training and talent assistance have been prioritized, and this has led to a rise in patents and the introduction of new solutions.

In some branches of the company, especially in countries with strong cultural differences, there are delays in the implementation of Microsoft's global initiatives. This is due to the discrepancy between centralized regulations and local specifics[8].

The analysis showed that the formalization of the principles of inclusivity and innovation at Microsoft allows the company to successfully adapt to global changes and enhances employee engagement.

For further growth, it is recommended to strengthen the localization of corporate values in regional offices in order to increase the effectiveness of adapting global initiatives.

Microsoft's systematic approach to consolidating corporate culture through documents and data is an example of how formalizing values can improve business results and support a company's long-term sustainability.

Case analysis has proven to be a highly effective method of researching corporate culture, especially for identifying real-world examples and practices that can be applied in various organizations. He made it possible to analyze organizations with different types of corporate culture and compare their performance indicators, such as financial results, innovation activity and employee satisfaction. In-depth study of specific companies allowed us to see how different cultures affect different aspects of work: from productivity to employee satisfaction.

The analysis of the company's internal documents and data has also confirmed its high value. This method allowed for a deeper understanding of how formalized elements of corporate

culture (values, regulations, codes of conduct) affect employee behavior and overall business results.

This method helps to track long-term trends affecting the organization, such as changes in productivity or staff turnover.

Research on how corporate culture affects an organization's effectiveness has shown how crucial it is to incorporate values, customs, and practices into day-to-day operations in order to attain successful outcomes. In addition to having an impact on employee engagement and motivation, corporate culture is crucial for fostering innovation, long-term competitive advantages, and financial success. The company's innovation and financial performance are directly impacted by its corporate culture. Businesses that have a strong innovation culture typically produce new products and technology with great success, which boosts their income and market value. On the other hand, organizations with a hierarchical culture are generally stable, but they have a restricted capacity for rapid innovation.

Values, rules, and codes—formalized aspects of company culture—have a big influence on how employees behave. Formalizing values aids in establishing a clear framework and expectations, which boosts output and lowers employee attrition. However, it is crucial to remember that in order to strike a balance between stability and innovation, the corporate culture must be somewhat flexible and adaptable. There is no clear correlation between an organization's corporate culture and its performance. Depending on the industry, company size, and external environment, an organization's culture can have a different effect on its effectiveness.

For example, in innovation-oriented companies, it is important to focus on flexibility and support for new ideas, whereas in organizations with well-structured processes, a culture of stability can be more productive. Thus, corporate culture is a powerful tool that affects the success of a company, its ability to adapt to changes and competitiveness. Companies that understand the importance of corporate culture and actively develop it have a better chance of achieving sustainable growth and innovative success. At the same time, it is important to realize that in order to effectively apply corporate culture, it is necessary to adapt it to specific business conditions, maintaining a balance between formalized norms and flexibility to stimulate innovation.

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DISCUSSION OF THE POTENTIAL BENEFITS AND RISKS OF IMPLEMENTING THE PROPOSED ACTIVITIES

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Abstract. This study explores the potential benefits and risks associated with the implementation of proposed measures in property management. The primary focus is on evaluating the impact of such measures on property value, tenant satisfaction, and overall operational efficiency. The potential benefits identified include enhanced property value, improved tenant relationships, and increased operational efficiency due to better maintenance and management practices. Additionally, the implementation of these measures could lead to higher tenant retention rates and a more attractive property portfolio for investors. However, the study also highlights several risks. These include the potential for increased operational costs, resistance from tenants or staff to changes in management practices, and the possibility of legal and regulatory challenges. The analysis suggests that while the benefits of implementing these measures could be substantial, careful consideration and strategic planning are essential to mitigate the associated risks. The findings underscore the importance of a balanced approach to property management, one that leverages the benefits while addressing the risks. The study concludes with recommendations for further research to explore these dynamics in different housing markets and institutional contexts, ensuring that the proposed measures are tailored to specific environments and stakeholder needs.

Keywords: property management, benefits, risks, property value, tenant satisfaction, operational efficiency, strategic planning

Introduction. Project management has now become a distinct management discipline. The importance of the project management approach has significantly increased due to rising consumer expectations for high-quality products and services, intensified market competition, and consequently, the growing need for organizations to continuously innovate and enhance their production and marketing processes [1]. Furthermore, the application scope of project management methodologies has greatly expanded in recent years [2]. Many companies have adopted project management methods for business reorganization, development and implementation of information systems, marketing processes, staff development programs, and various other activities. These methods are now used in large-scale government projects as well as smaller projects within small and medium-sized enterprises. Project management systems are increasingly being utilized as tools to improve the efficiency of internal development processes in enterprises that previously followed process-oriented production systems. Nevertheless, a significant number of projects still fail due to budget and time overruns, failure to meet goals, project phase interruptions, and other issues. This suggests a disconnect between the advancement of project management theory and its practical application. Additionally, the broader application of project management within organizations necessitates further

development and adaptation of its methods and tools. At the core of project management lies the concept of a project, a fundamental unit that occupies a central position in its theoretical framework. Although project management has existed as an independent discipline for a considerable time, the definition of a project continues to evolve in response to trends in project management theory and practice.

According to one of the key standards in project management, the Project Management Body of Knowledge (PMBOK) developed by the Project Management Institute (PMI) in the United States, the defining characteristic of a project is a specific initial objective, with the achievement of this goal serving as a measure of the project's success [3]. Another perspective, provided by the German Institute for Standardization in the DIN 69901 standard, outlines a set of essential project criteria. For an entity to be considered a project under this standard, it must meet the following conditions: a clearly defined initial goal; constraints in terms of time, budget, personnel, etc.; a unique organizational structure for its implementation; distinct separation from other projects [4].

These various standards offer differing interpretations of what constitutes a project. The most precise definition is given by the International Standard ISO 21500:2012. According to this standard, a project is a unique set of processes consisting of coordinated and controlled tasks undertaken to achieve a specific objective, with clearly defined start and end dates. The success of a project is determined by achieving results that meet previously established requirements, including key constraints such as time, cost, and resources. Typically, a project is divided into phases, each with a distinct beginning and end [5]. It is important to note that, despite the presence of clear definitions in project management standards, debates about the exact wording of these definitions continue in contemporary economic literature.

Materials and methods. In foreign literature, the project management approach has been explored by scholars such as John Dewey, William H. Kilpatrick, Luther Gulick, Ludwig von Bertalanffy, Chester Barnard, Paul Lawrence, Jay Lorsch, S. El-Mahroubi, Paul Martin, Kate Tate, Frank B. Baguley, Clark A. Campbell, and others. Among domestic researchers, notable contributions to the theory of project management have been made by V.I. Voropaev, B.P. Titarenko, V.M. Anshin, G.L. Tsipes, V.N. Mikheev, D.A. Novikov, and others [2]. The scientific publications of these researchers offer various interpretations of the concept of a project. For instance, Frank B. Baguley views a project as a sequence of interrelated events occurring over a predefined, limited period aimed at achieving a unique, pre-planned outcome [6]. Clark A. Campbell, on the other hand, defines projects as activities with clearly defined parameters, timelines, and goals, which are distinct from everyday processes or routine activities [7]. V.I. Voropaev, in his book "Project Management in Russia" [8], emphasizes that the concept of a project in professional project management differs from the earlier domestic practice of viewing a project merely as a set of design and cost estimate documentation for the creation of buildings, structures, or technical devices. Voropaev associates the concept of a project with a process of carrying out targeted activities to create new products or services within specified time, budget, and quality constraints. This process involves two components: a product-oriented process (creating the product or service) and a management process. Research on project management literature identifies two main approaches to interpreting a project: the systemic and the activity-based approaches [9]. The systemic approach understands a project as a system of time-defined actions aimed at achieving a unique but specifically defined result [10]. According to this approach, all projects, despite their diversity and complexity, share the following characteristics: Singularity: Projects are unique occurrences that appear and disappear upon achieving specific results. Uniqueness: Each project is based on a unique idea that distinguishes it. Innovation: All projects involve creating something new, regardless of the scale of changes. Effectiveness: All projects have clearly defined results. Temporal Localization: All projects have specific time frames, including start and end dates, after which the project team disbands. Analyzing literature sources reveals

the key characteristics of a project: Defined objective: Each project aims to achieve a specific goal. Outcome alignment: The final result must align with the project's objectives and stated requirements. Time constraints: Projects have strict timelines. Directed and coordinated activities: Projects consist of coordinated and manageable activities and processes. Uniqueness: Projects have distinctive features and characteristics. Centralized leadership: Projects have a project manager who oversees timelines, quality of work, and personnel efficiency.

Thus, a project can be defined as a set of tasks and activities with clearly defined end goals, interconnected tasks and resources, specified start and end dates, a known degree of novelty in goals and methods of implementation, and the presence of various conflict and risk situations within and around the project. Paul Martin and Kate Tate, in their work "Project Management," characterize project management as a continuous movement. They believe that project management is a process that helps project teams coordinate their efforts to create the needed product (service, process, or plan) at the right time for the right consumer, within the resource limits set by the organization [11]. Another definition is provided by the recognized expert in project management and strategic planning, Harold Kerzner. According to Kerzner, project management involves planning, organizing, leading, and controlling company resources for the duration of a relatively short-term task aimed at achieving specific goals and results. Additionally, project management employs a systemic approach with functional personnel (vertical hierarchy) assigned to specific projects (horizontal hierarchy) [12]. V.I. Voropaev [13] believes that modern professional project management is associated with creative activities in managing and coordinating resources (both human and material) throughout the entire project lifecycle using modern technologies and management methods to achieve the set goals and results, including scope, volume, cost, time, and quality of work, as well as satisfying the expectations of project participants. In contemporary risk management theory and practice, there are two main types of risk assessment: qualitative and quantitative. The methodology for assessing project risks might appear straightforward and descriptive at first glance. However, it must provide quantitative results to meet its purpose of showing experts and stakeholders the cost evaluation of identified risks, their negative consequences, and counter-risk measures.

Qualitative risk assessment aims to provide data that helps potential partners decide on the feasibility of participating in a project and develop measures to prevent financial losses due to risk situations. The first step in qualitative assessment is identifying possible types of project risks relevant to the analyzed project. Next, the causes and factors influencing each type of risk are determined and described, followed by a cost estimation of all potential consequences with indications of possible counter-risk measures. The results of qualitative risk assessments typically contain a large volume of useful information, such as data on identified root causes of risks, the extent of potential damage, etc. It is advisable to present the data obtained from qualitative project risk assessments in a table format, including the name of the risk, its causes (factors), consequences, and potential damage, as well as prevention measures and their approximate costs [14].

The expert method for qualitative analysis of project risks involves a set of procedures aimed at identifying, ranking, and qualitatively assessing possible project risks based on the expert opinions of project team members and external experts experienced in project activities [15]. Since project evaluation at each implementation stage is based on its cash flows, which can be affected by potential risks, accurate assessment and analysis of risk factors on the project's economic performance indicators are crucial. Experts conduct qualitative risk analyses using various expert assessment methods, including [16]:

SWOT Analysis: This method visually contrasts the project's strengths and weaknesses, opportunities, and threats. SWOT analysis is a universal qualitative analysis tool that helps identify potential project risks and compare them with the positive aspects of the project's

implementation. This method involves creating a four-cell table where experts enter information about the above characteristics and factors associated with the project's implementation.

Survey Cards Method: This involves creating specialized questionnaires for experts responsible for the relevant risk. The survey method allows for identifying, assessing, and ranking risks, although it has some degree of subjectivity. To obtain more objective data, it is advisable to involve as many highly qualified specialists and managers as possible in the survey.

Risk Spiral (Risk Rose) Construction: This method uses illustrated ranking of risks based on qualitative risk-factor assessments. Its advantage is the ability to trace the sequence of events from one possible incident through a chain of intermediate events to final or major events, with an assessment of the probability of each intermediate event and the derivation of their cumulative probability leading to losses [49].

Bowtie Method: This graphic method of qualitative risk analysis visually represents the factors and causes of risk occurrence and the consequences of its realization. The "bowtie" scheme is built based on the organization's risk incident statistics from other projects or by experts during brainstorming sessions.

Delphi Method: This is an expert assessment method characterized by the anonymity and confidentiality of each participant in the risk assessment process. This eliminates the possibility of authoritative or group pressure on individual participants and allows anonymous access to the responses of other experts, fostering a more objective exchange of opinions and the formation of the most accurate conclusions and assessments.

This method involves examining accumulated experience from similar projects to calculate the likelihood of losses. The degree of similarity with analogous projects is usually determined by investors or company managers. The essence of this method is analyzing existing information on the implementation of similar projects and extrapolating the resulting indicators to the project under evaluation. Applying this method should be based on a careful examination of the comparability of the projects being compared, as there is a significant risk of misinterpreting assessment results regarding the causes of similar risks, possible qualitative differences between risks, and so on. The complexity of this method also arises from the need for qualitative formalization and standardization of project data.

Investors typically use cost relevance analysis to identify potential risk zones and reduce possible investment losses. Four main conditional factors cause investment overruns: Overestimation of project or specific phase costs during the feasibility study stage. Variation in actual production volume compared to the plan. Increase in project work scope. Increase in costs due to macroeconomic reasons.

Quantitative risk assessment is an extension of qualitative analysis and involves creating a baseline scenario for project cash flow calculations, which can be adjusted based on identified risks. The primary goal of quantitative risk assessment is to numerically measure the impact of risk factors on the project's overall efficiency. This analysis relies on mathematical tools such as probability theory, statistics, and game theory. Quantitative risk assessment methods are categorized into statistical and analytical methods.

Statistical methods are predominantly used in the banking and insurance sectors, as they deal with structured, high-quality, comprehensive, and standardized statistical databases of risk cases.

In practical applications, especially in industrial enterprises, analytical methods for quantitative risk assessment are more commonly used. These methods are divided into two groups based on whether they account for probabilities.

Sensitivity Analysis: This widely used method analyzes the variability of project outcome indicators (such as NPV, IRR) in response to changes in project parameters. Increased sensitivity of economic efficiency indicators to changes in input parameters indicates higher susceptibility to

corresponding risks. Sensitivity analysis involves sequentially altering individual variables by a forecasted percentage ($\pm 5\%$, $\pm 10\%$, etc.), which leads to the recalculation of project outcomes. Sensitivity analysis focuses on key input parameters affecting project revenues and expenditures, including investment volume, inflation rates, income dynamics, product growth potential, market demand fluctuations, product pricing trends, sales volume, fixed and variable costs, and capital costs. Additionally, factors related to project timelines and discount rates are considered. Each project's specifics necessitate the application of sensitivity analysis and the determination of variable components affecting project stability.

Results and discussion. The implementation of both qualitative and quantitative risk assessment methodologies provides comprehensive insights into the potential risks associated with project management. Here are the key findings from applying these methodologies:

Identification and Classification of Risks:

The qualitative assessment identified a broad range of potential risks, including financial, operational, and external risks. Factors such as project delays, cost overruns, supply chain disruptions, and regulatory changes were pinpointed as major risk contributors.

Quantitative Impact Measurement:

Using sensitivity analysis, we determined how various risk factors impact key project indicators like NPV (Net Present Value) and IRR (Internal Rate of Return). The analysis revealed that the most sensitive parameters were changes in market demand, inflation rates, and project timelines. For example, a 10% change in market demand could result in a significant fluctuation in the project's NPV, indicating high exposure to market conditions.

Statistical Methods Application:

Statistical methods, although primarily used in banking and insurance, provided a structured approach to quantify risks based on historical data. The application of these methods helped in understanding the probability distributions of various risk factors and their potential impacts.

Analytical Techniques Efficiency:

Analytical techniques without considering probabilities, such as sensitivity analysis, proved effective in highlighting which project parameters are most vulnerable to risks. Adjustments in project parameters (like extending timelines to account for delays) provided a clearer picture of the project's risk resilience.

The results underscore the importance of a dual approach in risk assessment—qualitative identification combined with quantitative analysis. Here are the main discussion points:

Combining qualitative and quantitative methods offers a holistic view of project risks. Qualitative assessments are crucial for initial risk identification and understanding the nature of risks, while quantitative assessments provide the numerical basis to measure and manage these risks effectively. The integration of these methods enhances decision-making processes, enabling project managers to develop more robust risk mitigation strategies. The sensitivity analysis highlighted that external factors like market demand and inflation rates significantly impact project outcomes. This indicates that projects in volatile markets need rigorous risk management plans. The ability to predict and quantify the impact of such external factors allows for better financial planning and contingency measures. The use of statistical methods, although more common in sectors with extensive historical data, proved beneficial in providing a probabilistic understanding of risk impacts. For sectors like production where such data may be limited, developing standardized databases could improve the reliability of risk assessments. Analytical methods without probability considerations, such as sensitivity analysis, are practical and provide immediate insights into project vulnerabilities. Projects should adapt these methods to their specific contexts, ensuring that the selected parameters reflect the most critical aspects of the project. Ongoing research should focus on enhancing the accuracy and applicability of both

qualitative and quantitative methods in various industry sectors. Developing more sophisticated models that integrate real-time data and predictive analytics could further improve risk assessment practices.

Conclusion. In conclusion, the combined use of qualitative and quantitative risk assessment methods provides a comprehensive framework for identifying, measuring, and managing project risks. This approach ensures that project managers are well-equipped to handle uncertainties and enhance project success rates through informed decision-making and strategic planning. The study highlights the critical role of both qualitative and quantitative risk assessments in project management. Qualitative assessments provide a foundational understanding of potential risks, allowing for initial identification and classification based on expert judgment and historical data. This initial phase is essential for outlining the scope of risks and informing stakeholders about possible risk scenarios. Quantitative assessments, on the other hand, extend this analysis by using mathematical and statistical methods to measure the potential impact of identified risks on key project performance indicators such as NPV (Net Present Value) and IRR (Internal Rate of Return). Sensitivity analysis, in particular, has proven effective in determining how changes in various project parameters can influence overall project outcomes. This method highlights the importance of market demand, inflation rates, and project timelines as significant factors that require careful monitoring and management. The combined use of these methodologies enables a comprehensive risk management strategy, ensuring that both the qualitative nature and quantitative impact of risks are fully understood. This dual approach not only enhances decision-making but also supports the development of more robust risk mitigation strategies, ultimately leading to more successful project outcomes. The findings also emphasize the need for continued research and adaptation of risk assessment methods to different industry sectors and project environments. By integrating real-time data and predictive analytics, future risk assessments can become even more accurate and actionable, further improving the resilience and efficiency of project management practices. In summary, effective risk management in project management relies on the seamless integration of qualitative and quantitative assessments. This approach provides a holistic view of risks, facilitating better planning, improved stakeholder communication, and enhanced project success rates.

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METHODOLOGY FOR STRATEGIC PLANNING AND ALTERNATIVE MANAGEMENT CHOICES IN MANAGEMENT

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Abstract: Strategic planning was originally developed for industrial enterprises as a way to increase business efficiency and profitability. However, over time, the concept of strategic planning has become widespread in organizations of various sectors. Commercial organizations can benefit from strategic planning in various ways. The purpose of this study is to study the processes of strategic planning and provide practical recommendations for the creation of a strategic planning and management system in institutions.

Keywords: strategic planning, components enterprise, analyzing the external environment, problem solving, principles, objectives, stages, evaluation, mission.

Strategic planning, known for being crucial in achieving organizational goals, involves analyzing the external environment and managing resources. It addresses planning problems, principles, stages, and evaluation. The mission of strategic planning is understood as aligning with specific objectives. In the realm of management, the most important aspect of strategic planning is motivating organizations and enterprises towards competitiveness.

Strategic planning is a repetitive process of developing the entire firm's growth concept, shaping a long-term orientation for entrepreneurial activities to create an image and secure a strong and stable market position.

Strategic planning is one of the management functions that involves selecting the organization's goals and ways to achieve them. It provides the foundation for all managerial decisions, with organization, motivation, and control functions geared towards formulating strategic plans [1].

In an environment of increasing competition, the primary task for any enterprise is to maintain and enhance its competitiveness. An increasing number of enterprises focus on winning in competition and achieving set goals through constant managerial efforts to implement effective competitive development strategies and leverage the competitive advantages of the enterprises.

This article utilized key theoretical methods of scientific research: Induction, which moves from specific observations to general conclusions, typically resulting in probabilistic rather than certain knowledge. Deduction, conversely, derives specific conclusions from general premises. Analysis involves mentally breaking down a subject into its constituent parts, while synthesis combines the conclusions from previous methods into a unified whole [2].

The development of strategic planning in management has been reflected in the works of foreign researchers such as O.S. Vikhansky and R.V. Adiev, particularly in their work on strategic

planning at the enterprise level. Strategic planning, by its nature, cannot provide a detailed picture of the future but can offer a qualitative description of the state to which a company should aspire, the position it should occupy in the market and business to answer the crucial question—whether the company will survive in competitive struggle[3,4].

Strategic planning, known for being a critical component of achieving organizational goals, involves analyzing the external environment, managing resources, and addressing planning problems. It encompasses principles, stages, and evaluation of planning. In management, the most vital aspect is the motivation within organizations and ensuring competitiveness. Strategic planning is a continuous process of developing the firm's growth concept and shaping a long-term orientation for entrepreneurial activities to create an image and secure a strong, stable market position [5].

As a management function, strategic planning involves selecting organizational goals and the paths to achieve them. It provides the foundation for all managerial decisions, with organizational, motivational, and control functions focused on formulating strategic plans.

In an increasingly competitive environment, maintaining and enhancing an enterprise's competitiveness is paramount. More enterprises are focusing on achieving competitive success and meeting goals through continuous management efforts to implement effective competitive strategies and leverage competitive advantages.

A strategy is a long-term, qualitatively defined direction for an organization's development. It involves the scope, means, and form of activities, internal relationships, and the organization's position in the environment, guiding it towards its goals. To stay competitive in the market, each enterprise must set clear objectives and achieve all its goals. The challenge in strategic planning is selecting the right approach, aided by SWOT analysis to identify strengths, weaknesses, opportunities, and threats, assess competitiveness, and determine market position. The organization's mission should be clarified in a form manageable for implementing processes. Key Characteristics of Strategic Planning Goals:

Clear Time Orientation: Specific to a defined time interval. Specificity and Measurability: Goals must be concrete and quantifiable.

Consistency and Alignment: Goals should not contradict other missions and resources.

Addressability and Controllability: Goals should be clear and manageable.

Principles and Process of Strategic Planning: Strategic planning involves a continuous enhancement of all management system elements to develop the business successfully amidst competitive and unpredictable changes. Organizations use four management principles: planning, organization, motivation, and control, to devise strategies extending over five years or more, incorporating new equipment or ideas, organizing efforts, motivating achievements, and controlling goals for improvement.

Comprehensive Plan of Strategy: A strategy represents a comprehensive plan, depicting specific paths for organizational development based on external environment dynamics, formulating mission, setting goals, resource allocation, and planning future actions. It is primarily developed by top management but requires participation from all levels. A strategic plan should be holistic yet flexible for adjustments, providing clear direction and individual roles for employees.

Strategic Planning Components:

Mission: A concise statement explaining the company's existence and objectives.

Organizational Goals: Paths planned to fulfill the mission.

Strategies for Goals: Detailed plans on achieving these goals.

External Environment Analysis: Identifying opportunities and threats.

Key questions for analysis: Where is the organization now? Where should it be in the future? How to move from the current state to the desired future state?

Strategic Management Issues: Challenges often arise from external factors. Identifying economic, political, scientific, technical, social, and other influences is crucial in choosing the right strategy.

Strategic Planning Principles:

Purposefulness: Identifying and following a unified goal.

Comprehensive Planning: A unified system covering all activities and resources within a single timeline.

Rolling Planning: Continuous and sequential planning with necessary adjustments.

Centralization: Consolidating efforts from various divisions towards a common goal.

Continuity: Viewing activities as managed processes with feedback loops and resource redistribution.

Balanced Planning: Adjusting relations among different directions concerning time and resources.

Informational and Methodological Unity: Standardizing information systems across all levels for planning.

Strategic Planning Process Stages: mission statement, organizational goals and values, external environment assessment, analysis of strengths and weaknesses, strategic alternatives analysis, strategy selection, strategy implementation, strategy evaluation

Strategy evaluation: Comparing results with goals and using feedback to adjust strategies. Effective evaluation must be systematic and continuous, encompassing all organizational levels. Key evaluation questions include compatibility, risk, resources, external threats and opportunities, and the best use of resources.

Mission Statement: A conceptual intent detailing the enterprise's status, operating principles, management intentions, and key characteristics. It shows future aspirations, guiding the organization's efforts and prioritizing values. The mission should not reflect current financial issues or include profit as the main objective, despite its importance.

Strategic planning is a systematic and logical process based on effective thinking, forecasting, research, and selecting necessary alternatives. It enables the identification of real development opportunities while considering resource constraints. The main tasks of strategic planning include: defining necessary political decisions, assessing the future state of the economy and demand for certain products, evaluating future production capacities, preliminary estimation of potential capital investments.

The approach to planning can vary based on who makes the decisions. It can be decentralized (bottom-up), centralized (top-down), or interactive (collaborative). Each enterprise, when formulating strategic planning within a management system, must consider its market position and organizational competitiveness. It is important to account for the organization's strengths and weaknesses by conducting a thorough SWOT analysis and considering expert opinions.

By adhering to these principles, organizations can navigate competitive markets effectively and achieve long-term success through continuous refinement of their strategies aligned with their mission, goals, and resources.

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Adapting brand strategies to various Chinese regions is known as cultural branding

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Abstract. The study explores cultural branding as a modern strategy for regional development. Amid sociocultural transformations, cultural brands aid in forming regional identity. The author examines the experiences of Chinese regions, which not only employ cultural branding strategies to promote areas enriched with unique sociocultural narratives but also utilize them to preserve, transmit, and update cultural memory. From a philosophical and anthropological perspective, the article analyzes established brands in China, aligning them with cultural strategies and their value imperatives. Functions of brands, such as ontological, communicative, translational, and symbolic, are identified. The conclusion emphasizes the need to strengthen the value-cultural function of Chinese brands. The analysis employs a comprehensive methodology based on principles of systematics, structurality, axiology, cultural studies, and hermeneutics.

Keywords: Creative cultural brands, classification, characteristics, cultural and creative industry, cultural brand, region, regional identity, socio-cultural development, socio-cultural transformations, cultural memory, image of place.

Introduction. The development of cultural branding as a contemporary form of place representation is a pertinent approach that highlights the socio-cultural space of a region, marking it as an area with distinct and unique characteristics. On one hand, this form of representation provides information about the region's unique features, positioning it as an attractive site for cultural and economic investments. On the other hand, cultural branding serves as a means of revitalizing cultural memory, fostering regional identity among the population by connecting them with cultural phenomena that define the character of the place. Let's explore the content and directions of this process in the context of Chinese regions to understand the role of cultural branding in social and cultural transformations. With the onset of the era of full-scale international competition, the development of national cultural strategies has become increasingly important. In China, within the strategy of "building a powerful cultural state," special emphasis is placed on "creating cultural brands with the involvement of advanced creative forces [1]." In 2014, Chinese President Xi Jinping, at the Beijing conference on literature and art, stressed the need to "actively develop China's cultural industries and cultural brands as tools of the country's 'soft power' [2]." A well-established cultural brand, embodying both tangible and intangible assets, reflects the levels of development in China's modern cultural industry. An effectively constructed cultural brand promotes the growth of China's cultural industry, enhances its international competitiveness, and is essential for the global promotion of Chinese culture. Practices demonstrate that, in the context of cultural globalization, the creation of cultural brands takes into account the latest global trends involving creative approaches and the implementation of innovations. The importance of creative cultural brands as a new mechanism in strengthening

China's cultural "soft power" warrants close attention from government structures to their formation and operation. They are seen as a necessary innovative indicator of the cultural industry's competitiveness. At the same time, creative cultural brands are integrated as components within the content of China's cultural "soft power." Despite the novelty of the phenomenon, cultural and creative industry brands in China are becoming increasingly well-formed, gradually becoming a significant part of China's international cultural strategy [3].

Materials and methods. Evidence suggests that in the era of cultural globalization, creating cultural brands involves considering the latest global trends that incorporate creative approaches and innovation. The importance of creative cultural brands as a new mechanism for enhancing China's cultural "soft power" draws significant attention from government agencies to their development and operation. These brands are seen as necessary innovative indicators of the cultural industry's competitiveness. Simultaneously, creative cultural brands are integrated into the concept of China's cultural "soft power."

Despite the novelty of the phenomenon, cultural and creative industry brands in China have reached a certain level of maturity and are gradually becoming an essential part of China's international cultural strategy. Analysis of sources on this issue indicates that Chinese researchers identify three major groups of creative cultural brands: creative cultural regional brands, brands of organizations and cultural institutions, and brands of cultural goods and services.

1. Creative cultural regional brands. These brands have competitive advantages due to their reliance on the extensive cultural heritage of China's internal regions. They include city brands, cultural cluster brands, and exhibition industry brands.

- City brands: Formed based on geographic positioning and cultural landscapes, considering the historical development of the area and the traditional culture of its ethnic groups. High-quality international information technologies are used to highlight and emphasize the uniqueness and distinctive features of cities, making the cultural industry structure more balanced and enhancing cities' overall competitiveness. Examples include "Design Capital" Shenzhen, "Cultural Capital" Beijing, and "Creative Shanghai."
- Cultural cluster brands: These not only involve activities of individuals, enterprises, and traditional industrial clusters but also collective interregional and international interactive creativity, reflecting personal characteristics of activity subjects. The values of these brands are expressed through product manufacturing, intellectual property exchange systems, and creative industry mechanisms. Currently, there are over a thousand cultural clusters in China, with Guangzhou hosting 34 clusters focusing on high-tech sectors like digital content, media, and creative product manufacturing. Notable examples include "North Shore Guangzhou Cultural Pier," "1850 Creative Park," "Nansha International TV City," "Conghua Animation Industry Park," and the "National Music Creative Industry Base."
- Exhibition industry brands: These brands open new market spaces for traditional cultural industries and accelerate the development of media, animation, online games, and other innovative industries, promoting Chinese cultural products and services internationally. They effectively spread Chinese cultural values and enhance China's international image. Major exhibitions in 2016 included the 11th China International Cultural and Creative Industry Expo in Beijing, the 8th China Cultural and Creative Industry Fair in Nanjing, the 10th China Cultural and Creative Industry Expo in Hangzhou, and the Shanghai Art Design Exhibition.

2. Brands of organizations and cultural institutions. These brands showcase the capabilities of enterprises. In China, a unique innovation for cultural development is creating enterprise brands as indicators of competitiveness. Currently, brands of organizations and cultural institutions are well-developed, displaying advantages like human resources, intellectual property protection, and scientific-technological innovations. Prominent examples include Beijing Gehua Cultural

Development Group, Hangzhou Guzao Cultural and Creative Company, OCT Corporation, Southern Media Group, and Guangdong Alpha Animation.

3. Brands of cultural goods and services. These brands are distinguished by their differentiation, aiming to satisfy diverse consumer needs. Specialists emphasize that these brands should have specific cultural connotations, and their aesthetic content must fully meet consumers' spiritual needs. Popular examples include "Sing" software, "Zhangyue" e-readers, WeChat for text and voice messaging, and crowdfunding platforms. China's cultural industry has entered a new phase characterized by the competitiveness of cultural brands, increasingly used to represent regional cultural heritage and spread cultural values, contributing to China's image as a cultural power.

Results and discussion. In the development of Chinese creative cultural brands, several key trends have emerged. Firstly, their growth has been marked by a rapid increase, as evidenced by the "Reports on Cultural Brands in China," published annually by the China Cultural Industry Brand Research Center at Central South University in Changsha, Hunan Province. These reports, from 2006 to 2009, describe 159 cultural brands, of which 37 (23.3%) are original creative cultural brands, including television programs and shows, exhibitions, cultural clusters, animation, and performing arts. Notable examples widely recognized in China include the first entertainment TV show "Super Girls" (超级女声), the media marketing brand "Happy Shopping" (快乐购), the revolutionary youth idol series "How Young We Were" (恰同学少年), the cultural and creative park in Shenzhen (深圳文化创意产业园), the Songzhuang Creative Valley (中国宋庄创意谷), and the Yiwu International Cultural and Creative Fair (中国义乌国际文化创意产业交易博览会) [4].

These brands are emblematic of the rise of China's cultural industry. Their rapid emergence indicates that China's cultural industry has entered a stage of swift development. Representing innovative Chinese creative cultural brands, they set an example of fostering new thinking and guiding future development directions. Another trend in the cultural and creative industry is creative cultural city branding. Cities possess economic and technological resources to support the development of creative industries and the optimal conditions for nurturing creative individuals and management personnel. In urban environments, a comprehensive chain of cultural and creative industries can be easily established, promoting the overall development of cultural clusters and integrating marketing strategies to enhance brand competitiveness [5].

Chinese authorities encourage the creation of creative and cultural city brands based on their unique resources and regional characteristics, aiming for sustainable economic and social development and addressing global competition challenges. Another notable trend is the internationalization of Chinese creative cultural brands, developed with the intention of entering the global stage, becoming increasingly competitive products in the international cultural market. Currently, China's cultural and creative industry features transnational cultural enterprises, and cross-border collaboration is evident in the production and utilization of cultural products. Thus, at this historical stage of development, creative and cultural brands play a crucial role in enhancing China's "soft power" [6]. In future international cultural competition, China's strategy for cultural development has competitive advantages, aiming to develop regional creative cultural brands to strategically transform the direction of China's cultural industry development.

Research on branding in China is based on the "Classification of Cultural Industries and Related Sectors" adopted in 2004. Theoretically, cultural industries are categorized into three layers: the core, the peripheral, and the associated layer. The core includes print and publishing services, broadcasting, news services, television, cinema, and cultural and arts services. The peripheral layer consists of computer (Internet) services and entertainment industry services. The associated layer involves the production and distribution of cultural products and cultural household equipment.

Based on this typology, cultural brands are divided into three levels: primary (central), secondary (peripheral), and indirectly related to cultural industries. They encompass nine types of cultural brands. Primary brands are in areas like the press, publishing, radio, cinema and television, and the arts. Secondary brands include cultural entertainment and the Internet, while the third level includes cultural items and products related to the distribution of cultural goods [7].

Professor Chen Fang, an expert in cultural industries, believes that the essence of a cultural brand reflects cultural specificity. He notes that "cultural products have unique characteristics expressed in formal aspects such as design, color, and individual aesthetics, constituting the distinguishing features of a cultural brand. Additionally, a cultural brand formed by the traditions of an ethnic group possesses unique historical features and cultural identity. Human emotion, cognitive psychology, and value orientation are inevitably reflected in cultural brands [8]."

Another Chinese researcher, Professor Ouyang Yuquan, agrees that cultural brands are formed within the cultural industry but emphasizes the need to study their structure. He views a cultural brand as the result of branding cultural industries, which develop in key areas such as culture and art, journalism, radio, cinema and television, the Internet, entertainment and leisure, cultural tourism, and exhibition activities. "While sharing common brand traits, cultural brands have individual characteristics influenced by ideology [9]."

Overall, cultural branding in China is actively promoted as a distinct scientific direction, becoming an innovative form of state and regional policy to ensure favorable conditions for social, cultural, and economic development. Analyzing the relationship between cultural branding and the competitiveness of national culture, Chinese scholars have identified stages in implementing cultural branding: 1. Brand Creation: Developing strategy and positioning according to market demand. 2. Brand Promotion: Considering consumer traditions and modern dissemination methods. 3. Brand Management: Monitoring environmental changes in the region [10].

Cultural branding in China has become "an integral part of regional development strategies, based on the principle of accounting for local specificities in developing regional cultural brands, analyzing their further development, and competitiveness in the market." A regional cultural brand is a "resource for promoting a region, based on a historical-cultural event, cultural monument, or linked to a specific historical figure [11]."

Significant research is underway on regional cultural brands in provinces such as Fujian[12], Henan[13], Hunan[14], and Shandong[15]. Chinese scholars view the formation and development of cultural brands as tools that not only stimulate the promotion of regional cultural industries but also have a multiplicative effect on the comprehensive development of individual regions. When developing regional cultural brands, foundational elements include regional information resources such as scientific achievements, artistic works, traditions, customs, and rituals, representing vast potential for territorial development[16].

Research indicates that highly developed large cities and coastal areas in China can intensively develop innovative cultural brands. The central and eastern provinces are the most advanced in cultural industries. However, in economically underdeveloped central and western regions, cultural brand development is closely tied to territorial resource advantages.

Conclusion. Overall, creative and cultural brands are a crucial element of China's international cultural strategy, aimed at enhancing the country's cultural "soft power." Recently, the creative and cultural industry in China, as a new sector, has experienced rapid growth. The advancement of China's creative cultural brands heavily relies on state support and the creative potential of human resources. The experience of forming creative cultural brands in China is of significant scientific and practical interest, warranting further research. From our analysis of established Chinese brands, we conclude that these brands play a pivotal role in implementing China's innovative cultural strategies, which aim to develop the culture of the country's interior regions and strengthen Chinese culture's global standing. Their functional characteristics are

ontological, communicative, translational, and symbolic, primarily serving marketing purposes. During the development of cultural brands, their value function can be significantly enhanced by leveraging the rich and diverse potential of traditional Chinese culture.

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Modern approaches to quality management of educational services

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Abstract

This article explores the development characteristics of educational services within the changing socio-significant conditions of society. The changes in the provision of educational services are driven by qualitative characteristics that meet the current demands. Consumer preferences and the qualitative characteristics of educational services are shown and substantiated. A model for evaluating the quality of educational services based on the process approach is formulated. The study concludes with relevant findings.

Keywords: state, higher education, educational services, educational process, criteria.

Ensuring the necessary level of educational services is a key task for any state. Educational organizations are also interested in the quality of these services. The term "quality of education" was formulated and gained international recognition at the World Conference on Higher Education held in Paris, France, in 1998 [1]. The provisions reflected in the declaration adopted at this conference are relevant not only to the higher education system but also to other educational systems.

The concept of "quality" encompasses many aspects and can be viewed from different perspectives. When defining the category of "quality," some researchers consider the relationship between societal needs and individual needs concerning a certain system, in this case, the education system [2]. In this context, quality can be assessed through performance indicators and the state of the educational process, including criteria such as:

- The content of educational programs,
- Applied forms of teaching,
- Methods used in teaching,
- The material base condition of the educational organization,
- The quality of the teaching staff.

These criteria can be applied not only to a specific educational organization but also to the education system as a whole within a state.

Another group of researchers emphasizes characteristics such as:

- The level of knowledge acquired during the educational process,
- Skills obtained during the educational process,
- Socially significant qualities instilled in individuals [3].

Another viewpoint on the essence of "educational service quality" focuses on the compliance of the educational process with educational standards. Some researchers argue that the most important criterion of educational service quality is the alignment of the overall outcome with the goals of education for the prospective development of individuals.

Another perspective on educational service quality is consumer satisfaction with their educational needs. In this case, the evaluation criterion is the satisfaction of consumer demands [2].

As another view on the quality of educational services, one can cite the satisfaction of service recipients with the needs of the individual in education [4]. In this case, the evaluation criterion will be the satisfaction of consumer requests.

Based on the examined views of modern researchers on the category of educational service quality, it can be concluded that it can be characterized using an integral characteristic that involves evaluating:

- The conditions of the educational process,
- The results of the educational process,
- The level of individual development.

The quality benchmarks for educational services in this case will be:

- Conditions for individual development,
- The ability of the service recipient to compete in the professional market.

According to the international standard, quality is a combination of properties and forms that products possess, enabling them to satisfy consumers. For an educational organization's service recipient, the quality of educational services can be assessed by the alignment of personal and professional career competencies. It can be concluded that the quality of educational services possesses properties such as:

- The degree of incorporation of knowledge and skills formation processes desirable for service recipients and necessary for their professional activities,
- The level of meeting the demands of educational service recipients.

It is evident that an educational organization must possess a set of properties significant to consumers, and the degree of satisfaction should be determined through the lens of these properties. Consequently, the value of an educational service will be expressed in the level of satisfaction of the needs of educational service recipients.

However, it should be noted that the level of needs of educational service recipients varies greatly, and each quality level will correspond to a set of products offered by the educational organization. Consumer demands regarding the quality of educational services will be influenced by criteria related to the consumer, such as environment, life experience, personal needs, and media influence. Представим ожидания потребителя образовательных услуг в виде рисунка 1.

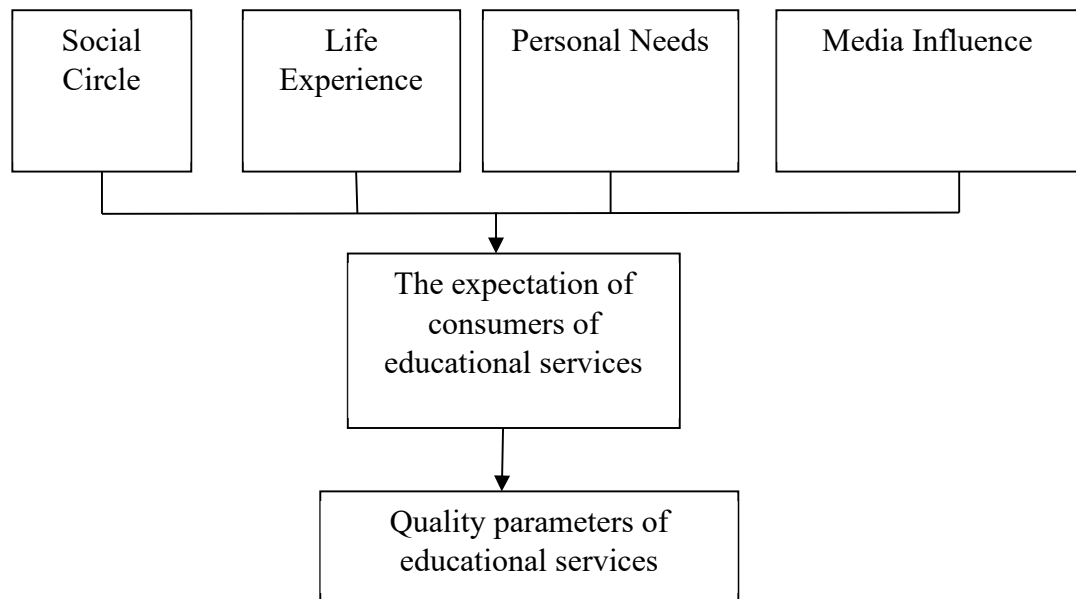


Figure 1 - Expectations of Educational Service Consumers

There are situations when the evaluation of educational service quality from the educational organization's perspective and that of the service recipient diverges. This can be due to the educational organization being insufficiently informed about the needs of service recipients.

To accurately assess the quality of educational services, it is necessary to bridge the gap between the educational organization and the consumers. Additionally, it is important to note that assessing the quality of educational services can be associated with several challenges:

- The educational process is time-consuming, and therefore its quality must be evaluated over this period,
- The educational organization is integrated into the system of social relations, so it must interact not only with educational service recipients but also with organizations in the professional market to improve service quality,
- The educational service consumer actively participates in the educational process, which also influences the quality of these services,
- A system of state control should be created to identify the main criteria for educational service quality.

Before starting the evaluation of educational service quality, the organization providing these services must solve the following tasks:

- Develop a system of quality criteria,
- Determine methods for forming an integral (final) characteristic.

The tasks set for the education system as a whole define the qualitative nature and determine the prospective directions of higher education specified by the state in strategic programs for the national economy's development.

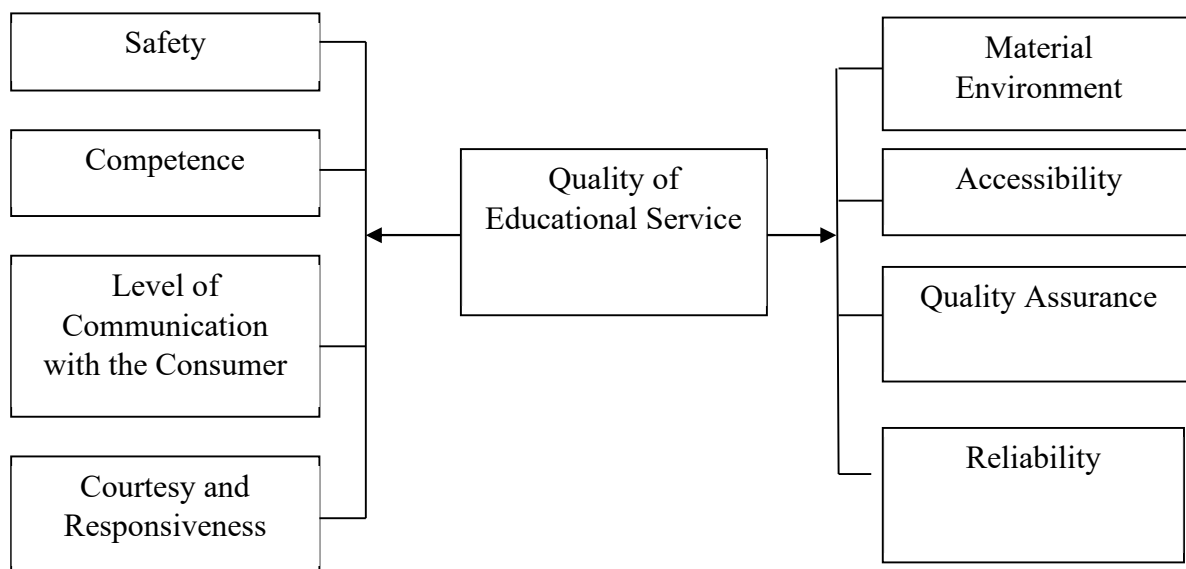


Figure 2 - Quality Characteristics of Educational Services

One of the most important criteria for determining the needs in the quality of educational services should be considered educational standards, i.e., the minimum level of knowledge and skills that consumers must acquire.

Currently, there are many approaches to evaluating the quality of educational services. Having considered these methodological approaches and critically analyzed them, we present a list of the most important quality parameters of educational organizations from our point of view:

- Educational processes,
- Educational programs,
- The composition of teaching staff,
- The level of preparation of applicants,
- Applied educational technologies,
- Resource provision,
- Management efficiency,
- The goals of the educational process,
- The competence of the management staff,
- The level of internal quality assessment systems,
- Applied advanced management technologies.

Based on the analysis of the results of the educational service quality assessment system, a set of management measures is formed to improve their quality. Undoubtedly, like any management system, the management of educational service processes has its difficulties, which are determined by the factor indicators considering the criteria of the processes under consideration. Overcoming these difficulties is quite justified and often adaptive. Overcoming certain difficulties in providing educational services increases the rating of any educational organization, which is crucial in competitive conditions, and overcoming management barriers should never be approached with pessimism.

Based on the above, process approaches in managing the education system are particularly significant for implementing the state's social policy. The difficulty in assessing the quality of educational services lies in formalizing the mentioned criteria.

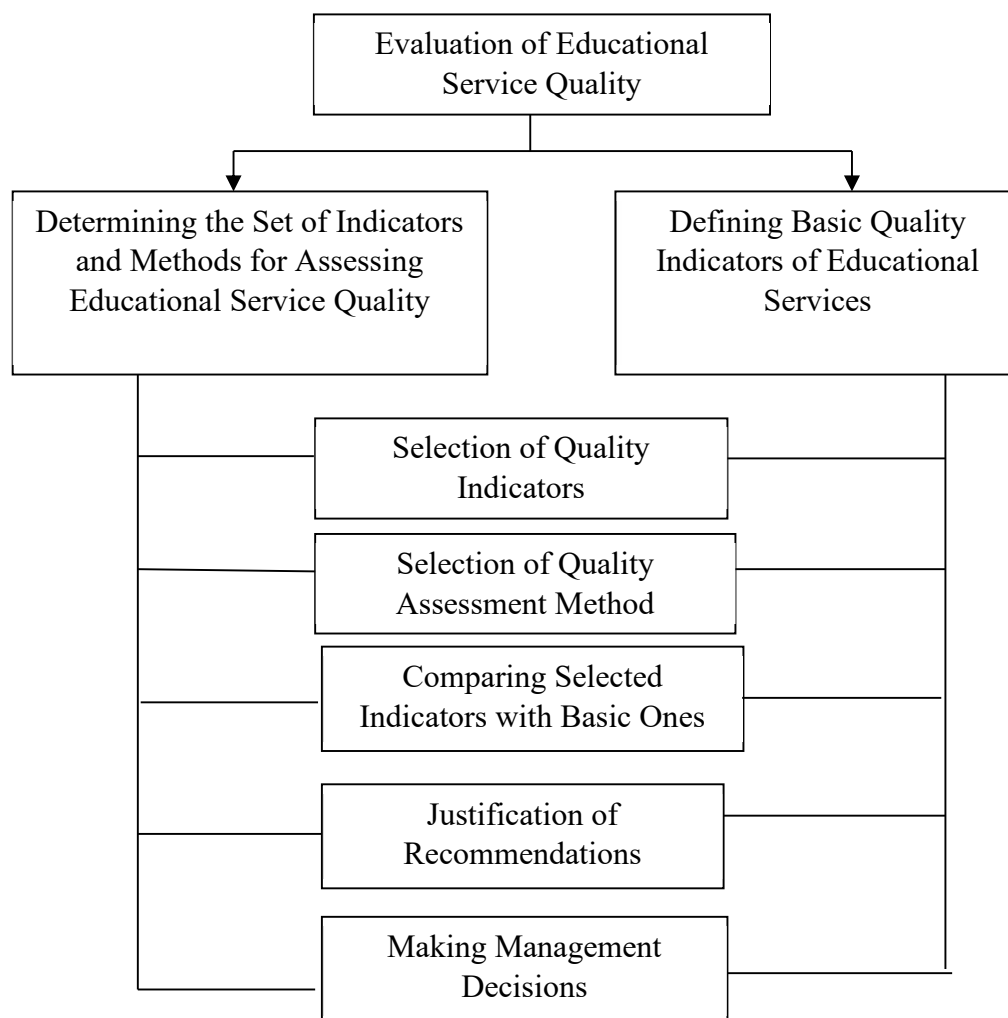


Figure 3 - Quality Management Process of Educational Services

The process of determining the quality of educational services can be divided into three stages: preparation for the assessment of educational services, conducting the assessment of educational services, and the final stage – making management decisions. At the first preparation stage, quality criteria, methods for determining the quality of educational services, the required accuracy level, necessary resources, and the method for processing and presenting results are selected.

The following types of educational service quality assessment are distinguished:

- Differentiated,
- Comprehensive,
- Containing elements of both differentiated and comprehensive methods.

The peculiarity of the first differentiated method is that some quality indicators of educational services will be compared with basic indicators. The following criteria will be accepted for analysis:

- Achievement of certain parameters of basic goals,
- Compliance or non-compliance of indicators with desired characteristics,
- The level of deviation of existing properties from the set standards.

Using the differentiated method, it is possible to evaluate parameters for which the quality of educational services does not meet (or meets) the set standards or exceeds established standards.

The comprehensive method of evaluating educational services involves aggregating obtained quantitative indicators into a single unified indicator. This method is convenient if the quality needs to be expressed by a single indicator.

If the comprehensive method is used for assessing the quality of educational services, its implementation will take place in several stages:

- Indicators are aggregated into group indicators or a single comprehensive one,
- Group or comprehensive indicators are compared with basic ones.

Assessing the quality of educational services represents the measure of service quality, reflecting the ratio of the measure of education criteria properties to the base containing the standard level of criteria.

The model for evaluating the quality of educational services will include criteria such as:

- Evaluation of the final product,
- Evaluation of educational processes,
- Assessment of the level of knowledge of applicants to compare the knowledge and skills obtained by them upon completion of the educational process.

The methodology for assessing the quality of educational services includes stages:

- Quality assessment based on the educational organization's reporting,
- Quality assessment based on sociological materials (students' personal files, graduates' careers, etc.).

Thus, the state and the educational organization are interested in the quality of educational services. The term "quality of education" was formulated and gained international recognition at the World Conference on Higher Education in France. The properties of educational service quality include the level of inclusion of education property formation processes desirable the quality of educational services include the level of inclusion of knowledge and skills formation processes desirable for service recipients and necessary for their professional activities, and the level of meeting the demands of educational service recipients. It is evident that an educational organization must possess a set of properties significant to consumers, and the degree of satisfaction should be determined through the lens of these properties. Consequently, the value of an educational service will be expressed in the level of satisfaction of the needs of educational service recipients.

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SUBSTANTIATION OF THE FIELD OF APPLICATION OF CRYPTOCURRENCIES IN THE DIGITAL ECONOMY

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Currently, representatives of various industries are showing interest in the Bitcoin cryptocurrency based on blockchain technology. Experts identify several areas of application that require special attention. Let's list some of them and describe them. First of all, these are the financial and banking sectors, since most blockchain-based applications are currently being developed for them. These are mainly interbank payments, credit history and securities.

This is due to the fact that the global financial services market is the largest industry sector by market capitalization. The problem is that the problem of inefficient processes is very acute in the financial system, namely: the vulnerability of centralized systems, the problems of paper transactions. All this ultimately leads to an increase in costs on the part of the consumer. In addition, 45% of financial intermediaries, in particular stock exchanges, suffer from fraud every year [1]. And if the latest blockchain-based technologies replace only a small part of such operations, then we can already talk about improving the efficiency of the financial sector.

An example of this is companies such as IBM and Microsoft, which work in the blockchain and direct their efforts primarily to the financial sector. The most popular area of application of this technology is money transfers based on bitcoins and cryptocurrencies in general. Today, there are many startups that compete with each other to become the official trading application for the Bitcoin cryptocurrency. Next, we will define the scope of Blockchain using cryptocurrencies in Europe and the Republic of Kazakhstan. That is:

- 1) blockchain as IoT (Internet of Things) sensors and accounting system;
- 2) charity and volunteering on the blockchain;
- 3) voting on the blockchain;
- 4) anti-corruption and supply chain;
- 5) loyalty programs on the blockchain;
- 6) online stores;
- 7) real estate trading;
- 8) land and cadastral registration.

Due to the peculiarities of the distributed registry system, it is difficult to identify the senders and recipients of money, which opens up opportunities for financing prohibited goods (drugs, weapons) and services (slave trade), smuggling and seizure of funds obtained illegally. Some studies show a high level of use of cryptocurrencies in these transactions in relative and absolute terms.

For example, according to some estimates, about a quarter (25%) of Bitcoin user accounts and about half (44%) of transactions are used in illegal transactions. Thus, the market value of bitcoin involved in such transactions may amount to about \$8 billion. The United States is worth \$100 billion compared to the projected annual volume of drug trafficking in the United States and Europe. The United States and 24 billion euros, respectively. Thus, e-commerce is developing on the "black" market.

In addition, it is a mistake to consider illegal activities as a special incentive for the development of digital signs (tokens) and cryptocurrencies

Firstly, a significant part of transactions with digital signs (tokens) requires certain computer literacy, and currently cryptocurrencies are not a generally accepted means of payment, therefore illegal money is fully involved in the chain of illegal actions;

Secondly, the use of digital signs (tokens) is much wider than in the financial sector. The share of financial projects is only 30% of the total number of ICO projects. Another risk of using cryptocurrencies is the risk that citizens will lose money due to participation in projects using digital tokens as a method of fundraising. For events related to digital signs (tokens), to date, a regulatory infrastructure has not been formed to help increase financial literacy and awareness of unqualified investors (primarily individuals), and information and educational content has not been created on a large scale. The scope of application of digital signs is shown in figure 1.

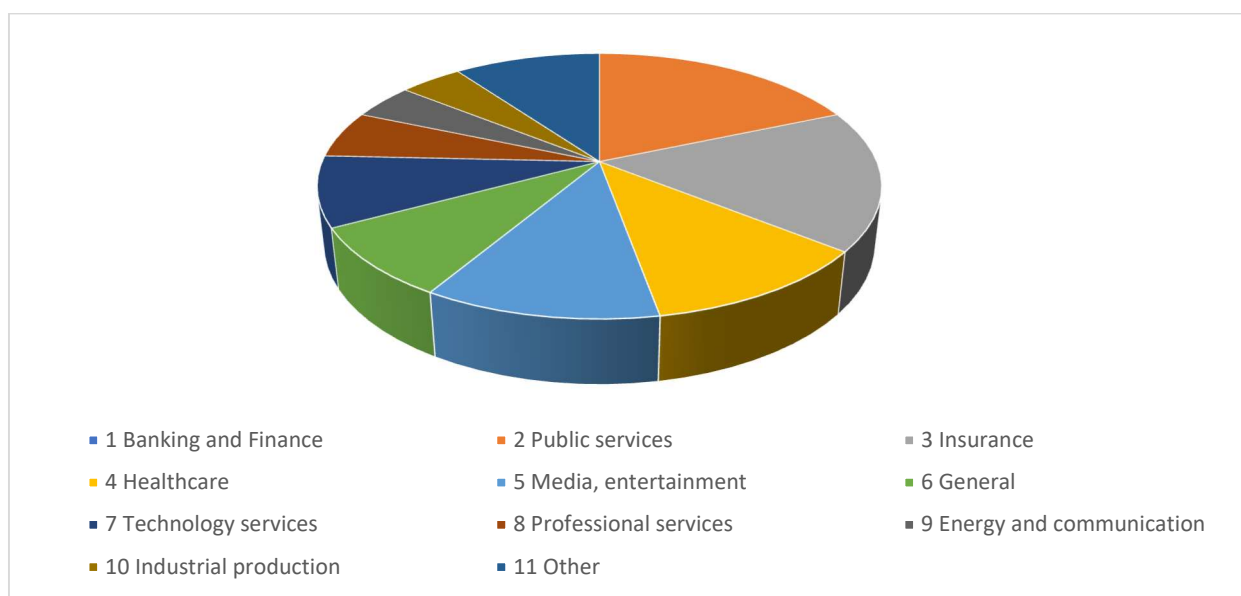


Figure 1. Areas of application of digital signage

The use of cryptocurrencies as a means of payment can occur without the use of banking networks, which does not allow monetary authorities to fully control cash flows in the country.

However, problems with the exchange of cryptocurrencies for fiat money are quite possible. Here's how to buy Bitcoin through the popular online exchange Localbitcoins. The user selects a bitcoin seller, sends him a request for the required amount, which has already been deposited to his account. Then he transfers the money to the seller (for example, through a bank or payment system) [2].

We can say that blockchain and bitcoin have great prospects for development. Nevertheless, all risks of non-repayment of invested funds due to the lack of a legislative framework are undoubtedly the responsibility of the investor.

In the case of unjustified or fraudulent actions that may lead to the loss of invested funds by the investor, there are no legal mechanisms in the state to protect unprofessional investors.

The use of blockchain compared to the existing infrastructure significantly reduces licensing costs, billing costs and other overhead costs, reduces time and increases reliability. And a high degree of reliability, transparency of tool movement processes and low cost of implementation are important incentives for expertise, implementation, and use [3].

In conclusion, the use of smart contracts may be particularly important in the banking and financial sectors. A smart contract is an executable piece of code that runs when certain conditions

are met. Smart contracts help to increase the speed and simplify complex processes when used for financial transactions. This also ensures that accurate information is transmitted, since the transaction is approved only if all the conditions of the written code are met. In addition, since these conditions are visible to all parties involved in transactions, the probability of an error during execution is sharply reduced. And trade finance is considered one of the most useful applications of blockchain technology in the banking sector. All parties involved can be connected to the blockchain network, so exporters, importers and banks can exchange information in one common distributed record. Smart contracts are executed automatically after certain conditions of the transaction are fulfilled, and the relevant parties can see all the actions performed.

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Inflation in Kazakhstan: an indicator of economic growth or crisis?

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Key words: inflation, National Bank, supply and demand model, economic growth, monetary policy, trade turnover, financial bubble, global economic crisis, lending, base interest rate, monetary policy, economic diversification, import and export, currency appreciation

In the light of global economic and political changes related to the Covid-19 pandemic and political conflicts, inflation is one of the discussed economic issues in modern society. The inflation rate is one of the important macroeconomic indicators, which has a negative impact on the activities of all economic entities. Inflation is an integral part of the development of the economies of countries, which appeared at the time of the origin of monetary relations, as it is closely interrelated with concepts such as monetary circulation, financial policy, interest rate, production and consumption. Keeping the inflation rate from rising is one of the main goals of the Central (National) Banks of the world.

The article considers the definition of inflation, the causes and consequences of inflation, and presents an analysis of inflation indicators in the economy of Kazakhstan in recent years. The term inflation itself was introduced by the American economist A. Delmar in 1864 and meant a "paper bubble", since at that moment the American monetary circulation was overflowing with banknotes due to the long-lasting civil war in the United States. There is no single definition of the term "inflation" among economists, since inflation is a complex socio-economic phenomenon with a complex of interrelated causes. Analyzing the above, we can conclude that inflation is the process of a general increase in prices for services and goods caused by the prolonged predominance of aggregate demand over aggregate supply, which causes an overflow of the channels of circulation of the money supply in excess of the needs of commodity turnover, as well as a result of a decrease in the purchasing power of the national monetary unit.

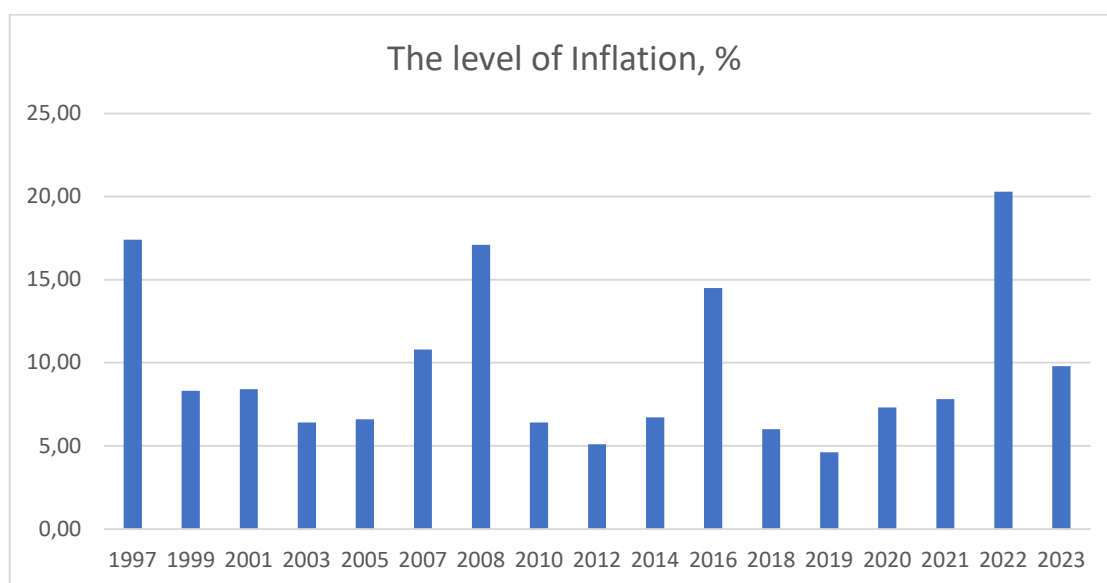
In economics, there are many ways to classify inflation by various parameters, but the most used is the rate classification: "creeping" inflation (less than 10% per year), "galloping" (up to 500% per year) and hyperinflation (over 500% per year). "Creeping" inflation is the most "harmless" for the country's economy – its scale is completely controlled by the National Bank, and in fact does not harm the economy, but on the contrary, stimulates consumption, production and investment. Galloping inflation and Hyperinflation cause significant damage to the country's economy and money turnover, during which money is significantly devalued and barter relations begin to develop instead of monetary relations, which has a destructive effect on the Banking system and production of the country. Also, one of the important classifications of inflation is the classification according to the factors that cause inflation: demand inflation (changes in the country's aggregate demand) and supply inflation (changes in aggregate supply).

As mentioned above, the increase in the inflation rate is caused by a whole range of reasons related to internal and external factors of the country's economy. Among the main factors of the growth of the inflation rate, economists distinguish:

1. The growth of government spending, causing a budget deficit, for the elimination of which the Central Bank conducts a monetary issue, without reinforcing the money supply with the necessary amount of issued goods
2. A significant predominance of imports over exports, as a result of which the prices of goods strongly depend on the economic condition of the country from which they are imported
3. Global economic crises accompanied by rising prices for raw materials and food (for example, because of the 1973 oil crisis, inflation in the United States increased from 3 percent to 12 percent)
4. A high level of monopolization of the market, in which prices are set not by the market, but by a monopolistic company
5. The imbalance between supply and demand
6. An undifferentiated economy focused on the sale of raw materials, as a result of which the price level in a country depends on the demand and price of raw materials sold by a given country.

An increase in the inflation rate may be an indicator of economic growth in cases where the Central Bank conducts a stimulating monetary policy, the purpose of which is to stimulate the growth of aggregate supply and demand, which has a positive effect on the economic growth of the country. However, a prolonged state of overheating of the economy can lead to deep financial crises. An example is the situation in the real estate market in the United States in the early 2000s, in which US banks issued loans at low interest rates, which led to the bubble that burst in 2008 and the global financial crisis.

To calculate the inflation rate, the price index is used, which is calculated as a percentage between the price of goods for a given period and the price of goods in the main period. In Kazakhstan, the inflation rate has remained unstable since the beginning of building a market economy in the country.



Source: stat.gov.kz, data courtesy of National Bank in Republic of Kazakhstan

After Kazakhstan gained independence in 1991, the inflation rate exceeded 2,900 percent in 1992 and remained at such a high level until 1996. The main reason for hyperinflation in the early 1990s was the abrupt transition of the planned economic system to a market one,

accompanied by shock therapy. The state was no longer involved in regulating the prices of goods and did not determine the exchange rate, as a result of which prices for all types of goods rose sharply. The transition to a new national currency, the tenge, in 1993 also had an effect on high inflation rates. The ongoing policy of privatization of large industrial enterprises by foreign and Kazakhstani companies (1994), the creation of an effective system of taxation and pricing, the establishment of trade relations with other states allowed by 1996 to reduce the inflation rate to 17.4 percent and contributed to the further prevention of repeated hyperinflation.

In further dynamics, the inflation rate remained fluctuating, but in marginal values, with the exception of two periods: 2008 and 2016. In 2008, the global economic crisis, better known as the "Great Recession", began in the world, which had a negative effect on all market economies, especially those focused on the export of raw materials, which includes Kazakhstan. In 2015, on August 20, the Government of Kazakhstan announced a new monetary policy based on inflation targeting and a free-floating exchange rate, which led to an increase in the value of the dollar to 322 tenge per dollar. The rapid devaluation of the tenge led to an increase in prices for goods and services of 14.5 percent on average. Further actions undertaken by the National Bank to strengthen the exchange rate made it possible to reduce the inflation rate to 4.6 percent by 2019.

Starting in 2020, the inflation rate in the country began to rise, and unlike previous crises, in which the rate of inflation growth was reduced by 1-2 years, the increase in the inflation rate continues to this day. In 2023, the inflation rate was 9.8 percent, which is a fairly high indicator. In order to accurately and correctly build an anti-inflationary policy, it is necessary to identify the factors that most affect the inflation rate in the country. To determine the main factors and causes, it is necessary to analyze the indicators of the inflation rate and compare them with the factors that may have influenced the change in the dynamics of inflation growth.

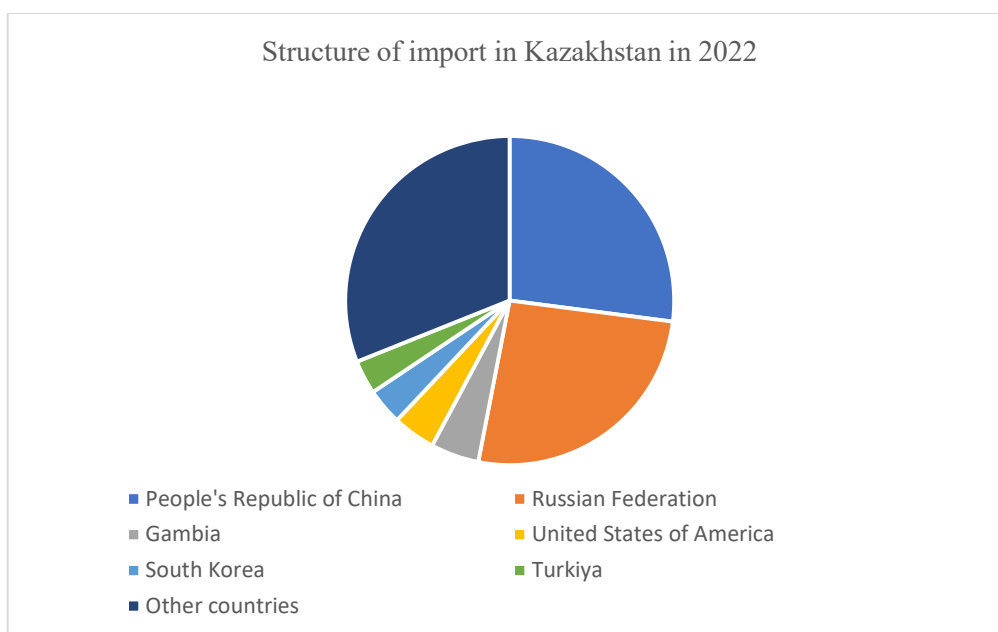
In 2020, according to the National Bank, inflation in the country averaged 7.3%, which is a "leap" compared to 2019, in which the inflation rate was 4.6%. The main reason for high inflation in 2020 was the Covid-19 pandemic, which caused the global economic crisis, which reduced global GDP by 4.3%. To combat the pandemic, about 1 trillion tenge was additionally allocated from the country's budget (the Ministry of Health of the Republic of Kazakhstan – 326 billion tenge for anti-pandemic measures, the Ministry of Labor and Social Protection of the Population of the Republic of Kazakhstan – about 501 billion tenge for targeted social assistance and support to socially vulnerable segments of the population during the pandemic), while reducing the level of GDP and production increased by 2.5 percent. In addition to additional budget expenditures, the inflation rate was negatively affected by the rapid growth in demand for food products that occurred at the beginning of the pandemic in Kazakhstan.

In 2021, the country's inflation rate was 8.7% on average, which is due to the consequences of the 2020 crisis. Despite the GDP growth in comparison with the pre-pandemic indicators (197.1 billion dollars in 2021 and 181.7 billion dollars in 2019), the growth is more related to the increase in oil prices (the price of Brent crude oil in 2021 increased as much as possible to \$ 120 per barrel, exceeding last year's figure by 2 times) and an increase in the amount of oil produced per year (from 52.2 million tons of oil in 2019 to 85.7 million tons of oil in 2021), while other sectors of the economy, such as agriculture or the service sector, were only recovering from the pandemic crisis. Due to the continued security measures against the Covid-19 pandemic, trade was limited, while the average cost of transporting goods increased. The price increase was also influenced by the factor of the worldwide increase in the cost of food due to the abnormal drought in 2021. According to the Food and Agriculture Organization of the United Nations, in 2021 the average value of the price index was 125.8 points, increased by 27.7 points compared to 2019, and since Kazakhstan provides the domestic market unevenly, prices for some types of goods dependent on imports increased, for example, sugar prices, 64.2% of products were provided imported from abroad.



The speech of the President of Kazakhstan Kassym-Jomart Tokayev at the international economic forum in the summer of 2022, at which it was announced about the high level of inflation in Kazakhstan. Source: www.akorda.kz

In 2022, according to the country's president Kassym-Jomart Tokayev, the inflation rate in the country rose to the levels of the 1990s. According to statistics from the World Bank department in the Republic of Kazakhstan, as of December 2022, the inflation rate was 20.3%. The main reason for this spike in inflation is the global political conflict between Russia and Ukraine, which led to a "shock" in all markets of Kazakhstan. Producers in Kazakhstan, due to the economic downturn against the background of sanctions in Russia, lost a source of cheaper raw materials, which led to an increase in prices even for those goods that were independently provided by their own production. Since Russia is a key partner of the Republic of Kazakhstan (at the time of 2023, 26.6 percent of Kazakhstan's total imports, rising prices in Russia and the departure of foreign industrial enterprises directly affect the subsequent price increase in Kazakhstan. Imports of non-food products from the EU and the Russian Federation, as a result of the sanctions imposed on the Russian Federation and the departure of foreign industrial companies, decreased and became more difficult, as a result of which the cost of transporting goods increased.



Source: stat.gov.kz

Oil production and exports decreased as a result of multiple disruptions at the Caspian Pipeline Consortium, which exports about 80% of the country's oil, but budget revenues, due to high oil prices, according to the Ministry of Finance of the Republic of Kazakhstan, increased by 21.1%. Depreciation of the value of tenge against the US dollar by 8.1, as a result, according to the World Bank, the cost of imported goods increased by 10.8 percent compared to the previous year, which contributed to the high inflation rate for 2022. A less important, but also influential factor is the short-term increased demand associated with a sharp increase in the number of visitors to Kazakhstan from Russia against the background of internal political changes in September-October (according to the Ministry of Internal Affairs of the Republic of Kazakhstan, 1.66 million Russian citizens entered the country) this had the greatest impact on the cost of housing and rent (the cost of renting housing increased by 40.7% on average). In order to combat high inflation, the National Bank of Kazakhstan increased the interest rate to 16.75%, while warning the government about the likely inflationary pressure associated with an increase in budget expenditures to approximately 29.7% of the originally planned for 2022. Restrictions were imposed on the export of goods, the prices of which increased the most. To strengthen the tenge exchange rate, the National Bank increased its presence in the market by selling foreign currency for about 1.5 billion US dollars from its own assets. Experts from the antimonopoly department have launched investigations into eight large companies that allowed themselves unjustified price increases due to the hype at the beginning of the political crisis.

As a result of the effective measures taken by the National Bank, the inflation rate was reduced to 9.8%, as a result of which the real incomes of the population began to recover and increased by 0.2 percent by the end of 2023. Real wages increased by 3.5 percent year-on-year. However, the inflation rate remains high due to the poor harvest in September of this year, associated with heavy rains, as well as a 20% drop in oil prices and an 8.5% reduction in exports, as a result of which the country's market became more dependent on imports by 24.6%. Based on this analysis of the inflation rate during 2020-2023, it is possible to identify the main causes of high inflation:

1. The dependence of Kazakhstan's economy on world prices for raw materials, in particular oil, and the lack of a developed manufacturing industry.
2. The high cost of raw materials produced in Kazakhstan, as a result of which it is more profitable for manufacturers to use imported raw materials.
3. The growth of budget expenditures from the originally planned, not supported by the corresponding state revenues.
4. The dependence of the Kazakh market on the prices of imported goods, as a result of which the increase in import prices causes a high level of inflation.
5. Dissatisfaction of the domestic market with domestic goods.

Based on certain reasons, several ways can be drawn up to minimize the inflation rate in Kazakhstan:

- 1) Developing a policy of gradual diversification of the economy of Kazakhstan by stimulating manufacturing industries and industries related to modern technologies, as well as borrowing the experience of modern industries in other countries.
- 2) Reducing the share of imports in the total turnover of the country by increasing the number of domestic industries, attracting investment and imposing higher duties on imported goods to increase the competitiveness of goods produced in Kazakhstan.
- 3) Strengthening the activities of antimonopoly services in relation to manufacturers who overestimate prices without appropriate reasons.
- 4) The introduction of measures to control the prices of goods that are socially significant and may be subject to speculation in unstable times.

5) The development of high-tech industries by improving the level of science in the country and creating a safe climate for business development in the country.

Summing up, it can be concluded that the high inflation rate over the past 4 years in Kazakhstan is not a sign of economic growth or crisis in the Republic of Kazakhstan, instead, it is a consequence of the country's main economic problems: an undifferentiated economy focused on the export of raw materials and dependence on importing countries. To solve these economic problems, the state needs to attract investments and sponsor funds in the development of modern production technology and their implementation in Kazakhstan, as well as fully provide the domestic market with domestic goods to reduce the dependence of the price level on the economic situation and the situation of other countries. Reducing the inflation rate is important for the state, since solving this problem will affect solutions to other important social problems, such as reducing poverty, reducing social inequality and improving the economic well-being of citizens.

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REGULATION OF FREIGHT AIR TRANSPORT TARIFFS

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Annotation. The topic “Optimization of Tariffs: Logistics Approaches” explores current issues related to the regulation and optimization of air transport tariffs through the application of logistics methods. The article emphasizes the role of effective decision-making tools in shaping pricing policies for freight air transport.

Methods for optimizing tariffs, reducing transportation costs, and improving service quality through logistics approaches are analyzed. The application of digital technologies and analytical models for flexible tariff regulation is also discussed. This approach can contribute to more economically efficient implementation of global freight transportation. The article serves as a valuable resource for researchers and industry professionals.

Keywords: logistics approaches, tariff optimization, freight air transport, pricing policy, effective management, transportation costs, digital solutions, analytical models, service quality, flexible regulation.

Logistics approaches are the primary tool for regulating and optimizing freight air transport tariffs. These approaches enhance decision-making processes for reducing transportation costs and ensuring efficient resource utilization. Additionally, logistics plays a critical role in developing flexible pricing policies tailored to customer demands. [1]

The optimization of tariffs involves the use of analytical tools to increase transportation process efficiency and create more cost-effective models. This method allows tariffs to be adjusted in line with market conditions and improves service quality. Optimization contributes to timely and cost-efficient transportation. [2]

Freight air transport is a crucial component of global trade and is widely used to meet rapid delivery requirements. This sector holds a significant position in the global economy, particularly in transporting high-value and urgent goods. Air transport is considered one of the fastest modes within international logistics systems. [3]

Pricing policy is essential for maintaining a competitive environment in freight air transport and attracting customers. It also ensures tariff stability in the market and optimizes the cost of air transport. Price adjustments provide economic benefits for both consumers and carrier companies. [4]

Digital solutions encompass the use of modern technologies in the management of freight air transport. These technologies play a crucial role in analyzing, optimizing tariffs, and making flexible decisions. Digital platforms offer extensive capabilities for tracking shipments and enhancing customer satisfaction. [5]

Service quality is a key advantage provided by air transport to its customers. Timely delivery and logistics solutions that meet customer demands are essential indicators of quality. High-quality service increases customer loyalty and fosters long-term partnerships. [6]

The regulation of freight air transport tariffs plays a crucial role in the development of global logistics. To better understand the significance of this topic, 2023 statistical indicators are

examined. The table below highlights the relevance of the topic and the effectiveness of logistics methods.

Table 1.

“Global cargo air transport”	
Statistical indicators	Information
Volume of global freight air transport	65 million tons in 2023
Average tariff (t/km)	\$2.5-3.0 USD/t/km (varies by region)
Reduction in transportation costs	Through logistics 10-20% reduction
Adoption rate of digital solutions	75% of air freight companies have invested in digital technologies
Factors affecting service quality	Flexibility (45%), speed (30%), cost (25%)
Economic impact of tariff regulation	Efficient tariff policies increase company revenues by 15-25%

Conclusion. The regulation and optimization of freight air transport tariffs are key elements ensuring the sustainability of the global logistics system. Proper tariff management creates favorable conditions for both airlines and customers. Logistics approaches enable flexible tariff regulation, enhance service quality, and minimize transportation costs.

Practical evidence shows that analytical models and digital solutions contribute to more effective pricing policies and alignment with market demands. Modern technologies have revolutionized air transport management, making the process more transparent and efficient. The analysis of big data and tools of artificial intelligence allows for more precise and flexible tariff optimization.

Optimizing tariffs is a necessary tool for increasing economic efficiency. Effective pricing policies enable airlines to increase transportation volumes, contributing to the development of international trade. Accurate pricing of freight air transport is also essential for maintaining a competitive environment and ensuring market stability.

In conclusion, regulating air transport tariffs is significant not only from an economic perspective but also strategically. In the future, broader application of digital technologies, artificial intelligence, and analytical approaches in this field will create new opportunities for tariff optimization. These approaches will ensure the sustainable development of global logistics networks, yielding both economic and environmental benefits.

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BENEFITS OF STARTING AND EXECUTING START-UP PROJECTS IN THE MODERN ECONOMY

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Abstract: In today's economy, startup projects play an important role in spurring innovation and creating jobs. Their introduction and development help to accelerate the acceptance of innovations, react to market changes, and fulfill the particular needs of consumers. Startups, because to their flexibility and creative attitude, frequently serve as drivers of digital transformation and economic competitiveness. Furthermore, they attract investments, which help to strengthen the entrepreneurial ecosystem and build innovation clusters. The study focuses on the economic benefits of startups, such as increasing technical innovation, diversifying businesses, and establishing a long-term environment for small and medium-sized organization growth.

Keywords: startups, innovation development strategy, business accelerators, development institutes

The growth of an innovative economy necessitates not just large-scale investment projects from major enterprises and government entities, but also initiatives from small businesses and startups. These firms aspire to bring unique items to market. This sector is currently gaining attention from both state businesses and development institutes.

Startups, like small businesses, are private firms that seek to create value over the medium term by launching innovative goods. Startups, on the other hand, must be unique, with an emphasis on providing novel products or services. Startups can make existing items (or services) more accessible through technological or organizational changes, in addition to pricing, by introducing new consumption models.

Traditional firms focus on specialized market sectors within a geographic area, with owners having a solid understanding of prospective and expected profitability. In contrast, startup founders think on a bigger scale, intending to win new markets, frequently beyond domestic ones, motivated by a desire to change the world.

Small business owners prioritize short-term profitability over long-term growth rates and business value. Startup founders, on the other hand, understand that their ventures may not generate cash or be self-sustaining in the early years, but they anticipate rapid market share growth, revenues, and business value over time. Some firms spend too much time in this stage, and business accelerators can help determine whether to free up resources for new ventures.

When launching a startup, founders frequently consider exit plans, which may include selling the company to large businesses or institutional investors, selling stock, or going public. Small business owners often rely on personal savings, family and friends, bank loans, and, in certain cases, government assistance. Assets can be utilized as collateral, with specific business plans to reduce risks and decrease repayment timeframes.

Valbona Mehmet and Erica Musabelliu they claim that Startups are not to be confused with any other typical firm that starts up, operates, and tries to prosper in a certain market[1]. The lead author argues that startups have become an integral part of modern economics, politics and culture. Their growing relevance highlights the rapid technological progress and globalization that are changing the modern economy. In today's economy, entrepreneurs do more than just provide goods and services that are in demand by customers. They have become active participants in the transformation, constantly questioning and transforming both existing business models and other startups[2].

Startups contribute significantly to economic growth. They drive a disproportionate share of innovation and job creation. Furthermore, startups frequently have a favorable impact on the economy as a whole. When a startup succeeds, it opens up new possibilities for other enterprises. For example, a successful company can generate new consumers for other firms or suppliers, or it can develop new technology that other businesses can use[3].

The article's goals are to examine the benefits of starting and growing businesses in the contemporary economy, examine how they affect the creation of jobs, innovation, and investment, and pinpoint the critical elements that enable them to successfully integrate into the entrepreneurial ecosystem.

Successful startup instances from a variety of areas, including fintech, biotechnology, and IT, were analyzed in order to examine the benefits of startup projects in the contemporary economy. Startups from emerging economies and those with highly developed entrepreneurial ecosystems (such as the United States and Singapore) were examined. A review of success variables, including government assistance, innovative company models, the introduction of new technology, and access to financing, was part of the investigation.

A comparative study of startups' effects on the growth of different economic sectors was conducted in order to determine their social and economic benefits. The following metrics were employed: innovation, scalability of business models, the amount of attracted capital, and the creation of jobs. The following metrics were employed: the amount of investments attracted, the creation of jobs, and the scalability and creativity of business models.

As the results of this study, IT should be noted that startups in the IT field, such as Zoom, have actively contributed to the creation of thousands of jobs both in their headquarters and in related sectors[4]. Startups in nations with developed ecosystems, like Singapore, draw a lot of venture money. As a result, the Grab startup raised over \$10 billion in funding, bolstering the local financial system[5].

Biotechnology startups like Moderna have emerged as key players in technical advancements, speeding up the creation of vaccines and expanding access to medical devices. The availability of reasonably priced venture capital, government assistance initiatives (such as grants in Singapore), and robust academic ecosystems were also important success factors[6].

Startups have some distinct advantages over regular businesses, according to a comparison of their effects with those of established businesses.

Startups adopt creative business models and adjust to changes more quickly in a market that is changing quickly. While traditional banks have taken longer to adjust to these developments, fintech firm Revolut, for instance, has developed a digital ecosystem for financial management in a matter of years[7]. Innovation cluster development is significantly influenced by startups. Up to 40% of new technology in Silicon Valley are created by entrepreneurs, making the area more competitive. Startups foster the growth of entrepreneurial thinking and digital literacy, which is particularly crucial in developing nations[8]. Startups foster the growth of entrepreneurial thinking and digital literacy, which is particularly crucial in developing nations. Startup acceleration programs, for instance, have facilitated the entry of thousands of new entrepreneurs into international markets in India.

According to the study's findings, startups are crucial for fostering innovation, generating employment, and drawing in capital, particularly in the global digital economy. These benefits can be used as a model for other states and are particularly noticeable in nations with advanced corporate infrastructure, like Singapore, the US.

Startup initiatives are a major force behind the modern economy, helping to diversify business models, introduce new ideas, and create new jobs. They can react swiftly to shifts in the demands and conditions of the market because of their flexibility and adaptability. A well-established ecosystem, which includes access to venture capital, government assistance, educational materials, and developed infrastructure, is crucial to the success of businesses. Because of a combination of these variables, leaders in this industry, including the United States, Israel, and Singapore, exhibit high efficiency. By creating innovation clusters, boosting national competitiveness, and promoting technological advancement, startups have a big influence on economic development. Additionally, their efforts aid in luring investments, particularly in high-tech sectors like finance, biotechnology, and IT.

Startups are especially valuable for emerging economies because they provide chances for the expansion of digital literacy, the development of an entrepreneurial culture, and integration into international markets. Startup development necessitates a comprehensive strategy that includes not only legal and financial assistance but also the establishment of favorable conditions for experience sharing across nations and regions, which speeds up global innovation processes.

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DIGITALIZATION PROCESSES IN THE ACTIVITIES OF PUBLIC AUTHORITIES

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Abstract The processes of digitalization in the activities of public authorities are gaining key importance in the context of rapid technological progress. The introduction of digital technologies helps to minimize corruption, reduce administrative barriers and optimize internal processes. This is especially important in the context of growing demands from society for the efficiency and quality of the work of government agencies. The novelty of the research lies in the comprehensive analysis of modern approaches and technologies, such as artificial intelligence, blockchain and big data, used in the activities of public authorities. Digitalization of public authorities acts as a driver of transformations in the public administration system. However, for the successful implementation of digital initiatives, it is necessary to overcome a number of challenges, including ensuring cybersecurity, digital literacy of employees and citizens, as well as overcoming legislative restrictions. The findings of the study emphasize the need to develop digitalization strategies based on interagency cooperation, stakeholder engagement and adaptation of global trends to national conditions.

Key words: digitalization, public administration, e-government, digital technologies, process automation, transparency, artificial intelligence

Digitalization is increasingly playing a crucial role in the evolution of public administration in the current era. Information and communication technology's quick development has a big impact on management procedures, changing how public services are provided, how citizens interact with the government, and how government operations are transparent. In addition to boosting productivity and cutting down on time expenditures, the adoption of digital technology helps to improve public-state trust. The literature review shows that the problem of digitalization of public administration is actively studied both in theoretical and practical aspects. Thus, the significance of the information society as a foundation for the development of new public administration models is emphasized in the writings of Durman, M. O. and Bashtannyk A. H.. Analyzing effective strategies for introducing digital technologies is one of the main subjects of scholarly publications. The theoretical foundations of this process are analyzed in the works of such authors as Bolívar-Ramos, M. T. and Garcia-Morales, V. J, who emphasize the importance of introducing innovative technologies to improve management efficiency. For example, China, displays the extensive use of artificial intelligence and big data in management, allowing for better control over legislative compliance and optimizing government agency work. In Singapore, the adoption of electronic management systems, such as the national digital platform MyInfo, has greatly streamlined citizens' interactions with government services. Despite excellent instances, many countries are facing a variety of issues. Among them are cybersecurity, a lack of digital infrastructure in distant areas, and reluctance to change from bureaucratic processes. These

issues necessitate thorough investigation and the creation of integrated solutions that take into account country characteristics[3].

As a result, reviewing the experiences of other nations and understanding the elements that influence the successful digitization of public administration is an important topic of scientific inquiry. This enables us to establish a theoretical and practical foundation for the continued development of digital transformation in public administration.

The topic is relevant because there is a need for a thorough examination of the processes of digitization in public administration with the goal of building sustainable, effective, and transparent public administration systems in the digital economy.

This study employed theoretical analysis approaches to examine information from international organizations (such as the OECD and the World Bank) and government digitalization efforts. The major concepts of digital transformation, such as E-Government models, approaches to the use of big data and artificial intelligence, and regulatory implications of digitalization, are discussed. The next method is comparative analysis. A comparative analysis was done to evaluate the effectiveness of digital technology adoption in various countries. Countries with different levels of digitalization development were selected, these are:

Singapore as an example of integrating digital technologies into city management;

China as an example of the large-scale use of artificial intelligence and big data.

The investigation employed indicators such as the e-government Index (EGDI), the cybersecurity index, and digital literacy levels. Scenario analysis methodologies were utilized to examine the chances for the introduction of new technologies, allowing researchers to simulate the potential outcomes of digitalization based on existing data and worldwide experience. The application of these methodologies resulted in a detailed examination of digitization processes as well as recommendations for their efficient implementation in public agencies.

OECD reports such as Digital Government (2023) highlight the importance of digital government for sustainable development. Digital Government investigates and promotes the creation and execution of digital government policies and projects that bring governments closer to citizens and companies. It understands that technology is a critical driver not only for increasing public sector efficiency, but also for improving policy effectiveness and making governments more open, transparent, inventive, participatory, and trustworthy. The OECD recognizes the importance of developing a unified platform for service delivery that avoids data fragmentation and improves people's interactions with the state. The OECD publications underline the importance of using digital technology and data to transform interactions with public service users throughout the policy and service life cycle. This comprises policy formulation, implementation, monitoring, and assessment (Fig.1)[4].

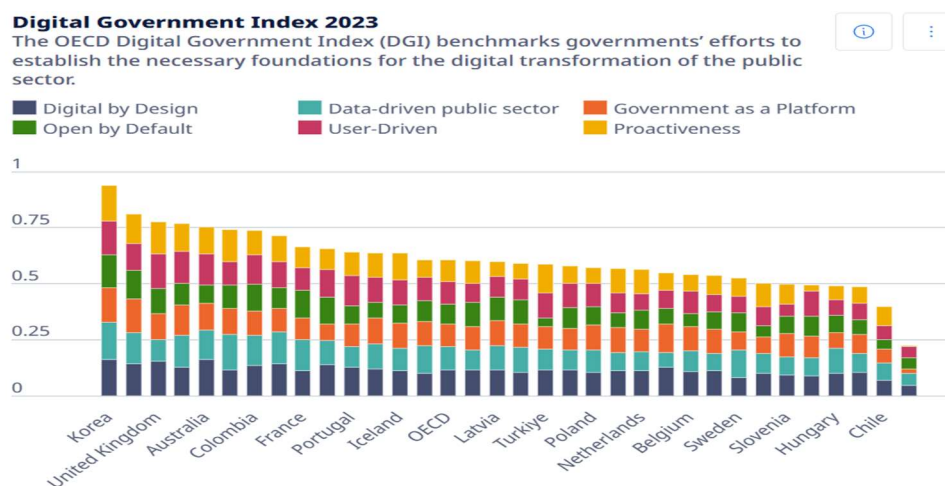


Figure I. Digital Government Index (DGI)[5]

The index consists of the following components, they are shown in different colors in the figure: Digital by Design (digitalization by project) – dark blue - it reflects the level of integration of digital technologies into the decision-making process and the development of government programs. Data-Driven Public Sector (data-driven public sector) - light green it shows how much the state uses data to improve the quality of its services and decision-making. Open by Default – blue it demonstrates the level of availability of government data and transparency of processes. Government as a Platform – orange indicates the degree of provision of public services through digital platforms. User-Driven (user orientation) is pink, it is the level of citizen participation in the development and provision of digital services. Proactivity – yellow is the government's ability to anticipate citizens' requests and provide services without waiting for requests. Korea demonstrates the highest overall level of digitalization, especially in aspects such as proactivity (yellow) and project digitalization (dark blue). The UK and Australia are also leading the way, showing strong results in data usage (green) and user orientation (pink). The average level of digitalization in countries such as France, Portugal and Iceland, which have a balanced profile with good indicators, but are inferior to the leaders in some components, for example, in proactivity. The average level of digitalization for OECD countries (designated as "OECD") provides a benchmark for countries with similar development. Chile has shown the least progress in digital transformation, especially in components such as data openness (blue) and data utilization (green). Leaders such as Korea, the United Kingdom and Australia demonstrate a balanced approach to all components of digitalization. Proactivity (yellow) is becoming one of the most important characteristics showing the willingness of governments to work ahead of citizens' requests. Comparing countries allows us to identify areas where individual States can improve their performance (for example, data usage in Chile or user orientation in Poland). Countries with a high level of digitalization are successfully using data and technology to increase transparency and efficiency of public services. The average indicators of most OECD countries indicate the need to strengthen work on productivity and citizen engagement in the digital ecosystem.

And in the reports of the World Bank, the report "GovTech Maturity Index" (2022) analyzes the digital maturity of states. As part of the GovTech initiative, the GovTech Maturity Index (GTMI) was created to help professionals create new digital transformation projects by introducing the GovTech maturity index in four key areas: supporting important government systems, enhancing service delivery, introducing citizen engagement, and facilitating GovTech tools. The most complete measure of digital transformation in the public sector is the GTMI, which was developed for 198 economies[6]. The following is a summary of the GTM 2022 update's key findings: High-

level mature nations, like Singapore, have had notable success integrating big data analysis and AI technologies. The GTMI 2022 Central Government study indicates that 147 economies (74%) have suitable policies to handle the difficulties of digital transformation unique to their countries, and 154 out of 198 economies (78%) have started GovTech or digital government projects. While sub-Saharan Africa (AFR) (followed by East Asia and the Pacific/EAP) had the lowest GTMI scores, economies in the regions of Europe and Central Asia (ECA), South Asia (South Africa), the Middle East and North Africa (MENA), and Latin America and the Caribbean (LCA) as a whole had the highest scores[7].

Using digital technologies, e-government offers individuals, corporations, and other government agencies information and a pre-existing set of public services. Different goal-setting styles, the peculiarities of public administration customs, the cultural, socioeconomic, and political traits of nations, the extent to which information and communication technologies are used and disseminated in the nation, and financial opportunities all had an impact on the creation of the models. These elements allow for the differentiation of four electronic governance models: 1) European; 2) Asian; 3) Russian; and 4) Anglo-American. The United States, Canada, and the United Kingdom all adopt the Anglo-American model of e-government. The twentieth century's 1990s saw the start of its deployment. The existence of supranational organizations, whose recommendations are communicated to EU member states and are obligatory for all nations, is what distinguishes the European model of e-government. Germany was the first nation in Europe to implement electronic government. The e-government model used in Russia. In the late 1950s, Soviet scientist A.I. Kitov was the first to suggest that all of the nation's electronic computing devices be consolidated into a single state network of computer centers. An group like this would provide more efficient solutions to the country's economic issues.

According to this study, large AI data is swiftly emerging as the most crucial management tool. For instance, the Chinese City Brain system analyzes data on urban infrastructure and traffic patterns, enabling prompt emergency response and traffic jam removal. Additionally, Singapore employs AI to forecast demand for public services like transportation and healthcare.

A developed digital infrastructure, cybersecurity expenses, and a rise in the general public's level of digital literacy are all necessary for successful digitalization, according to metrics like the e-Government Index (EGDI), the cybersecurity index, and the degree of digital literacy[8]. Both China and Singapore can take pride in their highly developed technological infrastructure and high levels of Internet accessibility. Both nations' governments have procedures in place to safeguard citizens' data, but China's regulations are more stringent. raising the population's degree of digital literacy. Since the emphasis is on teaching the public about their use, digital services are more common in Singapore. China is expanding steadily, particularly in the areas of big data technology and digital infrastructure. Regular infrastructure improvements and security system testing provide excellent data protection requirements in Singapore.

China spends extensively in the preservation of national systems, yet rigorous data management raises worries about the adherence of citizens' rights. Finding a balance between data efficiency and privacy is the main obstacle to digitization in China. Technologies that use facial recognition have come under fire for possible human rights abuses.

Access to public services is uneven in remote areas due to a lack of digital infrastructure.

Furthermore, the implementation and upkeep of new technology in Singapore is expensive and necessitates substantial financial resources.

The study's findings support the notion that increasing the digitalization of public authority enhances management's effectiveness and openness. But for it to be implemented successfully, a comprehensive strategy that removes current obstacles and takes into consideration national features is needed.

Enhancing the effectiveness, transparency, and accessibility of services for citizens is largely dependent on the digitalization of public administration. According to the report, proactive strategies, the use of data, and the development of platforms for citizen interaction have helped leading nations like China, Singapore, Korea, the United Kingdom, and Australia achieve notable success. China exhibits cutting-edge solutions in the application of big data and City Brain technology to govern megacities, while Singapore stands out in particular for integrating artificial intelligence into forecasting public demands. The responsibilities of creating digital infrastructure, raising the degree of data transparency, and implementing user-oriented services are still essential for nations with lower indices, like Chile. Overall, the study's findings show that in order to hasten the public sector's digital transformation, an integrated strategy and international sharing of best practices are required.

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COMPETITION AND ITS MANAGEMENT IN A GLOBALIZED WORLD

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Abstract: The purpose of this article is to assess the current state of the country's competitiveness, which serves as an indicator of the well-being of citizens, a guarantor of economic security and a catalyst for the growth of the national economy. This article uses several methods, including analysis and synthesis, as well as a systematic approach, to ensure that these issues are comprehensively addressed.

Keywords: Competitiveness, competitiveness of products, competitiveness factors, globalization, products.

In modern economic theory, it is customary to distinguish several aspects of competitiveness: product competitiveness, producer (firm, enterprise) competitiveness, and the competitiveness of regions (countries, nations). Product competitiveness refers to the ability of goods to meet the demands of competitive markets and consumer requirements compared to other similar products available, thereby allowing them to be sold at prices not lower than the market average [1].

Producer competitiveness (firms, companies) is the ability of manufacturers and sellers to compete with their rivals supplying similar products to the same markets or aiming to penetrate these markets. National or state competitiveness is defined as the ability of a country's economy to participate in international trade, maintain and expand specific segments in global markets, and produce goods that meet world standards.

The term "competitiveness" is primarily interpreted as the ability to compete, meaning the ability of an entity to operate successfully, achieve set goals, and protect its interests in competitive conditions—resistance from the external environment. Therefore, understanding the essence of competitiveness requires studying the nature of competition [2].

Competitiveness is assessed concerning a specific market or a particular group of consumers, determined by the strategic segmentation of the market. If the market where the object is competitive is not specified, it implies that the object is the best paradigm at a given time. In a market economy, competitiveness determines the degree of societal development. The higher a country's competitiveness, the higher the standard of living in that country.

Summarizing various researchers' findings on this issue, we can note that an enterprise's competitiveness depends on the following main factors:

- Competitiveness of the enterprise's goods in external and internal markets;
- Type of product produced;
- Market capacity (annual sales volume);
- Ease of market access;
- Market homogeneity;
- Competitive positions of enterprises already operating in the market;
- Industry competitiveness;
- Potential for technical innovations within the industry;

Competitiveness of the region and country.

Product competitiveness and enterprise competitiveness are related as part and whole. An enterprise's ability to compete in a specific product market directly depends on the product's competitiveness and the aggregate methods of the enterprise's activities, which affect the outcomes of competitive struggles.

Let's delve deeper into what product competitiveness entails.

Today, there are numerous interpretations of product competitiveness. One common approach is to view competitiveness as a collection of a product's consumer properties, irrespective of its cost. According to this view, low competitiveness leads to price reductions, whereas increased competitiveness can drive prices up. Here, competitiveness is equated with product quality, although quality is merely one of the factors contributing to overall competitiveness [3].

The qualitative methodology of pricing considers product competitiveness through the lens of its price. It sees price as a universal characteristic that reflects both consumer and exchange values. Differences in these properties among competing products should manifest in varying prices. This difference characterizes the relative competitiveness of these products. However, selecting among a group of competing products based solely on price comparison is insufficient.

In saturated markets, products, along with their producers and sellers, must engage in an intense battle for consumers. The same consumer need can be satisfied in various ways by multiple products offered at similar or slightly different prices. In such conditions, consumers tend to prefer the most competitive product.

To grasp the essence of "product competitiveness," it is crucial to consider the consumer's perspective in a market economy. According to marketing theory and practice, the primary principle for evaluating product competitiveness is its alignment with customer needs. The market is the domain where products compete, compared, and tested against consumer requirements. Each buyer, in making a purchase, chooses the product that best meets their needs from a range of similar items, selecting the one that provides the greatest satisfaction.

A product that better meets a specific societal need compared to competing products gains the most recognition among similar items. This elevates it above the general product mass, ensuring success in competitive struggles, thus making it competitive.

Consumers seeking a product that best meets their specific needs must also consider the associated costs. Naturally, they aim to achieve the best ratio of consumer properties to their expenses, obtaining maximum consumer effect per unit of cost. Therefore, defining competitiveness involves not only comparing a product based on its ability to satisfy a particular need but also accounting for the consumer's costs related to the product [4].

Hence, consumer costs in fulfilling their needs through a specific product encompass two elements:

Purchase costs, represented by the sale price.

Operating costs throughout the product's life span, including expenses for repairs, maintenance, technological servicing, spare parts, and more.

To enhance a country's competitiveness, improving human capital quality through the development of education and science is essential, as it fosters the introduction of new innovations and technologies. Addressing this issue necessitates the modernization of both the economy and society, as aspects of competitiveness assessments depend on economic development, societal mentality, and moral norms [5].

Implementing a targeted and consistent strategy to boost Kazakhstan's competitiveness requires the development of a national strategy. This strategy should not only focus on increasing actual competitiveness but also consider measures to improve Kazakhstan's ranking in the WEF Global Competitiveness Index for image purposes.

Several approaches can be taken to achieve these goals:

Firstly, the most significant challenges in assessing Kazakhstan's competitiveness are based on survey indicators. Since 77 out of 111 indicators in the WEF ratings are survey-based, a more realistic assessment by respondents is necessary, avoiding unjustified negative evaluations. It is recommended that Kazakhstani partners of the WEF meticulously select respondents for surveys within relevant research. Currently, the WEF's partner institution from Kazakhstan is the National Analytical Center under the government. Enhancing the quality and objectivity of Kazakh respondents participating in the survey could significantly improve the research outcomes [6].

By addressing these areas, Kazakhstan can develop a robust strategy to enhance its global competitiveness, ensuring sustainable economic growth and improved well-being for its citizens.

The total costs for the consumer serve as the price of satisfying their needs. The level of this price, or the consumption price, is considered an integral part of the product's competitiveness, primarily determined by the consumer properties of the product. The expenses associated with satisfying a need depend significantly on the conditions of purchasing and consuming the product, which are influenced by the socio-economic status of the consumers, the proximity of service enterprises, the availability of services, their costs, and other factors. These expenses are also affected by general economic factors. Often, the costs incurred by the consumer during the consumption process exceed the product's sale price.

This leads to defining product competitiveness as a comprehensive characteristic that determines the preference for a particular product over similar competing products in the market, based on its ability to meet a specific social need and the costs of fulfilling that need. It indicates that competitiveness is determined by the qualitative and cost-specific features of the product, which the consumer considers crucial for satisfying their needs. Therefore, among similar products, the one that offers the highest utility (P) relative to its consumption cost (C) is deemed more competitive (K). Hence, the condition of a product's priority among others can be represented as:

$$K = \frac{P}{C} \rightarrow \max$$

This expresses the general condition of product competitiveness.

Attempting to sell non-competitive products is futile, as it leads to financial and moral losses. However, absolute competitiveness or non-competitiveness does not exist. These concepts are closely linked to the market and time, as well as various influencing factors discussed earlier. Product competitiveness is tightly connected to specific markets (such as local, regional, national, or international markets) and determined by the demands of particular consumer groups. Excessive striving for "unnecessary" quality can make a product inaccessible to its intended consumers, failing to achieve the "required" level of competitiveness. Sometimes, a product may not need the best parameters for successful sales. Conversely, a product meeting the highest global standards may struggle to find active sales in certain markets, indicating insufficient competitiveness [7].

Requirements for a product are divided into individual consumer demands and general requirements for all products, such as regulatory standards set by international and regional standards, current laws, technical regulations, and patent documentation. These requirements are mandatory. If any are not met, the product may be prohibited from market entry.

Competitiveness is a relative measure, strongly influenced by time. The level of product competitiveness can change due to scientific and technological progress, fashion, and market demands. Although one can influence this process, it cannot be fully controlled. Therefore,

products prepared for market entry should have a competitive edge that lasts longer, the longer their development period.

Fundamental theoretical concepts of competitiveness underwent significant changes at the turn of the 21st century. Globalization of the world economy has led to new forms of corporate rivalry, known as "global competition." Globalization is an objective process of creating goods and services by multinational companies within a unified market environment, driven by the development of modern production forces and relations.

In contemporary conditions, the classical economic approach to national development based on natural resources, labor force, interest rates, and the purchasing power of national currency is insufficient. Competitiveness as the foundation of national prosperity must stem from the ability of a country and its industries to introduce and adopt innovations and modernize promptly. No state can be competitive in all or most industries. Even nations with the highest living standards have areas where local companies are uncompetitive. Success is achieved in specific sectors due to favorable, dynamic, and promising internal conditions.

Previously, distance was a critical competition factor. High transportation costs for overcoming distances made local natural resources and cheaper labor crucial for ensuring relative advantages. Companies leveraged local advantages from accessible raw materials and local consumer demand. In developed regions, firms benefited from large domestic markets characteristic of wealthy countries with high living costs. However, the reduction in communication costs, the rise of network firms, multi-level marketing systems, and virtual commerce and marketing via the Internet removed this "distance protection" from competition, leading to new forms of territorial competition. Whereas territorial battles once involved conquest wars, they now take the form of peaceful economic takeovers. Some regions utilize the opportunities of others, making them places for production or sales (e.g., waste disposal in other countries, selling used cars, developing small businesses in other regions). Another form of utilizing other regions' resources is attracting qualified labor. US and Western European firms draw in high-quality labor from other countries, and modern virtual technologies allow working for a foreign company while staying "at home."

Globalization strips regions of traditional advantages, as many local opportunities become global assets. Low labor or natural resource costs, large domestic markets—these are called "transparent local resources," which global firms can mobilize. The pursuit of access to these resources drives globalization and global firms, a trend termed the globalization of local resources. A region's own natural or labor resources no longer constitute a significant competitive advantage when these can be acquired on global markets at similar prices. Globalization demands that regions respond to global challenges, adapt, seek, and protect local competitive advantages.

Globalization also leads to the formation of integration unions based on two principles: the strong initiative role of the state (e.g., the EU) and the dominant role of large corporate capital, which essentially drives the state towards integration with other countries (e.g., the NAFTA agreement between the US, Canada, and Mexico). The EU exemplifies successful international integration, having created a single internal market (EIM) with no restrictions on the movement of goods, capital, and labor. The EIM benefits consumers, aiming to lower consumer prices through production scale optimization, structural shifts, and cost reductions.

Globalization primarily affects competitiveness factors of enterprises in global industries, especially in electronics, information, and telecommunications. Liberalization, deregulation, and industrial capital growth have continuously increased the number of enterprises in these sectors, intensifying competition. This makes achieving and maintaining competitive advantages more challenging (increased R&D costs, longer development times, shorter product life cycles). Vertical integration, relatively low market entry barriers, and international antitrust regulation within the

WTO have increased competitors capable of overcoming market barriers and competing equally with existing companies.

Globalization has qualitatively changed corporate rivalry, prompting a more differentiated approach to competitive goals. Previously, competition focused on increasing company profits. Now, the competition goal has shifted to vying for each consumer.

Concluding this part of our research, we draw the following intermediate conclusions:

Product Competitiveness: Defined as a comprehensive characteristic that determines the preference for a product over similar competing products in the market, based on its ability to meet specific social needs and the costs associated with fulfilling those needs.

Globalization: An objective process rooted in the economic factors driving the development of modern productive forces and production relations.

Key Drivers of Globalization: The scientific and technological progress and the inadequacy of the "welfare economy" model have become the primary factors driving globalization.

Core of Globalization: Economic processes that bring countries closer together, reflected in the integration of national economies into a unified global reproduction process, which includes the production, exchange, and consumption of goods and services.

New Requirements of Globalization: It imposes new demands on economic entities to ensure the competitiveness of their products, representing a qualitatively new stage in the development of global markets.

These conclusions highlight the multifaceted nature of competitiveness and globalization, underscoring the need for economies to adapt to new global standards to remain competitive.

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An overview of the marginal analysis as an instrument in making management decisions

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Abstract

The article discusses the importance of marginal analysis as a tool for making management decisions in modern market conditions. Marginal analysis is presented as a method that allows assessing the impact of various factors on the company's profit, optimizing the cost structure and pricing policy. The study is based on a theoretical analysis of economic literature and empirical data on the production and financial activities of JSC «IC «Kazakhmys».

The use of the Direct-costing method made it possible to divide costs into variable and fixed, which ensured the accuracy of calculations of key financial indicators, including the break-even point, the marginal income ratio and the degree of operating leverage. The analysis showed that the company's marginal income ratio is 0,137, and the safety zone reaches 60,4%, which indicates its financial stability. However, the high share of variable costs (86% of revenue) limits the company's flexibility in the face of changing market conditions.

Based on the data obtained, recommendations for optimizing management decisions were developed. Among them are the revision of reinsurance conditions, the introduction of technologies for the automation of loss settlement processes and the adjustment of pricing policy. The use of scenario analysis made it possible to assess the company's possible financial results in various market conditions, emphasizing its ability to adapt to external changes.

The results obtained confirm the importance of regular use of marginal analysis in management practice to increase profitability, minimize risks and strategic planning. The tool helps not only to diagnose current financial indicators, but also to predict their development, ensuring the company's sustainability in an unstable economic environment.

Key words: marginal analysis, management decisions, «Direct-costing», break-even point, safety zone, operating leverage.

Introduction

In today's volatile market conditions, enterprises face the challenge of making informed management decisions that directly affect their financial results. The high level of competition, constant changes in the economic environment and currency volatility require managers to implement effective analytical tools. In such circumstances, traditional approaches to management lose their relevance and are replaced by more innovative methods of analysis.

Margin analysis is key to ensuring the financial sustainability of an enterprise. It provides an opportunity to evaluate the influence of various factors on the enterprise's profit, allowing enterprises to optimize the cost structure and price policy. Margin analysis is also necessary for strategic planning, as it helps to identify key factors that influence the profit. To understand the concept of margin analysis and how it can be used effectively in practice, it is important to consider its origins.

The history of margin analysis covers several key stages, traces its roots from the 19th century. The ideas underlying margin analysis began to develop in the mid-19th century. Economists William Forster Lloyd and Nassau William Senior were the first to develop concepts

related to marginal utility. However, their ideas were not fully developed and failed to attract significant attention at the time[1].

French engineer and economist Jules Dupont deepened the subject by applying the concept of marginal utility to the problem of determining the fare for bridges. He proposed the concept of utility measurement and introduced the idea of reducing the marginal utility, linking it to economic solutions. His analysis of demand and supply curves initiated the study of the interaction of limit values in economics, which became the basis for a marginal approach[2]. In 1854, the German economist Hermann Heinrich Gossen published a paper presenting the theory of ultimate utility and its application to market economy. Despite his innovation, his work was not appreciated by contemporaries and was forgotten before rediscovery after the "marginal revolution"[2].

In the 1870s, three economists- William Stanley Jevons in England, Karl Menger in Austria, and Leon Walras in Switzerland- independently developed a theory of utility that ushered in a margin revolution in economics. This theory explained the value of goods and services based on their ultimate utility, which became the basis for further development of margin analysis[2].

In 1930, the American engineer Walter Rautenstrauch developed a planning method known as the critical volume graph which laid the foundation for modern margin analysis. This method has been widely used in advanced market economies, allowing enterprises to analyse the relationship between profits and production volume and costs[3]. In the USSR, marginal analysis was introduced in the 1970s. In 1971 Chumachenko N.G. described this method in detail in the domestic literature, and was further developed by Zudilin A.P. The methodology was based on a division of costs into variable and constant, as well as using the category of marginal income[3].

Margin analysis is now an integral part of management accounting and financial analysis. It is used to determine the break-even point, analyze the profitability of various products and services, and to make informed management decisions aimed at optimizing costs and increasing profits.

Literature review

Margin analysis is one of the key tools in management accounting. This method allows to assess the impact of various factors on profit, make informed decisions on cost management and determine strategic priorities of a company. There are many interpretations of margin analysis, which reflect the diversity of views on the essence of analysis and its application.

In foreign practice, margin analysis is considered as an important element of cost management. Charles Thomas Horngren emphasizes the role of margin analysis in determining the point of no-loss and margin. Working with Srikant Datar, margin analysis is presented as a short-term decision-making method in resource constraints[4].

Doroshchuk A.I. in his article considers the method «cost-volume-profit» as a mechanism for managing break-even operations. He stresses the importance of defining a critical point of production, which allows for the minimum sales volume needed to cover all costs. This information is used to make management decisions aimed at improving the financial condition of the enterprise[5].

Razberg B.A. in his approach to margin analysis emphasizes the importance of analyzing the ratio of sales volume, cost and profit. He believes that forecasting these values within given limits allows for a more accurate management of the financial performance of an enterprise. Lozovsky L.S. and Staroduvtseva E.B. also share this view, noting that margin analysis helps to make informed management decisions[6].

Ivanova E.V. and Kryatova L.A. see margin analysis as a method that helps to assess the effectiveness of management decisions. They emphasize that this method is aimed at increasing the company's profitability and ensuring its stable development, especially in conditions of

instability and variability of external environment. This analysis allows a better understanding of how management decisions affect the company's financial results and strategic development[7].

Kondrashova N.V. and Endovitskaya E.V. in their work «Organization of margin analysis and some aspects of its application» emphasize the importance of margin analysis as a key tool in the process of managerial decision-making. They note that the use of margin analysis allows for a more accurate determination of the profitability of individual business transactions and eliminates uncertainty in the justification of effective management decisions[8].

Among domestic researchers, margin analysis is considered an important element of financial management of the company. Karipova A.M. and Bactybayeva D.C. emphasize its importance for the justification of strategic decisions in modern market conditions. They stress that this analysis allows to study the ratio of «cost-volume sales production profit» and predict the optimal values of each of these indicators under given conditions[9].

Suleimanova A.A. in her article «Theoretical aspects of margin analysis of profit limitation» explores the theoretical aspects of margin analysis and emphasizes its methodological basis. She sees margin analysis as a tool for assessing the profitability of a company, and also as a method to optimize management decisions. The author notes that the application of analysis is particularly important in an unstable economic situation, since it allows to identify strengths and weaknesses of the organization's activities and to define priority directions for its development[10].

Thus, marginal analysis is a universal management accounting tool that allows solving a wide range of problems: from short-term cost optimization and increasing profitability to strategic planning in conditions of limited resources and an unstable economic environment. The diversity of approaches presented by both foreign and domestic researchers reflects the versatility and importance of making management decisions aimed at improving the efficiency of an enterprise.

Methods and materials

In the process of research, methods of theoretical analysis of economic literature were applied, comparing foreign and domestic experience of using margin analysis. The empirical part of the study was based on data on the production and financial activities selected as the object of the enterprise's research. The indicators of the point of break-even, financial stability and operational leverage were calculated during the work. Recommendations were also developed for optimizing management decisions based on the practical application of margin analysis in conditions of market uncertainty.

Results

The margin analysis is closely related to the system of «Direct-costing», which divides costs into variable and fixed categories. This system focuses solely on variable costs, while fixed costs are treated separately. This allows a more accurate analysis of how changes in production and sales affect the enterprise's profit.

Using the «Direct-costing» method, managers can apply margin analysis to assess the profitability of different products or services, determine optimal production volumes and develop effective pricing policies. Thus, the combination of margin analysis and «Direct-costing» system provides tools for making informed management decisions aimed at improving the financial sustainability and competitiveness of the company.

Let's consider how this method can be applied in practice, analyzing the financial indicators of JSC «IC «Kazakhmys» for 2023 (table 1)[11].

Table 1.

Chart of the report on income and expenses of JSC «IC «Kazakhmys» under the system of Direct-costing for 2023

Indicators	Amount, thousand tenge
Revenue	46 640,6
Variable costs:	40 273,6
-insurance costs	15 579,4
-net reinsurance expenses	24 449,02
-interest expenses	245,1
Margin income	6 367,01
Fixed cost:	2 530,8
-other operating expenses	1 315,9
-financial costs of the insurance contracts issued	140,3
-impairment losses	25,6
-other financial expenses	1,3
-CPN expenses	1 047,8
Interest income	2 206,1
Other investment income	(413,5)
Financial income from held reinsurance contracts	108,2
Operating profit	5 736,9

Since the «Direct-costing» method is used, the fixed costs will not be taken into account, because regardless of what decisions are made, these costs will still be incurred. The important feature of the Direct-costing is that it allows to study the relationship and interrelationships between production volume, cost and profit[12]. This is illustrated in the graph (figure1).

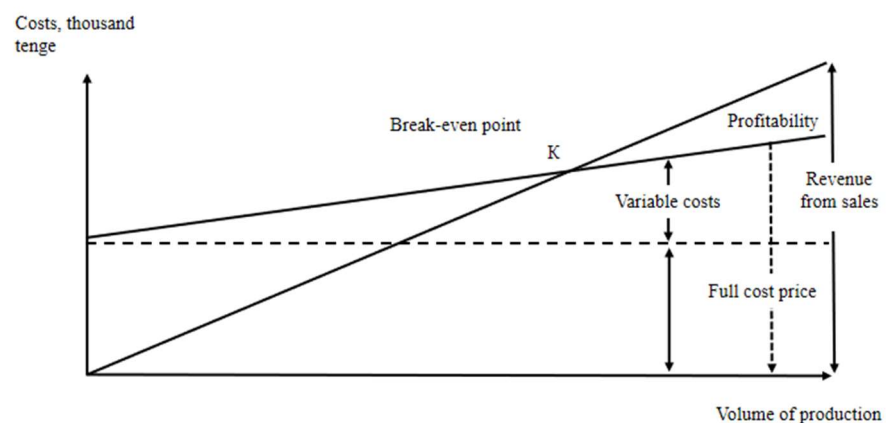


Figure 1. Relationship between production, cost and profit

The study continues with calculations of the analysis of non-loss-making (table 2), based on data for 2023.

Table 2.

Analysis of profitability for 2023, in thousands of tenge

№ п/п	Indicators	Calculation formula	2023 year
1	Break-even point in monetary terms, thousands of tenge	Fixed cost/ Margin profit ratio	18 473,3
2	Margin profit ratio	Margin income/ Revenue	0,137
3	Safety zone, thousands of tenge	Revenue- Break-even point in monetary terms	28 167,3
4	Safety zone, %	Safety zone, thousands of tenge/ Revenue	0,604
5	Leverage degree	Margin income/ Operating profit	1,11
6	Cash income for target profit, thousands of tenge	(Fixed cost + Targeted profit) / Margin profit ratio	40 370,8
7	Fixed cost recovery period, month	Break-even point in monetary terms/ Revenue x 12	10

The calculations revealed a margin ratio of 0,137, and the break-even point - 18 473 thousand tenge. The safety zone reached 60,4%, which indicates the stability of the enterprise. Fixed cost recovery period estimated at 10 months, indicating a reasonably effective cost management strategy.

For the analysis of future financial results of JSC «IC «Kazakhmys», based on the expected target profit, a scenario planned profit and loss report was developed using the method of «Direct-costing» presented in table 3.

Table 3.

Scenario profit and loss report under the Direct-costing system, thousands of tenge

Indicators	The planned profit		
	Pessimistic forecast	Realistic forecast	Optimistic forecast
Revenue	40 370,8	62 268,6	84 166,4
Variable costs	34 840	53 737,8	72 635,6
Margin income	5 530,8	8 530,8	11 530,8
Fixed costs	2 530,8	2 530,8	2 530,8
Profit	3 000	6 000	9 000
Probability of an event	0,3	0,5	0,2
Optimal margin income	0,3x5 530,8=1 659,24	0,5x8 530,8=4 265,4	0,2x11 530,8=2 306,16
	8 230,8		

For each of the scenarios, the probability of its realization and the expected target profit are determined. Revenue, variable and fixed costs lead to different levels of margin income, which is then adjusted for the probability of each event occurring in order to obtain the expected margin income.

Table 4 presents the projected target revenue calculations for different scenarios: pessimistic, realistic and optimistic.

Table 4

Calculation of the planned target revenue indicator in thousands of tenge.

Forecasts	Calculation
Pessimistic forecast	TP = (2 530,8+3 000)/0,137 = 40 370,8
Realistic forecast	TP = (2 530,8+6 000)/0,137 = 62 268,6
Optimistic forecast	TP = (2 530,8+9 000)/0,137 = 84 166,4

Given that scenarios may deviate from the set values, it is important to determine a standard deviation for a more accurate assessment of risks and uncertainties in the assumed scenarios. This will allow for more informed decisions, taking into account possible fluctuations in the data.

The mean quadratic deviation from the probability (optimal) margin of income will be (δ):

$$\delta = \sqrt{\frac{0,3 \times (1\,659,24 - 8\,230,8)^2 + 0,5 \times (4\,265,4 - 8\,230,8)^2 + 0,2 \times (2\,306,16 - 8\,230,8)^2}{3}} =$$

5 276,2 thousand tenge.

Discussion

The results of the conducted analysis demonstrate that the use of marginal analysis in combination with the Direct Costing system is an important tool for strengthening the financial stability of JSC «Insurance Company «Kazakhmys». These methods allow the company to better understand the structure of its income and expenses, identify key factors affecting profitability, and suggest ways to optimize them. Marginal analysis, based on a clear division of costs into fixed and variable, made it possible to assess how changes in the volume of insurance premiums and expenses affect financial results. It is important to note that such detailing is especially relevant for an insurance company, where a significant portion of costs is associated with loss settlement and reinsurance. The data obtained serve as a basis for developing strategies aimed at maintaining a stable financial position of the company in an unstable market environment.

A high level of the safety zone, amounting to 60,4%, is a key indicator of the company's stability even with a decrease in the volume of insurance premiums. This indicator, calculated in Table 2, reflects the difference between the current revenue of 46 640,6 thousand tenge and the break-even point, which is 18 473,3 thousand tenge. The absolute value of the safety zone of 28 167,3 thousand tenge emphasizes the presence of a significant reserve for the company to cover possible losses or unforeseen expenses. This indicates the company's ability to adapt to unfavorable changes in the external environment without significant financial losses. At the same time, such a safety zone should be considered as a temporary advantage that requires the development of long-term measures to increase profitability and reduce dependence on the current reserve.

Despite the impressive level of the safety zone, the analysis of the cost structure revealed a number of problems that may become an obstacle to further development. According to Table 1, variable costs are 40 273,6 thousand tenge, which corresponds to 86% of total revenue. Such a high share of variable costs limits the company's flexibility in the face of changing market conditions. In particular, a significant part of these costs is made up of expenses on reinsurance contracts (24 449,02 thousand tenge) and on the settlement of insurance claims (15 579,4 thousand tenge). Optimization of these expense items, for example, by revising the terms of reinsurance or introducing technologies to speed up the settlement of losses, can lead to a decrease in variable costs by 10-15%. This, in turn, will increase the safety zone and improve the company's financial performance. Reducing the share of variable costs is key to increasing the company's profitability. In the current cost structure, marginal income is only 6 367,01 thousand tenge, which reflects a low marginal income ratio of 0,137. This means that only a small part of the

revenue is used to cover fixed costs and generate profit. If the company manages to redistribute resources and reduce variable costs, it will be able to increase marginal income, which will create the basis for more efficient income and expense management.

According to Table 2, the company's marginal income ratio is 0,137, indicating a limited ability to cover fixed costs from operating income. The low level of this indicator indicates that the company's current cost structure is not fully efficient, since a significant portion of income is used for variable costs. The company's total marginal income is 6 367,01 thousand tenge, which only slightly exceeds fixed costs of 2 530,8 thousand tenge. This situation limits the company's ability to further invest and implement strategic initiatives, which may affect its competitiveness in the long term.

To increase marginal income, it is important to focus on reducing variable costs, which account for a significant share of the company's expense structure. One of the key steps in this direction may be to revise the terms of reinsurance, since expenses under reinsurance contracts account for a significant part of variable costs. Analysis of existing tariffs and their adjustment can also help increase the profitability of insurance products. In addition, the introduction of more efficient methods of settling insurance claims, such as process automation or the use of digital technologies, will reduce the associated costs. For example, a 5-10% reduction in reinsurance costs can lead to an increase in marginal income and, accordingly, net profit.

The company's operating leverage of 1,11 confirms its resilience to financial fluctuations when changing the volume of insurance premiums. This value indicates that fixed costs account for a relatively small share of the company's cost structure, which is typical for the insurance business, where variable costs prevail. Such a cost structure reduces the risk of significant financial losses when changing premium volumes, but at the same time limits the company's ability to increase profits with revenue growth. If the company manages to transfer some of the variable costs to fixed ones, for example, through investments in long-term technologies and automation, this can help increase the operating leverage and open up new opportunities for growth.

While low leverage provides stability, it also limits the company's ability to grow faster. If some of the variable costs can be converted to fixed costs (for example, by automating processes or introducing new technologies), the operational leverage will increase, opening up opportunities for greater profit gains when premiums are increased.

The scenario analysis presented in table 3 shows that under a realistic scenario with revenues of 62 268,6 thousand tenge the company's profit will be 6 000 thousand tenge. The optimistic forecast assumes an increase in profits to 9 000 tenge. with revenues of 84,166.4 thousand tenge. Even in the pessimistic scenario with earnings of 40 370,8 thousand tenge, the company remains profitable, covering its fixed costs and maintaining a positive financial result. The company is also very successful in the business. The results of the scenario analysis show that the company is able to adapt to changing market conditions. However, to minimize risks it is important to consider the impact of extreme events such as natural disasters or sudden increases in losses. This requires developing contingency mechanisms (such as supplementary reinsurance contracts) and predictive models that include a probability distribution of insurance events.

Conclusion

The analysis of the activities of JSC «IC «Kazakhmys» using marginal analysis demonstrated its importance as a tool for improving the efficiency of management decisions. The methodology allows us to identify key elements of the income and cost structure that require priority attention to strengthen financial stability. For example, the company's current marginal income indicates the potential for increasing profits, provided that reinsurance and loss settlement costs are optimized. This confirms the need for regular use of marginal analysis to assess operating performance and long-term planning.

It is important to note that a high level of the company's safety zone creates a stable basis for work even in conditions of economic instability. However, it should not be considered as the only indicator of success. To maximize the use of current financial reserves and sustainable development of the company, a more detailed analysis of variable costs and their redistribution in favor of strategic investments is necessary. For example, the introduction of modern technologies to automate processes and reduce costs can significantly improve operational efficiency.

Marginal analysis also demonstrates its practical importance in scenario planning. The forecasts considered showed that the company maintains a positive financial result even in a pessimistic scenario. This indicates its ability to adapt to changing market conditions. At the same time, the implementation of the optimistic scenario requires active efforts to develop the product portfolio and revise the tariff policy. This will increase revenue and profit while maintaining current costs.

As a recommendation, we can highlight the need for regular marginal analysis when making management decisions. This tool allows not only to identify key factors affecting financial indicators, but also to develop measures to optimize them. The constant use of this technique in combination with other cost and income management tools will allow JSC «IC «Kazakhmys» to maintain competitiveness and achieve strategic goals in an unstable economic environment.

To summarize, marginal analysis serves not only as a tool to diagnose the current state of the company, but also facilitates forecasting and strategic planning. Its use gives the company the opportunity to adapt to market challenges, minimize risks and ensure sustainable development. The implementation of the proposed approaches will allow JSC «IC «Kazakhmys» to improve its financial results, strengthen its position in the market and use its available resources as efficiently as possible.

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TEAM MANAGEMENT PRINCIPLES IN HARD SITUATIONS

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Abstract: The article argues that to achieve productive teamwork requires formalization of management, a clear definition of responsibilities and clarification of the role of each employee. The novelty of this article lies in the breakdown of each element into component control points with a scale of measurements showing the level of maturity of the organization. The authors focus on developing rules that will help teams work effectively together.

Keywords: team, team formation, team management model, rules for effective team work; situations

The evolution of management systems over recent decades has tasked organizational leaders with forming professional teams. This involves developing the ability to collaboratively solve various tasks, take responsibility, show initiative, innovate, and achieve results together, known as teamwork. It's crucial to note that teamwork is not a cure-all. Many organizational problems can be solved by a single employee performing their duties properly. Teams are mainly formed for unexpected tasks such as reducing project timelines, implementing innovations, addressing urgent issues, and developing solutions, which require a multifaceted approach.

Teamwork demands active participation from each member in forming and achieving the organization's overall goals, which sets it apart from linear, line-functional, and divisional management structures where employees mostly follow predetermined tasks without considering the need to improve their work to enhance productivity and organizational effectiveness. Thus, modern top management aims to create high-performing teams capable of systematic improvements.

The issue of team management as an independent field of scientific study emerged relatively recently, in the 1960s, with the development of group organization and behavior theories [1] (Chris Argyris and others). Simultaneously, quality circles evolved into working teams worldwide. In the 1970s, American psychologist Bruce W. Tuckman proposed a two-dimensional model of group development, later forming the basis for numerous team-building models [2]. In the 1980s and 1990s, works defining the concept of "team" (J. Conger, R. Tannenbaum, R. Bird, E. Salas, J. Katzenbach, D. Smith) appeared [3-5]. Later, Joseph G. Boyett, Jimmy T. Boyett, J.W. Newstrom, and K. Davis examined the leader's role in team formation and outlined several team-building stages [6,7].

These researchers provided valuable insights for management science and practice. However, most studies focused on teams working at the middle and lower management levels, preparing recommendations and developing projects in specific management areas. Only recently have studies, including translations, attempted theoretical analysis of top management's joint activities, refining the concept of "management team" and its specific parameters [8-11] (P.M. Belbin, K. Blanchard, D. Carey, J. Parisi-Carey, J. Katzenbach).

Soviet and Russian scholars like D.M. Gvishiani, Yu.D. Krasovsky, A.I. Prigozhin, V.V. Avdeev, T.Yu. Bazarov, T.P. Galkina, A.M. Karyakin, and Yu.N. Lapygin have significantly contributed to understanding the specifics of managerial team activities in enterprises [12-19]. They have incorporated the experience of foreign colleagues, developed, and are developing team-building technologies, and are analyzing the formation of managerial teams. However, the adaptation of team-building principles and technologies to higher management practices remains insufficiently explored.

The methodological foundation of the research is based on the works of Russian and international scholars who have studied the relevant issue. The study employed methods such as systems analysis, observation, and document analysis. The primary information sources included publications in periodicals, as well as works on sociology, psychology, organizational behavior, and management.

A team is a cohesive group of individuals working together to achieve a common goal, collectively responsible for the outcome. Management expert J. Conger refers to a team-based organization as the "management system of the future," highlighting its necessity in quickly responding to an increasingly competitive environment. Team members must "learn to quickly understand each other, work together effectively, and achieve set goals." However, not everyone is capable of working together efficiently or quickly understanding one another, and finding prepared, professional people is becoming increasingly challenging. Therefore, it is essential to work with the available team members, ensuring they are compatible.

Compatibility refers to the most favorable combination of worker attributes that ensure effective collaboration and personal satisfaction, characterized by mutual understanding, shared responsibility, empathy, and mutual support among team members. This compatibility should be maintained through training, education, and testing. It is important to consider each person's unique traits (values, perspectives, life goals, etc.), which can differ significantly based on their environment, education, and upbringing [20].

The manager's task is to manage this diversity, respecting each person's unique capabilities and contributions while fostering a sense of belonging within the organization.

The diversity of personnel in terms of professional experience, psychological type, etc., within organizational teams is growing each year. A crucial characteristic of this diversity is the internal state of individuals, particularly their mindset, which must be managed effectively. Over time, people develop their own viewpoints or beliefs about the events around them, influenced by recognized "authorities." For example, in a family, a child might choose one parent as the "main" authority. In daily activities, a child might consider one parent's opinion more correct on some issues and the other parent's on different matters. A person's viewpoint is also shaped by school, leaders in companies, idols, and others with whom they interact and trust.

As a result, individuals form their own beliefs or mental models about "how things should be." A mental model is a person's worldview or way of perceiving the world. Simply put, it's a set of tools people use to think. Each mental model implies its own system of views on life (or a specific problem): it gives meaning to events, interprets experiences, and explains causes and effects. American entrepreneur, writer, and blogger James Clear explains mental models as follows: "Mental models determine your perception and behavior. They are thinking tools you use to understand life, make decisions, and solve problems. Learning a new mental model gives you a new way to see the world [21]."

Mental models are deeply rooted concepts, beliefs, generalizations, or even images in a person's consciousness that influence how we perceive the world and act. They can be positive (helping us quickly solve problems and enhance our life opportunities) or negative (often creating problems). Mental models determine people's relationships with one another. If some are convinced of their rightness, they want others to act the same way they do, and vice versa. This

can lead to conflicts when no one wants to yield. People need to adapt to fit into a team, survive in existing conditions, and work cohesively.

One of the main tools for forming a cohesive team is staff training. Training should help create new mental models for individuals, assisting them in becoming who they want to be. Another tool for achieving cohesive and productive team work is the formalization of management, clear definition of duties, and clarification of each employee's role in the overall value creation chain for consumers. Management formalization involves creating a clear digital link between the organization's mission, company goals, departmental goals, and the monitoring of each employee's activities and overall expected outcomes.

Unfortunately, a lack of understanding of all organizational activities' interconnections by managers leads to the inability to create an ideal work picture, measure deviations from the current state to the desired state, and set clear tasks for employees. This results in vague directions for improving employee performance. Our formalized team management model, "Smart Management Organization Model," helps measure the organizational excellence level of an enterprise and identify missing elements in the existing management system.

The model consists of the following elements:

Business Orientation:

Development of mission, strategic goals, policies, approaches, tasks, planned indicators, and an interconnected system of metrics.

Employee Responsibility Zones:

Identifying gaps in responsibility distribution among employees.

Assigning and securing tasks and final results to responsible individuals.

Responsibility Matrix:

Developing a responsibility matrix for employees.

Identifying non-fulfilled mandatory actions within employees' responsibility areas.

Job Descriptions:

Developing job descriptions aligned with business orientation.

Position Passports:

Creating position passports outlining the ideal state ("as it should be").

Organizational Chart:

Developing an organizational chart detailing each department and position's results.

Planning and Control by Performance Indicators:

Developing goals, tasks, and roadmaps for each department and position.

Digitizing primary and secondary performance indicators.

Creating checklists for managers and employees.

Establishing control points for each enterprise/department/position.

Employee Motivation and Engagement:

Digitizing the salary and bonus components.

Monitoring employee engagement.

Enhancing discipline and responsibility in employee interactions.

The novelty of this model lies in breaking down each element into constituent control points with a measurement scale, showing the level of organizational maturity (organizational excellence level). This approach helps leaders visually monitor not only changes (growth and lag) but also threats and risks. We believe this approach will foster the development of competent, engaged, and highly productive employees.

In the smart management organization model, the ability of leaders to create a vision of "how it should be" is emphasized. To improve something, one must understand its ideal state. Simultaneously, leaders must be able to measure the current state. If leaders fail to realize this

ability, it indicates that the area is not being controlled, improvement work is not being done, tasks are not assigned to employees, and their competencies are not monitored.

This ability is particularly important for senior and middle managers in enterprises undergoing rapid development, as they cannot independently oversee all processes. Additionally, contemporary leaders often lack sufficient expertise in various enterprise activities. Without digitizing and documenting all processes and operations, chaos ensues for both employees and leaders, leading to disastrous consequences.

Chaos typically results in severe penalties, fines, lawsuits, and conflicts, which can dismantle years of work by a large team. Unfortunately, such examples are not uncommon.

In today's fast-changing world, survival and leadership require not only relying on one's own strengths and knowledge but also effectively coordinating team work, considering each member's unique characteristics, abilities, mental models, and knowledge. It involves measuring the state and maturity level of each area, identifying value creation links and gaps for the consumer, analyzing provided information to choose the optimal solution based on the current situation, and creating new mental models to revolutionize employees' thinking.

Here are the rules that can help a team work effectively:

Effective Team Leadership: An effective team needs a leader.

Key Function of Leadership: The leader's key function is to manage the team effectively.

Interaction Dynamics: The nature of interactions between participants should not be ignored in collective work.

Role Alignment: Each person should play a role that matches their abilities.

Clear Responsibilities: Every team member must be thoroughly familiar with their duties.

Psychological Compatibility: Select participants based on professional skills and psychological compatibility.

Decision-Making Process: Develop an optimal decision-making process, whether collectively or individually, depending on the situation.

Optimal Motivation Mechanism: Choose the best mechanism for employee motivation.

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Methodological Aspects of the Organization's Personnel Audit in the Management System

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ABSTRACT HR audit is a methodical procedure that checks the personnel management of an organization for compliance of personnel policy and practice with the strategic goals of the enterprise. The development of analytical stages, the selection of appropriate tools and the formulation of proposals to improve the effectiveness of personnel management are all examples of methodological components of the audit. In this work, special attention is paid to key elements, including the assessment of professional competence of employees, motivation management and risks to human capital. The novelty of the research is the creation of a thorough methodology of personnel audit, taking into account modern problems, including digitalization, changes in labor legislation and requirements for the introduction of sustainable methods of personnel management.

KEYWORDS: HR audit, HR management, methodology, human capital, organizational efficiency, digitalization, strategic management, sustainable development

Effective human capital management is becoming essential for modern firms as it plays a major role in competitiveness and sustainable development. A systematic approach to personnel management is necessary in light of digitization and global economic shifts. This includes routinely evaluating the efficacy of personnel policies. As a technique for evaluating and improving personnel management in this setting, personnel audit is becoming increasingly important.

The value of people audits in an organization's management system is supported by scientific studies. A. Karpenko and other author's claims that a personnel audit enables the identification of discrepancies between the organization's strategic goals and the existing state of personnel management[1]. In order to improve organizational efficiency, S. A. Kamara's research emphasizes the necessity of incorporating HR audit within the strategic management system[2].

The selection of auditing methods and instruments is given careful consideration. Complex techniques, including as competence assessment, staff interviews, and documentation analysis, are suggested in L. Q. Ying's writings. In his publications, R. Manita stresses that the audit should consider outside variables such shifts in the labor market and the advent of digital technologies.

The need to modify the personnel audit methodology to address contemporary issues, such as the shift to hybrid forms of employment and shifting employee expectations, is the subject of recent study, such as that done by P. Lois. However, there is a vacuum in the methodology of its implementation because the problem of integrating HR audit with sustainable development principles is not adequately disclosed in the literature.

In order to increase the efficacy of people management in the face of contemporary difficulties, this study aims to establish the methodological underpinnings of personnel audit. The following tasks are assigned in order to accomplish the goal:

To research the HR and it's current methods and resources.

Determine the main issues and restrictions with the way auditing is done now.

To create a methodology that combines the ideas of sustainable development with digitization.

Therefore, the goal of this research is to address the pressing scientific and practical issue of improving human management in contemporary firms.

This study used the method of collecting and studying internal documents of the organization, such as personnel policy, regulations, job descriptions, staff training and development plans, as well as reporting on key employee performance indicators. Data analysis allows you to identify the compliance of current practices with strategic goals, identify gaps in personnel management and assess compliance with labor legislation.

And the next method is the analysis of professional competencies of employees. This method includes testing, case studies and business games to assess the level of professional knowledge, skills and competencies of the staff. Within the framework of this study, this approach made it possible to identify the strengths and weaknesses of employees, to determine their compliance with their positions and the needs of the organization. The results of the analysis were used to develop recommendations for training, professional development and career development, which contributes to improving the overall effectiveness of human capital management.

The methodical process of studying the internal accounting and regulatory documentation of an organization in order to assess the effectiveness of personnel management is called a complete documentation check. The collection, classification and in-depth study of documentation are all part of this approach. The organization's strategic documents are examined to see how well they align with the company's overall goals and current challenges such as digitalization and human resource management flexibility.

The correctness of the provisions is checked, as well as their compliance with current standards and laws. Special attention is paid to the importance of job responsibilities, the openness of delegation of authority and the degree of responsibility of employees.

For example, Google, one of the biggest tech companies in the world, regularly uses cutting-edge personnel management techniques. One example of a useful tool for sustaining high productivity and creativity is a thorough examination of the company's paperwork and personnel records. Google is renowned for its forward-thinking HR strategy designed to draw in and keep talent[6].

Creating a supportive work environment that encourages creativity and productivity; implementing flexible employment programs, such as the option for remote work; and investing in employee training and development, including through Google Career Certificates and internal educational initiatives, are the main priorities, according to an analysis of the company's personnel documentation.

Google ensures process transparency through well-defined regulations. The Objectives and Key Results method, for instance, is used to evaluate employee performance and enables you to connect personal objectives with organizational priorities.

The organization conducts extensive training and professional development initiatives, such as technical training, soft skill development, and leadership seminars. These programs enhance human resources and aid in employees' professional development[7].

Google actively employs HR analytics to track metrics including team performance, employee engagement, employee churn, and the outcomes of diversity and inclusion initiatives. Google was able to determine through routine audits that training programs needed to be improved in order to help staff members adjust to new technology.

The audit data was used to assess employee support initiatives, such as competitive benefit packages and flexible work arrangements, which helped to lower the number of layoffs. Initiatives

to establish a creative and inclusive workplace have been able to be modified thanks to the study of employee engagement and feedback data.

Google serves as an example of how thorough documentation and personnel data analysis can be used to develop human capital management that not only helps the company achieve its strategic goals but also enhances its standing as one of the world's top employers.

During the study, the Starbucks brand was selected to analyze the professional competencies of employees in the company. Starbucks, as a global leader in the coffee retail industry, actively implements programs for evaluating and developing the professional competencies of its employees to ensure a high level of customer service and brand maintenance[8].

Starbucks frequently hosts training sessions and role-playing games to assess and improve customer service abilities[9]. For example, staff members role-play customer interactions under various circumstances, such as managing a queue, recommending products, and dealing with clients who are at odds. This enables you to determine the need for more training and evaluate employees' competencies in actual working conditions. A thorough understanding of the selection and the capacity to serve appropriate drinks are two of a barista's most important skills. Starbucks often assesses employees' cross-selling abilities, composition knowledge, and beverage preparation technologies.

Every new hire receives training under the supervision of an experienced mentor who assesses his abilities and team fit. Qualitative markers, such as communication skills, engagement level, and skill mastery speed, are employed in the mentoring process. Starbucks is able to sustain a high standard of customer service by regular evaluation of professional skills, which enhances customer loyalty and brand reputation[10]. The organization provides employees with individual growth plans based on the findings of the competence analysis. High-potential baristas, for instance, can pursue further education and run cafes. Starbucks has modified their training programs with the aid of data analysis, emphasizing critical skills like emotional intelligence, stress tolerance, and sales through suggestions.

Starbucks serves as an example of how a methodical approach to professional competency analysis aids in both identifying and removing employees' areas of weakness and fostering the development of their careers. Consequently, this enhances the brand's standing in the international marketplace.

The examples of Google and Starbucks clearly demonstrate the importance of applying a systematic approach to the analysis of personnel management. Google successfully uses a comprehensive analysis of personnel documentation and data, which makes it possible to optimize strategic personnel processes, reduce the risks of non-compliance with modern challenges and support the innovation of the organization. Starbucks focuses on analyzing the professional competencies of employees, which contributes to improving the quality of customer service, developing corporate culture and career growth of staff.

Both examples confirm that the regular use of HR audit methods allows:

- identify weaknesses in human capital management;
- adapt HR strategies to strategic goals and market changes;
- to increase the level of employee engagement, satisfaction and loyalty.

Thus, the system personnel audit becomes an integral tool for improving the competitiveness, sustainability and efficiency of organizations in the global market.

In contemporary firms, the methodological components of HR audit are essential to efficient human capital management. Utilizing a variety of audit techniques, such as examining employee professional competencies and documentation, allows for the identification of discrepancies and the optimization of personnel procedures, all of which enhance organizational effectiveness, boost competitiveness, and support sustainable development.

Examples of companies such as Google and Starbucks illustrate the successful use of HR audits to achieve strategic goals. At Google, the focus on integrating digital technologies and optimizing HR processes helps to improve employee performance and compliance of HR policy with organizational goals. At Starbucks, attention is paid to the development of professional competencies of staff through regular training and evaluation, which contributes to improving the quality of service and strengthening the brand.

As a result, HR audits become not only a crucial instrument for enhancing personnel management effectiveness but also a prerequisite for accomplishing the organization's long-term strategic objectives. A people audit is a crucial first step in enhancing an organization and preparing it for new challenges in the context of globalization, digitization, and labor market shifts.

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Социальная защита пожилых женщин и гендерное неравенство в пенсионных накоплениях в Казахстане

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Аннотация: Качество жизни женщин в старости тесно связано с уровнем их пенсионных накоплений. В Казахстане, как и во многих других странах, существует значительное неравенство в пенсионных накоплениях между мужчинами и женщинами, что обусловлено различными социально-экономическими факторами, включая перерывы в трудовой деятельности женщин, связанные с декретом и уходом за детьми, а также их более низкими зарплатами и нестабильностью трудовой занятости. Целью данного исследования является анализ причин данного неравенства и предложения решений для его устранения. В статье рассматриваются ключевые факторы, влияющие на пенсионные накопления женщин, исследуется воздействие этих факторов на качество жизни в старости и предлагаются возможные меры для снижения гендерного пенсионного неравенства в Казахстане.

Ключевые слова: социальная защита, пожилые, население старшего возраста, гендерное не равенство, пенсия, пенсионные накопления

Введение. Пенсионное обеспечение является важным аспектом социальной политики, поскольку от уровня пенсионных выплат зависит качество жизни людей на поздних этапах жизни. В большинстве стран, включая Казахстан, пенсионные накопления женщин заметно ниже, чем у мужчин. Эта проблема обусловлена множеством факторов, таких как гендерная зарплатная разница, прерывание трудовой деятельности из-за семейных обязанностей и недостаточная финансовая грамотность среди женщин. В Казахстане женщины составляют значительную часть пенсионеров, однако их доходы на пенсии часто оказываются недостаточными для обеспечения достойного уровня жизни. Важно исследовать причины этого неравенства и предложить комплексные меры для улучшения пенсионного положения женщин. Цель данного исследования заключается в анализе факторов, влияющих на разницу в пенсионных накоплениях между мужчинами и женщинами, а также в разработке предложений по снижению этого неравенства.

Литературный обзор. Проблема гендерного неравенства в пенсионных накоплениях была активно изучена в последние десятилетия. Исследования показывают, что женщины часто сталкиваются с низкими пенсиями из-за неполной трудовой занятости, перерывов в карьере, а также высокой доли работы в низкооплачиваемых секторах. В ряде стран проводились исследования, подтверждающие, что женщины в среднем зарабатывают меньше мужчин, что, в свою очередь, приводит к меньшему уровню пенсионных накоплений (OECD, 2018). Также исследования показывают, что после выхода на пенсию женщины

сталкиваются с более высокими расходами на здоровье и социальной изоляцией, что делает их финансовую ситуацию еще более уязвимой (Carter et al., 2020). В Казахстане этот вопрос ещё не был исследован в достаточной мере, что делает актуальность данного исследования особенно высокой.

Методы: Для анализа пенсионных накоплений женщин в Казахстане был проведен количественный анализ статистических данных, полученных от Министерства труда и социальной защиты населения Республики Казахстан и Бюро национальной статистики АСПР РК. Использовались данные о среднем уровне дохода, продолжительности трудовой активности и пенсионных выплатах для мужчин и женщин. В дополнение к этому были проведены качественные интервью с пенсионерами, что позволило получить более глубокое понимание социальных и экономических аспектов жизни женщин на пенсии. Модели анализа учитывали такие переменные, как возраст, уровень образования, семейное положение и продолжительность трудовой деятельности.

Обсуждение: Результаты исследования подтверждают гипотезу о существующем гендерном неравенстве в пенсионных накоплениях в Казахстане. Женщины, как правило, имеют меньшие пенсионные накопления, что связано с прерываниями карьеры. Около 50 % женщин в Казахстане, в возрасте 25-40 лет временно теряют трудоспособность вызванными уходом в декрет или отдыхом по уходу за детьми или за больными родственниками. Кроме того, женщины чаще работают в секторе с низкими зарплатами и менее стабильными условиями труда. Это неравенство имеет серьезные социальные последствия, так как женщины более склонны к бедности в старости, особенно в случае утраты трудоспособности. Наши данные подтверждают выводы предыдущих исследований, указывающих на важность политики, направленной на повышение доходов женщин в трудоспособном возрасте, улучшение условий для совмещения работы и семейных обязанностей.

Важным аспектом решения проблемы гендерного неравенства в пенсионных накоплениях является развитие социальной защиты для пожилых, особенно для женщин. В Казахстане социальные программы для пенсионеров, включая медицинское обслуживание, субсидии на коммунальные услуги и другие меры поддержки, играют ключевую роль в обеспечении достойного уровня жизни в старости. Однако, несмотря на наличие этих программ, пожилые женщины сталкиваются с дополнительными трудностями из-за более низких пенсий и часто ухудшающегося состояния здоровья. Многие женщины, особенно те, кто не имел стабильных доходов в трудоспособном возрасте, вынуждены полагаться на государственные выплаты, которые могут быть недостаточными для удовлетворения всех нужд. В связи с этим необходимо усилить социальную защиту пожилых женщин, повысив доступность медицинских и социальных услуг, а также создать дополнительные программы, направленные на улучшение финансовой самостоятельности женщин в старости.

Результаты исследования показывают, что в Казахстане, как и в других странах, существует значительное гендерное неравенство в пенсионных накоплениях. Согласно данным Министерства труда и социальной защиты населения Республики Казахстан, средний размер пенсионных накоплений женщин на момент выхода на пенсию составляет примерно 30% меньше, чем у мужчин.

Таблица 1
Средний размер назначенной месячной пенсии¹

	Всего, тыс. человек	Распределение по полу, в процентах		Средний размер месячной пенсии, тенге	на начало года Распределение по полу	
		женщины	мужчины		женщины	мужчины
2018	2 147,9	70,8	29,2	53 901	51 916	58 275
2019	2 192,5	70,1	29,9	56 965	55 051	61 169
2020	2 227,7	69,2	30,8	62 994	61 103	67 147
2021	2 251,3	68,5	31,5	66 127	64 389	69 912
2022	2 252,7	67,7	32,3	72 517	70 760	76 172
Женщины и мужчины Казахстана / Статистический сборник / Астана 2022						

Это связано с прерываниями в трудовой деятельности женщин из-за декрета, ухода за детьми, а также с низким уровнем зарплат в отраслях, где традиционно работают женщины (например, в сфере образования, здравоохранения и торговли). По данным Бюро национальной статистики АСПР РК, примерно 60% женщин работают в сфере услуг и образования, где зарплаты значительно ниже, чем в других секторах экономики, таких как финансы и промышленность, где традиционно работают мужчины. Все это оказывает долгосрочное влияние на их пенсионные накопления. Женщины «беднее» мужчин не только в связи с низким размером назначенной пенсии, но и потому что до достижения пенсионного возраста их заработная плата была меньше, чем у мужчин (таблица 2).

Таблица 2
Среднемесячная номинальная заработная плата по отдельным профессиям и должностям т(тенге)

Наименование профессий и должностей	2021		
	всего	в том числе	
		мужчины	женщины
Руководитель организации	521 336	608 493	415 701
Руководители специализированных (производственно-эксплуатационных) подразделений (служб)	342 864	376 246	296 115
Программист (компьютерный)	242 824	244 199	233 725
Инженер по охране труда и технике безопасности	378 760	421 717	273 303
Бухгалтер	188 722	179 382	189 686
Экономист	227 738	244 498	222 983
Переводчик	412 527	432 540	407 570
Агент по снабжению	215 737	220 582	200 170
Юрисконсульт (среднего уровня квалификации)	302 121	308 109	298 092
Бухгалтер (среднего уровня квалификации)	149 301	184 865	144 903
Секретари, офис-менеджеры	97 946	109 873	97 312
Охранник	89 260	89 846	84 389
Водитель автомобиля	143 564	143 939	83 842
Грузчики, подсобные рабочие	100 062	105 055	77 645

Уборщики служебных и производственных помещений и территорий	93 231	104 034	92 530
Женщины и мужчины Казахстана / Статистический сборник / Астана 2022			

Сравнение с другими странами подтверждает, что это глобальная проблема. Согласно отчету ОЭСР, в среднем женщины в странах-членах ОЭСР получают на 20-30% меньше мужчин, что также ведет к меньшим пенсионным накоплениям. Например, в странах Северной Европы, таких как Швеция и Финляндия, где существует более равномерное распределение социальных выплат, разрыв между пенсионными накоплениями мужчин и женщин значительно меньше — около 10-15%. В этих странах активно развиваются программы по улучшению условий для совмещения работы и семейных обязанностей, что способствует сокращению пенсионного разрыва.

Однако, несмотря на положительные примеры, Казахстан в этом плане отстает. Например, в Казахстане по данным Всемирного банка, только 15% женщин имеют доступ к дополнительным пенсионным накоплениям, в то время как для мужчин этот показатель составляет 25%. В странах, таких как Германия или Нидерланды, этот процент достигает 50% для женщин, что связано с более активной государственной политикой по увеличению финансовой независимости женщин, включая налоговые льготы и субсидии для семей с детьми.

Кроме того, важным фактором является длительность жизни. В Казахстане женщины живут в среднем на 8 лет дольше мужчин, 79,06 лет против 70,99 лет. Ожидаемая продолжительность жизни человека после выхода на пенсию составляет всего 7,99 лет для мужчин и 18,06 лет для женщин. Это означает, что женщины нуждаются в большем объеме пенсионных выплат в старости.

Таблица 3

Ожидаемая продолжительность жизни при рождении

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Республика Казахстан	71,44	71,97	72,41	72,95	73,15	73,18	71,37	70,23	74,44	75,09
Мужчины	66,90	67,49	67,99	68,72	68,84	68,82	67,09	66,33	70,26	70,99
Городское население	66,50	67,14	67,69	68,60	68,42	68,39	66,61	65,77	70,31	71,44
Сельское население	67,42	67,97	68,43	68,88	69,44	69,42	67,82	67,19	70,17	70,27
Женщины	75,82	76,26	76,61	76,92	77,19	77,30	75,53	74,03	78,41	79,06
Городское население	75,90	76,46	76,77	77,07	77,21	77,23	75,43	73,70	78,66	79,57
Сельское население	75,70	75,97	76,40	76,71	77,17	77,43	75,73	74,64	77,91	78,11
Женщины и мужчины Казахстана / Статистический сборник / Астана 2022										

Однако, в силу вышеупомянутых факторов, многие пожилые женщины в Казахстане сталкиваются с трудностями, связанными с недостаточностью своих пенсионных накоплений. Это приводит к повышенным расходам на здравоохранение, где женщины также могут испытывать финансовые трудности, поскольку в целом пожилые женщины более подвержены хроническим заболеваниям.

На основе международного опыта, можно рекомендовать Казахстану улучшить политику по социальной защите пожилых женщин, внедрить дополнительные программы по финансовому обеспечению женщин в старости, а также укрепить роль государственных пенсионных систем. Успешные примеры из таких стран, как Швеция, Канада и Австралия, показывают, что инвестиции в пенсионные накопления женщин, включая субсидии на пенсионные взносы для матерей и семей с детьми, могут значительно улучшить финансовую ситуацию пожилых женщин.

Выводы:

Решение важной социальной проблемы пенсионного неравенства между мужчинами и женщинами невозможно без учета важности социальной защиты пожилых людей, особенно женщин. В Казахстане для улучшения положения и качества жизни пенсионеров, в частности женщин, требуется развитие социальных программ, которые обеспечат стабильный доход и доступ к необходимым услугам, а также повышение финансовой грамотности женщин. Важно также развивать поддержку для женщин, которые в силу различных обстоятельств не накопили достаточно средств на пенсию, путем внедрения дополнительных социальных пособий и медицинской помощи. Это позволит улучшить качество жизни женщин и обеспечить более справедливые условия в старости, сократить разрыв между пенсионными накоплениями мужчин и женщин.

Такой подход поможет подчеркнуть важность социального обеспечения пожилых женщин и поддержит рекомендации по улучшению их положения.

Мейрамхана бизнесіне zero-waste тұжырымдамасын енгізу тәжірибесі

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Zero-waste концепциясы тағам қалдықтарын азайтып, ресурстарды тиімді пайдалануға бағытталған. Бұл ұғым тек қалдықтарды қысқарту ғана емес, сонымен қатар қалдықтарды қайта өңдеу, қайта пайдалану және алдын алу шараларын қамтиды. Мейрамханалар жаһандық тағам қалдықтарының негізгі көздерінің бірі болып табылады. Зерттеулер көрсеткендей, әлемде өндірілген тағамның шамамен үштен бірі ысырап етіледі. Бұл шамамен 1,3 миллиард тонна қалдықты құрайды, және мұндай көлем азық-түлік қауіпсіздігіне, экологияға, сондай-ақ экономикаға кері әсерін тигізеді. Мейрамхана индустриясы, әсіресе Қазақстан сияқты елдерде, бұл мәселені шешуге үлкен үлес қоса алады. Сондықтан мейрамханалар үшін zero-waste концепциясын енгізу – өзекті әрі болашағы зор бастама.

Қазақстандағы жағдайды қарастырсақ, жыл сайын қалдықтардың көлемі өсіп келеді. Тағам қалдықтарының негізгі бөлігі тұрмыстық сектордан, қоғамдық тамақтану орындарынан және азық-түлік өндірісінен түседі. 2022 жылы Қазақстанда шамамен 2 миллион тонна тағам қалдықтары тіркелді, бірақ олардың тек 5%-ы қайта өңделген немесе компостқа айналдырылған. Қалған бөлігі қоқыс полигондарына тасталады, бұл экологиялық проблемаларды ушықтырып, метан сияқты парниктік газдардың бөлінуіне әкеледі. Сонымен қатар, мейрамханалардың көпшілігі қалдықтарды басқару жүйесін енгізуге дайын емес. Алматыдағы бірнеше премиум-класс мейрамханасы zero-waste принциптерін қолдана бастаса да, бұл тәжірибені кеңінен тарату үшін көп жұмыс істеу қажет.

Zero-waste концепциясы тек мейрамханалардың ішкі процестерін ғана емес, сонымен бірге қоғамның экологиялық мәдениетін қалыптастыруға да айтарлықтай әсер етеді. Мейрамханалар экологиялық жауапкершілікті қолдау арқылы тұтынушылар арасында тұрақтылық идеясын тарата алады. Тұтынушыларға тағам қалдықтарының зияны туралы ақпарат беру, экологиялық таза таңдау жасауды ынталандыру және мейрамханалардың тұрақты даму бастамаларына қатысуға шақыру мейрамхана индустриясының имиджін жақсартуға мүмкіндік береді.

Сонымен қатар, zero-waste концепциясы азық-түлік қауіпсіздігі мәселелерін шешуге көмектеседі. Қайырымдылыққа берілген тағам қалдықтары кедейлікпен күресуге және әлеуметтік әділдік орнатуға үлес қосады. Мысалы, Солтүстік Еуропадағы мейрамханалар артық тағамды жергілікті қайырымдылық ұйымдарына жеткізуді ұйымдастырды, бұл мыңдаған адамдарды қолжетімді және сапалы тағаммен қамтамасыз етті. Қазақстанда да бұл тәжірибені енгізу елдегі әлеуметтік теңсіздікті азайтуға және мұқтаж жандарға көмек көрсетуге үлкен мүмкіндік береді.

Zero-waste философиясы тұтынушылардың өз әрекеттерін қайта қарауға әсер етуі мүмкін. Мейрамханалар қалдықтарды азайту бойынша науқандар жүргізе отырып, тұтынушыларды жеке үйлерінде де экологиялық жауапкершілікті сақтауға шақырады. Мысалы, кейбір мейрамханалар «тағамды тастаудың орнына сақтау» қағидасын дәріптеп, арнайы тағам сақтау қаптамаларын сатады немесе сыйға тартады. Мұндай тәсіл

мейрамханалар мен олардың тұтынушылары арасында тығыз байланыс орнатуға мүмкіндік береді.

Мейрамханалардағы zero-waste концепциясы тағам қалдықтарын азайтудың түрлі стратегияларын қамтиды. Біріншіден, тиімді мәзір жоспарлау маңызды рөл атқарады. Мәзірді алдын ала жоспарлау арқылы артық өнімдерді сатып алудан аулақ болуға болады. Солтүстік Еуропадағы кейбір мейрамханалар тағам дайындауға қажетті ингредиенттердің нақты мөлшерін есептеу үшін цифрлық технологияларды белсенді түрде пайдаланады. Бұл әдіс тағам қалдықтарын 20%-ға дейін азайтуға мүмкіндік береді. Екіншіден, тағам порцияларын бақылау қажет. Қазіргі уақытта көптеген мейрамханалар клиенттерге үлкен порцияларды ұсынады, бұл тамақ қалдықтарының көбеюіне әкеледі. Клиенттерге өздерінің порцияларын таңдауға мүмкіндік беру немесе порциялардың кішірек нұсқаларын ұсыну тағам қалдықтарын азайтып қана қоймай, тұтынушылардың қанағаттануын арттыруға көмектеседі.

Сонымен қатар, клиенттердің zero-waste бастамаларына белсенді қатысуы мейрамханалардың тұрақты дамуына ықпал етеді. Клиенттерді тағам қалдықтарын азайтуға тарту үшін мейрамханалар “doggy bags” ұсынуы мүмкін. Бұл тәсіл тек экологиялық жауапкершілікті арттырып қана қоймай, клиенттердің мейрамханаға деген оң көзқарасын қалыптастырады. Жапониядағы кейбір мейрамханалар тағам қалдықтарын компостқа айналдырып, оны фермерлерге тыңайтқыш ретінде ұсынады. Мұндай тәжірибе тағам қалдықтарын тиімді пайдаланудың жарқын үлгісі болып табылады.

Zero-waste концепциясын жүзеге асыру үшін заманауи технологияларды қолдану қажет. Қалдықтарды басқаруға арналған цифрлық құралдар мейрамханаларға тағам қалдықтарын қадағалауға, сатуға немесе қайырымдылыққа беруге көмектеседі. Мысалы, АҚШ-тағы Too Good To Go қосымшасы мейрамханалар мен тұтынушылар арасында артық тағамды қайта бөлу процесін жеңілдетеді. Сонымен қатар, арнайы компосттау құрылғылары тағам қалдықтарын тыңайтқышқа айналдыруға мүмкіндік береді. Қазақстандағы кейбір мейрамханалар бұл технологияларды қолдана бастағанымен, олардың кеңінен таралуы үшін қосымша инвестициялар қажет.

Zero-waste тәжірибесін енгізу мейрамханаларға экономикалық пайда әкеледі. Артық өнімдерді сатып алуды азайту және тағам қалдықтарын дұрыс басқару шығындарды едәуір төмендетеді. Еуропадағы мейрамханалар zero-waste концепциясын енгізу арқылы жалпы шығындарын 15%-ға қысқартқан. Сонымен қатар, экологиялық жауапкершілікті қолдайтын клиенттер мейрамхананың беделін арттыруға ықпал етеді. Бұл ұзақ мерзімді перспективада клиенттер ағынын көбейтіп, кірісті арттырады.

Дегенмен, zero-waste концепциясын жүзеге асыру барысында белгілі бір қиындықтар туындайды. Қалдықтарды басқару жүйелерін енгізу немесе қызметкерлерді оқыту қосымша шығындарды талап етеді. Сонымен қатар, Қазақстандағы қайта өңдеу инфрақұрылымының шектеулі болуы да zero-waste концепциясын кеңінен таратуға кедергі келтіреді. Бұған қоса, кейбір мейрамхана иелері zero-waste бастамаларының қаржылық және экологиялық артықшылықтарын толық бағаламауы мүмкін. Бұл кедергілерді жеңу үшін білім беру бағдарламаларын әзірлеу, мемлекеттік қолдау көрсету және мейрамхана индустриясы арасында ынтымақтастықты нығайту қажет.

Zero-waste концепциясының табысты мысалдары халықаралық деңгейде кеңінен таралған. Лондондағы Silo мейрамханасы zero-waste философиясын толығымен ұстанады. Олар барлық қалдықтарды қайта өңдеп, өндірістік циклді экологиялық таза деңгейге жеткізді. Норвегияда тағам қалдықтарын қайырымдылыққа беру заңы енгізілген, ал Жапонияда компост жүйелері бүкіл мейрамхана индустриясында кеңінен қолданылады. Бұл тәжірибелерден Қазақстан да үлгі ала алады.

Zero-waste тәжірибесінің экологиялық әсері де әлемдік деңгейде маңызды орын алады. Концепция тағам қалдықтарын азайту арқылы парниктік газдардың бөлінуін азайтуға тікелей ықпал етеді. Тағам қалдықтары негізінен қоқыс полигондарында шіріп, атмосфераға метан сияқты зиянды газдарды шығарады. Метан көмірқышқыл газынан 25 есе күшті парниктік әсерге ие, сондықтан тағам қалдықтарын дұрыс басқару климаттың өзгеруін бәсеңдетудің маңызды шарасы болып табылады.

Мейрамханаларда тағам қалдықтарын азайту, қайта өңдеу және компост жасау бұл проблемаға нақты шешім ұсынады. Компосттау органикалық қалдықтарды тыңайтқышқа айналдырады, бұл ауыл шаруашылығының дамуына да көмектеседі. Мысалы, Жапония мен Германиядағы кейбір мейрамханалар арнайы компосттау жүйелерін қолдана отырып, қалдықтарды толығымен қайта өңдейді. Бұл әдіс топырақтың құнарлығын арттырып қана қоймай, химиялық тыңайтқыштарды қолдануды азайтады, осылайша қоршаған ортаға оң әсер етеді.

Сонымен қатар, zero-waste концепциясы суды үнемдеуге ықпал етеді. Тамақ өндірісі үлкен көлемдегі суды қажет етеді, ал тағамның ысырабы бұл ресурстарды да жоғалтуға әкеледі. Зерттеулер көрсеткендей, әлемде жыл сайын тағам қалдықтары арқылы шамамен 250 км³ су ысырап етіледі. Бұл су көлемі бүкіл халықты қамтамасыз етуге жеткілікті еді. Қазақстанда су ресурстарының шектеулі екенін ескерсек, zero-waste принциптері суды үнемдеудің тиімді әдістерінің бірі ретінде қарастырылуы мүмкін.

Қорытындылай келе, zero-waste концепциясын енгізу тек экологияға ғана емес, мейрамханаларға да пайда әкеледі. Ол шығындарды қысқартып, клиенттердің экологиялық жауапкершілігін арттырады. Қазақстанда бұл концепцияны кеңінен тарату үшін инфрақұрылымды жақсарту, білім беру бағдарламаларын дамыту және инновациялық технологияларды енгізу қажет. Zero-waste тек мейрамхана индустриясына емес, бүкіл әлемге экологиялық тұрақтылықты қамтамасыз етудің маңызды қадамы бола алады.

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Procedure for preparation of consolidated financial statements and analysis of key indicators

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Abstract

Consolidated financial statements are the main source of financial information about the company's activities. The relevance of the study is due to the constant interest of various groups of stakeholders in the company's reporting. The study examines the content, features and analysis of the main indicators of the consolidated financial statements. Based on the results, it is recommended to form an international standard for the preparation of consolidated financial statements, which includes the principles of IFRS, and, at the same time, takes into account the international instruments used in practice.

The purpose of the dissertation work is to identify problems related to the preparation of consolidated financial statements, problems of financial and economic activities of the considered JSC, as well as the development of proposals for their elimination. Consolidated financial statements are prepared for the purpose of providing interested users with transparent and reliable information on the property, financial position and results of financial and economic activities of groups of companies.

Keywords: Consolidated financial statements, financial information, company statements, IFRS, RAS.

Introduction

In the modern world, transnational relations are developing and companies are active in the international market. Among the promising areas of business development at the time of its emergence, the main issue is the creation of a group of enterprises economically related to each other, but remaining separate legal entities. In this regard, the formation of consolidated financial statements is invaluable, in particular, the presentation to investors and shareholders of the financial position and performance of the company and all its controlled entities as a single economic entity. Under international standards, if a company controls other entities, it must include all controlled entities in its consolidated financial statements. The definition of effective control in the current IFRS system is not perfect and has shortcomings, the main of which is the lack of clarity in the uniform principles specific to control of a parent company. This relevance is effective from 01.01.2013 10 (IFRS) 'Consolidated Financial Statements' was one of the main reasons for the development of the new IFRS standard.

The adopted standard IFRS 10 (IFRS) gives the most complete definition of consolidated reporting 'consolidated financial statements - assets, liabilities of the main company and its subsidiaries, a single capital, income, expenses and cash flows financial statements of a group of companies presented as an economic unit' Formation of consolidated financial statements of the group allows to combine information contained in the statements of main and subsidiary companies reasonably. But consolidation is limited to adding up the same items of assets,

liabilities, equity, income and expenses sequentially: the consolidation process involves a number of special calculations and can be presented in aggregate.

As noted Blank I. A. and Azrilian A. B : the 'consolidated financial statements' standard is notable mainly for its novelty in defining control of structural elements within consolidated groups. The procedures for reporting forms once the scope of consolidation has been determined remain as they are. However, the standard requires continuous monitoring of all factors affecting the control of an entity of an entity, as the determination of the date on which control commences and the date on which control ceases for derecognition or recognition of assets, liabilities, non-controlling interests, intra-group transactions of subsidiaries and the consolidated financial statements at that date must be appropriately important to make the change. Also they noted that defines consolidated reporting as ' the results of financial activities of the main company and its subordinate independent subsidiaries integrated reporting. It shows mutual financial claims and financial liabilities, total assets and capital employed. Consolidated financial statements are prepared and maintained by the main company'. In this definition, the consolidated 'combined' reporting description is somewhat inaccurate, as the essence of this reporting document is to summarise assets and capital [1].

A similar definition is provided by Aliyev M.K. : 'consolidated accounts are prepared for a Group of companies providing a Single Economic Entity. In consolidation, all assets, liabilities and results of the main company and the group are brought together in such a way that the consolidated financial statements present the overall financial information of the group as a single economic entity' [2].

Such monitoring requires identifying the factors that signal these events . 10 (IFRS), consolidated financial statements under IFRS means the assets, liabilities, equity, income, expenses and cash flows of the main entity and its subsidiaries, the assets, liabilities, equity, income, expenses of a single economic entity and the group financial statements presented in the form of cash flows. It is interesting that before the adoption of the law on consolidated reporting the concept of consolidated, not consolidated, reporting appeared in regulatory documents. This raises the question of the appropriateness of using these terms as synonyms. In the opinion of a number of authors, the use of the definition 'summary' is erroneous, as the actual consolidated financial statements are not consolidated.

The leader in the realisation of the idea of concentration belongs to the USA. American Cotton Oil Trust prepared the first set of consolidated reports in 1866, but the first consolidated report of the United States Steel Corporation in 1902 was officially published. The author of consolidation is the English accountant Arthur Dickinson [5]. V.F. Palya, 'International Accounting and Financial Reporting standards', the author: "Consolidated financial statements are a single economic report on the property, financial condition and results of economic activity of all companies included in the scope of consolidation" shows as a whole' [3].

B. V. Kovalev in the book 'Financial Analysis' gives the following definition: 'Consolidated financial statements are the statements of a corporate group, which are necessarily prepared by a holding company and represent the combined statements of the main company with the statements of all subsidiaries' [4].

In the textbook G. B. Dontsova and H. A. Nikiforova separate the concepts of 'Analysis of financial statements of authors of consolidated reporting and consolidated reporting' 'Comprehensive reporting is prepared within a single owner or for statistical data collection'. , and several owners consolidate it on jointly controlled property' [5].

Authors A. A. Matveev and V. P. Soitz on the Definition of Consolidated Accounting. P. Soitz on the issue of the definition of consolidated accounting gave a definition : 'Consolidated accounting is a special accounting of accounts of two or more enterprises that are in certain legal,

financial and economic relations. merger through acquisition procedure (not a simple merger), when one or more legally independent enterprises are under the control of only one company - a company superior to all other members of the group', . It should be noted that the need to prepare consolidated financial statements in different countries of the world depends on different features of business development. The United States Steel Company, 1903, 31 December 1902, prepared and published consolidated financial statements for the first time. At the same time, Price Waterhouse & Co. called it the most complete and detailed report issued by American companies in 1903 [6].

Consolidated Report Form 'Consolidated Statement of Financial Performance of the Main Company and its Subordinate Independent Subsidiaries'. There are mutual financial claims and financial liabilities, total assets and capital employed are shown. Consolidated financial statements are prepared and maintained by the main company'. In the formation of consolidated statements, special attention should be paid to income and expense indicators. Any business entity determines profit in the course of its activities [7].

So noted that the indicator of accounting profit 'is often the basis for calculating the profit tax, the criterion for determining dividend payments' is used as an indicator of economic activity of the enterprise, as well as a determining factor in determining the wages and remuneration of administration '.

Consolidated financial statements are necessary to provide accurate and reliable information about the economic activities of the group. Each main company prepares consolidated financial statements separately from its own financial statements. The group of companies for which consolidated accounts are prepared comprises the main company and all subsidiaries under its control. An intermediate main entity is exempt from preparing consolidated financial statements if it is considered a subsidiary, if the entity's debt and equity instruments are not traded on the open market and if the entity is subject to securities commission or any of the instruments to the open market [8].

Elmesov R.E. has not provided or is in the process of providing its financial statements to another regulatory organisation for the purposes of its issue. The latest main company of the listed company submits consolidated financial statements. Concentrated The financial statements are prepared as at the reporting date of the main organisation. If the financial statements of a subsidiary used in the preparation of the consolidated financial statements are prepared at a reporting date that is not the same as the reporting date of the main entity, adjustments are required to take into account the effects of significant transactions and events that have occurred between that date and the reporting date of the main entity. The reporting dates of the subsidiaries and the main organisation should not exceed the reporting date of the main organisation.

The consolidated financial statements shall consist of the uniform accounting policies of the group. If a subsidiary's accounting policies are inconsistent with the group's accounting policies with respect to any items of accounting or transactions, then for consolidation purposes that subsidiary must make adjustments. In preparing the consolidated financial statements, an entity concentrates the financial statements of the main and subsidiary organisations into a series by adding together similar items of income assets, liabilities, equity [9].

As noted by N. T. Labintsev and E. Smertnova. N. N., a single and universally recognised methodology of reporting transformation has not been developed at present, despite the fact that the literature considers many variants of sequential actions that are recommended to follow when implementing this process [10].

Methods and materials

You can use different methods of study to examine dissertations corresponding to your dissertation topic. The totality of various techniques, methods and elements of accounting is called an accounting method. It serves for detailed representation of the subject of accounting, which is the economic activity of the enterprise under consideration. The main methods of accounting include:

- documentation;
- costing;
- double entry;
- balance sheet;
- accounting records.

In addition, dynamic and statistical analyses are used to examine the financial health of companies. Statistical analysis can help financial professionals analyse data, manage risk and make buying and selling decisions related to investments. Statistics also help financial professionals to forecast and manage the uncertainties inherent in forecasting.

Dynamic analysis is characterised by the real possibility of identifying financial results based on the accounting statements of the reporting period in order to find out in what financial position the economic entity is in. Materials for the thesis topic are directly taken from the official website of the companies.

The main techniques and methods used in accounting as elements of the method are: documentation, accounts and double entry; valuation and costing; inventory; balance sheet and reporting. All these techniques and methods of accounting will be dealt with in more or less detail in the whole course of accounting. Here, however, only a general characterisation of the accounting method. Documentation in accounting is considered as a method of primary, continuous registration (reflection) and registration of business operations.

Results

The following table with data from recent years can be viewed to summarise the results

Table 1

KEGOC 2022-2023 consolidated information on total income

Capital	2022 year		2023 year		Change, +/-		
		%		%	2023/2022	%	
Revenue	217 255 548	100	252 136 383	100	34 880 835	116,1	X
Cost of services rendered	166 355 885	76,57	18 140 604	71,94	15 041 719	109,1	-4,63
Profit	50 899 663	23,42	70 732 779	28,06	19 833 116	138,9	4,64
General and administrative expenses	9 020 431	4,15	11 113 427	4,40	2 092 996	123,2	0,25
Other expenses	3 885 530	1,78	1 985 409	0,78	2 932 024	75,5	-1,00
Operating profit	37 993 902	17,48	58 665 846	23,26	20 671 944	154,4	5,78
Profit before tax	32 468 088	14,94	53 598 632	21,25	21 130 544	165,1	6,31
Expenses by weight of income	5 720 479	2,63	10 202 243	4,04	4 481 764	178,3	1,41
Gross profit	26 747 609	12,31	43 396 389	17,21	16 648 780	162,2	4,90

According to Table 1, the company's revenue in 2023, the cost of sales and the amount of total profit increased significantly compared to 2022 and at this level there were structural changes: in 2023, the share of cost of sales in revenue was 71.94%, which respectively consisted of 28.06% of total profit

It is also an important part of the study of the consolidated financial statements to examine the capital and reserve fund of the organisation. Reserve capital is a guarantee for the smooth operation of the enterprise and protection of the interests of third parties. The presence of such financial source increases the confidence of third parties that the enterprise fulfils its obligations. Table 2 shows the composition and structure of KEGOC's capital and reserves for 2022-2023.

Table 2

KEGOC 2022-2023 Composition and structure of capital and reserves

Capital	2022 year		2023 year		Change, +/-		
		%		%	2023/2022	%	
Equity capital	126 799 554	19,40	148 922 757	21,31	22 123 203	117,44	+1,91
Treasury shares purchased	(930)	1,32	(930)	1,35	-	1	+0,03
Asset revaluation reserve	489 297 133	73,85	488 537 852	70,24	-759 281	99,84	+3,61
Retained earnings	37 469 407	5,34	48 259 455	7,04	10 790 048	128,79	+1,70
Capital and reserves, summary	653 565 164	100	685 719 134	100	32 153 970	104,92	-

Analysing the data in Table 2, we can see that in 2023 compared to 2022 capital and reserves increased by 32,153,970 thousand tenge or 4.92%. What influenced this: although the reserve for revaluation of assets decreased in 2023 compared to 2022 by 759,281 thousand tenge, but its share increased by 3.61% points.

Discussion

Improvement of the preparation of consolidated financial statements is a process of improving the quality, reliability and usefulness of the consolidated financial statements presented by joint stock companies. It includes the following main aspects:

Improving uniformity and transparency: developing and implementing standardised principles and procedures for the preparation of consolidated financial statements to ensure that all companies provide uniform information. This may include the adoption of International Financial Reporting Standards (IFRS) or equivalent national standards;

Enhanced disclosures: requiring entities to provide more detailed and meaningful information in their consolidated financial statements. This may include disclosure of significant dependencies, transactions with stakeholders, risks and uncertainties, and other information necessary to understand the financial position and performance of the group.

Improving the consolidation methodology: reviewing and improving the methodology for consolidating the financial statements of subsidiaries and associates. Such concentration may include demonstrating the economic viability of relationships between companies and preventing intra-group transactions.

Consolidated reporting shows investors how well their money is performing; indicates to a lender how great its repayment risks are; and allows shareholders and management to analyse the performance of the business and draw informed conclusions about its economic efficiency. Only consolidated information on the composition of assets, the amount of liabilities, the amount of capital, income, expenses and total cash flows for all companies of the group allows assessing the economic state of the business as a whole. If the companies issuing consolidated reports choose an extended format of presentation of these reports, they will be able to ensure its transparency and investors' understanding of the processes occurring within the holding.

Conclusion

Based on the research conducted during the thesis research work. the following conclusions and recommendations can be made:

Consolidated financial statements in accordance with IFRS 10 - assets, liabilities, equity, income, expenses and cash flows of the parent company and its subsidiaries from economic activities. Group financial statements are presented as assets, liabilities, equity, income, expenses and cash flows of a single entity. Interestingly, prior to the adoption of the law on consolidated reporting, there was no concept of aggregated reporting in the regulations it appeared.

KEGOC's financial result in 2022 is determined by the amount of profit in the 'Statement of Profit and Loss and Comprehensive Income'. Rapid growth negatively affected the profitability of KEGOC's business. In 2023, the value of the enterprise increased by 15,041 thousand tenge or 9.1%, while revenues increased only by 34,880 thousand tenge or 16.1%. This has a negative impact on the stability of the company's profitability.

According to the results of the analysis and diagnostics of financial and economic activity of KEGOC:

- during the analysis of indicators of financial stability and solvency it is found that most of the coefficients correspond to the proposed value;
- during the analysis of profitability indicators there is a decrease in the level of profitability from 2021, however, it is noted that it is respectively stabilised in 2023;
- liquidity indicators have normal values;
- it can be noted that the optimal values of the structure of solvency indicators and financial stability indicators are preserved.

The accounting policies adopted in the preparation of KEGOC's consolidated financial statements are consistent with those followed in the preparation of the Group's annual consolidated financial statements for the year ended 31 December 2021, except for the new accounting policies adopted. standards effective from 1 January 2022. In accordance with these accounting policies, KEGOC reviews its interim and annual consolidated financial statements.

According to the financial analysis of KEGOC, its financial condition for the period from 2021 to 2023 is generally positive, financial stability is high enough. The organisation ensures the growth of all invested funds and has an acceptable level of investment risk. Sufficient amount of highly liquid assets indicates the organisation's ability to pay off creditors. The stable state of the enterprise is the results of the enterprise's activity is the result of skilful, calculated management of the totality of determining production and economic factors.

When analysing consolidated financial statements, it is recommended that in addition to the main consolidated analysis, the analysis of the financial statements of each entity in the group should be carried out, since the losses of one entity may be covered by the profit of another, and the potential insolvency of one entity is concealed by the high solvency of another entity. The analysis of individual financial statements is also used to determine the impact of each group entity on the consolidated financial statements. Each organisation within the group acts, as a rule, in the interests of the parent company. If the individual financial statements of each organisation within the group are analysed, for example, a significant improvement in the financial position of the parent company can be detected when the liabilities of the subsidiaries increase or even losses occur.

In the context of international business co-operation, business consolidation, and the creation of financial and industrial groups, the importance of reporting compiled in accordance with international standards is increasing, helping to ensure transparency and openness of Russian companies, increase their business reputation among competitors and investment attractiveness, and playing a decisive role in making important management decisions. Globalisation and

digitalisation are driving certain transformational changes. In the near future, doing business internationally will not be possible without uniform standards that will allow companies to provide various stakeholder groups with transparent, standardised reporting on their activities.

Thus, further research and development in this area should contribute to the development of a Russian standard for consolidated reporting that incorporates IFRS principles and, at the same time, takes into account Russian tools used in practice.

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Analysis of the efficiency of a commercial bank in conditions of interbank competition

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Abstract

This article analyzes the activities of a commercial bank in the context of interbank competition, with particular attention to its financial performance, operational stability and ability to adapt to modern challenges. The study highlights the significant growth in the bank's net profit, driven primarily by the growth in interest income from loans, demonstrating effective lending operations and customer acquisition strategies. The analysis provides an understanding of how effectively the bank is able to manage its resources, attract depositors and increase its financial base.

The bank's liquidity shows how timely the company is able to pay off its obligations within one year. The article also indicates how financially stable the company is. What is the profitability of sales and return on assets of JSC "BCC". The article concludes that although the bank demonstrates strong financial performance and operational efficiency, addressing certain issues that undermine the bank's efficiency will be critical to maintaining long-term growth and competitiveness in a dynamic financial market.

Keywords: bank, liquidity, net profit, efficient bank activity, interest income, interest expenses

Introduction

The relevance of the topic is due to a number of key factors. Firstly, in recent years there has been an increase in the number of commercial banks, which ensures competition in the financial market. This requires banks to analyze their efficiency and adapt to new conditions. Secondly, changing consumer preferences lead to the fact that banks are forced to impose stricter requirements for quality services and conditions, which forces banks to reconsider their strategy.

The introduction of new technologies and the digitalization of banking services are radically changing the landscape of the financial sector. Evaluation of efficiency taking into account these new solutions is becoming important. No less important is the impact of regulatory changes: legislation and regulation also affect the activities of banks, which requires Diptychs and strengthening trends.

In conditions of economic instability, it is important to assess the stability of banks and their ability to adapt. Studying this topic allows us to identify key factors influencing the efficiency of commercial banks and offer recommendations for increasing competitiveness in modern conditions. As the financial industry has developed, so too has the idea of efficiency in banking. Banks in the early 20th century placed more emphasis on preserving solvency and liquidity than they did on operating efficiency. Because of stringent rules and restricted access to alternative financial services, banking services were comparatively standardized during this time, and there was little rivalry among financial institutions. Without any innovation in their procedures, banks acted mainly as middlemen, enabling loans and deposits.

For the banking industry, a period of transformation began in the middle of the 20th century. Financial institutions have new opportunities as a result of the post-World War II

economic recovery and the growth of international trade. Banks started to expand the range of services they provided, going beyond standard lending and deposit collection. A significant turning point came in the 1970s and 1980s, with the deregulation of banking sectors in many developed economies. Governments loosened regulations on lending practices, interest rates, and market entry, which increased competition. While encouraging innovation, this liberalization also made it clear how crucial cost control, resource optimization, and technology development are to efficiency. Efficiency is crucial in this industry, as evidenced by the fact that institutions who were unable to adjust to this new competitive environment frequently struggled to exist.

Technology's incorporation into banking operations accelerated dramatically in the 1990s and early 2000s. The way financial institutions provided services was completely transformed with the advent of computers, automated teller machines (ATMs), and internet banking. These developments made it possible for banks to access a larger client base, streamline operations, and lower transaction costs. As banks are increasingly prioritized reducing the cost-to-income ratio, increasing return on assets, and improving operational scalability, efficiency has emerged as a critical performance criterion.

The 2008 global financial crisis made it even more clear that the banking industry needs to be resilient and efficient. The crisis revealed weaknesses in the way financial institutions operated, especially those that are engaged in high-risk or ineffective activities. Banks responded by tightening their risk management procedures and attempting to streamline their resource allocation procedures. A more balanced and effective banking environment was created by governments and regulators around the world implementing changes meant to promote competition while maintaining financial stability.

Interbank competition has increased over the past 10 years due to the emergence of fintech businesses, digital technology, and shifting customer expectations. The emergence of digital platforms and non-banking financial organizations has put pressure on established banks to improve their operations and innovate. Big data analytics, blockchain, and artificial intelligence are examples of technologies that have emerged as essential resources for increasing productivity and obtaining a competitive advantage. Moreover, as banks compete both domestically and internationally, the continuous globalization of financial markets has highlighted the necessity for efficiency.

The adoption of new technologies, creative services, and efficient management techniques is fueled by the constant demand to increase efficiency in a competitive environment. This keeps banks viable and relevant despite changing financial and economic obstacles.

Literature review

A lot of scholarly research has been done on the effectiveness of commercial banks, especially when it comes to interbank rivalry. Research in this field frequently focuses on determining the factors that influence efficiency, quantifying it using different approaches, and analyzing how competition affects banking performance.

I.S. Ilyasov argues that "the effectiveness of a bank's activities is the ability to clearly and promptly perform its functions in the dynamic conditions of the market environment, ensure the reliability of deposits of legal entities and individuals and its obligations to service clients." [1]

L.V. Tatarinova believes that "the financial efficiency of a commercial bank is a qualitative characteristic of its activities that allows it to promptly adapt to changes in the macroeconomic environment, function effectively in the banking services market, fulfill obligations to clients and shareholders regardless of the impact of external and internal factors, and ensure potential growth and development of all structural divisions in the medium and long term [2]

M.A. Gorsky writes in his work that "the financial efficiency of a commercial bank is the state of financial resources in which a commercial bank, transforming financial risks, is able to

quickly perform its functions and maintain the main parameters of economic activity (capital, profit) when the macroeconomic environment changes." [3]

L.I. Yuzvovich and E.A. Trofimova believe that "the efficiency of a commercial bank is the competitive results of its activities, which involve the creation and increase of the bank's value." [4]

I.V. Klyuev considers the multifaceted and polysemantic nature of the concept of "the efficiency of a commercial bank." He believes that this concept allows us to consider financial results (income and profit), performance (profitability) and the entire set of financial condition indicators (stability, liquidity, solvency) achieved by the bank as efficiency criteria, taking into account their value or target significance both for the bank itself and for the socio-economic environment of its activities. [5]

"The efficiency of a commercial bank is not only the results of its activities, but also an effective management system built on the formation of a scientifically sound strategy for the bank's activities (a system of goals for the bank's activities, ranked by their importance) and monitoring the results of its implementation," say V.V. Davydova, A.V. Medvedev and I.A. Shvedova. [6]

"The efficiency of banking activities is the ability of a credit institution to achieve its goal in accordance with the economic and socio-cultural norms of society," says O.I. Lavrushin and T.N. Vetrova. [7]

Finally, N.I. Valentseva states that "the efficiency of a commercial bank can be interpreted as the result of the redistribution of funds in the financial market, characterized by the level of traditional active and passive operations, as well as the level of their profitability, which should be adequate to the needs of society." [8]

G.E. Karataeva and D.K. Shikhveledova write that the efficiency of a commercial bank is an economic category that characterizes the financial result achieved by the bank in the course of its activities, as well as certain pre-established strategic goals or benchmarks that ensure its competitiveness and sustainable development. [9]

"The activities of a commercial bank can be defined as a management system that provides an effective methodology for the processes of managing the bank's assets and liabilities, its liquidity, equity and borrowed capital, bank risks, credit portfolio, internal bank control and audit to maintain the stability of the bank's operations, its compliance with the requirements and established standards by state supervisory bodies," A.M. Islangerieva and D.I. Aslanov state in their article. [10]

In general, most authors approach the concept of "effectiveness of commercial bank activity" differently, so certain authors, such as L.V. Tatarinova, M.A. Gorsky, L.I. Yuzvovich define this term as, first of all, a characteristic of the enterprise, which determines its financial condition. I.S. Ilyasov and O.I. Lavrushin believe that it is the ability of the enterprise to perform its functions effectively. Others, A.M. Islangerieva and V.V. Davydov believe that effective activity is the bank's management system, which ensures its high-quality activity.

I think that the effective activities of a bank are the ability to achieve the results necessary for the bank in the conditions of interbank competition. Effective bank activities presuppose the organization of high financial stability. It helps banks adapt to market conditions.

Methods and materials

When writing the article, various methods were used, such as the method of general scientific research, comparison of the studied indicators, the method of financial coefficients, the system approach, vertical and horizontal analysis, and the logical approach. Information processing and data generation were carried out using Microsoft Office software.

Results

The income statement is an important tool for analyzing a company's financial condition, assessing its profitability and management efficiency. It is important to analyze this statement in comparison with previous periods and compare it with similar indicators of other companies in the industry to assess current financial performance and identify trends. Table 1 shows the structure and dynamics of the income statement.

Table 1
Profit and Loss Statement of JSC Bank CenterCredit

Indicators	In millions of tenge		Growth Rate
	2024	2023	
Interest income calculated using the effective interest method, excluding interest income on loans to customers and banks carried at amortized cost	113 631	105 473	108%
Interest income calculated using the effective interest method on loans, loans to customers and banks carried at amortized cost	411 060	269 024	153%
Interest expense	(267 112)	(196 288)	136%
Net interest income before provisions for expected credit losses, on interest-earning assets	257 579	178 209	145%
Formation of reserves for expected credit losses on loans granted to customers and banks	(55 669)	(31 139)	179%
NET INTEREST INCOME	201 910	147 070	137%
Income from services and commissions	63 614	62 987	101%
Service and commission costs	(30 899)	(26 743)	116%
Net commission income	32 715	36 244	90%
Net gain/(loss) on financial instruments at fair value through profit or loss	5 294	1 432	370%
Net gain on sale and redemption of financial assets at fair value through other comprehensive income	2 123	443	479%
Net income from foreign exchange transactions	54 941	37 713	146%
Reserve for expected credit losses on other financial assets and amounts due from banks	(5,086)	(1 205)	422%
Reserve for credit related commitments	2 695	(23 200)	-12%
Impairment loss on other non-financial assets	40	(689)	-6%
Other expenses	(4 260)	(5 892)	72%
NET NON-INTEREST INCOME	88 462	44 846	197%
OPERATING INCOME	290 372	191 916	151%
OPERATING EXPENSES	(119 295)	(82 760)	144%
OPERATING PROFIT BEFORE TAX	171 077	109 156	157%
Corporate income tax expense	(31,968)	(9 919)	322%
NET PROFIT	139 109	99 237	140%

Based on the data in the table, it can be understood that the company's net profit increased by 40%, this is a positive result for the company, as it shows that the bank is using its own resources effectively. An increase in net profit can allow the company to improve its economic activity, attract a larger number of not only potential clients, but also potential investors.

Financial ratios are numerical indicators used to assess the financial condition and efficiency of a company. The most important indicators for assessing the efficiency of a JSC are the company's financial stability and profitability. To calculate the financial stability ratio, balance sheet items such as "Equity" and "Balance Sheet Currency" are used. For the profitability of sales and assets, the indicators of net profit, assets and revenue are used.

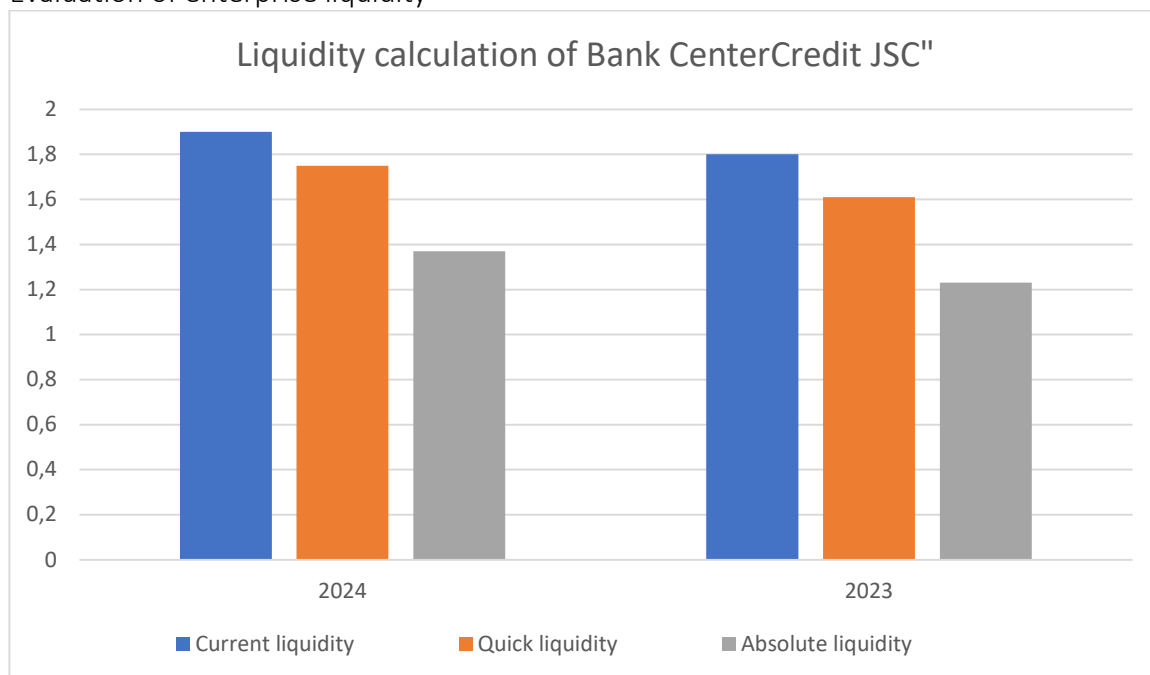
Table 2
Evaluation of the performance indicators of JSC "BCC"

Indicators	2024 year	2023 year
Financial stability ratio	0.09	0.08
Return on sales ratio	0.48	0.52
Return on assets	0.02	0.02

According to the data in the table, it can be seen that the financial stability of JSC has increased by a small percentage. This means that the company has not changed in terms of self-financing ability. The return on sales has decreased despite the increase in profit. The return on sales at the level of 48-52% is a healthy indicator for many industries and indicates that the company skillfully manages its expenses and ensures a sufficient level of profit from its activities. The return on assets has been low in recent years. Low return on assets indicates that the company does not effectively use its assets to generate profit. The return on assets remained at the same level as in the previous period.

An important indicator for assessing the efficiency of the company's activities is the liquidity of the organization. The liquidity of the company is the ability of the company to pay off its own short-term liabilities using its short-term assets. Liquidity ratios help to analyze the current level of liquidity, compare it with the standard, determine the trend of changes in the company's liquidity, and formulate recommendations for its optimization. The calculation of the ratios is performed based on the financial statements of the organization. In this case, it is convenient to calculate the ratios for several periods. This way, you can identify the trend of their change (growth or decline) to formulate recommendations. The current liquidity ratio, quick liquidity ratio, and absolute liquidity ratio are used to analyze liquidity.

Figure 1
Evaluation of enterprise liquidity



The current liquidity ratio has exceeded the standard value several times over each year, which may indicate that the company has enough current assets to pay off its short-term liabilities. This indicates that the company as a whole is in a sufficiently liquid condition to cope with current financial liabilities without the need to sell long-term assets or attract new financing. The quick liquidity ratio has also exceeded the standard indicator for 3 years, since the total amount of cash, short-term financial investments and short-term accounts receivable exceeds the amount of current liabilities. The absolute liquidity ratio also exceeds the standard value many times, which means that the company is able to pay off its debts with the most liquid means, such as cash and financial investments.

Discussion

The analysis showed that the company's net profit had increased. This was primarily due to the increase in such an indicator as "Interest income calculated using the effective interest rate method on loans, on loans provided to customers and banks, accounted for at amortized cost." This indicator increased by 53%. This demonstrates that interest income from issued loans increased because the number of customers willing to take out a loan from the bank increased. However, despite the increase in interest income, interest expenses increased by 36%. The increase in interest expenses is due to the growth in the volume of funds attracted. The bank was able to attract a larger number of depositors. As a result of the increase in interest income, the company's operating profit increased. The company's operating profit is the bank's income from its core business. This means that the organization is effective in lending.

The bank is also doing well in terms of sales profitability. The 53% increase in interest income indicates an increase in the bank's revenue from its core business - providing loans to customers and banks. This means that the bank is successfully attracting new customers and retaining existing ones, which may be the result of competitive lending conditions, improved service quality and product flexibility. The increase in the number of depositors, which ensured the growth of attracted funds, allows the bank to finance a larger number of credit transactions. At the same time, the growth in interest income exceeds the growth in interest expenses (53%

versus 36%), which indicates a positive gap between the return on assets and the cost of liabilities. This indicates effective resource management, which directly affects sales profitability.

The bank's financial stability does not exceed the indicator's norm. This demonstrates the fact that the enterprise is absolutely dependent on external sources of financing. However, this indicator is acceptable for the bank, since banks largely exist due to customer deposits.

The company has high liquidity. This is due to the fact that short-term assets in the enterprise, such as cash, are sufficient to pay off short-term liabilities (for example: short-term accounts payable, short-term customer deposits). High liquidity allows the company to pay off its debt on time. Thanks to it, the company becomes more flexible, which allows it to fulfill its own obligations to creditors in emergency situations. There are also various regulators for banks. A high liquidity indicator allows you to comply with these standards.

Conclusion

In conclusion, it should be written that an analysis of the effectiveness of a commercial bank emphasizes the bank's ability to adapt to the conditions of interbank competition and market conditions. Shows how financially stable the bank is. Determines its profitability and liquidity. Shows how much the bank's profit has changed over the past two periods.

Net profit increased by 40%, because despite the greater number of company expenses, compared to the previous period, the company's income increased significantly. Over the past period, the Bank has improved its operational efficiency. An increase in the bank's net profit will allow the organization to further improve its core activities, provide the opportunity to repay its debt on time and efficiently perform its own functions. A positive difference between return on assets and cost suggests prudent allocation of bank resources and management of interest rates. Such an initiative broadcasts international profits, which is the main measure to ensure international stability and profitability.

The bank's liquidity indicators are at a very high level. High liquidity of the bank indicates that the company has enough cash and other working capital to pay off short-term liabilities. Liquidity helps the bank remain flexible in the conditions of interbank competition and in the conditions of market relations. High liquidity meets regulatory requirements, maintains the authority and trust of the bank among clients and stakeholders. In general, it can be concluded that the bank is able to pay off its own debts within the specified timeframes.

The bank's financial stability is not high, as the vast majority of banks depend on external sources of financing. The bank's financial stability ratio is at an acceptable level. Despite the decline, the bank's return on sales also remains high. This indicates that the bank has good profitability from its own operations. However, the return on assets is stagnant and remains low. This indicator shows that the bank does not effectively use its own assets to increase its profit. With effective use of assets, the bank will be able to further increase its own net profit. To summarize, the bank has demonstrated significant progress in financial performance and operational efficiency. Continuous focus on optimizing resource use, combined with technological advances and innovative strategies, will be critical to maintaining long-term growth and competitiveness.

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A discussion of bankruptcy as a main problem in agricultural work

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Abstract

The study is devoted to assessing the financial condition and forecasting bankruptcy of an agricultural enterprise using the example of *LLP «En-Dala»*. The work covers the analysis of the historical development of the bankruptcy institution, determination of the main factors of financial instability and practical application of diagnostic models. Based on the analysis of financial statements, key problems were identified, such as high accounts receivable, low liquidity and significant growth of administrative expenses, which puts the enterprise at risk of bankruptcy.

The use of theoretical and empirical research methods made it possible to propose solutions to reduce financial risks. Among the recommendations: reducing accounts receivable through a system of discounts, cost optimization, and placing available cash on deposits to increase profitability. The predicted economic effect from reducing accounts receivable amounted to 118.94 million tenge, and the potential income from the deposit was 47.61 million tenge.

The implementation of the proposed measures helps to improve the financial stability of the enterprise, increase its profitability and reduce the risk of bankruptcy. The study emphasizes the importance of regular assessment of the financial condition and the need for strategic management to ensure the stability and growth of enterprises in the agricultural sector.

Keywords: bankruptcy, financial analysis, accounts receivable, liquidity, agro-industrial sector.

Introduction

In modern economic conditions and realities, the importance of studying the financial condition of companies is becoming critical. This is directly related to the fact that companies that have become independent from the state participants fully assume responsibility for the results of their business management, and, therefore, become more susceptible to the rapidly changing conditions of the modern economy.

Today, there is an increasing need for regular assessment of the financial condition of an agricultural enterprise to determine the risk of bankruptcy. In addition, to ensure the functioning of the enterprise, as well as its stability due to the influence of unfavorable economic changes, the ability of management personnel to assess the financial condition of the enterprise as accurately and effectively as possible is important. In turn, a significant aspect of the economic analysis of an enterprise at present is analysis of its potential bankruptcy.

To achieve the goal of this article, it is necessary to turn to the origins of the formation of bankruptcy risk assessment methods in order to understand its theoretical basis and historical significance. The history of the development of the institution of bankruptcy covers several key stages, starting with medieval civilizations and ending with modern legal systems.

Stage 1 - (16th-18th centuries) - recognition of the good faith of debtors. During this period, the institution of bankruptcy began to develop as a mechanism for settling debt obligations, taking into account the interests of both creditors and debtors [1].

In the 17th century, the Dutch lawyer Hugo Grotius formulated the Principles of fair treatment of debtors. He advocated a humane approach to those who found themselves in a difficult financial situation through no fault of their own. The English philosopher John Locke

emphasized the importance of protecting contractual obligations and the good faith of debtors, which influenced bankruptcy laws. In France, the concept of *bonne foi* (goodwill) emerged in the 17th–18th centuries, based on respect for *bona fide* bankruptcies, which was an important step in the development of legal practice [3].

Stage 2 – the 19th century – the formation of the modern institution of bankruptcy. In the 19th century, bankruptcy acquired the status of a legal institution that allows for the settlement of economic crises and the protection of the rights of all parties [2].

In 1804, the Napoleonic Code systematized bankruptcy rules, establishing for the first time the rights of *bona fide* debtors and procedures for their rehabilitation. Economists such as Adam Smith and David Ricardo emphasized in their works the importance of debt relations for a market economy. Their ideas helped to understand bankruptcy as an integral part of the economic system. In the UK, the Bankruptcy Act 1869 introduced procedures for debt relief for debtors who cooperated with creditors, which became the basis for many modern laws [2].

Stage 3 – 20th century – bankruptcy as a tool for reorganization. In the 20th century, bankruptcy legislation focused on business reorganization and restoration of solvency. In 1938, the Chandler Act was passed in the United States, which introduced rules for the reorganization of enterprises, allowing debtors to continue operations and protecting the interests of creditors. Austrian economist Joseph Schumpeter developed the concept of "creative destruction", showing that bankruptcy contributes to economic renewal and allows the market to get rid of inefficient participants [3].

Stage 4 – 21st century – modern times. Today, bankruptcy is an integral part of the legal and economic systems. It is used to restore the solvency of enterprises, settle debt obligations, protect the interests of creditors and debtors, and prevent economic crises. Modern bankruptcy procedures help identify points of financial instability, facilitate business reorganization and allow conscientious debtors to start a new financial life. This makes the institution of bankruptcy an important tool aimed at stabilizing the economy, optimizing the use of resources and ensuring social justice.

Literature review

In economic works, including legislative sources of the Republic of Kazakhstan, the term "insolvency" is placed on a par with the term "bankruptcy" and both concepts are recognized as equivalent. However, there are many approaches proposed by scientists and economists to the definition of this concept, which must be studied in order to more fully reveal its nature and economic essence.

Thus, the famous scientist and economist D.A. Adrianov puts forward the following definition of this concept: "insolvency (bankruptcy) is the inability of a legal entity, due to a lack of assets in liquid form, to satisfy the demands made on it by creditors within a certain period of time and to fulfill obligations to the budget" [1]. Supporters of a similar opinion are famous scientists A.D. Sheremet, V.A. Slepyshev, who consider insolvency (bankruptcy) as a result of the insolvency of an economic entity: "insolvency (bankruptcy) is associated with insufficient liquid assets, the inability of a legal entity to conduct business in accordance with the requirements of its creditors within the established time frame" [4].

With regard to other prominent Russian scientists, one can note the well-known economist Kadyrova R.R., who believes that bankruptcy is manifested in the lack of an enterprise's ability to ensure financing of current operations and pay off urgent obligations as a result of the use of ineffective financial and investment policy strategies, which ultimately confirms the imbalance of the economic mechanism, the task of which is the reproduction of capital [5].

At the same time, a more complete definition of insolvency (bankruptcy) is offered by the author Kazakova N.A., who asserts that bankruptcy is a market instrument that manifests itself in the protection of "healthy" from "hopelessly sick" economic entities [6].

Economist Markaryan E.A., in contrast to other approaches, emphasizes that the cause of insolvency (bankruptcy) is associated with the unfavorable balance sheet structure of the debtor enterprise. He emphasizes that the imbalance between assets and liabilities, as well as insufficient liquidity, are key factors leading to financial difficulties [7].

However, PhD in Economics I.A. Blank, S.E. Metelev consider it reasonable to expand the previously mentioned definition of economist Kazakova N.A.: "Bankruptcy is financial insolvency, when a legal entity is unable to fulfill its debt obligations due to a lack of monetary assets, which usually leads to the termination of activities or liquidation of the company with the subsequent sale of its assets to pay off debts" [8,9]. Examining the definition of PhD in Economics I.A. Blank and S.E. Metelev, it becomes not entirely clear what they mean by the termination of a company's activities. If this means the termination of the company's activities, then this is not yet the final stage, since after this there are still possible options for action in the form of sale, liquidation or conservation of the company. And if by the termination of the company's activities the scientist means the complete cessation of its existence, then there is no difference between the concepts of termination of activities and liquidation, which is partly an erroneous idea.

In addition to the above statements, attention is drawn to the interpretation of the statistician, economist I.V. Sedlov, who claims that "bankruptcy means the implementation of catastrophic risks of the enterprise in the course of its financial transactions, as a result of which it is unable to fulfill the requirements of creditors within the established time frame and fulfill obligations to the budget" [10]. It should be noted that the author has quite fully and clearly defined the essential content of the concept under study, since it is precisely because of the relationship between risk factors and profitability that the key concept of insolvency (bankruptcy) is formed from a financial point of view.

A study and review of economic literature on the topic of the study showed that bankruptcy as an economic process is the result of unproductive financial activity of economic entities, which has a huge destructive effect on the finances of both a specific business and the state as a whole.

Methods and materials

The study used theoretical and empirical research methods. Theoretical research methods include a literature review, which allows to determine the relevance of the topic and highlight key aspects for analysis. The empirical method used a dynamic approach focused on studying changes in production indicators over time. The material of the study is the agricultural enterprise LLP "En-Dala" of the Akmola region, which provided data for analysis. The results obtained to identify the main factors affecting the efficiency of the enterprise.

Results

Based on the analysis, recommendations are proposed to improve productivity and optimize processes in the agro-industrial sector. Based on the analysis of the financial position, as well as the identified problems associated with insufficient financial stability and leading to bankruptcy in the future, are the presence of sufficient accounts receivable, which should be reduced to a minimum and the availability of reserves sufficient for the continuous implementation of the main activity.

At the same time, it should be noted that the financial position of an economic entity can always be assessed from the point of view of its short-term prospects using liquidity indicators, meaning whether the enterprise is able to fulfill its obligations to counterparties in a timely manner and in full. Consequently, in order to improve the liquidity indicators themselves, it is necessary to balance liabilities by their maturity dates with assets by the dates during which they can be realized for conversion into cash.

The example of the enterprise shows the reduction of accounts receivable by providing a cash discount of 3% for payment within 10 days. The probable effectiveness of this measure is given in Table 1.

Table 1

Savings from providing a cash discount taking into account inflation

Indicators	Without providing a discount	Taking into account the discount provided	Calculation
Payment terms	3% discount if paid within 10 days	Payment term 30 days	
Expected inflation rate, %	0,27	0,81	9,8/365*10; 9,8/365*30;
Losses from inflation, thousand tenge	478,4	1435,3	177193*0,27/100; 177193*0,81/100
Economic effect	1435,3 – 478,4 = 956,9		
Note - compiled by the author based on the financial statements of LLP «En-Dala»			

By changing the terms of the debt repayment terms, with the provision of a cash discount of 3%, the amount of accounts receivable could be reduced by 40%. The forecast of the expected economic effect from the reduction in the amount of accounts receivable is presented in Table 2.

Table 2

Forecasting the economic effect of reducing the amount of accounts receivable

Indicator	2023 year	Forecast for 2024
Revenue, thousand tenge	1641534,6	1641534,6
AR, thousand tenge	297350,0	178410,0
AR average balances, thousand tenge	257350,0	242970,0
AR turnover	6,4	6,8
AR turnover period	57,2	54,0
Economic effect, thousand tenge		118940,0
<i>Note - compiled by the author based on the financial statements of LLP «En-Dala»</i>		

According to the forecast estimates, the reduction of accounts receivable will lead to an increase in its turnover to 6.8 times, while the average duration of one turnover will decrease to 54 days. Consequently, the calculated amount of cash release will be 118940.0 thousand tenge.

Another way to increase cash flows in the future, and, consequently, to increase solvency and reduce the degree of bankruptcy is to replenish funds in the company's deposit account in the amount of 300 million tenge. The conditions for placing funds on deposit are given in Table 3.

Table 3

Terms of placing funds in a deposit account

Deposit term	1 year
Interest rate	15% per annum
Interest accrual	Quarterly
End of deposit term	Full withdrawal available
<i>Note - compiled by the author based on the financial statements of LLP «En-Dala»</i>	

The data in the table show that if put money in a deposit account with a rate of 15% per annum, then the quarterly accrual of interest increases the profitability due to the compound interest effect. Such a deposit is suitable for investors who are ready to put money in for a year in order to receive a fixed income.

The analysis of the financial condition showed that the total amount of accounts receivable in 2023 amounted to 177,193 thousand tenge. The annual inflation rate for 2023 was 9.8%, according to the National Bank of the Republic of Kazakhstan. Then, the calculated price growth index is 1.098 ($1 + 9.8 / 100$), the decline in purchasing power was 0.912 ($1 / 1.098$). From this it follows that for 2023 the enterprise did not receive funds in the amount of 15,593 thousand tenge ($177,193 - 177,193 * 0.912$).

Over the period from 2022 to 2023, the company's available cash increased from 215.0 thousand tenge to 930.0 thousand tenge, therefore, the company has a real opportunity to grow cash flows and receive additional profits by increasing its other income. It is known that in the composition of other income, along with subsidies, there is an item "Payments of interest on the deposit". In addition, over the past year (2023), the company has already received an additional 3.5 million tenge in interest. Therefore, consider the opening of a deposit in the amount of 300 million tenge to be a real source of profit replenishment and in the future can additionally bring a significant increase in other income of the company.

To find out what amount of money will accumulate in the account in a year, will use the formula for calculating compound interest (1):

$$FV = PV \times \left(1 + \frac{r}{m}\right)^{m \times n}, \quad (1)$$

where: FV – future value; PV – present value; r – interest rate; m – number of interest accrual periods per year; n – number of years in the calculation period.

Applying formula (1), the results are:

Interest rate for quarterly capitalization: $15\%/4=3.75\%$;

Number of periods for quarterly capitalization = 4 times.

The future value of 300 million tenge deposited today will be:

$FV = 300 \times (1 + 0.0375)^4 = 300 \times 1.1587 = 347.61$ million tenge – therefore, the amount of interest on the deposit as part of other income of the enterprise could be 47.6 million tenge, which will also ensure the growth of its profit.

Discussion

Based on the results of the analysis, believe that it is reasonable and realistic to reduce administrative expenses to the level of the average annual growth rate of revenue from sales of products. It is important to note that such a reduction should be accompanied by optimization of processes and the elimination of ineffective costs without compromising the quality of management. The implementation of this approach will strengthen the financial stability of the company and create conditions for more dynamic growth in the future.

The results of the conducted research in the article allow us to draw the following conclusions and recommendations:

- 1) Assessing the financial condition and forecasting bankruptcy will always allow the enterprise to avoid financial risks in the future;
- 2) It should be noted that in the composition of other income of the enterprise, an important role is played by exchange rate income, the size of which in 2023 increased by 3.4 times compared to 2022, which made it possible to increase the volume of flax exports, since it sells linseed oil to the foreign market. In general, an increase in exchange rate income is a positive signal that indicates various opportunities to increase profits and improve the financial condition of the enterprise;
- 3) Analysis of the main economic indicators of the LLC demonstrated that its activities are inefficient. This is expressed, first of all, in a significant decrease in profit in 2023 compared to 2022 by 9.6 times;
- 4) The study of the financial statements of En-Dala LLC revealed that it is experiencing a financial crisis and is approaching the stage of bankruptcy according to its calculations based on the use of well-known diagnostic models. Moreover, the negative dynamics of the maneuverability and equity ratios is associated with the lack of the company's own working capital;
- 5) The calculations for the future showed that the growth rate of administrative expenses was 109.3%, financing costs - 116.4%, and the revenue growth rate was only 103.1%, which may lead to bankruptcy in the future. Therefore, believe that it is justified to reduce administrative expenses and financing costs, which will lead to an increase in the company's profits;
- 6) An increase in cash flows and an improvement in the financial condition of the company will be facilitated by an increase in other income due to accrued interest on the deposit. Calculations showed the availability of free cash of the company for 2023 in the amount of 930.0 million tenge. This confirms that the amount of such income can be increased if the company opens a deposit.

Conclusion

In conclusion, it should be noted that the effective implementation of the proposed plan will enable the company to break out of the current crisis, improve its economic condition and guarantee reliable income in the future. The implementation of measures aimed at optimizing costs and increasing operational efficiency will strengthen the company's competitive position in the market. In addition, successful implementation of the plan will create conditions for sustainable growth and attracting additional investment. This will provide the enterprise with long-term stability and the ability to adapt to changing external conditions.

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Control of settlements with budgets based on analytical procedures

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Abstract

The article reveals the topic of budget calculations using the example of a small business LLP using analytical procedures. Calculations with the budget include different types of taxes of the Republic of Kazakhstan; they are compared with each other to demonstrate changes in the organisation's profits over specified periods and to examine the extent to which the controls of system performance testing procedures are effective. The research takes place with the help of the relevant tax documentation issued, the Tax Code of the Republic of Kazakhstan and collected statistical information. The results obtained indicate that the tax calculation control system works, but requires improvements and further research into this topic.

Key words: taxes, budget, analytical procedures, control, calculations.

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Relevance

This topic is relevant since budget payments are an integral section of economic and tax policy, which affects the revenue side of the country's budget.

Accounting for calculations with the budget is performed for various types of payments: corporate income tax, individual income tax, VAT, excise taxes, land tax, property tax, etc. in accordance with the tax legislation of the Republic of Kazakhstan. Control and analysis of the budgets of economic entities is an important part of their accounting policies. Tax control is necessary at all stages of management activities. Such reasons as identifying common errors, tax risks, regulating the tax burden and systematising the database are the highest priorities. Violations and illiteracy in accounting and tax payments can lead to significant consequences. To prevent such

errors, tax committees commit methodological work and consultations for economic organisations.

The results of work on this topic can be used when conducting audits by tax authorities and internal control units of organisations, as well as in the process of implementing basic procedures for tax control of business entities. Analysis of methods for controlling calculations with the budget is of great practical significance for the organisation of accounting. The outcome of the study can be used in the activities of tax authorities, accounting services and audit organisations when optimising the system of calculations with the budget and developing regulations for conducting audits.

Historical background

In current times, tax liabilities occupy a major share in the overall cost structure of companies, which gives particular importance to the accounting and tax systems used in it. For the company, the primary goal is always to achieve a positive financial result and systematically increase profits. The main way to achieve this outcome is to audit budget payments.

In the Republic of Kazakhstan, the development of the tax system was formed simultaneously with its regulatory legal framework. One of such acts in the legislative system is the Code of the Republic of Kazakhstan, which regulates tax relations. The development of the tax system of Kazakhstan as an independent country began in the 1990-s and continues to this day.

Conjointly with the development of the tax system of the Republic of Kazakhstan, at the end of the last century, auditing began to vigorously develop as a new type of business activity. With the increase in volume and complexity of clients' undertakings, the requirements for the accounting and reporting system have become higher. In this regard, there is a need to create a new form of control over the activities of enterprises, which would include advice on the organisation and maintenance of accounting, the correctness of tax calculations and other types of services. Therefore, the financial control of the Republic of Kazakhstan was formed in the system of economic supervision; the Law "On Auditing Activities" dated November 20, 1998, No. 304-I was adopted.

Audit control is necessary for government agencies, courts, prosecutors, and investigators to confirm financial statements of interest to them. Independent confirmation of information about the performance of enterprises and their compliance with the law is vital for the state to make decisions in the field of economics and taxation.

Literature review

When exercising tax control, analytical procedures are widely used, which have now become one of the most important components of the control of settlements with the budget, carried out both by tax authorities and by business subjects. Control and audit of tax calculations are carried out on the basis of variable actions of the auditor based on their experience, professional judgment, the results of assessing the risks of material misstatement, and analytical procedures, as well as adjustments due to clarification of risk indicators throughout the audit process.

The analytical procedures play a significant role at the planning stage, which means the assessment of financial and non-financial information based on the study of indicators of materiality, their correlation, identification, and consideration of trends (especially the unusual ones between the analysed indicators. [1]. The significance of analytical procedures in an audit is manifested not just in the usage of internal information of the audited organisation, but also the possibility of comparing it with external data and assessing the effectiveness of decisions made by management. The scale and efficiency of using analytical procedures at the planning stage largely depends on the possibility of detailing accounting data, the level of automation, and the degree of

interaction between the auditor and employees of the accounting service and other departments. The significance of analytical procedures is undeniable, but each specialist has their own understanding of this term.

According to Lozovsky L. S., the analytical procedure is “an assessment of financial and economic information based on the study of the relationships between accounting and non-accounting (analytical) data, as well as a comparison of data recorded in financial statements and data obtained during the audit process”. [2]. In addition, Merzlikina E. M. and Nikolskaya Y. P. in their book focus not only on the analysis and assessment of information received by the auditor, but also on the causes of errors and distortions in reports. [3]. Sokolova E. S. and Sitnov A. A. believe that in addition to analysing current trends and coefficients, it is necessary to study the subsequent changes in various deviations and correlations that deviate from the forecast data. [4]

Moreover, Yudina G. A. and Chernykh M. N. believe that an in-depth study of the activities of the audited entity and analysis of the patterns of this data should be included in the concept of analytical checks. [5]. Kazakova N. A. characterises analytical procedures as “analysis of indicators to justify certain management decisions or formulate professional judgments based on the assessment of indicators, identifying correlations and trends using financial and non-financial information with the assumption of a cause-and-effect relationship between the analysed phenomena”. [6]. Sheremet A. D. notes that “analytical procedures, which are one of the types of audit procedures, are the identification, analysis and assessment of the relationships between the financial and economic indicators of the activity of the audited economic entity”. [7]. Broilo E. V. makes it clear that analysis and comparison of individual indicators are important at each stage of the procedure: “at the planning stage, it helps the accountant to determine the nature and timing of the audit, the scope of audit procedures; at the verification stage, it makes it possible to process a significant part of the data; the final stage of the review is to provide a general overview of the financial information.” [8]

Analytical procedures are one of the methods for checking economic activity and they include such techniques as: the ratio of various financial data (revenue, costs) or financial and non-financial data (salaries and headcount); comparison of reports from two adjacent periods; investigation of unexpected deviations, etc. Heslinga L. notes that analytical methods are less time-consuming and require less documentation, which makes them more efficient than traditional tests. [9]

During the study of tax calculations through analytical procedures, for a more effective approach to conducting an assessment, the auditor must obtain an understanding of the accounting policies of the audited company and estimate the impact of existing differences in accounting and tax accounting methods. At the preliminary stage of a tax audit, the following are determined: basic principles, stages and approaches to performing a tax audit; the basis of the relationship between an audit organisation and tax authorities during a tax audit; responsibility of the parties when carrying out a tax audit; the procedure for conducting and documenting the results of a special audit assignment on tax issues. [10]

Methods and materials

The methodology of this study includes the use of primary data, which is collected through a case study framework, as well as secondary data obtained through scientific articles, case books and other research papers. In the article general research methods are applied, such as analysis, comparison, deduction, measurement, generalisation, etc. In addition, knowledge of accounting, economic analysis, statistics and auditing is utilised.

The information and empirical base of the study are regulatory documents that determine the order of organisation and functioning of the tax and internal control system, official statistical data, materials provided by financial and tax reporting for the organisations under research, and the

author's calculations. The object of the study is the totality of business transactions for calculations with the budget, including planning, accrual, and deadlines for paying taxes.

Results

Content	Sum in 2023	Sum in 2024
Accrued income for 1 month	350 000	400 000
Accrued income for 2 month	390 000	480 000
Accrued income for 3 month	550 000	582 300
Total	1 290 000	1 462 300
The amount of personal income tax calculated from accrued income		
for 1 month	20 462	30 031,2
for 2 month	21 506	37 071,2
for 3 month	32 894	46 074
Total	74 862	113 176

Table 1. Correspondence of accounts for the calculation of personal income tax.

Content	Sum in 2023	Sum in 2024
Income subjected to social tax		
for 1 month	308 000	312 200
for 2 month	343 200	362 400
for 3 month	484 000	450 222
Total	1 135 200	1 124 822
Amount of ST payable to the budget		
for 1 month	18 235	15 642
for 2 month	20 319	17 671
for 3 month	20 655	19 971
Total	59 209	53 284

Table 2. Correspondence of accounts for the accrual of ST.

Content	Sum in 2023	Sum in 2024
Income from which social contributions are calculated		
for 1 month	315 000	310 200
for 2 month	351 000	370 420
for 3 month	495 000	520 500
Total	1 161 000	1 201 120
Sum of SC		
for 1 month	11 025	9 457
for 2 month	12 285	11 285
for 3 month	17 325	16 162
Total	40 635	36 921, 2

Table 3. Correspondence of accounts for accrual of SC.

Content	Sum in 2023	Sum in 2024
Accrued income from which compulsory pension contributions are withheld		
for 1 month	350 000	400 000
for 2 month	390 000	480 000
for 3 month	550 000	582 300
Total	1 290 000	1 462 300
Sum of CPC		
for 1 month	35 000	40 000
for 2 month	39 000	48 000
for 3 month	55 000	58 230
Total	129 000	146 230

Table 4. Correspondence of accounts for the accrual of CPC.

Content	Sum in 2023	Sum in 2024
Accrued income from which contributions to compulsory social health insurance are withheld		
for 1 month	350 000	400 000
for 2 month	390 000	480 000
for 3 month	550 000	582 300
Total	1 290 000	1 462 300
Sum of CCSHI		
for 1 month	7 000	8 000
for 2 month	7 800	9 600
for 3 month	11 000	11 646
Total	25 800	29 246

Table 5. Correspondence of accounts for CCSHI accrual.

Content	Sum in 2023	Sum in 2024
Sales income	75 000 000	85 000 000
Income in the form of property received free of charge	500 000	420 000
Total annual income	75 500 000	85 420 000
TAI adjustments	62 000 000	60 000 000
Expenses on goods (services) sold	12 000 000	13 000 500
Deductions	200 000	250 000
Remuneration deductions	250 000	300 000
Amount of entertainment expenses	100 000	50 000
Uncollectable accounts expense	200 000	230 500
Deduction of taxes and payments to the budget	3 300 000	3 900 200
Deduction of compensation amounts for business trips	1 000 000	1 750 000
Total deductions	67 050 000	66 480 200
Taxable income/loss	8 450 000	18 939 800
Abatement of taxable income	250 000	300 000

Taxable income subjected to abatement	8 200 000	18 639 800
CIT rate	20%	20%
CIT on taxable income	1 640 000	3 727 960
Net income	6 560 000	14 911 840

Table 6. Correspondence of accounts for the calculation of CIT.

Discussion

LLP “Aisulu” is a legal entity and operates based on the existing legislation of the Republic of Kazakhstan and the Charter. The partnership is considered as a small business entity. Small businesses are understood as individuals engaged in business that meets certain requirements for the number of employees and average annual income. The company's income, generated in accordance with the procedure established by the legislation of the Republic of Kazakhstan, is spent on covering material costs, paying taxes, other obligatory payments, and wages to employees. The main goal of the partnership is to generate income from business activities and to contribute to the fullest satisfaction of the population's needs for services, goods, and products.

LLP's accounting system is an orderly constitution for collecting, registering and summarising information in monetary terms about the property, obligations of the organisation and their movement through continuous, uninterrupted and documentary accounting of all business transactions. The article examines how this system affects the LLP's tax history through its comparison for different periods.

Personal income tax (PIT) is a tax for individuals that is levied on income received. The subject of taxation is an individual (tax agent), and the object is taxable income. The rules for calculating individual income tax are regulated by the Tax Code of the Republic of Kazakhstan. According to the Tax Code, personal income tax is deducted from employees' salaries in the amount of 10%. It is necessary to take into account that the calculation of personal income tax occurs when all deductions have been made. In other words, in the process of calculating all taxes, the compulsory pension contribution (CPC)- 10%, compulsory health insurance contributions- 1%, minimum wage (85 000 tenge in 2024), and additional deductions (the amount of voluntary pension contributions, remuneration, medical care, etc.) are subtracted. Next, 10% is subtracted from the remaining amount when calculating the employee's personal income tax for the month.

In the Table 1 it is showed that the correspondence of personal income tax (PIT) accounts. It can be clearly seen that income has greatly rocketed compared to last year. It grew from 1 290 000 to 1 462 300. However, personal income tax has also considerably risen, corresponding to the increased revenue.

Social tax (ST) is a tax that the employer pays for employees from their own funds, which goes as a total amount to the state budget. Social tax in Kazakhstan has been levied since January 1, 1999. Payers of social tax are: individual entrepreneurs; private notaries, lawyers; legal entities- residents of the Republic of Kazakhstan, as well as non-residents operating in the Republic of Kazakhstan through a permanent establishment, branches and representative offices. The object of taxation for legal entities is the employer's expenses paid to employees in the form of revenue, as well as the income of foreign personnel provided by a non-resident legal entity. The Tax Code establishes the mandatory submission by employers of special reports on social tax- declarations. Social Tax is calculated using the formula:

$$ST = (\text{Income} - \text{CPC} - \text{CCSHI}) \times 9,5\% - SC$$

As can be observed from the Table 2, both taxable revenue and the number of social tax calculated from accrued income have greatly declined. The total amount of ST payable to the budget noticeably decreased from 59 209 to 53 284.

Social contributions are money paid by payers of social contributions to the State Social Insurance Fund in the manner established by the legislation of the Republic of Kazakhstan. The

procedure and number of social contributions in the Republic of Kazakhstan are regulated by the Social Code, as well as the Order of the Ministry of Labor and Social Protection of 2020. The rate is equal to 3.5% of the calculated amount; this rate has been maintained since 2019.

Social contributions are calculated using the formula:

$SC = (\text{Income} - \text{CPC}) \times 3,5\%$, if the employee's salary is more than the minimum wage. If the salary is equal to the minimum wage, then the calculation occurs without subtraction of CPC. As can be seen on the Table 3, the amount of taxable revenue has risen by more than hundred thousand, whereas the sum of SC has noticeably dived.

Mandatory pension contributions (CPC) are 10% of all types of wages in monetary terms and other income that the agent (employer) pays to the UAPF to an individual pension account. At the same time, the monthly income accepted for calculating CPC should not exceed 50 times the minimum wage. Mandatory pension contributions are paid by: legal entities and individuals; private and individual entrepreneurs; small businesses; peasant and farm enterprises; those who work outside the country while remaining its citizen. In the Table 4 the revenues for both trends have significantly grown compared to last year's numbers.

Corporate income tax (CIT) is a tax paid by companies (LLP, TDO, JSC and others) on the income received. CIT is paid by resident companies and non-resident legal entities that operate in the Republic of Kazakhstan through a permanent establishment or receive income from sources in the country. The object of taxation is a taxable income, and a revenue taxed at the source of payment. The rate is 20% for residents of the Republic of Kazakhstan. Revenue subjected to tax represents the difference between adjusted income for the year and the deductions that are provided for in the Tax Code of the Republic of Kazakhstan. Dividends, remunerations, gratuitously received property and other types of income may also be subject to corporate income tax. According to paragraph 5 of Art. 195 of the Tax Code of the Republic of Kazakhstan, when calculating CIT as a whole for the taxpayer's activities, losses are not taken into account.

Corporate income tax is: $\text{CIT} = \text{taxable income after reduction} \times 20\%$

In the Table 6 the revenue has rapidly increased in comparison to the last year. It can be noted that income from sales has considerably surged up by 10 million, and it impacted on the total net value of the period.

Conclusion

In conclusion, it can be said that when comparing the history of taxes and various contributions over several years, no pronounced deviations were found. With increased income, taxable profit is within the acceptable limits. Financial analysis shows that the financial condition of this LLP in 2023 and 2024, according to the results of the study, can be described as stable, with constantly growing profits and income. The system of control of tax statements works in order, albeit some details are still neglected and skipped through. In order to improve the accounting of calculations with the budget in LLP "Aisulu", it is recommended to improve control over the correctness of tax calculations and the organisation of tax reporting, as well as to develop standards for auditing settlements with the budget.

Economic Assessment of Milk Production and Processing in the Northern Region of Kazakhstan

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Abstract

Milk production in Kazakhstan is concentrated in the northern part of the country, where favorable climatic conditions and large tracts of land provide the ideal environment for dairy farming. The Northern region, with its substantial number of dairy farms, represents a key area for economic development. Yet, despite the potential for growth, there remain significant barriers to optimizing milk production and processing. For instance, much of the dairy sector continues to rely on outdated farming practices and processing technologies. Additionally, the economic policies and regulatory frameworks affecting the dairy sector require modernization to align with the evolving market conditions and international standards.

The purpose of this study is to conduct a comprehensive economic assessment of milk production and processing in the Northern region of Kazakhstan. The purpose of the study is to assess the economic feasibility, problems and opportunities in the dairy sector, with an emphasis on both milk production and its subsequent processing. By assessing factors such as cost of production, productivity, market conditions and value-added processing, the authors of the study seek to obtain information that could help in policy development, improve the efficiency of the industry and increase the economic sustainability of dairy farming in this region. To achieve the goal, it will be necessary to perform a number of tasks, namely:

To assess the current state of milk production:

- To assess the scale and structure of milk production in the Northern region of Kazakhstan.
- Identify the main milk producing regions and types of dairy farms (for example, small farmers or large enterprises).
- Analyze the key factors affecting milk production, such as farm management practices, livestock health, feed quality, and technology adoption.

Evaluate the milk processing sector:

- Study the scale and capacity of milk processing enterprises in the Northern region.
- Evaluate the effectiveness of processing technologies and the quality of processed dairy products.
- Assess the market demand for processed dairy products such as milk, cheese and yogurt.

By achieving these goals, the study will provide valuable information about the economic situation in the field of milk production and processing in Northern Kazakhstan, helping stakeholders make informed decisions that can lead to the growth and development of the industry.

Keywords: milk, northern region, processing, dairy products, animal husbandry

Introduction

In the wake of burgeoning population expansion, cities' rapid growth, a looming worldwide health emergency (Covid-19), escalating geopolitical tensions between Ukraine and Russia [1], skyrocketing food and oil costs, pressing climate considerations, and adverse natural circumstances, an array of compounded pressures significantly disrupts global agricultural output

and trade dynamics. Both the nations of Ukraine and the Russian Federation stand as linchpins in worldwide agri-exportation; their ongoing predicament poses dire implications on importing countries' markets, prices, supply chains, and overall risk profiles. The FAO's Food Price Index for five essential commodities soared to 127.4 points by 2024—a jump of around 4.85% compared with the previous year. Among these key indicators is milk, which in October 2024 surged to a record high at 139.1 points, marking an alarming increase of nearly 24.5 points over the same month in 2023 and a monthly rise of approximately 1.87% [2].

In 2023, global milk production increased to 965.7 million tons, which is 1.5% more than in the previous year. The growth was mainly driven by an increase in milk production in Asia, which now accounts for 46% of total global milk production. Notably, India and China made the main contribution to growth: volume increased by 2.5% in India and 6.6% in China, helped by supportive government policies and higher prices for farmers[3].

Dairy production occupies a leading position among the agricultural sectors in the global and Kazakh agro-industrial complex (AIC). In 2023, there was a significant increase in the volume of dairy products — up to 6,5 million tons of raw materials and about 2.1 million tons of processed milk. [4], [5]. The Kazakh market provides a wide range: from classic milk to various types of cheeses (including hard, processed), dairy products with and without sweet additives, as well as popular yogurts and kefir. The general trend in the field of recycling is steady growth. Nevertheless, a number of significant challenges stand in the way of further development of the industry. These include: inconsistent capital inflows, insufficient own funds of agricultural companies and farmers, digitalization, depreciation of agricultural machinery and non-systemic measures to support private farms.

The economic assessment of milk production and processing in the Northern region of Kazakhstan is highly **relevant** for several key reasons:

Milk production is a vital component of Kazakhstan's agricultural sector, particularly in the Northern region, which is known for its vast agricultural landscapes and livestock farming. The economic assessment provides insights into the profitability, efficiency, and sustainability of milk production systems. This is crucial for understanding how dairy farming contributes to the local economy, rural livelihoods, and job creation. A well-developed milk production sector can foster regional economic growth, create employment opportunities, and stabilize incomes in rural areas.

Milk is a critical source of nutrition, providing essential proteins, vitamins, and minerals for local populations. Assessing milk production helps determine whether the region is self-sufficient in dairy products and how much it relies on imports to meet domestic demand. A strong local milk industry supports food security by reducing dependence on external sources and ensuring a stable supply of dairy products.

Understanding the economic dynamics of milk production also includes evaluating the environmental footprint of dairy farming, such as land use, water consumption, and greenhouse gas emissions. Economic assessments can guide policies aimed at improving the sustainability of dairy farming practices, minimizing environmental impact, and promoting eco-friendly technologies in milk production and processing.

The Northern region of Kazakhstan is not only a major producer of milk but also a key market for dairy products. An economic assessment can provide valuable data on consumer demand trends, pricing mechanisms, and the competitiveness of locally produced milk versus imported products. This information helps policymakers and producers align their strategies with market needs, improve product quality, and explore opportunities for value-added dairy products.

Economic assessments are vital for informing governmental policy decisions regarding subsidies, support programs, and regulations in the dairy sector. They also help identify opportunities for private investment in milk production and processing infrastructure. Analyzing the economic

performance of the sector can lead to targeted investments in dairy farming technologies, cold storage facilities, and processing plants, boosting efficiency and product quality.

Milk production in Kazakhstan faces several challenges, such as limited access to modern farming technology, low productivity, high production costs, and fluctuating milk prices. An economic assessment can identify bottlenecks in the milk production chain and offer solutions to overcome these challenges. By evaluating profitability and identifying gaps in processing capacity, the assessment can suggest potential areas for investment and technological upgrades to drive growth and enhance competitiveness.

Northern Kazakhstan, with its substantial dairy production capacity, has the potential to become a key exporter of dairy products, especially to neighboring countries in Central Asia and beyond. By conducting an economic assessment, it becomes possible to evaluate the feasibility of expanding export markets, optimize production for export needs, and address barriers such as logistics, trade regulations, and quality standards.

Historical background of problems in the dairy sector. Milk production plays a crucial role in the agricultural economy of Kazakhstan, particularly in its northern regions. As a nation with a significant rural population, the sector not only provides food security but also sustains livelihoods for a large portion of the population. However, despite its importance, milk production and processing in Kazakhstan face several economic challenges that affect its productivity, profitability, and sustainability. These challenges include fluctuations in the cost of feed, inefficiencies in the processing industry, and a lack of modern infrastructure. Understanding the economic dynamics of milk production and processing in the Northern region of Kazakhstan is essential for developing strategies to improve the sector's performance and increase its contribution to the national economy.

Materials and methods of research. Due to the fact that countries are unable to provide their populations with high-quality food and contribute to ensuring food security around the world, a systematic approach, cooperation with international organizations and large producing countries is required to solve these problems in a sustainable manner. To study the dairy industry in the Northern region of Kazakhstan, the entire chain was studied - from the number of cows, their productivity to the processed milk produced.

An economic and statistical analysis was carried out among the region and materials related to the progress in dairy production over the past 5 years were summarized. Using the method of comparative and sequential analysis, the calculation of changes in the amount of cow's milk produced, as well as the average number of milk yields per cow per year and the number of cows in the Northern region of Kazakhstan was carried out. A causal analysis of the amount of milk produced and processed was carried out.

Using the factor assessment methodology, we have identified some factors related to the level of depreciation of agricultural machinery, the lack of equity among farmers, the lack of government funding and sophisticated digital equipment.

These factors made it possible to identify and explain certain relationships that characterize the level of dairy production in our region. From the point of view of evaluating the collected data, the generalization method was used in the work. The above gave the right to identify threats, shortcomings and formulate several recommendations.

literary review

When analyzing the economic assessment of milk production and processing, it is important to consider the various approaches proposed by authors specializing in agroeconomics and agricultural production. Some researchers focus on resource efficiency and reducing production

costs, while others emphasize the importance of innovative technologies and their impact on product competitiveness.

For example, authors who focus on classical economic theories often analyze the cost-benefit ratio, paying attention to the scale factor of production. At the same time, modern research is increasingly turning to issues of sustainable development and ecology, which contributes to the inclusion of new parameters in economic assessment, such as the carbon footprint or the social impact of dairy production.

Zhukova (2019) and Akhmedyarov (2019) argue that although productivity has increased slightly due to improved feed management methods, inefficient agricultural operations and outdated technologies still hinder overall growth [6], [7]. Milk production has increased in recent years, but if we pay attention to the statistics, we will see that the number of cows has decreased. This means that even if there are fewer cows over the years, production is growing, which means that technologies in agriculture are still being implemented.

Ponomarev et al. (2018) note that over the past 10 years, there has been a gradual shift towards larger and more mechanized dairy farms in Northern Kazakhstan [8]. However, Mamutova (2019) believes that the processing sector is lagging behind, and many dairies are still operating at suboptimal capacity due to outdated equipment and insufficient investments in modernization [9]. Currently, there are 15 milk processing plants in the Northern region of Kazakhstan with a total capacity of 149 thousand tons per year. Despite this, they cannot increase their capacity because they do not have enough resources in the form of milk, as they are located far from cities.

Toleubaev and Dzhumabayeva (2023) [10] emphasize that the increase in feed prices over the past decade has had a profound impact on the cost of milk production in Kazakhstan, especially in the Northern region, while Zhukova (2019) and Akhmedyarov (2019) focus on inefficiency caused by disunity between dairy companies, farms and processing enterprises, which led to an increase in production costs [6, 153], [7, 75]. In recent years, the increase in feed prices has increased significantly, as many farmers are losing their crops due to climatic conditions.

Mamutova (2019) compares the current state of the dairy processing industry with what it was ten years ago, noting a slight increase in the number of dairy products with added value [9, 46]. On the other hand, Zhukova (2019) and Akhmedyarov (2019) note that, despite these achievements, the gap between milk production and processing capacity remains a constant problem limiting the profitability of farmers [6, 160], [7, 81]. Milk production reaches, so to speak, record levels, but, as mentioned earlier, processing plants are located far from populated areas, and farmers simply do not go there, so as not to incur even greater costs.

Over the past ten years, more and more milk has been produced in the country every year, despite the small acreage for forage crops and their prices, a high proportion of outdated equipment and high costs associated with the purchase and transportation of products. Any dairy products are difficult to store and transport because they are unstable and have limited storage capacity. Milk is a product that spoils easily and must be stored at sufficiently low temperatures, processed during the day and transported quickly [11].

New research on the possibility of improving milk production is also being explored by farmers and management entrepreneurs. Leddin et al., 2023, note in their work digital technologies that help automate large amounts of data on dairy farms, including spatial data. Dairy management is a complex process, since feed cultivation and milk production depend on the season, therefore, providing the right information at the right time using digital technologies leads to an improvement in overall productivity [12]. Similar studies are being conducted by Maretto and co-authors. (2023), Neethirjan & Kemp (2021), where digital technologies and digitalization are being introduced into agriculture, the agro-industrial complex and other industries [13-14]. Klerks and co-authors (2019) analyzed seventeen studies and found a link between computerized agriculture

and farm diversity by examining farm management systems and new methods of conducting robotic agriculture [15].

New industrial technologies are increasingly being introduced in the world that we could introduce into our production. Recent work by Masera et al. talks about the use of solar thermal energy in the dairy industry for processes such as cooling, heating and cleaning. All these processes are necessary for pasteurization, fermentation, storage or transportation of milk [16].

To date, there are 23 digital farms and 171 advanced farms in Kazakhstan, 24 million hectares of arable land have been digitized, that is, electronic field maps have been created, which is almost 100% of the total area of arable land. Digitalization of pastures has also begun, the leaders in digitalization of pastures are Akmola, Kostanay and Karaganda regions [17]. The Ministry of Agriculture has developed a law that shortened the period of inspection and seizure of unused land: if it used to take two years, now it takes one. Control over land use is promised to be fully digitized. The exclusion of the human factor should reduce corruption risks.

Results.

Over the past ten years, the country has been producing more milk every year, despite the small amount of sown area for feed crops and their prices, a high proportion of outdated and worn-out equipment, and high costs arising from the procurement and transportation of products. Any products that are made of milk are hard to store and transport because they are unsteady and have limited storage options. Milk is a product that spoils quickly and must be stored at low temperatures, processed during the day and transported as quickly as possible.

The country produces more than 6,5 million tons of raw cow's milk. Table 1 shows the amount of cow's milk produced in the region over 5 years.

Table1. Volume of milk production in districts of Akmola region over the past 5 years, tons

	2019 ж.	2020 ж.	2021 ж.	2022 ж.	2023 ж.
by region of Akmola	397 906,1	404 699,3	406 240,4	226 319,9	224 866,8
Kokshetau city	3 324,3	3 411,6	3 498,5	1 389,5	1 448,8
Kosshi city	-	-	-	-	37,4
Stepnogorsk	5 254,1	5 573,0	5 631,9	2 807,1	2 836,6
Akkol	17 613,7	18 055,3	18 705,1	12 225,8	12 142,9
Arshaly	19 059,1	19 057,6	18 501,9	9 697,9	10 103,3
Astrakhan	20 659,2	20 712,0	20 777,4	12 354,1	12231,1
Atbasar	24 393,8	24 394,1	24 397,6	13 867,2	14 495,8
Elk	19 421,9	19 982,7	20 349,6	11 103,1	10 176,3
Yegindikol	4 856,5	4 965,4	4 958,2	2 208,4	2 299,1
Birzhan Sal	21 000,4	21 329,7	21 095,5	15 628,3	8 734,2
Erementau	37 458,4	38 209,5	38 219,4	18 422,7	18 163,8
Esil	15 321,4	15 647,5	14 977,8	7 592,4	6 914,4
Zhaksy	21 493,7	21 694,4	21 546,2	2 086,6	5 173,6
Zharkain	10 727,7	10 739,3	10 886,6	4 794,4	4 960,9
Zerenda	54 777,4	54 286,7	51 137,8	28 111,5	26 596,6
Korgalzhyn	9 318,7	9 448,1	9 559,2	4 412,8	4 414,4
Sandyktau	21 294,0	21 630,7	22 353,5	12 445,1	10 863,8
Tselinograd	39 691,5	42 602,9	44 339,2	37 948,7	43 474,5
Shorthair	15 264,9	15 451,1	15 696,7	9 025,5	9 156,6
Burabay	36 975,4	7 507,6	39 608,7	20 198,8	20 643,3
Note: [4] created on the basis of literature.					

In general, we are seeing a decrease in milk production in 2022 and 2023. There is a reasonable explanation for this: the production of other dairy products.

However, the goods that are sent to enterprises for processing mainly come from agricultural enterprises or individual entrepreneurs and farms, since the quality of milk from households is questionable. Thus, in 2023, agricultural enterprises produced 43174.4 tons, and farms produced about 13042.3 tons of milk. The rest of the production of 168650.1 tons of milk was produced by households.

We also see that the city of Kossy has recently started its activities in the dairy sector. Many residents expect good indicators from the city of Kossy in the future.

Foreign authors have found that people consume a lot of dairy products, which are the second most popular choice of food and beverages [18]. In the Northern region, according to our observations, the consumption of milk and some dairy products for 2023 is 20.99 kg per month or 251.92 kg per year per capita. This is 1.91% more than a year earlier.

When studying milk production, due attention should be paid to the indicator of the number of cows. After all, their number also affects the volume of production. Table 2 shows the number of cows in the Northern region.

Table 2. Number of cows in the Northern region

Region	cattle	Of which are cow			
		Number of cow	Agricultural enterprises	Farms	Household
Akmola	479911	234497	47814	57206	129477
Pavlodar	544918	274368	28141	126807	119420
Northern Kazakhstan	415490	225437	47308	40900	137229
Qostanai	489981	249038	36494	75841	136703
Astana city	237	183	-	-	183
All	1930537	983523	159757	300754	523012
Note: the table is compiled by the author based on the [4] literature.					

As can be seen from the table, the number of cows is half of the number of cattle. Every year farmers try to buy dairy cows from abroad and improve milk production technologies accordingly. Based on our own research results on the production of raw milk, regions were identified and analyzed according to indicators in the North of the country. Table 2 shows the average milk yield per dairy cow for all categories of farms and agricultural enterprises over 5 years in the regions with the highest raw milk production rates.

Table 3. Guidelines for the development of dairy cattle breeding in Akmola region for all categories of farms for 2019-2023

Year	Number of cow heads (all categories of farms)	Including			Milk produced (all categories of farms)	Including		
		Agriculture	Farmers' farms	Household		Agriculture	Farmers' farms	Household
2019	100	27,4	19,9	52,7	100	18,3	5,0	76,7
2020	100	26,6	21,5	51,9	100	19,4	5,0	75,5
2021	100	24,8	23,2	52,0	100	20,0	5,3	74,7
2022	100	23,0	24,2	52,8	100	19,1	5,7	75,2
2023	100	22,5	24,0	53,5	100	19,2	5,8	75,0
Note: [19] created on the basis of literature								

The following conclusions can be drawn from the table: over the past year, the agricultural enterprise has fewer cows and the volume of milk produced has also decreased, but this is offset by farmers and households.

Milk yield per dairy cow is an important indicator in the field of agronomy. In the table, we will consider the average milk yield per cow per year.

Table 4. Average milk yield per dairy cow

Region	Average milk yield	Agriculture	Farmers' farms	Household
Akmola	3246,67	4657	2672	2411
Kostanay	3056,33	4969	1922	2278
Pavlodar	2896,67	4669	1894	2127
The Northern Kazakhstan	3136,33	4662	2318	2429
city of Astana	687,67	-	-	2063
Note: [4] created on the basis of literature				

The highest milk productivity is observed in agricultural enterprises of Kostanay region, with an average of 4969 kg per cow per year. For comparison, the productivity of one dairy cow in the USA, one of the five leading countries in the world, gives about 10 thousand kg of raw milk per year.

Currently, Kazakhstan produces more than 6,5 million tons of raw milk, which is enough to provide raw materials for processing enterprises. However, about 50% of the milk produced, sent for processing to dairies, does not meet the technical and biological requirements of the Customs Union [20]. Table 5 shows data on the volume of processed milk in Kazakhstan from 2018 to 2023.

Table 5. Milk production and processing volume

Year	Volume of milk produced (tons)	Volume of processed milk (tons)	Percentage ratio
2019	3962,3	1105,2	27,9
2020	4090,7	1235,4	30,2
2021	3924,8	1310,9	33,4
2022	3973,5	1275,5	32,1
2023	4123,7	1373,2	33,3
Note: the table is compiled by the author based on the [21] literature.			

Analyzing the data in the table, we can say that the percentage of processed milk is only a third of all milk. This may be due to several factors, namely the consumption of milk by households, the sale of raw milk to dairies located near the region, and the production of other types of dairy products such as butter, all kinds of cheeses, cottage cheese, etc.

For more efficient operation and development of the agricultural sector in countries such as the USA, China, Australia and the EU, new technologies and innovative equipment are being introduced. In Kazakhstan, the use of digital technologies in agriculture is only gaining momentum. In 2021, country adopted the National Project called —Technological breakthrough through digitalization, science and innovation|. The goal of the project is to make our republic a modern country with optimal government by using technology, making decisions based on reliable data, and using infrastructure safely in the digital age. The project also aims to increase the role of science in the country's socio-economic development. Thus, 45 914 122 tenge were allocated from the central budget for the digitalization of agriculture. However, we can see elements of digitalization within the rural segment, to be specific within the dairy branch in Kazakhstan.

Discussion

Despite challenges such as outdated equipment, high production costs, and storage issues, the country consistently produced over 6.5 million tons of raw milk annually. This growth indicates resilience and adaptability within the dairy sector.

Data shows a general decline in milk production in 2022 and 2023 compared to earlier years, with notable reductions in regions like Akmola and Zerenda. This dip is attributed to shifts in focus toward producing other dairy products and changes in farming practices.

The constant leaders in the region are Tselinograd, Zerende, Burabai, Ermentau and Atbasar. Together, they produce more than half of the total milk production in the Northern Region. There are several reasons for this: government support, the introduction of innovative technologies and climatic conditions in the regions. Northern Kazakhstan formed the basis of the program for crediting dairy industry projects through a social and entrepreneurial corporation, which is the reason for leadership.

Households remain significant contributors, producing 168,650.1 tons of milk in 2023, though their milk quality is often inconsistent. Agricultural enterprises and farms contribute a smaller but more reliable share.

Table 3 shows the number of farms with the best indicators in terms of milk production for all categories of farms in 2023. Despite the fact that the number of cows in the North Kazakhstan region is smaller than in others, this region is the leader in milk production in the Northern region. This indicates the high productivity of cows in this area and the high quality of raw milk sent for processing.

Table 2 shows that the average cow yield in agricultural enterprises is on average twice the average milk yield for all categories of farms, which means low productivity of cows in private subsidiary farms, individual entrepreneurs and farms of farms. Despite the fact that production in

private farms accounts for more than 70% of the total production of raw milk in Kazakhstan, due to insufficient technology, proper structure and investments, this milk does not comply with technical regulations and cannot be accepted for processing by dairies. This allows the state to grow and increase its productivity on a larger scale.

The number of cows accounts for about half of the total cattle population. Farmers are increasingly investing in high-yield dairy breeds, reflected in the higher productivity of agricultural enterprises in regions like Kostanay, where average milk yield per cow reaches 4,969 kg annually.

By analyzing the above factors, we can present a number of several issues in the dairy industry in Kazakhstan:

- the raw milk is insufficient to be processed in dairies;
- a little number of agricultural enterprises compared to farms/peasant enterprises or private farms. There are also only a few cows or other livestock;
- cows in farm enterprises and households are not productive;
- weak degree of use of new technologies and the introduction of digitalization in all categories of farms;
- also, there is a lack of technological equipment in private farms.

In our government, a generous amount of the milk is produced by people in their own house farms. From our opinion, the solution to the problem will rely on creating and using a good economic system for how farmers and processing companies work together.

We believe that in order to function effectively, processing organizations, with the encourage of the state and local authorities, must actively pursue an investment policy, which will consist of modernizing dairy equipment, training in new technologies, introducing digitalization into agricultural enterprises and improving the logistics infrastructure. On this premise, it is necessary to carry out basic changes within the dairy industry with the help of government support.

Conclusion

The data highlights a multifaceted perspective on milk production and processing in Kazakhstan, particularly in the Northern region. Despite an upward trend in overall milk production, challenges such as inefficiencies in the processing sector, outdated equipment, and logistical hurdles constrain the industry's growth potential. The following key insights and considerations emerge from the analysis:

Kazakhstan's milk production continues to grow, with over 6.5 million tons produced annually. However, less than 34% of this milk is processed, reflecting a significant gap in the sector. This gap is partly due to the geographical dispersion of farms, the low quality of raw milk from certain suppliers, and a lack of investment in modernizing processing plants.

The Northern region remains a pivotal contributor to Kazakhstan's dairy industry. However, the data shows a decline in the number of cows in agricultural enterprises, with households and private farms playing an increasing role in maintaining milk production levels. This shift underscores the importance of supporting small-scale producers while addressing disparities in production efficiency and technology adoption.

Average milk yields per cow in the Northern region are notably lower than global benchmarks, such as the United States. Agricultural enterprises demonstrate the highest productivity, yet they still fall short of maximizing potential output, indicating a need for improved feed management and breeding practices.

Only a third of the produced milk undergoes processing, with a significant portion failing to meet quality standards. This limits the potential for value-added dairy products and export opportunities. Investment in modernizing processing facilities and improving supply chain infrastructure is essential to bridge this gap.

The integration of digital and sustainable technologies, as seen in other regions and industries, offers promising avenues for enhancing efficiency in both milk production and processing. However, implementation remains in its infancy, requiring targeted policy interventions and private-sector engagement.

Comprehensive economic assessments underscore the need for systemic reforms, including increased subsidies for farmers, investments in digital infrastructure, and the promotion of eco-friendly technologies. Addressing barriers such as high feed costs and outdated machinery can help stabilize production and improve profitability across the dairy sector.

In conclusion, while the Northern region of Kazakhstan demonstrates resilience and growth in milk production, unlocking its full potential will require concerted efforts in modernizing infrastructure, improving quality standards, and fostering innovation. With strategic investments and policy alignment, the region can enhance its competitiveness, meet domestic demand, and explore opportunities in international dairy markets.

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The use of modern technologies for cash flow management: a study of the role of financial technologies in process optimization

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Abstract

The article is devoted to the study of the role of modern technologies in the management of cash flows of commercial organizations on the example of JSC "Kedentransservice". The key aspects of cash flow analysis, including an assessment of their structure and dynamics, are considered. A coefficient analysis of financial statements was carried out, the main factors influencing positive and negative cash flows were determined. The importance of using technology to optimize cash flow management in an unstable economic environment is emphasized. The trends in the growth of income from operating activities are revealed, the strategic directions of the company's development are noted, including the modernization of assets and reducing the debt burden. Conclusions are drawn about the need to strengthen positions in international areas and expand the range of services. The work is of practical value for specialists in the field of financial management and strategic planning.

Keywords: money, cash flow, cash flow management system, cash flow statement.

The current difficult economic environment, constant changes in world politics, instability of financial markets and various internal and external factors have a significant impact on the financial condition of companies. In such cases, there should be effective cash flow management tools that can adapt to changes and minimize risks. The use of modern technologies for cash flow management allows companies not only to take into account potential risks, but also to actively manage them based on analytical data and financial instruments. This approach helps to identify potential threats in advance, develop strategies and tactics to reduce them, as well as ensure the stability and reliability of financial activities of companies.

At the same time, special attention is paid not only to external risks, such as changes in legislation or market fluctuations, but also to internal factors, such as errors in planning or resource management.

In cash flow management, accounting data is considered an information base for risk analysis, for example, to identify patterns of internal fraud or deficiencies in the financial management system that can lead to inefficient spending of funds or financial losses. In addition, Accounting is an integral part of the approach to cash flow management, providing the information necessary for analysis and decision-making aimed at managing risks and ensuring the financial stability of the organization.

Thus, the use of modern technologies to manage the cash flows of commercial organizations: studying the role of financial technologies in optimizing processes is an important step in improving the effectiveness of financial management and ensuring sustainable business development in modern conditions.

It is generally believed that cash flow management originated in the 1950s in the United States. However, if we consider cash flows as an object of management more broadly, then the appearance of individual elements of money management arose much earlier, since both enterprises and the state can be subjects of management. Therefore, the 50s of the twentieth century can be considered the starting point of cash flow management only at the micro level (the level of economic entities).

The problem of managing cash flows at the micro level in Kazakhstan arose in the early 1990s, when non-payments and offsets appeared. The purpose of cash flow management at this stage is to eliminate non-payments, increase the share of the monetary component in settlements. However, at this time, the state, albeit indirectly, participates in this process, enterprises are given complete freedom in financial management. Market transformations in Kazakhstan were accompanied by a sharp increase in mutual debts of enterprises, the massive spread of non-monetary forms of settlements - barter and offsets of mutual obligations. The emergence of these processes has raised many questions: about the reason for their appearance and spread, about their impact on economic efficiency. In the mid-1990s, the heads of large enterprises, in particular natural monopolies, which found themselves at the center of the problem of non-payments, began to actively solve the problem of non-payments and offsets. This group of enterprises was the first to introduce modern technologies. The study of foreign financial management experience has begun. At this time, cash flow management is emerging in Kazakhstan in order to optimize them. The stabilization of the economic situation in the country contributes to this. Management accounting, budgeting and other financial management technologies are being introduced at large enterprises. Active work on financial management at enterprises began in 1994-1995. It was during these years that the financial director became the key figure instead of the chief accountant. At the present stage of the development of market relations, the tasks of financial management of enterprises operating in an unstable socio-economic environment lead to the implementation of a systematic approach. The task is to identify the key, system-forming factors of financial policy. They can be such integral parameters as liquidity, superposition of financial flow vectors, financial stability of the enterprise, etc.

There are many studies, articles and practical examples for optimizing cash flow management that allow you to deeply analyze the topic and give new recommendations on practice.

The issues of organization of cash accounting, preparation and analysis of reporting, optimization, and strategic management are studied in the works of domestic scientists: Dyusembayev K. Sh. Yerzhanov M. S., Utibayev B. S., Taigashinova K. T., Aliyev M. K., Amanova G. D., Shaukerova Z.M., etc., etc.

In the textbooks, Dyusembayev K.Sh. and Aliyeva M.K. from the point of view of accounting, cash flow management is the process of ensuring accurate and reliable financial reporting by tracking and accounting for all cash receipts and payments. This process helps to make decisions regarding investment and liquidity management [1, 2].

In the textbook, B. S. Utibaev, A. K. Baidakov, and others. From the point of view of financial management, cash flow management – cash flow management is the process of planning, analyzing and controlling cash receipts and expenditures in order to ensure the liquidity and financial stability of an organization. This process includes the development of strategies to optimize the use of funds and reduce financial risks [3].

According to Blank I.A., from the point of view of strategic management, cash flow management is the main component of strategic management, including the development and implementation of financial plans aimed at ensuring long-term financial stability and competitiveness of the organization [4, 5].

According to Grigoriev T.I. and Borisov O.V., from the point of view of operational management, cash flow management – cash flow management is the process of effectively managing the day-to-day financial operations of an organization aimed at ensuring a sufficient level of liquidity to fulfill current obligations and maintain business continuity [6, 7].

Currently, the general methodology for analyzing cash flows in financial statements has been sufficiently studied on the pages of academic literature in this area. Among them are domestic researchers Dyusembayev K. Sh. [1], Aliyev M. K. [2], Utibayev B. S., Akhmetova D. T., Baidakov A. K. [3, 4]; foreign researchers Blank I. A. [5]., The works of Borisova O. V. can be noted [6]. These works explore vertical and horizontal analysis of cash flows, cash adequacy analysis, and conventional methods of analyzing monetary coefficients. In fact, there is currently a shortage of scientific research related to a risk-based approach to the calculation and analytical support of cash flow management.

Yu.B. Gerber, in his monograph on digital polarization and the development of industry in it, indicates that by now information is absorbing all spheres of activity every day, including economic. The research presented in the monograph indicates a progressive trend in the influence of digitalization on economic entities, and this trend is growing annually [8].

As part of the research aimed at analyzing cash flow management and optimizing its use, various methods were used. The analytical method was used to study the financial statements of JSC Kedentransservice and identify key indicators and their changes for 2020-2022. The horizontal and vertical analysis of cash flows, as well as the calculation and interpretation of financial ratios, allowed us to identify the main trends. The comparative method was used to compare income and expense indicators, the structure and dynamics of cash flows for different periods, which helped to determine the effectiveness of cash flow management and their impact on the overall financial condition of the company. The coefficient method was used to calculate the indicators of participation of operating, investment and financial activities in the formation of cash flows, which made it possible to identify structural changes and their impact on the financial stability of the enterprise. The systematic approach provided a comprehensive analysis of cash flow management, including the relationship between different types of activities and their impact on the solvency of the enterprise. The structural analysis method made it possible to identify the shares of individual areas in the company's operating activities, which provided a deeper understanding of the structure of income and expenses. The expert method included the study of the conclusions of domestic and foreign scientists such as Dyusembayev K.Sh., Aliyev M.K., Borisova O.V., Utibayev B.S., which provided the theoretical basis for the study. The empirical method was used to evaluate the effectiveness of cash flow management based on the company's financial statements, analysis of the current structure of income, expenses and changes in net cash flow. The research materials used are the financial statements of JSC "Kedentransservice" for 2020-2022, scientific publications on the topic of cash flow management, methodological recommendations on financial analysis and data provided by the enterprise. This approach made it possible to provide a comprehensive study of the topic and develop recommendations for optimizing cash flow management using modern technologies.

The use of modern technologies for cash flow management includes not only accounting and analysis, but also a systematic assessment of potential risks that may affect these flows in the future. This includes identifying potential threats to the financial stability of the organization and developing risk management strategies. In the context of the economy of Kazakhstan, where the economic environment may be subject to various changes and external influences, an important tool for ensuring financial stability and business development may be the introduction of modern technologies of the cash flow management approach.

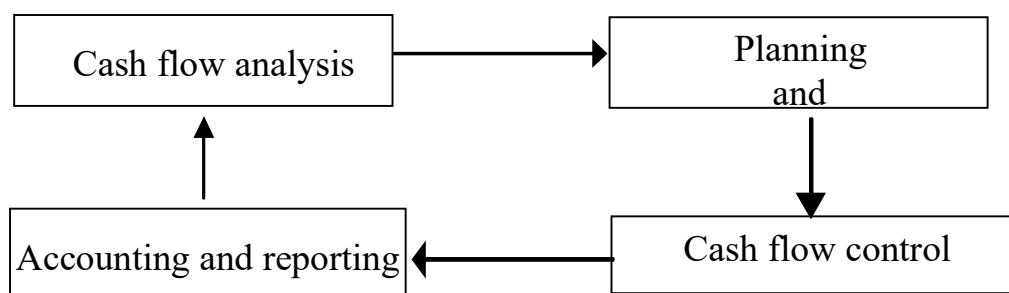


Figure 1. The relationship between the stages and methods of cash flow management

The purpose of analyzing the cash flows of the Kedentransservice Group is to obtain relevant information about the directions of receipt and expenditure of funds, the composition and structure of funds, as well as factors affecting changes in cash flows. Cash is an integral part of the working capital of the Group of JSC "Kedentransservice", which become the object of analysis of turnover and efficiency of their use.

The group of JSC "Kedentransservice" is not a manufacturing enterprise, therefore, the time of cash turnover depends on the demand for services provided by this enterprise and on how quickly calculations are made for the provision and payment of telecommunications services.

Currently, domestic analysts are increasingly using the coefficient analysis method. During the analysis, using the coefficient method, it is possible to calculate various relative indicators characterizing cash flows, as well as the degree of influence of these indicators on the overall financial condition of the enterprise.

To carry out a coefficient analysis using the example of the Group of JSC "Kedentransservice", we will preliminarily group the inflow and outflow of funds by type of activity and present it in Table 1.

Table 1

Assessment of the cash flow balance by type of activity of JSC "Kedentransservice", 2022

Indicators (types of activities)	Money movement, thousand tenge		Net cash flow (+, -) thousand tenge	Estimation of changes in net cash flow
	Flow	Outflow		
Operational activities	44 016 528	26 043 965	+17 972 563	positive
Investment activities	426 350	8 257 217	-7 830 867	positive
Financial activities	-	8 095 166	-8 095 166	positive
Total	44 442 878	42 396 348	+2 046 530	positive
Cash balance at the beginning of the year	x	x	11 659 227	corresponds to the balance data
Cash balance at the end of the year	x	x	16 448 381	corresponds to the balance data
Change in cash balance	x	x	+4 789 154	positive
<i>Note - calculated on the basis of data from the financial statements of JSC "Kedentransservice".</i>				

According to table 1, KZT 2,047 million has been allocated at the enterprise for all types of activities, a positive cash flow of tenge is formed: The positive balance of operating activities exceeds the full financing of investment and financial activities. As a result, the cash balance has

increased so much. According to the company's balance sheet at the beginning of 2022, cash amounted to 11,659,227 thousand tenge, at the end of the year - 16,448,381 thousand tenge. It shows the correspondence of cash flow accounting to the balance sheet data.

The results of the calculation of these coefficients are presented in Table 2

Table 2

Composition and structure of income from operating activities of JSC "Kedentransservice"

Indicators	Amount, thousand tenge			Structure, %		
	2020	2021	2022	2020	2021	2022
1. Operations with rolling stock	20 871 978	22 489 907	25 948 144	57,0	59,1	59,0
2. Transshipment and securing of goods to international destinations	10 571 730	10 029 404	9 382 776	28,9	26,4	21,3
3. Freight forwarding services	1 269 078	1 269 078	3 851 913	3,5	3,3	8,8
4. Terminal Service	2 680 338	2 423 728	2 530 700	7,3	6,4	5,7
5. Operating leases	530 125	996 927	1 191 683	1,4	2,6	2,7
6. Warehousing and storage of goods	695 384	630 163	1 104 719	1,9	1,7	2,5
7. Other operating income	20 930	54 626	6 593	0,1	0,1	0,0
8. Income from operating activities - total	36 639 563	37 991 403	44 016 528	100,0	100,0	100,0
<i>Note - calculated on the basis of data from the financial statements of JSC "Kedentransservice".</i>						

According to the presented data on income from operating activities of the company for the period 2020-2022 in table 4, the total amount of income from operating activities of the company increased from 36,639,563 thousand tenge in 2020 to 44,016,528 thousand tenge (20%) in 2022. The main share of operating income is occupied by operations with rolling stock, the share of which increased from 57% in 2020 to 59% in 2022. The volumes of transshipment and securing of goods in international directions have been reduced, the share of which decreased from 28.9% in 2020 to 21.3% (7.6 points) in 2022, on the contrary, there is a significant increase in freight forwarding services, revenues in this direction increased from 1,269,078 thousand tenge in 2020 to 3,851,913 thousand tenge in 2022. The Company has demonstrated steady growth in operating income over the past three years, which indicates its successful development and effective management of its core activities.

Based on the analysis of cash flow and income structure of JSC "Kedentransservice" for the period 2020-2022, the following conclusions can be drawn. The Company demonstrates stable financial stability and positive dynamics of operating activities.

When estimating the net cash flow in table 2 by type of activity, attention should be paid to the following:

- the net cash flow of operating activities should be positive. The positive cash flow of operating activities is the key to the successful operation of the enterprise, the source of its development at its own expense;
- the net cash flow of investment activity should be negative (more than expenditure income), which indicates significant investments in long-term assets, the growth of the enterprise;

- the net cash flow of financial activities should be positive. This means that the company financed the increase in its activities not only from retained earnings, but also from external sources.

Thus, based on the analysis of the company's cash flow for 2022, its composition and structure, rhythm and balance of cash flows (net cash flow) for certain types of activities, an assessment can be made as follows:

1) a positive flow of tenge is generated from the result of operating activities of 17,972 million tenge. It reflects the success of the main activity of the organization, the possibility of financing all types of activities at the expense of the main activity;

2) negative cash flow was generated for investment activities (-7,831 million tenge). A positive assessment can be given for such a result. This is due to the fact that the company has allocated funds for its long-term assets in the form of fixed assets and intangible assets. Consequently, the investments were aimed at asset reproduction;

3) cash flow from financial activities (-8 095 million tenge. negative cash flow is formed. During the reporting period, the loan was not received, the loan obligations were paid. Therefore, the financial stability of the enterprise has increased.

4) the main part of the income and expenses of cash is the operating activity, which characterizes the stability of the main activity;

5) the amount of the remaining funds compared to the beginning of the year is KZT 17,973 million, which means an increase in the solvency of the enterprise.

The first group includes the coefficients of participation of operating, investment and financial activities in the formation of positive and negative cash flows of the enterprise. That is, the dynamics of the volume and structure of the formation of positive cash flow in the context of individual sources of cash flow and negative cash flow in the context of individual areas of spending money are considered

Net cash flow from operating activities in 2022 amounted to KZT 17,972 million, which is the main source of financing for investment and financial activities. This indicator indicates the success of the company's core business, which generates most of its income and expenses.

The investment activity is characterized by a negative cash flow in the amount of KZT 7,831 million. This is due to significant investments in long-term assets, which confirms the company's commitment to modernization and growth. The funds are aimed at the reproduction of fixed assets and intangible assets, which creates the foundation for further development.

The negative cash flow of financial activities (-8,095 million tenge) reflects the full repayment of loan obligations without attracting new loans. This highlights the financial stability of the company and the reduction of the debt burden, which is a positive signal for investors.

The dynamics of operating income also confirms the effective management of the main business processes. Total income increased by 20% in three years, reaching 44,016,528 thousand tenge in 2022. Rolling stock operations account for the main share in the revenue structure (59%), which indicates their strategic importance. The growth in revenues from freight forwarding services (from 3.5% to 8.8%) indicates the expansion of services and diversification of activities.

Reducing the share of revenues from transshipment and securing of goods in international destinations (from 28.9% to 21.3%) requires attention, since this area previously occupied a significant place in the revenue structure.

Thus, Kedentransservice JSC demonstrates sustainable development, confirmed by an increase in the cash balance from KZT 11,659,227 thousand at the beginning of 2022 to KZT 16,448,381 thousand at the end of the year. The company effectively manages cash flows, reducing debt burden and investing in long-term assets, which lays the foundation for future growth. To further improve efficiency, it is recommended to pay attention to increasing the share of income from new types of services and improving positions in international directions.

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СРАВНИТЕЛЬНЫЙ АНАЛИЗ ЦУР 1 В КАЗАХСТАНЕ И КОРЕИ

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Абстракт

В работе представлен сравнительный анализ двух стран: Казахстана и Кореи по ЦУР №1. Дана общая характеристика двух стран, рассмотрены экономические методы борьбы с нищетой и успешные примеры. Предложены рекомендации.

Общая характеристика Казахстана.

Одной из главных задач государственной политики в Казахстане является обеспечение устойчивого роста доходов населения. Для реализации данной задачи Правительством РК разработана комплексная Программа по повышению доходов населения до 2025 года, где одним из целевых индикаторов является «Доля населения, имеющего доходы ниже прожиточного минимума». Уровень бедности определяется отношением численности населения, имеющего доходы, использованные на потребление, ниже величины прожиточного минимума в процентах к общей численности населения. Величина прожиточного минимума в среднем на душу населения в месяц по республике за 2021 год составила 37 266 тенге, а уровень бедности – 5,2 %. Сохраняется значительная диспропорция как между городской и сельской местностью, так и на уровне регионов. Наиболее высокие значения уровня бедности в разрезе регионов в 2021 году зафиксированы в Туркестанской (9,8 %) и Мангистауской (8,6 %) областях, наименьшие – в г. Астана (2,2 %). Сильное влияние на риск бедности оказывает размер домашнего хозяйства. Так, уровень бедности среди домашних хозяйств, состоящих из 5 и более лиц, по итогам 2021 года составил 9,3 %, что выше общего уровня бедности почти в 2 раза [1].

Правительством РК проводятся системные меры для сокращения разрыва в доходах. В целях поддержания малоимущих и нуждающихся слоев населения выплаты населению по причине потери работы увеличиваются, и численность получателей в 2021 году составила 105,7 тысяч человек, что по сравнению с 2015 годом больше в 4 раза. В связи с увеличением размера адресной социальной выплаты (АСП) число получателей также выросло с 38,2 тысяч человек в 2015 году до 990,5 тысяч человек в 2021 году. Социальная поддержка материнства и детства обеспечивается через многоуровневую систему социальной помощи и социального страхования и включает в себя 7 видов пособий и выплат. На базовом уровне государство гарантирует за счет средств республиканского бюджета выдачу единовременного пособия на рождение ребенка в размере от 110 846 тенге до 183 771 тенге в зависимости от очередности рождения детей. В 2021 году пособие выплачено 484,0 тыс. человек, что по сравнению с 2015 годом показывает снижение почти на 11 % [1].

В возрастной структуре населения увеличивается доля пожилых людей, и число пенсионеров из года в год растет. В 2021 году число получателей пенсии по возрасту и

выслуге лет составило 2 240,0 тысяч человек, что больше на 15,3 % по сравнению с 2015 годом. При этом 70 % пенсионеров по возрасту – это женщины. За период с 2015 по 2021 годы доля государственных расходов на социальную защиту к общему бюджету выросла с 19,3 % до 20,2 %. В 2021 году на юге республики был зафиксирован ураган, скорость которого достигала 38 м/с, в результате произошли срывы кровли жилых домов (576 объектов), пострадало 11 человек. Также в Алматинской области прошел сель, в результате чего пострадало 6 человек [1].

Общая характеристика Кореи.

Южная Корея за последние десятилетия добилась значительных успехов в снижении уровня бедности. Расходы на социальное обеспечение, образование и здравоохранение постоянно увеличиваются, что способствует улучшению качества жизни граждан. Например, с 2011 по 2023 годы доля расходов на основные услуги в государственном бюджете выросла с 41,3% до 50,5%. Уровень бедности на основе располагаемого дохода сократился с 18,6% в 2011 году до 15,1% в 2021 году. Особенно заметно улучшилось положение семей с детьми и пожилых людей в возрасте 66–75 лет. Однако среди граждан старше 76 лет уровень бедности остаётся высоким, что указывает на необходимость совершенствования системы социальной поддержки пенсионеров [2].

Важной частью социальной политики Южной Кореи стало развитие системы страхования занятости, охват которой вырос с 64,7% в 2011 году до 77% в 2023 году. Тем не менее, остаются значительные различия в доступе к страхованию в зависимости от типа занятости: работники с почасовой оплатой труда и временные сотрудники менее защищены, чем их коллеги с постоянной работой. Также наблюдаются успехи в сокращении гендерного разрыва в доступе к социальным гарантиям: например, уровень страхования занятости женщин и мужчин стал практически одинаковым [2].

Жилищный вопрос остаётся значительным фактором экономической стабильности граждан. В Южной Корее уровень владения жильем растёт с возрастом, что отражает тенденцию накопления имущества. Однако молодые домохозяйства всё ещё сталкиваются с высокой стоимостью аренды, что требует дальнейших мер поддержки со стороны государства. Кроме того, социальные расходы на улучшение условий жизни и обеспечение доступности жилья для малообеспеченных семей продолжают расти.

Южная Корея остаётся одной из стран с низким эффектом сокращения бедности через политику перераспределения доходов в сравнении с другими членами ОЭСР. Это связано с тем, что, несмотря на рост социальных расходов, их доля в ВВП остаётся относительно низкой. Например, государственные социальные расходы Южной Кореи в 2020 году составили лишь 14,4% ВВП, что значительно ниже, чем в других развитых странах [2].

Образование, здравоохранение и социальная защита составляют основу усилий по борьбе с бедностью. Государство инвестирует значительные средства в развитие образовательной инфраструктуры и медицинских услуг, что не только улучшает доступность этих услуг, но и укрепляет социальную стабильность. Однако для дальнейшего прогресса необходимы дополнительные меры по снижению уровня бедности среди пожилых людей и обеспечению равного доступа к социальным гарантиям для всех слоёв населения [2,3].

Экономические методы борьбы с нищетой и успешные примеры

Экономические методы борьбы с нищетой включают в себя широкий спектр стратегий и инициатив, направленных на улучшение жизненного уровня населения и преодоление социальной несправедливости. Для каждой страны эти методы могут варьироваться в зависимости от экономических и социальных условий. Казахстан и Южная Корея — два разных государства, находящихся в разных частях мира, но оба имеют успешные примеры экономической борьбы с бедностью (рис.1).

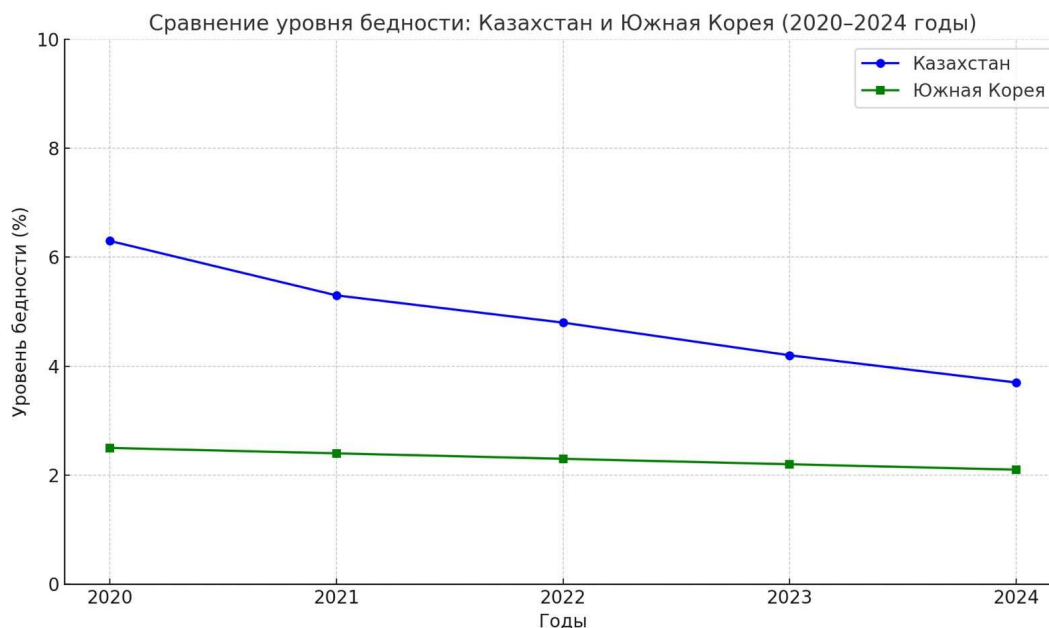


Рисунок 2- Сравнение уровня бедности: Казахстан и Южной Корея

В диаграмме показано сравнение уровня бедности в Казахстане и Южной Корее с 2020 по 2024 годы. Как видно из данных, в Южной Корее уровень бедности остаётся стабильно низким, а в Казахстане наблюдается устойчивое снижение.

В Казахстане борьба с бедностью тесно связана с развитием национальной экономики, диверсификацией её структуры и улучшением качества жизни граждан. Страна имеет богатые природные ресурсы, такие как нефть, газ, уголь и металлы, что делает её экономику во многом ориентированной на экспорт. Однако, несмотря на этот богатый природный потенциал, Казахстан сталкивается с проблемой экономической зависимости от сырьевых ресурсов, что сдерживает развитие других секторов экономики. В ответ на это правительство страны активно работает над диверсификацией экономики, стимулируя развитие промышленности, сельского хозяйства, а также информационных технологий. С целью улучшения социального положения на уровне населения, особенно в сельских районах, реализуются масштабные инфраструктурные проекты, такие как строительство дорог, больниц, школ и жилья. Это помогает создать новые рабочие места, улучшить условия жизни и повысить доступность социальных услуг [1-3].

Кроме того, Казахстан продолжает совершенствовать систему социальной защиты. Одной из важнейших мер является поддержка малообеспеченных граждан, которая включает в себя как прямую финансовую помощь, так и субсидирование коммунальных платежей, помощь в обеспечении жильем и бесплатное медицинское обслуживание для наиболее уязвимых слоев населения. Программы по обучению и повышению квалификации граждан также играют ключевую роль в борьбе с бедностью. Государственные инициативы по поддержке малого и среднего бизнеса, включая льготные кредиты и налоговые льготы, позволяют создать дополнительные рабочие места и стимулировать рост занятости среди молодежи и женщин. Однако главной проблемой остается социальное неравенство и региональные различия, где более развиты города, а в сельской местности люди зачастую сталкиваются с ограниченным доступом к современным социальным и медицинским услугам. Для преодоления этих трудностей требуется продолжение реформ и более равномерное распределение ресурсов.

Южная Корея, в свою очередь, является ярким примером успешной борьбы с нищетой и экономической трансформации. В послевоенный период, начиная с 1950-х годов, Южная Корея была одной из беднейших стран Азии. Однако благодаря внедрению политики индустриализации, направленной на развитие ключевых отраслей экономики, таких как судостроение, автомобильная промышленность и электроника, страна смогла превратиться в одну из ведущих экономик мира. Важную роль в этом процессе сыграл государственный подход к планированию и поддержке стратегических секторов, который способствовал не только экономическому росту, но и снижению бедности (рис.2).

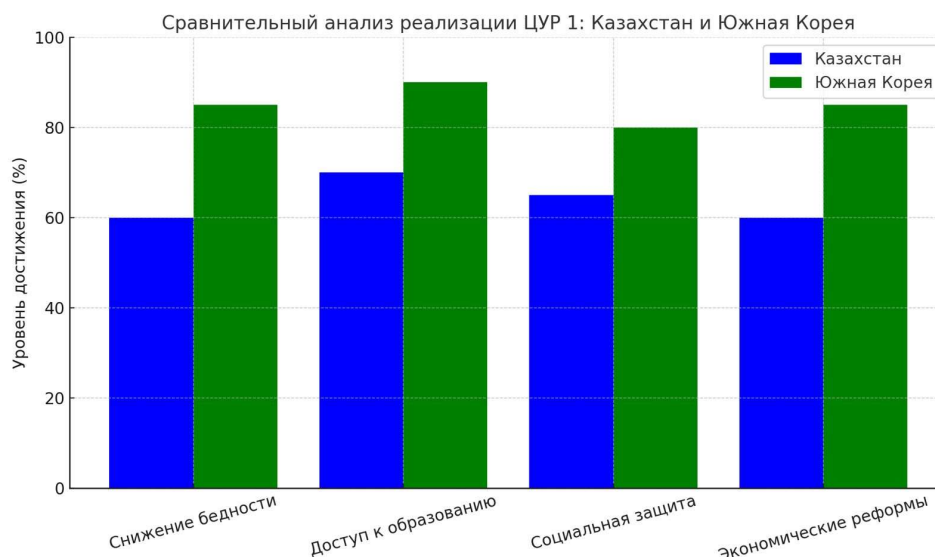


Рисунок 3 – Сравнительный анализ реализации ЦУР 1

Сравнительный анализ реализации Цели устойчивого развития 1 "Ликвидация нищеты" в Казахстане и Южной Корее по четырем направлениям: снижение бедности, доступ к образованию, социальная защита и экономические реформы. Южная Корея демонстрирует более высокий уровень достижения по всем показателям, что обусловлено эффективно функционирующей системой социальной поддержки, высоким уровнем доступности образования и успешно реализуемыми экономическими реформами. Казахстан также показывает прогресс в данных областях, однако его показатели ниже, что может быть связано с ограничениями в финансировании, охвате социальных программ и качеством их реализации. Южная Корея особенно выделяется в доступности социальной защиты и снижении бедности, тогда как Казахстану требуется усиление усилий в этих направлениях для достижения более значительных результатов.

Однако экономический успех Южной Кореи не был бы возможен без значительных инвестиций в образование и здравоохранение. Корея сделала акцент на повышение уровня образования на всех его ступенях, что позволило населению быстро адаптироваться к изменениям на рынке труда и получать высокооплачиваемую работу. В стране была внедрена система всеобщего обязательного образования, что позволило многим гражданам выбрать карьеру, которая обеспечивала стабильный доход. Социальная политика Кореи включает в себя развитую систему пособий и субсидий, направленных на поддержку пенсионеров, инвалидов, многодетных семей и других уязвимых групп населения [3,4].

Одним из значительных достижений является также доступная система здравоохранения. В Южной Корее функционирует одна из лучших медицинских систем в мире, основанная на принципах всеобщего медицинского страхования, что обеспечивает высокий уровень жизни и здоровья населения. В результате таких мер уровень бедности в

стране значительно снизился, а большинство граждан имеют доступ к высококачественным медицинским услугам и образованию, что способствует улучшению общего качества жизни.

Южная Корея также активно развивает социальное жилье и программы по обеспечению доступности жилья для бедных слоев населения. Строительство нового жилья и субсидии для его аренды помогают снизить финансовую нагрузку на семьи с низким доходом. Экономика Южной Кореи в значительной степени ориентирована на инновации и технологическое развитие, что также способствует созданию новых рабочих мест в высокотехнологичных секторах.

Таким образом, обе страны применяют комплексные подходы к борьбе с бедностью, учитывая свои особенности и вызовы. Казахстан, несмотря на свои богатые ресурсы, сталкивается с проблемами социального неравенства и требует продолжения реформ, направленных на равномерное распределение ресурсов и диверсификацию экономики. Южная Корея, в свою очередь, продемонстрировала, как комбинация индустриализации, инвестиций в образование и здравоохранение, а также эффективная социальная политика могут привести к значительному сокращению бедности и улучшению жизненных условий населения.

Устойчивое развитие на данный момент остается неоднородным и недостаточно четким в своей структуре. Его внедрение во многом опирается на рекомендации, а не на обязательные стандарты, что приводит к разрозненности действий стран и организаций. Каждое государство или корпорация интерпретирует устойчивое развитие в выгодном для себя ключе, акцентируя внимание лишь на отдельных аспектах, что усложняет общий прогресс.

Хотя многие страны заявляют о намерении достичь углеродной нейтральности к 2050 году (а некоторые, как Китай, к 2060), конкретные планы часто ограничиваются периодом до 2030 года. Однако их реализация вызывает сомнения из-за текущих глобальных кризисов и экономической нестабильности. На сегодняшний день устойчивое развитие больше воспринимается как идея, нежели полноценная практика.

Южная Корея предпринимает активные шаги по возвращению производства на свою территорию, стремясь снизить зависимость от Китая. Однако это вызывает вопрос: удастся ли сохранить экологическую ответственность, или увеличится антропогенная нагрузка? Пример других стран, таких как Норвегия, демонстрирует, что экологические достижения иногда достигаются за счет переноса негативных последствий на развивающиеся страны. Это проявляется в вывозе отходов или загрязнении ресурсов менее развитых регионов [5].

Проблема противостояния между развитыми и развивающимися странами остается нерешенной. Первоначальная цель устойчивого развития заключалась в улучшении условий жизни в бедных странах, включая обеспечение доступа к чистой воде, медицине и другим базовым благам. Однако на практике развивающиеся страны часто сталкиваются с экспортом экологических и социальных проблем со стороны более богатых государств, что препятствует их развитию.

Для решения этих вопросов необходим более честный и сбалансированный подход к устойчивому развитию. Требуются прозрачные и обязательные рамки, которые обеспечат справедливое распределение ответственности между странами и предотвратят эксплуатацию беднейших регионов ради улучшения условий жизни в развитых странах.

Казахстан и Южная Корея предпринимаяют различные меры для борьбы с нищетой, но сталкиваются с разными вызовами, обусловленными их социально-экономическими реалиями. В Казахстане основной проблемой остается значительная социальная и экономическая неравномерность, особенно между городами и сельской местностью. Несмотря на экономический рост, многие жители, особенно в сельских районах, сталкиваются с низким уровнем доходов, ограниченным доступом к качественным услугам,

медицинской помощи и образованию. Для борьбы с нищетой правительство активно внедряет социальные программы, направленные на улучшение жизни малообеспеченных слоев населения, включая субсидирование жилья, бесплатное медицинское обслуживание, повышение социальных выплат и помощь многодетным семьям. Важной частью государственной политики является создание рабочих мест, особенно в сельской местности, через развитие инфраструктуры, малого и среднего бизнеса, а также программы переподготовки и трудоустройства для молодежи. Однако высокие уровни коррупции, недостаточная эффективность некоторых социальных программ, бюрократические барьеры и проблемы с доступом к качественному образованию и здравоохранению остаются основными препятствиями на пути к полноценной ликвидации нищеты в стране [5].

Южная Корея, будучи высоко развитой экономикой, достигла значительных успехов в сокращении уровня бедности. Страна внедрила эффективные программы социальной помощи и развития, которые помогли обеспечить широкие социальные гарантии для населения, включая систему универсального здравоохранения и пенсионные выплаты. Южная Корея активно развивает проекты по трудоустройству для молодежи и улучшению условий жизни для пожилых людей, поскольку эта группа является одной из наиболее уязвимых. Основное внимание в борьбе с бедностью уделяется обеспечению доступности образования и созданию условий для более равномерного распределения богатства. Несмотря на эти успехи, проблемы с неравенством все равно сохраняются, особенно среди пожилых людей, молодежи, а также в связи с высокой стоимостью жилья и образования, что создает дополнительные экономические нагрузки на бедные слои населения. В стране также наблюдается растущее неравенство между богатыми и бедными, что приводит к усилению социальной напряженности [6].

Таким образом, в обеих странах борьба с бедностью требует комплексного подхода, включающего реформы в области образования, здравоохранения, создания рабочих мест, улучшения социальной инфраструктуры и повышения социальной мобильности. Казахстану предстоит еще преодолеть проблемы с эффективностью социальной помощи и доступом к качественным услугам для всех слоев населения, в то время как Южной Корее необходимо решить вопросы социальной справедливости и уменьшения разрыва между различными социальными группами.

Сравнительный анализ стратегии борьбы с бедностью в Казахстане и Южной Корее демонстрирует разнообразие подходов, продиктованное различиями в социально-экономических реалиях, ресурсах и приоритетах. Казахстан, обладая значительными природными ресурсами, концентрирует усилия на преодолении региональных и социальных диспропорций, улучшении инфраструктуры и увеличении доступности базовых социальных услуг. Особое внимание уделяется поддержке малоимущих граждан, развитию сельской местности и стимулированию занятости через государственные программы, включая инфраструктурные проекты и поддержку малого и среднего бизнеса. Однако вызовы, такие как неравномерное распределение ресурсов, коррупция и бюрократические барьеры, требуют дополнительных реформ для повышения эффективности государственной политики.

Южная Корея, напротив, представляет собой пример успешного перехода от бедной экономики к высокоразвитой за счет интенсивной индустриализации, масштабных инвестиций в образование и здравоохранение, а также системного подхода к социальному обеспечению. Страна добилась значительных успехов в сокращении бедности среди молодежи и семей с детьми, обеспечив доступ к качественным образовательным и медицинским услугам. В то же время сохраняется высокая степень уязвимости пожилых людей, что связано с растущими экономическими нагрузками, включая стоимость жилья и социального обеспечения [6].

Несмотря на различия, обе страны сталкиваются с общей необходимостью адаптации своих стратегий к глобальным вызовам, таким как экономические кризисы, демографические изменения и климатические угрозы. Для Казахстана ключевыми приоритетами остаются сокращение разрыва между городскими и сельскими районами, улучшение качества управления и реализация инновационных экономических подходов. Южная Корея должна сосредоточиться на решении проблем стареющего населения, снижении экономического неравенства и дальнейшем усилении социальной справедливости.

Общий вывод заключается в том, что эффективная борьба с бедностью требует системного подхода, включающего комплексную поддержку уязвимых слоев населения, стимулирование экономического роста, а также внедрение инновационных технологий и методов управления. Международное сотрудничество и обмен успешными практиками, накопленными в Казахстане и Южной Корее, могут сыграть важную роль в достижении Цели устойчивого развития №1 на глобальном уровне. Такие усилия способствуют не только улучшению качества жизни населения двух стран, но и укреплению глобальной повестки устойчивого развития, направленной на ликвидацию бедности во всех ее проявлениях.

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Asia leading power as a Global Logistics force

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International Business Management

In recent decades, Asia has emerged and has firmly established itself as a dominant force as a Global Logistics force, taking the lead as a player in the international logistics landscape due to its gigantic economic growth, vast manufacturing capacity and substantial investments in

Top-notch infrastructure, and major industrialization adopt with progressive policies that attract foreign investment in logistics.

By its strategic location, this continent occupies a central position in global trade routes, acting as a bridge between key markets in America, Europe and the Middle East. This advantageous location enables the movement of goods worth billions of dollars each year with rapid industrialization and rising consumer demand, taking center stage as a destination of choice for shippers and manufacturers seeking to strengthen and diversify their supply chains.

Driving unprecedented and progressive changes, the continent's integration into the world economy has revolutionized the global trade dynamics and perspective of other regions. The world's second most integrated trade region, China, Japan, Singapore and India are the

Outstanding countries in that region to be now categorized as a logistics powerhouse facilitating international trade reshaping global supply chains focusing on the keys of leading on the distribution, transport and infrastructure contributes with a significant portion of nearly 40% of the world's total exports and imports.

One of the biggest countries in the world, China has become synonymous with manufacturing and export dominance, earning its reputation as the world's factory; this industrial strength is supported by an extensive network plus its economic power. Technological advancements like automation and AI driven inventory management and blockchain for supply chain transparency operations are the core of China's logistics sector, and giant e-commerce businesses have revolutionized warehousing and last-mile delivery, requiring advanced logistics networks to support high-speed delivery, setting the lead in the industry.

Through its development initiatives, China has connected and served as a trade link between Asia, Europe, and Africa via a system of railways, ports, and highways integrating emerging markets into its supply chain handling billions of tons of cargo each year. Positioning China as an indispensable player in the global supply chain ecosystem. For example China is home to seven of the world's top ten busiest ports, including Shanghai and Ningbo-Zhoushan, which handle a significant portion of global container traffic.

So its Singapore, has established itself as a fundamental logistics hub in Asia due to its strategic location elite Port and Airport Facilities in which Changi Airport is a major international gateway important for Singapore's economy and global connectivity, is not just a passenger hub but also a leader in air freight that aloud connectivity to global markets preferred for multinational corporations across the globe to enable the smooth flow of goods and services.

As a member of ASEAN (The Association of Southeast Asian Nations), Singapore plays a crucial role in facilitating trade within southeast Asia and between the region also the Indian Ocean and the Pacific, and the rest of the world.

Singapore is a leader in Innovation and Sustainability adopting smart technology and green logistics initiative, using AI and optimizing cargo handling and reducing delays and using renewable energy by reducing carbon emissions.

Not less important are Japan, South Korea and India whose advanced technology, logistics capabilities, precise supply chain processes, excels in robotics and automated logistics solutions, enhancing efficiency provide high-value logistics, particularly in the automotive and electronics sectors.

Despite its notable successes, Asia's logistics industry faces 3 major notable challenges such as political tensions where and territorial conflicts can disrupt supply chains, environmental matters as the exponential growth of logistics activities has raised sustainability issues, demanding eco-friendly and pro environmental practices and lastly the capacity limitations with increasing trade volumes, ports and transport networks risk congestion and delays.

Addressing these challenges requires a multifaceted approach, these difficulties can be fought to continue and accelerate Asia's logistics growth with 3 fundamental keys that combine technological innovation, infrastructure development and free trade agreements which can help overcome the adversities and current challenges adopting cutting-edge technologies like artificial intelligence, blockchain to optimize supply chains to enhance tracking, reduce costs, and improve delivery speeds.

Governments in Asian countries have to keep investing heavily in upgrading transportation and logistics infrastructure, multimodal transport solutions, smart ports and networks, cybersecurity measures and create alliances and strong agreements to facilitate smoother trade between Asian nations and the rest of the world. All these actions will boost and evolve even more logistics activities.

Asia's rise as a global logistics is and will be the results from strategic investments, innovation, setting the bar high, making strides in logistics excellence, shaping the future of global commerce shaping international trade dynamics. The industry has constantly adapted to the changing needs of the global market, improving everything from transportation, freight handling, streamlining warehousing, to making warehousing and inventory management efficiently.

Kumra (2024).Asia the epicentric of global trade shifts

<https://www.mckinsey.com/featured-insights/future-of-asia/asia-the-epicenter-of-global-trade-shifts>

Agricultural Sciences

SELECTION OF PERSPECTIVE VARIETIES OF WHEAT ACCORDING TO PHENOTYPIC INDICATORS

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Wheat accounts for about 30% of world grain production and grain reserves [1,2]. The harvest of wheat affects the overall world economy. With the increasing world population and the frequent occurrence of extreme weather conditions caused by climate change, ensuring adequate wheat production is essential for food security. The architecture of the inflorescence plays a crucial role in determining the number and size of grains, which is a key trait for yield improvement. Recent advances in wheat genomics have improved the understanding of the of wheat ear development and its application in breeding practices. Plant breeders are striving to develop improved varieties based on phenotypic measures of yield and grain quality data, with the expectation that stable yields will be maintained under a variety of environmental conditions [3]. Efforts to develop varieties that combine resistance to unfavorable biotic and abiotic factors with high yields have remained relevant for many years.

The aim of the study is to select perspective wheat varieties by phenotypic indicators in the field conditions of two agroecological points of Kazakhstan.

The research was conducted in the period from May to October 2024 in two agroecological points of Northern and Central Kazakhstan. Laboratory studies were conducted on the basis of the Scientific and Production Platform of Agricultural Biotechnology of the S. Seifullin Kazakh Agrotechnical Research University. In the study applied agronomic, breeding methods.

In the selection of productive varietal samples was studied the collection represented by domestic and foreign varieties. When selecting for ear productivity, such structural indicators as ear length, number of grains per ear and weight of grains per ear were taken into account. According to the results of field work in 2024 studied 65 varieties of spring soft wheat and 100 hybrid sister lines of hybrid combinations Xn-08 x Karabalykskaya 90 and Xn-02 x Karagandinskaya 31, as well as 10 new hybrid combinations of the most promising varieties of the collection. All samples were studied within the framework of the project to further investigate the most important genes and QTL controlling the trait of ear productivity. The objects of the study were wheat *Triticum aestivum* L. of Kazakhstani selection of Karaganda Agricultural Center, A.I.Barayev RPCGF. Foreign varieties are represented by samples of Omsk, Tyumen, Orenburg selection, as well as varieties of Chinese selection.

According to the results of structural analysis, promising material was selected on the basis of spikelet productivity. In the conditions of dry-steppe zone of Akmoła region, the most

distinguished samples were identified: Uralosibirskaya 2, Start, Steppe, KS 115/09-1, Silantiy, GAU 6-2018, Orenburgskaya 22, Lutescens 1012, Lutescens 1003, Lutescens 307/97/23, Phyton 41, Lutescens 106-0-200, OK 01, Krayushka, Lutescens 1486, Lyut. 71/10-4. Varieties were selected for three traits with spike height above 10 cm, the number of grains per spike more than 30 pieces, the weight of grains per spike more than 1 g and the number of spikelets more than 16. The maximum values of ear height were observed in varieties Start, L-70/06-4, GAU 6-2018, Orenburgskaya 22, Phyton 41, Expot2017, Lut. 71/10-4. Maximum values for the number of grains per ear more than 40 pieces had varieties Start, Silantiy, GAU 6-2018, Lutescens 1003, Phyton 41, Lutescens 106-0-200, OK 01, Lutescens 1486, Lut. 71/10-4. The varieties Silantiy, L.70/06-4, GAU 6-2018, Orenburgskaya 22, Lutescens 1486, Lutescens 71/10-4 were distinguished by the indicator of grain weight per ear with a value above 1.5 gr. 71/10-4. In terms of the number of spikelets per spikelet we can distinguish such varieties as Uralosibirskaya, Start, GVK 2140/6, Silantiy, L.70/06-4, Orenburgskaya 22, Lutescens 1135, Lutescens 1082. The average number of spikelets in the collection had a value of 15.1 pcs. Regarding hybrid sister lines, all 100 samples had spike height more than 10 cm, the maximum value reached 15.8 cm in sample WHS-340, the number of grains per spike reached more than 90 pieces in such samples as WHS-251, WHS-319, WHS-320. In terms of grain weight per ear, the values were above 3 g. Almost all samples had grain weight per ear above 2 gr. As for the number of spikelets, the average value was 19 pcs of spikelets and more. Maximum values were observed in hybrid lines of combination Xn 02 x Karagandinskaya 31, where in 70% of samples the value reached 20 and more spikelets.

According to the results of structural analysis of collection material from Central Kazakhstan, the following samples can be distinguished: KS 60/09-9, GVK 2140/6, Stepnodar 90, Lutescens 2055, Lutescens TR-64, KS 115/09-1, Line 1616 ae 14, L. 70/06-4, L. 147/10-14, GAU 21-2018, GAU 6-2018, Orenburgskaya 22, Lutescens 13-15, Lutescens 123-17, Karagandinskaya 31 and 60. According to the results of structural analysis in Karaganda region distinguished mainly released varieties, while the variety Silantiy, Uralosibirskaya, Phyton 41, which showed excellent results in Akmola region did not show themselves. In all distinguished varieties, the value of ear length was 9-12 cm. The number of grains per ear also had high values listed varieties value was from 29 and up to 39 pcs per 1 ear. The maximum values had varieties L. 147/10-14, Line 1616 ae 14, GVK 2140/6. The average weight of grains per ear in the distinguished varieties had a value higher than 1 g, the maximum values were observed in varieties KS 60/09-9, GVK 2140/6, Line 1616 ae 14, L. 147/10-14, GAU 6-2018. The value of the number of spikelets per spike varied from 13.7 to 16.8 pcs in the distinguished samples. In Karaganda region hybrid lines between the most promising varieties Favorit 41, Silantiy, GVK 2140/6, Karagandinskaya 30,31,55,60,70 and Lutescens varieties were obtained. The obtained hybrids had excellent results in all indicators. Thus, the number of grains per ear had a value from 30 to 44.6 pcs. values above 40 pcs had hybrids GVK 2140/6 x Karagandinskaya 30, Silantiy x Favorit, Chelyaba 80 x Karagandinskaya 31, Karagandinskaya 30 x Novosibirskaya 31. The value of grain weight per ear had an average value of 1.3 g, with an index of 2.2 g had hybrid Karagandinskaya 30 x Novosibirskaya 31. Spikelet length in all samples varied from 9 to 11 cm. The average value of the number of spikelets was 17.4, with a minimum value of 14.6 pcs. This index was high in all hybrids.

According to the results of field trials, more than 30 most perspective varieties of spring soft wheat, 100 hybrid sister lines and 10 hybrid combinations of promising varieties of the collection were selected.

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Биелерді азықтандыру әдісінің сүт өнімділігіне әсері

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Мал шаруашылығында, оның ішінде жылқы шаруашылығының бие сүті өнімділігіне әсер ететін негізгі себептер қатарына олардың азықтандыру ерекшеліктері жатады. Сондықтан жергілікті аймақтардың (өңірлердің) табиғи-климаттық және жайылымдық ерекшеліктерін ескере келе, сол аймақтарға бейімделген, жақсы көбею мен өсіп-даму қабілеттеріне ие, белгілі бір өнімділік бағытындағы жылқы тұқымдарын өсірудің ғылыми тұрғыздан негіздеп жолға қою осы саланың өркендеуіне негіз бола алады [1].

Жылқы еті мен сүтін өндіру бағытындағы жылқы шаруашылықтарына, олардың өнімдік көрсеткіштеріне тікелей әсер ететін фактор ретінде жылқыларды, оның ішінде биелерді күтіп-бағу, азықтандыру, әсіресе жайылымды тиімді пайдалану немесе қолда қолда ұсталынатын биелерді дұрыс рационмен қамтамасыз ету өте маңызды [2,3].

Біздің осы мақаламызда Солтүстік-шығыс өңірінде өсірілетін «Жабы» тұқымды жылқылардың биелерінен өндірілетін бие сүтін өндіру технологиясы, әсіресе олардың азықтандыру түрлеріне байланысты сүт өнімділігі қамтылған.

Ғылыми ізденіс нәтижесінде зерттеу жүргізілген шаруашылықта 1000 бас жылқы, оның ішінде: 700 бас «Жабы» және 300 бас «Жаңа-алтай» жылқы тұқымы бар екені анықталды. 700 бас «Жабы» тұқымының 420 басы немесе 60%, ал 300 бас «Жаңа-алтай» тұқымы жылқыларының 180 басы немесе 60% биелер екені анықталды. Зерттеу барысында жайылымдағы биелердің азық рационы негізінен төмендегі шөп түрлерінен: жасыл шөп, жүсан, бетеге және қауырсын шөп түрлерінен қамтамасыз етілетіні, ал қора жағдайында қолда ұсталған биелердің тәуліктік азық рационы: әртүрлі пішен түрі, сұлы, арпа, жүгері, бидай кебегі, күнбағыс жомы және премикстен құралған рациондағы азық бірлігі сауылмайтын биелер үшін 10,5, ал сауылатын биелер үшін 13,4 азық өлшемін құрайды. Ал қорытылған протеин және каротин, сәйкесінше 0,96-1,3 кг және 206-248 мг құрады.

Жоғарыда келтірілген азықтандыру әдістеріне сәйкес биелердің сүт өнімділігі анықталды.

Негізінен, биелерден сауылатын жалпы сүт мөлшері тәуліктік өнімділігі анықталды. Шаруашылық жағдайында биелер бес рет сауылды. Сауу арасында биелерден құлындарды айыру, биелерді суару және азықтандыру технологиялық жұмыстары орындалды. Сонымен, әртүрлі азықтандыру әдісімен азықтанған биелердің сүт мөлшері төмендегідей болды. Жалпы 101 күн лактация мерзімінде жайылымда жайылған биелердің сүт мөлшері 1444,8 кг, ал қора жағдайында қолда ұсталған биелердің сүт мөлшері 1932,0 кг, яғни қора жағдайында қолда ұсталған биелердің сүт өнімділігі 487,2 кг немесе 33,7% жоғары болды. Ал, сәйкесінше тәуліктік сүт мөлшері 13,76 және 18,4 кг құрады немесе қорада ұсталған биелердің тәуліктік сүт мөлшері 4,64 кг жоғары болды.

Лактация мерзімдерінде, яғни жалпы биелерді сауу мерзімдері(айлары) бойынша (маусым, шілде, тамыз, қыркүйек) салыстырып зерттегенде биелердің ең көп сүт беруі маусым-шілде айларына сәйкес келді. Демек, жайылым жағдайында болған биелердің сүт өнімділігі маусым, шілде айларында, сәйкесінше 5,94-6,41 кг, ал қора жағдайында ұсталған биелердің сүт өнімділігі 8,40-9,14 кг мөлшерінде болғаны анықталды. Жоғарыда келтірілген

мәліметтер негізінде шаруашылықта өсірілетін биелердің сүт беру мерзімдерін, мүмкіндігінше маусым, шілде айларына келтірілген дұрыс болады деп есептейміз.

Жалпы, бие сүтінің органолептикалық қасиеттері оның тағамдық құндылығына да бірқатар әсер етеді. Сондықтан, әртүрлі әдіспен азықтандырылған биелердің сүтіне органолептикалық талдау жүргізу барысында олардың иісі, дәмі, түрі мен консистенциясының ҚР ГОСТ 1005-98 «Бие сүті. Сатып алу талаптары» мемлекеттік стандартының талаптарына толық сәйкес екені анықталды.

Қорытынды. Солтүстік-шығыс өңірінде өсірілетін қазақ жылқы тұқымының «Жабы» типі тұқымының жайылым жағдайында және қолда күтіп-бағу, азықтандыру әдістері бойынша орындалған зерттеу жұмыстарының нәтижесінде қора жағдайында қолдан азықтандырылған биелердің орташа тәуліктік, сәйкесінше лактация мерзімінде сауылған сүтінің мөлшері айтарлықтай жоғары болғаны анықталды. Атап айтқанда, жайылымдық жағдайында азықтандырылған биелердің лактация мерзімінде 1444,8 кг, ал қора жағдайында азықтандырылған биелердің сүт өнімділігі 1932 кг құрады, яғни 487 кг немесе 33,7% жоғары болғаны байқалды.

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Study of technologies for growing and feeding Kazakh white-headed calves in the conditions of the “North Kazakhstan Agricultural Experimental Station”

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Abstract

The aim of the study is to analyze and develop technologies for growing and feeding Kazakh white-headed calves to improve their productive qualities. The study used methods for weighing and measuring calves, as well as calculating various body condition indices to assess growth and development. The assessment was carried out in the spring on the territory of the “North Kazakhstan Agricultural Experimental Station”. The study showed that the use of balanced feeding and proper care significantly improves the growth and development of Kazakh white-headed calves. The main body condition indices were determined, such as keudelost, corpus and others, which confirm the effectiveness of the developed technologies. To achieve high productivity and health of calves, it is necessary to continue research and implement modern feeding and care technologies. It is also recommended to regularly monitor the condition of animals and adjust the diet depending on the season and conditions of detention.

Keywords: Kazakh White-Headed cattle breed, meat production, growing and feeding technologies, body condition indexes.

Introduction

The Kazakh White-Headed cattle breed is one of the leading meat breeds in Kazakhstan. This breed was bred in the 1930s by crossing local cattle with Herefords. The main goal was to create a breed that is resistant to the continental climate of Kazakhstan and has high meat qualities. The breed is characterized by high productivity, good meat and milk qualities, as well as adaptability to local conditions.

The external characteristics of animals are considered depending on the direction of production, breed, health status. The appearance is affected by gender, age, feeding and living conditions of animals. When assessing the appearance of a breeding herd, special attention is paid to the most important signs and defects that can be passed on to offspring.

During the work during this period, the body size and live weight of calves on the farm were measured. Animals are weighed before they are watered and fed.

Hereditary factors also affect the growth and development of animals. But in the process of personality development, hereditary factors are often not fully realized, it is influenced by environmental factors. In such cases, organs and features that contribute to changes in animal feeding technology, conditions of maintenance and use of young animals (productive direction) are more developed.

The main task of proper feeding of calves and young cattle is to obtain a large, well-developed, strong constitution, improve the quality of edible, healthy, highly productive animals, and the quality of breeding work.

Standardized and sufficient feeding of calves and young animals allows for the full use of high qualities inherent in animals at an early age, growth capabilities, promotes the development of resistance to various substances, types of diseases, and also reduces feed consumption per unit of gain. Statistics on agricultural reproduction show that 9 out of 10 dead animals die from infectious diseases. In addition, 50% of deaths occur in the first 10-15 days. In 80% of calves, digestive and respiratory disorders are detected during colostrum.

Literature review

The Kazakh White-Headed breed is a meat breed bred in the 1930s. Its homeland is considered to be Kazakhstan and the RSFSR. Such cattle were bred taking into account the local harsh continental climatic conditions. In 1930, work began on breeding the Kazakh White-Headed breed. It was obtained by absorption hybridization of local cattle with Hereford bulls. The new breed was approved in 1951. Among beef cattle, the first place is occupied by Kazakh White-Headed cows. This famous breed has been confirming its reputation for decades. Based on the current conditions, livestock breeders often choose it for its high productivity and performance characteristics, allowing them to keep animals outdoors all year round. Usually these cows are used for meat production, but there are also Kazakh white cows for meat and milk production.[2]

In order to increase the meat productivity of fattened cattle, special conditions were created for the animals. Except for winter, they were kept outdoors almost all the time. As a result, strong, hardy animals with high meat productivity were bred. The new breed turned out to be a successful combination of genetic material and in many ways surpassed its parents.

In terms of weight and meat quality, the Kazakh White-Headed breed is one of the best breeds. Small layers of fat "marble" the tasty and juicy meat. Slaughter weight is 53-55% of the total carcass weight. Thanks to fat, this figure can be increased to 64% in bulls. Bone mass is only 14% of the slaughter yield.[2]

During selection in Kazakhstan, it was bred not only for meat, but also for meat and dairy purposes. During the breeding period, these animals were fed succulent feed, cows were milked after calving, and calves were bred. The breed is characterized by high productivity, adaptability to the continental climate and excellent meat qualities. In modern conditions, selection continues to improve the productive and adaptive qualities of the breed.[3]

Methods and Materials

The study was conducted using methods of weighing and measuring calves, as well as calculating various body condition indices, such as weight, corpus, and others. Weighing and measurements were carried out before watering and feeding the animals.

The study was conducted from April to May 2024. During the study, measurements were taken of Kazakh White-Headed calves raised at the North Kazakhstan Agricultural Experimental Station. Their growth, development, and productive qualities were assessed.

The growth and development of calves depend on a number of factors, including genetics, housing conditions, and feeding. The North Kazakhstan Agricultural Experimental Station uses modern technologies and methods aimed at improving these indicators.

Specialized premises and pen systems are used for raising calves, providing optimal conditions for their development. Particular attention is paid to ventilation, temperature conditions and cleanliness of the premises.

Calves are fed in accordance with modern standards and include both natural milk and its substitutes. The diet is balanced in terms of proteins, fats, carbohydrates, vitamins and minerals. In the first month of life, calves receive mainly milk, then concentrates and roughage are gradually introduced.

The farm uses the "Smart Pasture" system, developed by specialists from the Seifullin Kazakh Agrotechnical University. This system includes digital devices for monitoring the state of pastures, automated feeding and watering systems, as well as parasite protection systems.

Results

The body type indices determined during the research are as follows: leanness, bony structure, chest size, chest to buttock ratio, body character, body mobility, leanness of the body, and body fullness.

Body sizes and indices. Measuring the body of animals is a more accurate way to study the appearance. Assessing animals based on measurements allows them to be compared with each other. Each measurement is taken at specific points on the animal's body using a measuring ruler, compass, and tape measure.

The article shows the live weights obtained during the study. We see that the live weight of calves increases rapidly up to 6 months of age according to the specified weights. In older age groups, we can observe only a slight decrease in the intensity of growth of their indices without a decrease in body weight. The growth indices calculated based on the live weight of cattle are given.

Breeding bulls are given more milk and concentrated feed and less roughage than calves. The article also shows the diet used for feeding them.

Discussion

The body sizes of the cattle being raised are shown. The body size increased from 6 months to 8 months of age. From 6 months to 8 months of age, the height at the withers is 4.0 ± 0.2 cm, the height at the withers is 4.6 ± 0.6 cm, the length of the diagonal of the withers is 8.2 ± 0.86 cm, the chest girth is 13.5 ± 0.67 cm, the chest depth is 5.5 ± 0.80 cm, the chest width is 4.1 ± 0.75 cm, the width of the interspinal cord increased to 2.6 ± 0.72 cm, and the circumference of the tibia to 0.3 ± 0.43 cm.

According to the obtained indicators, the nature of the structure up to 6 months of age increased to 3.4%, and up to 8 months of age it decreased to 4%. The rarity index also decreased to 2.1% from 6 to 8 months of age, and the ossification index decreased to 0.4% by 8 months of age. At the age of up to 8 months, the breast size index increased by 12.5%, the breast-to-buttock ratio by 7%, and body mobility by 3.3%. The body oppression indices decreased to 11.4%, and the body fullness indices decreased to 20%.

The absolute growth index is 138 ± 1.24 kg by the age of 6 months, and by the age of 8 months this growth rate is less by 30.4 ± 0.98 kg. The result of relative growth also decreased to 17.0% in the 6-month and 8-month age intervals. The average daily growth index is 0.766 ± 5.32 g at the age of 6 months and decreases to 0.506 ± 4.71 g at the age of 8 months. This indicator is 0.260 ± 5.7 g less than the indicator at the age of 6 months.

The following products were included in the diet: 3 kg of hay, 10 kg of silage, 2 kg of barley, 3 kg of straw, 50 kg of salt. We compiled the energy value of the feed ration according to the Kalashnikov norm. If the feed size according to this norm is 6, then the feed size in the ration given in the table is 6.07, that is, it increases by 0.7. The exchange energy according to the norm is 66, the exchange energy in the ration is 2.5 times greater. If the specified dry matter norm is 8 kg, then in this ration it is 1.18 kg more, if the specified digestible protein norm is 584 g, then its indicator in the ration is 2 g less. If the calcium norm is 90 g, then in the ration it is 46.5 g less, if the phosphorus norm is 45 g, then the indicator in the ration is 20.8 g less.

Conclusion

The Kazakh White-Headed breed has high potential for beef cattle breeding. The use of modern growing and feeding technologies can significantly improve the productivity and health of animals, which is confirmed by the results of this study.

The following feeds were included in the calf diet on the farm: hay 3 kg, silage 10 kg, barley 2 kg, straw 3 kg, salt 50 kg. We compiled the energy value of the feed ration according to the Kalashnikov norm. If the feed size according to this norm is 6, then the feed size in the ration given in the table is 6.07, that is, it increases by 0.7. The exchange energy according to the norm is 66,

the exchange energy in the ration is 2.5 times higher. If the specified dry matter norm is 8 kg, then in this ration it is 1.18 kg more, if the specified digestible protein norm is 584 g, then its indicator in the ration is 2 g less. If the calcium standard is 90g, then the dietary figure is 46.5g less; if the phosphorus standard is 45g, then the dietary figure is 20.8g less.

The body sizes of the cattle being raised are shown. The body size increased from 6 months to 8 months of age. From 6 months to 8 months of age, the height at the withers is 23.1 ± 0.6 cm, the height at the withers is 12.4 ± 0.6 cm, the oblique length of the withers is 26.0 ± 0.86 cm, the chest girth is 35.3 ± 0.67 cm, the chest depth is 13.7 ± 0.80 cm, the chest width is 15.1 ± 0.75 cm, the width of the interspinal cord increased to 14.1 ± 0.72 cm, and the circumference of the tibia increased to 3.6 ± 0.43 cm.

According to the obtained indicators of the physical structure of cattle, the nature of posture by the age of 6 months increases to 3.4%, and by the age of 8 months it decreases to 4%. The rarity index also decreased to 2.1% from 6 to 15 months, and the ossification index decreased to 0.4% by the age of 8 months. At the age of up to 8 months, the breast size index increased by 12.5%, the ratio of the chest and buttocks by 7%, body mobility by 3.3%. The indicators of body depression decreased to 11.4%, the body fullness decreased to 20%.

We see that the live weight of calves increases rapidly up to the age of 6 months. In older age groups, we can observe only a slight decrease in the intensity of growth of their indicators without a decrease in body weight.

The absolute growth rate is 138 ± 1.24 kg up to 6 months of age, and up to 8 months of age this growth rate is lower by 96.1 ± 0.98 kg. The result of relative growth also decreased to 132.2% in the 6-month and 8-month age intervals. The average daily growth index is 0.766 ± 5.32 g at the age of 6 months and decreases to 0.465 ± 3.14 g at the age of 8 months. This indicator is 0.301 ± 5.7 g less than the indicator at the age of 6 months.

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Sociological Sciences

Уровень смертности в Казахстане: причины и решения

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1. Введение

Статистика смертности является одним из ключевых индикаторов, характеризующих состояние общественного здоровья, экономического развития и эффективности социальной политики в любой стране. В Казахстане, как и в большинстве других стран, показатели смертности отражают сложные социально-экономические, экологические и медицинские аспекты жизни населения. Анализ таких показателей помогает выявить основные причины смертности, выявить динамику изменений и оценить состояние здравоохранения в стране. За последние годы в Казахстане наблюдаются значительные изменения в уровне смертности, что связано как с внутренними факторами (развитием медицины, изменением образа жизни населения, социально-экономическими реформами), так и с внешними влияниями (глобальные эпидемии, изменение экологической ситуации и др.). Среди основных причин смертности в Казахстане традиционно выделяются сердечно-сосудистые заболевания, онкологические болезни, дорожно-транспортные происшествия, а также внешние причины, такие как травмы и несчастные случаи.

Особое внимание уделяется также разнице в уровне смертности между городским и сельским населением, а также между различными регионами страны. Анализ этих данных позволяет лучше понять, как социальные и экономические условия влияют на продолжительность жизни и здоровье людей в разных частях Казахстана.

Таким образом, статистика смертности представляет собой важный инструмент для правительства и медицинских организаций в разработке стратегий по улучшению качества жизни, профилактике заболеваний и снижению уровня преждевременной смертности.

2. Общая статистика смертности в Казахстане

На протяжении последних лет уровень смертности в Казахстане оставался стабильным с некоторыми колебаниями, вызванными внешними факторами, такими как пандемия COVID-19 и экономические изменения. В таблице 1 представлены данные по общей смертности в стране по годам.

Год	Общая смертность (на 1000 чел.)	Причины смерти	Особенности
2017	7	ССЗ, Онкология, ДТП	Экономическая стабильность
2018	8	ССЗ, Онкология, ДТП	Увеличение ДТП
2019	8	ССЗ, Онкология, COVID-19	
2020	9	ССЗ, Онкология, COVID-19	Влияние пандемии Высокий пик COVID-19
2021	9	ССЗ, Онкология, ДТП	Снижение смертности
2022	7		после пандемии

Таблица 1: Данные по смертности в Казахстане с 2017 по 2022 годы

Смертность в Казахстане, как и в других странах, определяется множеством факторов, среди которых особое место занимают такие причины, как инфекционные заболевания, в том числе COVID-19, хронические болезни, такие как онкологические заболевания, а также травмы и аварии, в частности дорожно-транспортные происшествия (ДТП). Эти три направления имеют значительное влияние на демографическую ситуацию в стране, вызывая озабоченность среди специалистов здравоохранения и органов государственной власти.

2.1. Смертность от COVID-19

Пандемия COVID-19 оказала колоссальное влияние на систему здравоохранения и показатели смертности в Казахстане. Первый случай заражения был зарегистрирован в марте 2020 года, и с тех пор COVID-19 стал одной из ведущих причин смертности. По данным Министерства здравоохранения, в периоды вспышек заболеваемости нагрузка на медицинскую систему страны резко возрастала, что приводило к нехватке медицинских ресурсов и усложняло борьбу с другими заболеваниями.

Хотя пандемия изменила привычный уклад жизни, она также продемонстрировала уязвимость людей с хроническими заболеваниями, включая сердечно-сосудистые и онкологические патологии. Повышенные риски летальных исходов среди пациентов с ослабленной иммунной системой или тяжелыми сопутствующими болезнями подчеркивали необходимость усиленного внимания к профилактике и лечению как COVID-19, так и других хронических заболеваний.

2.2. Смертность от онкологических заболеваний

Онкологические заболевания продолжают занимать одно из лидирующих мест среди причин смертности в Казахстане. Рак остается серьезной проблемой для системы здравоохранения, несмотря на усилия по его ранней диагностике и лечению. Наиболее распространенными типами рака в Казахстане являются рак легких, молочной железы, желудка и печени.

Факторами, способствующими высокой смертности от рака, являются как поздняя диагностика, так и недостаточная доступность современных методов лечения для всех слоев населения. Хотя в последние годы наблюдается активное развитие онкологической помощи, включая строительство новых медицинских центров и повышение квалификации специалистов, проблема позднего выявления раковых заболеваний остается актуальной.

Ключевыми направлениями в борьбе с раком в Казахстане являются расширение программ скрининга, улучшение профилактики и повышение осведомленности населения о факторах риска.

2.3. Смертность от дорожно-транспортных происшествий (ДТП)

Дорожно-транспортные происшествия остаются одной из главных причин смертности в Казахстане, особенно среди молодежи и трудоспособного населения. Несмотря на меры по улучшению дорожной инфраструктуры и усилению контроля за соблюдением правил дорожного движения, количество жертв ДТП продолжает оставаться высоким. Основными факторами, способствующими смертности на дорогах, являются превышение скорости, управление транспортом в состоянии алкогольного или наркотического опьянения, а также несоблюдение правил безопасности, таких как использование ремней безопасности и детских кресел.

Особенно уязвимыми участниками дорожного движения остаются пешеходы и велосипедисты. Проблемы с качеством дорожного покрытия, недостаточное освещение дорог в ночное время, а также низкий уровень культуры вождения способствуют росту числа трагических случаев на дорогах. Для снижения смертности от ДТП в Казахстане ведутся масштабные программы, направленные на повышение безопасности дорожного движения, включая усиление наказаний за нарушение правил и активное внедрение технологий контроля, таких как камеры видеонаблюдения и автоматизированные системы штрафования.

3. Причины высокой смертности

3.1. Сердечно-сосудистые заболевания (ССЗ)

Сердечно-сосудистые заболевания являются основной причиной смертности в Казахстане, что связано с рядом факторов, таких как неправильное питание, низкий уровень физической активности, а также высокий уровень стресса. В таблице 2 показано количество смертей, связанных с ССЗ, за последние пять лет.

Год	Количество смертей от ССЗ	Доля в общей смертности (%)	Изменение по сравнению с прошлым годом (%)
2018	25,000	34.2	-
2019	24,500	32.8	-2.0
2020	26,000	33.3	+6.1
2021	27,500	34.0	+5.8
2022	25,800	33.5	-6.2

Таблица 2: Статистика смертей от сердечно-сосудистых заболеваний

3.2. Статистика смертей от сердечно-сосудистых заболеваний

Сердечно-сосудистые заболевания (ССЗ) являются одной из ведущих причин смертности и заболеваемости в Казахстане. В последние десятилетия проблема ССЗ приобрела огромные масштабы и стала значительным вызовом для системы здравоохранения страны. ССЗ включают широкий спектр патологий, таких как ишемическая болезнь сердца, инфаркты миокарда, инсульты, гипертоническая болезнь, сердечная недостаточность и другие нарушения сердечно-сосудистой системы.

3.3. Статистика и масштабы проблемы

По данным Министерства здравоохранения Казахстана, на долю сердечно-сосудистых заболеваний приходится более половины всех случаев смертности в стране. Это отражает глобальную тенденцию, когда ССЗ занимают лидирующие позиции среди причин преждевременной смертности, опережая даже онкологические заболевания и инфекционные болезни.

Особенно остро проблема ССЗ проявляется среди людей старшего возраста, однако в последние годы наблюдается тревожная тенденция к "омоложению" этих заболеваний. Увеличение числа случаев инфарктов и инсультов среди людей трудоспособного возраста свидетельствует о необходимости активизации профилактической работы и улучшения системы раннего выявления заболеваний.

3.4. Факторы риска

Основными факторами риска развития сердечно-сосудистых заболеваний в Казахстане, как и в других странах, являются:



Рис. 1: Сердце при ССЗ

Нездоровое питание: Повышенное потребление жирной, солёной и высококалорийной пищи, недостаток овощей и фруктов в рационе ведут к накоплению холестерина и повышению артериального давления.

Низкая физическая активность: Малоподвижный образ жизни, характерный для современных городских условий, увеличивает риск ожирения и сопутствующих ему сердечных заболеваний.

Курение и злоупотребление алкоголем: Эти вредные привычки напрямую связаны с повышенным риском развития гипертонии, атеросклероза и других серьёзных сердечно-сосудистых проблем. Стресс: Высокий уровень стресса, вызванный как социально-экономическими факторами, так и личными проблемами, способствует ухудшению состояния сердечно-сосудистой системы.

Генетическая предрасположенность: Наследственность играет важную роль в развитии ССЗ, особенно при наличии семейного анамнеза гипертонии или ишемической болезни сердца.

3.5. Онкологические заболевания

Онкология остаётся второй по значимости причиной смертности в Казахстане. Несмотря на современные методы лечения, смертность от онкологических заболеваний остается на высоком уровне из-за поздней диагностики и недостаточного доступа к качественной медицинской помощи в отдалённых регионах.

Год	Количество смертей от онкологии	Доля в общей смертности (%)
2018	19,500	26.2
2019	19,700	26.3
2020	20,100	25.7
2021	21,000	26.0
2022	20,500	26.4

Таблица 3: Смертность от онкологических заболеваний

Онкологические заболевания являются одной из наиболее серьёзных проблем в области здравоохранения в Казахстане. Рак — это не только вторая по частоте причина смертности после сердечно-сосудистых заболеваний, но и источник значительного социально-экономического бремени для страны. В последние десятилетия Казахстан активно работает над улучшением диагностики, лечения и профилактики рака, однако проблема остаётся актуальной из-за ряда факторов, включая рост числа случаев и сложности с ранним выявлением.

3.6. Статистика и масштабы проблемы

По данным Министерства здравоохранения Казахстана, количество случаев онкологических заболеваний в стране стабильно растёт. Ежегодно регистрируется около 35-40 тысяч новых случаев рака, а уровень смертности от онкологических заболеваний достигает 17-19 тысяч человек в год. Одним из наиболее острых вопросов является поздняя диагностика, когда болезнь выявляется на поздних стадиях, что существенно снижает шансы на успешное лечение.

Наиболее распространённые виды рака в Казахстане включают:

- Рак лёгких
- Рак молочной железы
- Рак желудка

Рак печени

Колоректальный рак

Рак лёгких и рак молочной железы занимают лидирующие позиции среди мужчин и женщин соответственно. Важным аспектом остаётся также гендерное и возрастное распределение: женщины чаще страдают от рака молочной железы, в то время как мужчины более подвержены раку лёгких и желудка. Возрастные группы, наиболее подверженные риску, это люди старше 50 лет, хотя и среди молодёжи наблюдается рост числа случаев.

3.7. Факторы риска

Факторы, способствующие развитию онкологических заболеваний в Казахстане, в целом соответствуют глобальным тенденциям, однако имеют и свои региональные особенности:

Курение: Курение остаётся одной из основных причин рака лёгких, а также связано с повышенным риском возникновения ряда других видов рака, включая рак горла, пищевода и мочевого пузыря.

Нездоровое питание: Высокое потребление жирной пищи, недостаток овощей и фруктов в рационе повышают риск рака желудка и кишечника. Это особенно актуально в свете изменений в диетических привычках населения Казахстана.

Ожирение и малоподвижный образ жизни: Избыточный вес связан с повышенным риском рака молочной железы, толстой кишки и поджелудочной железы.

Алкоголь: Злоупотребление алкоголем также увеличивает риск развития онкологических заболеваний, таких как рак печени и полости рта.

Генетическая предрасположенность: Наличие онкологических заболеваний у близких родственников увеличивает вероятность возникновения рака.

Воздействие экологических факторов: В некоторых регионах Казахстана, таких как Семипалатинск и Аральское море, экология значительно пострадала из-за ядерных испытаний и экологических катастроф, что привело к росту онкологических заболеваний в этих районах.



Рис. 2: Легкие при онкологическом заболевании

3.8. Внешние причины смертности (ДТП, несчастные случаи)

Дорожно-транспортные происшествия (ДТП) являются одной из ведущих причин смертности в Казахстане, особенно среди молодого и трудоспособного населения. Ежегодно в стране фиксируется тысячи ДТП, в которых гибнут и получают тяжёлые травмы сотни людей. Проблема смертности на дорогах остаётся актуальной на протяжении многих лет, несмотря на усилия государства по улучшению дорожной инфраструктуры и повышению безопасности дорожного движения.

3.9. Статистика и масштабы проблемы

По данным Комитета по статистике Министерства национальной экономики Казахстана, ежегодно в результате ДТП погибают около 2-3 тысяч человек. При этом около 20 тысяч человек получают ранения различной степени тяжести. Казахстан входит в число стран с высоким уровнем смертности на дорогах в сравнении с другими государствами региона и мира.

Наиболее опасными являются крупные автомагистрали, соединяющие города, а также оживлённые дороги в городских агломерациях. Особенно высокий уровень аварийности фиксируется в южных и центральных областях страны, где наблюдается высокая интенсивность движения транспорта. Причём ДТП чаще всего происходят в летние месяцы, когда увеличивается поток автомобилей и ухудшаются погодные условия.

3.10. Основные причины ДТП и смертности на дорогах

Превышение скорости: Превышение скоростного режима остаётся одной из главных причин ДТП с летальным исходом. Высокие скорости увеличивают вероятность тяжёлых травм при столкновениях, особенно в случаях лобовых столкновений или наезда на пешеходов.

Управление автомобилем в состоянии алкогольного или наркотического опьянения: Водители в нетрезвом состоянии существенно повышают риск возникновения ДТП, так как их реакция замедляется, а способность контролировать транспортное средство снижается.

Нарушение правил дорожного движения: Недостаточная дисциплина на дорогах, игнорирование правил при обгоне, пересечении перекрёстков или проезде на красный свет также являются частыми причинами ДТП. К этому добавляется невнимательность водителей, особенно при использовании мобильных телефонов за рулём.

Низкий уровень культуры вождения: Часто водители не соблюдают дистанцию, агрессивно маневрируют на дорогах и не уважают права пешеходов и других участников движения.

Нарушение правил безопасности: Неиспользование ремней безопасности и детских кресел увеличивает риск гибели и получения тяжёлых травм при авариях.

Плохое состояние дорожной инфраструктуры: Низкое качество дорожного покрытия, отсутствие разделительных полос, недостаточная освещённость дорог и нехватка дорожных знаков и разметок также способствуют росту числа аварий, особенно в ночное время и на сложных участках трасс.

3.11. Влияние на молодёжь и трудоспособное население

Наибольший уровень смертности и травматизма от ДТП фиксируется среди людей в возрасте от 18 до 45 лет. Молодые водители, часто нарушающие правила дорожного движения из-за неопытности и склонности к рисковому поведению, становятся участниками серьёзных аварий. Потеря трудоспособного населения в результате ДТП наносит не только демографический, но и экономический ущерб стране, влияя на производительность и развитие общества.

3.12. Меры по снижению смертности на дорогах

В ответ на высокие показатели смертности и травматизма от ДТП, государство Казахстан принимает активные меры для улучшения безопасности на дорогах. Основные направления политики включают:

Ужесточение наказаний за нарушение правил дорожного движения: Введение более суровых штрафов и наказаний за превышение скорости, вождение в состоянии алкогольного опьянения и другие серьёзные нарушения. Это стимулирует водителей к более ответственному поведению на дорогах.

Развитие инфраструктуры: Модернизация дорожной сети, улучшение качества дорог, установка дополнительных камер наблюдения и автоматизированных систем контроля скорости. Эти меры способствуют снижению аварийности на сложных участках дорог.

Повышение культуры вождения: Важной частью программы является работа по повышению осведомлённости водителей о правилах дорожного движения, ответственности за нарушение и последствиях ДТП. Информационные кампании призваны улучшить культуру вождения и повысить уровень дисциплины на дорогах.

Внедрение технологий контроля за движением: Установка камер на дорогах и автоматизированных систем фиксации нарушений, таких как превышение скорости, помогает снижать уровень аварийности. Это позволяет эффективнее контролировать соблюдение правил дорожного движения и предотвращать аварии.

Развитие системы экстренной помощи: Улучшение системы экстренной помощи при ДТП, включая работу службы скорой помощи и спасательных служб, позволяет быстрее реагировать на аварии и оказывать своевременную медицинскую помощь пострадавшим, что способствует снижению числа смертей.

Повышение безопасности для пешеходов: Строительство пешеходных переходов, надземных и подземных мостов, а также установка светофоров и знаков безопасности на дорогах с высоким потоком автомобилей помогают защитить пешеходов и снизить количество наездов.



Рис. 3: Автомобиль при дорожно транспортном происшествии

Год	ДТП	Несчастные случаи
2018	2,500	4,000
2019	2,800	4,100
2020	2,700	3,900
2021	2,900	4,300
2022	2,600	4,100

Таблица 4: Смертность от ДТП и несчастных случаев

4. Заключение

Уровень смертности в Казахстане можно снизить только при реализации комплексных мер, направленных на улучшение здравоохранения, профилактику заболеваний и повышение безопасности на дорогах. Необходимы долгосрочные программы, направленные на улучшение качества жизни, раннюю диагностику заболеваний и доступ к медицинским услугам, чтобы обеспечить стабильное снижение уровня смертности в будущем.

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СОЦИАЛЬНАЯ РАБОТА С ЖЕРТВАМИ БЫТОВОГО НАСИЛИЯ В РЕСПУБЛИКЕ КАЗАХСТАН

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Социальная работа с жертвами домашнего насилия, включая различные формы семейного насилия (физического, сексуального, экономического насилия, жестокого обращения с детьми, психического насилия, принуждения к употреблению алкоголя, немедицинского употребления наркотиков, проституции и других преступных действий), должна основываться на утверждении, что Социальное явление, характеризующееся их взаимосвязью и взаимопроникновением.

В социальной работе с женщинами выделяют три группы задач: спасение их, сохранение и развитие их деятельности. В конкретных индивидуальных и социальных ситуациях та или иная группа выходит на первое место. Например, в случае реальной угрозы жизни и здоровью женщин и детей можно использовать стационарные приюты, кризисные центры, приюты с комплексом социальных услуг. Острые экономические проблемы дают женщине право обращаться за адресной социальной и неотложной помощью.

Цели социального развития могут быть достигнуты посредством мероприятий по поддержке групп самопомощи и взаимопомощи, объединений по защите социальных и других прав различных групп женщин, содействию самозанятости и самодостаточности женщин.

Все эти задачи, как правило, решаются социальными работниками совместно с работниками различных комплексов социальной сферы – правоохранительных органов, служб занятости, медицинских и образовательных учреждений и др.

Направления социальной работы с жертвами бытового насилия

Выделим следующие направления социальной работы с жертвами бытового насилия:

Организационным, административно-правовым направлением социальной работы является формирование нормативно-правовой базы защиты жертв бытового насилия, организация учреждений, оказывающих помощь жертвам насилия.

- Медико-социальная направленность регулирует оказание медицинской помощи жертвам бытового насилия.
- Социально-психологический отдел организует оказание психологической и психотерапевтической помощи жертвам насилия.
- Социально-педагогическое направление разрабатывает принципы, направленные на перевоспитание домашних тиранов, и организует консультативную помощь.

Одну из важнейших ролей в профилактике бытового насилия играет специалист по социальной работе. К его непосредственным функциям относятся проведение просветительской работы среди населения, выявление неблагополучных семей, социальный контроль над неблагополучными членами семьи, при необходимости передача

дел правоохранительным органам, а также органам опеки. Домашнее насилие часто может быть скрытым. «Не только насильник, но и жертва прилагают все усилия, чтобы не выносить проблему наружу, поэтому проблема выявления обстоятельств и причин бытового насилия и формирования активного подхода к изменению сценария является сложной и важной профессиональной проблемой, требующей от специалистов социальной работы высокой квалификации, способности устанавливать связи и создавать атмосферу безопасности и доверия».

Основываясь на практическом опыте, мы можем определить определенные задачи, которые необходимо решить вместе с клиентом. Это в той или иной форме - определение ожиданий и ролей, которые могут быть разными для клиента и специалиста по социальной работе. Если этого не сделать, может возникнуть неприязнь, неудовлетворенность и нерешительность проблемы.

Учитывая роль клиента в ситуации насилия, его пол, возраст и индивидуальные особенности, это может выглядеть иначе. Тем не менее, на каждом этапе процесса необходимо выделить:

- установление ожидаемых результатов с клиентом, поскольку их понимание может не совпадать;
- уточнение взаимных обязательств. Клиент должен четко понимать, что он должен делать и какова будет ответственность социального работника;
- совместное определение проблемы на каждом этапе. Поскольку Клиент находится внутри ситуации, ему очень трудно дать объективную оценку, например, он может воспринимать признаки по причинам, не зная своих интересов, путать их со своей позицией.

Специалист по социальной работе должен сделать собственное заключение по имеющейся проблеме и прийти к соглашению с клиентом по ее формулировке. Защита от насилия может осуществляться в условиях стационарного наблюдения и с помощью нестационарных учреждений. Защита от бытовой жестокости в нестационарном учреждении, как правило, должна совмещать деятельность правоохранительных органов и учреждений социального обслуживания. Первый прекращает насилие, второй оказывает реабилитационную, правовую и другие виды помощи пострадавшим от него. Он состоит из морально-психологической реабилитации, информационно-консультационной работы по правам потерпевшего и социальных ресурсов по их защите.

Центры социального обслуживания оказывают непосредственную помощь женщинам и детям, ставшим жертвами домашнего насилия. Граждане данной категории имеют право на неотложные социальные услуги (в отделениях экстренной социальной помощи), которые включают в себя следующие социальные услуги: оказание доврачебной помощи, помощь в получении временного жилья, оказание гражданам юридической помощи в целях защиты их прав, оказание скорой медико-психологической помощи, в том числе телефон доверия. Кроме того, центры социальной помощи семье и детям оказывают непосредственную помощь жертвам насилия.

Формы социальной работы с женщинами, подвергшимися домашнему насилию

Оказание экстренной социальной помощи заключается в оказании единовременной, единовременной помощи лицу или семье, оказавшимся в трудной ситуации, путем предоставления денег, продуктов питания или предметов. Адресная социальная помощь оказывается малообеспеченным слоям населения, а также состоит из выдачи денег, продуктов питания и вещей и может оказываться неоднократно, даже на постоянной основе. Получателями этих видов помощи могут быть различные категории населения, прежде всего представители социально-малообеспеченных семей.

Социальное жилье, социальная гостиница-учреждения социальной помощи в стационарных условиях. Эти учреждения позволяют временно проживать людям,

оказавшимся в трудной жизненной ситуации, прежде всего детям и женщинам. Эти учреждения могут стать убежищем для клиентов от семейной жестокости, а специалисты окажут им социально-психологическую помощь, юридические услуги, при необходимости помогут защитить свои права, устроиться на работу.

Особым видом деятельности таких отелей является помощь беременным несовершеннолетним, так как их состояние часто является поводом для побега из дома и школы. Специалисты социальных учреждений проводят медицинскую и социально-психологическую реабилитацию таких клиентов, содействуют их дальнейшему существованию, в том числе содействуют получению жилья, продолжению обучения, трудоустройству, при отказе от него несовершеннолетней матери-помещению новорожденного ребенка в семью.

Основной вид работы кризисного центра-очное консультирование. Пострадавшие имеют возможность напрямую общаться со специалистами: психологами, врачами, учителями, юристами. Некоторые центры проводят групповые занятия и организуют группы самопомощи.

Технологии социальной работы с женщинами, подвергшимися домашнему насилию

Социальные технологии часто используются в социальной работе с женщинами, подвергшимися домашнему насилию.

В сфере здравоохранения и социальной защиты населения социальная работа использует формы и методы, разработанные в других системах, а именно:

- преодоление бессознательных защитных механизмов, прежде всего отторжение, препятствующее достижению проблемы;
- разработка системы поддержки, которая может включать социального работника и терапевта, друзей, близких людей, любимые занятия и животных;
- создание системы преодоления кризиса-создание перечня телефонных номеров кризисных служб, специалистов, людей, с которыми можно связаться в случае чего, потери уверенности в себе, страха, растерянности и т.д.;
- познать, научиться заботиться о себе;
- разработка пути принятия решений и реабилитации;
- пересмотреть травмирующее событие и проанализировать, что произошло и как это повлияло на жизнь клиента;
- проанализировать, что помогло клиенту выжить, определить источники силы, простить себя;
- подготовка к изменениям, анализ страхов, вселение надежд и подготовка оснований для их реализации;
- понять, что произошедшее не вина клиента, «научиться»верить в себя;
- оплакивать прошлое и свои проблемы и совершать и совершать похороны;
- выражение гнева и стыда и избавление;
- определение того, с чем нужно бороться в семье, и разработка тактики сопротивления;
- возвращение в семью (вообразить сначала), изучение dna, планирование будущих связей, формирование реалистичных ожиданий;
- создание и реализация процедуры оценки достигнутого и празднования достижений»

Создание терапевтических групп женщин, подвергшихся насилию во время реабилитации, было бы эффективной технологией. Члены таких групп могут поддерживать друг друга, добиваться хороших результатов в коррективке своей личности и защите своих социальных интересов под руководством специалиста.

Другой вид социальной работы с женщинами, подвергшимися насилию,-это создание горячей линии, основной целью которой является оказание психологической и правовой помощи. Психологическая помощь осуществляется путем снятия эмоционального

напряжения, активизации внутренних ресурсов женщины и разрешения внутренних конфликтов. Юридическая помощь заключается в информировании женщины о ее законных правах.

Заключение

Перспектива работы специалиста по социальной работе включает технологии социального посредничества с женщинами, подвергшимися домашнему насилию. Зайнышев И. Г., Студенова Е. Г., Фирсов М. В., Холостова Е. И. и др. группируют групповую посредническую деятельность по следующим направлениям «посредничество между государством, организацией, учреждением и клиентом; между организациями и учреждениями; между специалистами различных подведомственных специальностей; социальные группы среди клиентов учреждений; межличностная медиация. Все перечисленные направления социального посредничества являются актуальными в решении проблем женщин, подвергшихся домашнему насилию».

Таким образом, мы видим, что в последние годы активно развивается система центров социальной помощи и других учреждений социального обслуживания. Независимо от типа социальных учреждений и технологии работы с кейсом непосредственно в реабилитационной работе с клиентом (семьей), часто встречается психосоциальный подход. Она позволяет повысить эффективность работы, так как предполагает не только использование имеющихся социальных ресурсов, но и активацию личных ресурсов клиента (семьи) и применение методов психологического воздействия на агрессора, жертву, семью в целом и на него. На современном этапе процесс предупреждения и пресечения бытового насилия приобрел статус политического приоритета страны.

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Социальное сопровождение семей, нуждающихся в социальной поддержке, либо находящихся в социально опасном положении, либо иной трудной жизненной ситуации: метод. рекомендации для специалистов, обеспечивающих внедрение социального сопровождения семей с детьми на территории Астраханской области, - Астрахань: Изд-во Многопрофильного социального центра «Семья», 2015.

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Legal Sciences

THE IMPACT OF DETENTION AND ARREST ON THE PRESUMPTION OF INNOCENCE IN THE CONTEXT OF EUROPEAN COURT JUDGMENTS

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Abstract

The article is dedicated to examining the impact of "detention" and "imprisonment" on the presumption of innocence in the context of the decisions made by the European Court of Human Rights. The article analyzes detention and imprisonment from the perspective of the presumption of innocence, specifically addressing how exceeding the "reasonable time" affects this principle. According to the authors, when applying detention or imprisonment that restricts an individual's freedom before the final court decision, the presumption of innocence is fully applicable, provided that the requirements of Article 5 of the European Convention on Human Rights are strictly followed. The authors also believe that exceeding the "reasonable time" can be seen as an additional punishment beyond the expected sentence. Therefore, special attention should be paid to ensuring that the "reasonable time" does not extend beyond the potential length of the imposed sentence.

Key words: Presumption of innocence, detention, arrest, reasonable time, guilt, crime, punishment

1. Examination of Detention and Arrest through the Prism of the Presumption of Innocence

Article 5 of the European Convention on the Protection of Human Rights and Fundamental Freedoms is devoted to the right to liberty and security. This article outlines the specific circumstances under which an individual may lawfully be deprived of their liberty (detention and arrest) [5].

The article states:

1. Everyone has the right to liberty and personal security. No one shall be deprived of their liberty except in the following cases and in accordance with a procedure prescribed by law:

- (a) The lawful detention of a person after conviction by a competent court;
- (b) The lawful arrest or detention of a person for non-compliance with a lawful court order or to secure the fulfillment of any legal obligation;
- (c) The lawful arrest or detention of a person effected for the purpose of bringing them before the competent legal authority on reasonable suspicion of having committed an offense, or when it is reasonably considered necessary to prevent their committing an offense or fleeing after having done so;

- (d) The detention of a minor by lawful order for the purpose of educational supervision or for bringing the minor before a competent authority;
 - (e) The lawful detention of persons for the prevention of the spread of infectious diseases, of persons of unsound mind, alcoholics, drug addicts, or vagrants;
 - (f) The lawful arrest or detention of a person to prevent their unauthorized entry into the country or of a person against whom action is being taken with a view to deportation or extradition.
2. Every person who is arrested shall be informed promptly, in a language which they understand, of the reasons for their arrest and any charges against them.
 3. In accordance with paragraph 1(c) of this article, any person who is arrested or detained shall be brought promptly before a judge or another official empowered by law to exercise judicial authority, and shall be entitled to a prompt decision on the lawfulness of their detention, with the possibility of being released within a reasonable time or pending trial. Release may be conditioned upon the provision of guarantees for appearance at trial.
 4. Every person who is deprived of their liberty as a result of arrest or detention has the right to have the lawfulness of their detention promptly reviewed by a court and, if their detention is found to be unlawful, the right to be released.
 5. Anyone who has been subjected to arrest or detention in violation of the provisions of this article has the right to compensation.

According to Article 6 of the Convention, the presumption of innocence means that a person's guilt is not proven until the court issues a conviction. However, certain freedoms, including those outlined in Article 5, may be restricted before a court's conviction. At first glance, these two articles may seem contradictory, but in fact, they are not. Specifically, in cases where there are sufficient grounds to prevent a person from committing a possible offense or fleeing after committing an offense, detention or arrest is deemed necessary.

Legal literature suggests that restricting the right to liberty to prevent flight or the destruction of evidence indicates that the presumption of innocence may not fully apply to the individual. It is argued that prior to a final conviction, a person's liberty can be restricted [3, p. 33]; [2, p. 75]. However, we disagree with this view. We believe that the presumption of innocence fully applies to a person whose liberty is restricted, as the nature and essence of the presumption of innocence does not prevent the lawful restriction of liberty.

In its judgments, the European Court has stated that even referring to suspicion as a reason for detention and arrest does not contradict the presumption of innocence. In this regard, we believe that, provided the requirements of Article 5 of the Convention are strictly adhered to when applying detention or arrest that leads to the restriction of liberty before a final court decision, the presumption of innocence is fully applicable to the person detained or arrested [4].

Adhering to Article 5 of the Convention also helps prevent the abuse of detention and arrest, ensuring that such measures are not misused in practice.

The arbitrary and unconditioned application of detention and arrest undermines the presumption of innocence. It is no coincidence that, in its recent decisions concerning the excessive duration of detention and arrest, the European Court has referred to the presumption of innocence, emphasizing the necessity of considering it in such cases.

It is worth noting that in several of its rulings (e.g., the judgment in the case *Tacıroğlu v. Turkey* of May 2, 2006, paragraph 19; *Selçuk v. Turkey* of April 10, 2006, paragraph 30; *Vayıç v. Turkey* of June 20, 2006, paragraph 32, etc.), the European Court has expressed this necessity through the phrase "*with due regard to the principle of the presumption of innocence.*"

2. The Impact of Exceeding the Reasonable Time Limit on the Presumption of Innocence

According to Article 5.3 of the Convention, "Everyone who is arrested or detained shall be entitled to a trial within a reasonable time."

The right to a trial within a reasonable time is also an integral part of the right to a fair trial as outlined in Article 6.1 of the Convention.

Analyzing both provisions, it can be concluded that even if a person is acquitted after a lengthy trial, the right to a trial within a reasonable time is considered violated if the trial took an unreasonably long period [6].

The European Court has issued numerous rulings regarding violations of Article 5.3 of the Convention. In these cases, the length of time the applicants were held in detention was considered. For example, in the case *Neumeister v. Austria* (judgment of June 27, 1968), the detention lasted two years and four months; in *Stögmüller v. Austria* (judgment of November 10, 1969), it lasted two years and seven weeks; in *Ringeisen v. Austria* (judgment of July 16, 1971), the detention lasted two years; in *Letellier v. France* (judgment of June 26, 1991), it lasted two years and nine months; in *Kemmache v. France* (judgment of November 27, 1991), it lasted two years, nine months, and ten days; in *Clooth v. Belgium* (judgment of December 12, 1991), it lasted three years and two months; in *Tomasi v. France* (judgment of August 27, 1992), it lasted five years and seven months; and in *Müller v. France* (judgment of February 18, 1997), it was approximately four years.

In cases resulting in a friendly settlement, the following examples can be given regarding the length of time the applicants were detained: In *Vallon v. Italy* (judgment of June 3, 1985), the detention lasted five years and three months; in *Woukam Moudefo v. France* (judgment of October 11, 1988), it lasted approximately three years; and in *Birou v. France* (judgment of February 27, 1992), it lasted five years and three months.

So, can the mere fact of being subjected to charges during a trial that has exceeded the reasonable time limit, in itself, be considered an infringement of the presumption of innocence?

The European Court, in its judgment in *Neumeister v. Austria* and subsequent cases, has expressed its view on the relationship between detention, arrest, and the reasonable time limit in relation to the presumption of innocence. According to the Court, the reasonable nature of the detention period should be assessed based on the specific circumstances of each case. Since a person is presumed innocent until a conviction is made, the purpose of Article 5.3 of the Convention, which sets a reasonable time limit for detention and arrest, is to prevent the unjustifiable restriction of an accused person's liberty.

Considering the perspective of the accused, their family, their environment, and society as a whole, it can be concluded that the fact of being subjected to a prolonged trial for one or more crimes over many years in itself causes significant harm to personal dignity. To put it figuratively, the "sacrifice" required of an accused person due to the exceeding of the reasonable time limit is far more severe than the "sacrifice" that could normally be expected of a person presumed innocent.

We believe that exceeding the reasonable time limit also serves as an additional punishment beyond the potential sentence. Therefore, it is especially important to ensure that the reasonable time limit does not exceed the anticipated length of the sentence. According to the author Schroeder, if the expected sentence is longer, the detention period can be extended. However, the key point here is that the detention period should not last as long as the expected sentence, nor should it be of the same length [1, p. 30]. It is no coincidence that in the case *Szeloch v. Poland* (judgment of February 22, 2001), the European Court concluded that the expected length of the sentence was insufficient to justify the continuation of detention when assessing whether the detention period was reasonable. However, it is interesting to note that in one of its decisions, the

European Commission of Human Rights concluded that extending the detention period while relating it to the expected sentence violated the presumption of innocence [1, p. 30].

It would be appropriate to touch upon one more issue. The UN Human Rights Committee, after analyzing the Italian judicial system, which has caused numerous complaints to the European Court regarding the reasonable time limit, concluded that the time elapsed from the moment of suspicion until the accused has been convicted and has exhausted all domestic legal remedies, which can last up to six years, violates the right to a trial within a reasonable time. Furthermore, after such a prolonged period, particularly if the case ends with an acquittal, it also undermines the presumption of innocence.

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Philosophical Sciences

The concept of information society as the implementation of a new information paradigm

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Annotation: The article attempts to retrospectively analyze the genesis of the concept of information society through the main concepts and their philosophical meaning. The author reveals the essence of information and communication reality as an interdisciplinary integrative concept. A critical analysis of private scientific methodological approaches is conducted. A number of conclusions are made, including the polyparadigmality of the general methodological approach of the post-non-classical stage of modern science, the fundamental diversity of scientific methods and their classification, the invariance of the main structural units of scientific knowledge.

Keywords: genesis, paradigm, prognostics, methodological schools, post-non-classical, rationality, polyvariance, philosophy of science, polyparadigmality, integration.

“The schools differ from each other not by individual particular shortcomings of the methods used (they were all quite “scientific”), but by what we will call the incommensurability of the ways of seeing the world and the practice of scientific research in this world” [1].

Information technologies have rapidly integrated into the life of humanity at the end of the 20th century. Let us answer the question: what are the technologies of which digital (information technologies) have become a part? In a broad sense, technology is a way for a person to master the material world with the help of socially organized activity, which includes three components: information (scientific principles and justification), material (tools of work) and social (specialists with professional skills). This triad is the essence of the modern understanding of the concept of technology. The concept of information technology appeared with the emergence of the information society, the basis of social dynamics in which are not traditional material, but information resources: knowledge, science, organizational factors, intellectual abilities, initiative, creativity, etc. Unfortunately, this concept is so general and all-encompassing that until now specialists have not come to a clear, formalized formulation. The only thing that is certain is that this technology is developing rapidly, covering all types of social activity: production, management, science, education, financial and banking operations, medicine, everyday life, etc.

Let us turn to the history of information revolutions: as a result of the first, the invention of writing became possible, which gave a giant leap in the mechanisms of knowledge transfer from generation to generation; the second gave humanity the invention of printing, and with it a radical change in industrial society, culture, and the organization of all activities; as a result of the third, electricity was invented with the advent of the telegraph, telephone, and radio, which made the transmission and accumulation of information in any volume operational; and, finally, in the 70s of the 20th century, the invention of microprocessor technology and the emergence of the personal computer took place, which led to the emergence of computer networks and information communications.

It is with the information revolution 4.0 that information communications are rapidly developing. This period is characterized by 3 fundamental innovations:

- the transition from mechanical and electrical means of converting information to electronic;
- miniaturization of all units, devices, instruments, machines;
- creation of software-controlled devices and processes.

Since 2010, the term “Digital Revolution” has become widespread, which is usually understood as the widespread transition from analog to digital technologies in electronics, which began in the 1980s and continues to the present day.

The digital revolution also involves a variety of radical transformations associated with the widespread distribution of the latest information and computer technologies. The result is the construction of an information society (knowledge society). And since then, informatization has come to be understood as the process of creating and large-scale implementation in all spheres of society and in the activities of each person of information and computer technology and technologies used to acquire, store, produce, transform and transmit information (including knowledge). Informatization is a qualitatively new, integral characteristic of society. [2].

The next industrial revolution will introduce the next generation of robots, commonly called cobots (collaborative robots), that already know or can quickly learn what to do together with a human. These robots “know” about the presence of a human, so they can ensure that safety criteria are met and will take into account various work risks. They will notice, understand and sense not only the human, but also the goals and expectations of the human operator. Like a student, cobots will observe and learn how a human performs a task. Once trained, cobots will perform the desired tasks in the same way as human operators. It is expected that a person will experience a sense of satisfaction when working together with cobots.

The fifth information revolution 5.0 is associated with the formation and development of transborder global information and telecommunications networks covering all countries and continents, penetrating every home and affecting both each individual person and huge masses of people. The most striking example of such a phenomenon and the result of the fifth revolution is the Internet. The essence of this revolution, obviously, lies in the integration in a single information space around the world of software and hardware, communications and telecommunications, information reserves or knowledge reserves as a single information telecommunications infrastructure in which legal entities and individuals, government bodies and local governments actively operate.

5.0 refers to robots and intelligent machines working alongside humans, with the added goals of sustainability and resilience. While Industry 4.0 focused on technologies such as the Internet of Things and Big Data, Industry 5.0 aims to bring human, environmental and social aspects back into the equation. Industry 5.0 will prioritize closer collaboration between humans and machines through cyber-physical systems and technologies. Humanity is witnessing technological and economic changes associated with the integration of such innovations as artificial intelligence/AI, blockchain, the Internet of Things, cryptocurrencies, etc. into activities. Optimization of processes with the help of these achievements has significantly affected the importance of humans in performing many tasks in various industries, which has caused considerable concern and protest.

Deakin University scientists: 5.0 involves combining human intelligence and creativity with the capabilities of a “machine” to improve process efficiency. 5.0 involves synergy between humans and autonomous machines. Humanity will work alongside robots without fear, knowing that their robotic colleagues understand them adequately and are able to collaborate with them effectively. This will lead to an extremely efficient, value-added manufacturing process, the flourishing of reliable autonomy, and the reduction of waste and production-related costs.

Expectations for 5.0: A new manufacturing role will emerge: The Chief Robotics Officer (CRO), a person who understands robots and their interactions with people. This specialist will be responsible for making decisions about adding or removing robots from the environment. This specialist will have

experience in robotics, artificial intelligence, human factors modeling and human-machine interaction, and have a deep understanding of how cobots work.

Collaborative robots (cobots) or KUKA are automatic devices for optimizing the work processes of manufacturing enterprises, research educational projects and other areas of activity. A collaborative robot or cobot for short is an industrial robot with built-in functionality that enables joint work in a shared workspace simultaneously with a person within the framework of one production operation. The concept of a collaborative robot is defined by the technical specification ISO/TS 15066:2016, on the basis of which harmonized standards are issued in various countries of their application. The design of the cobot consists of a manipulator and a reprogrammable control device that generates control actions and sets the trajectory of movement. Created for joint work with a person, robots are safe and do not require the use of any protective devices.

And one more historical discourse:

- 1950s A. Turing publishes his work “Computing Machinery and Intelligence”, J. McCarthy introduces the term “artificial intelligence”. McCarthy also develops the popular programming language Lisp, which is used in AI research.
- 1960s The first industrial robot begins working at a General Motors plant. The ELIZA program is developed, capable of talking to a person in English.
- 1970s: The first anthropomorphic robot with the very simple function of seeing, moving and communicating is created in Japan. An early identification system is developed at Stanford University.
- 1980s Mercedes-Benz tests the first self-driving car, incorporating the fundamental principles of modern cars. Jabberwacky is released as an early example of a modern chatbot system.
- 1990s Deep Blue, the chess computer, defeats the reigning world champion. Google's first web index crawls 26 million pages.
- 2000s: Several new robots are developed, such as Honda's ASIMO and MIT's Kismet. The volume of variable digital information is in the hundreds of exabytes and growing rapidly. Google's web index reaches 1 billion pages within two years.
- 2010s: IBM's Watson natural language processing computer defeats two former “Jeopardy!” champions. Worldwide Internet usage tops 4 billion [3].

Artificial intelligence generally defines computer systems that mimic human thinking and abilities, such as learning. Modern AI consists of systems of different categories, each with a corresponding specialization. “Weak” AI, performs a single, often simple, limited function. Example: a digital assistant that can automate a series of steps, and software that analyzes data to provide recommendations. These tools usually require a human to set a task or series of tasks, and for the human to perform an action based on the information provided by the AI. “Strong” AI. As of 2024, this category is considered to be currently non-existent, as it requires a level of human cooperation or service. However, many developers continue to improve the capabilities of their systems.

Theory of mind is the first theoretical stage of AI development. It does not currently exist, scientists say, but it represents the point at which an AI system will be able to discern emotions when deciding how to respond to a user prompt. The system might assume that a person has an urgent tone in their voice or is upset. This capability allows the system to adapt its behavior to different situations because of what is possible today [4].

One of the most shocking (but expected) predictions is this: in the future, an AI system with a theory of mind will be able to reach the stage of self-awareness. At this stage, the system will understand that it has a mind and that it was created by humans. A self-aware AI system will provide human-level consciousness, allowing it to adapt to extremely complex situations. This development will rely on much more advanced technology than we have today.

Euronews Next has selected the five most serious risks associated with artificial intelligence (AI) from more than 700 collected in a new MIT FutureTech database:

1. Deepfake technology could make it easier to distort reality.
2. The emergence of inadequate attachment to AI.
3. AI can deprive people of free will.
4. AI can pursue goals that are contrary to human interests.
5. Artificial intelligence becomes intelligent.

In our opinion, the epistemological context of the digital revolution is as follows: firstly, the desire for a conceptual synthesis of history, sociology and philosophy of technology, the rejection of the construction of global models of the structure and development of technology, an emphasis on the study of specific episodes in the history of technical knowledge, an emphasis on the personal and socio-cultural characteristics of technical activity, and the active borrowing of resources from the social and humanitarian disciplines [5]. Secondly, the philosophical-methodological and cognitive factors of the dynamics of technical knowledge are considered in the system model of technical knowledge in the context of the objective logic of technical progress. The reorientation of the philosophy and methodology of technical knowledge to the study of the situation of the restructuring of technical knowledge and the technologies accompanying this knowledge actualizes a set of new problems of the system direction of the analysis of the information and computer revolution

As a result of globalization, countries are becoming increasingly interdependent, and the problems of each country are instantly reflected on a global scale, and some of them are spreading on the scale of world regions or even the world as a whole. Transformations not only radically and rapidly change the essence of socio-economic interactions, but also break the boundaries of the usual way of life of mankind. The material and virtual worlds have become interdependent. The nature of technological development has changed: the usual sequence of research has been replaced by a spiral-like model in which previously independent stages of research interact with each other. Managing this interaction within the framework of special projects or organizations can significantly accelerate innovative development. the formation of Society 5.0 will provide a common social infrastructure of prosperity based on the improvement of the service platform. The main differences between Society 5.0, which is a human-centric world order, and the modern post-industrial world, which is focused on the formation and implementation of tasks within the framework of a hybrid of hierarchy and market [3]. In 2013, the Japan Science and Technology Agency (JST) introduced the concept of “wisdom computing” aimed at achieving the ability to find better solutions to social and everyday problems: “Wisdom computing consists of certain components focused on the creation and accumulation of wisdom, predictions of this wisdom, and the activation of wisdom. The activation of wisdom is a kind of “brainwashing”, and thus there are risks involved that require ethical policies as well as policies to address potential legal, societal, and social problems. All these policies and components are contained in the same service platform that can help understand the proper ways to distribute the positive effects of wise computing, as well as help create cognitive mediators to eliminate potential confrontations and conflicts among people and even countries to “live wisely” [6]. Business value is shifting from “things” to services. To create newer and greater business value, things must be included in services. It is important to remember that the end users of any development are ultimately people, so it is important to understand what people are going to do and what they want, otherwise the technology is useless.

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Philological Sciences

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Abstract

Translation is the remaking of a literary work from one language to another, an artistic work written on the basis of the original in another language. The purpose of translation is to convey the grammatical forms of the original text that do not correspond to the translated language. One of the main conditions here is that differences in grammatical forms in the original must serve a certain stylistic function. Selecting a grammatical option in translation. No matter which language we take, sometimes the same meaning-content is conveyed through different grammatical options. For example, phrases like “he left the city (қаладан шықты), he left the suburbs (қала маңынан шықты), he came out of the city (қала жақтан шықты)” in the Kazakh language can have only one meaning depending on the context. In the same way, sentences like “It’s better not to overdo it when insulting someone.”, “It’s better not to overdo it when you slander someone”, although they are in different order, but the content is very similar.

Key words: translation, grammar, similarities, translation norms, equivalent

Translation is the transfer of a certain people or text from the original language to the translated language. According to this definition, an exact translation is often impossible. After all, two languages are different not only in terms of their grammar, but also in terms of cultural features and the size of words. And all this affects the translation method and its result [1, 12]. For example, when translating a business letter from English to Kazakh, it is not correct to translate the beginning “Dear Sir” into “Құрметті сэр (Kurmetty Sir)” or “Құрметті мырза (Kurmetty Myrza)”. We translate it as “Құрметті директор (Dear Director)” or “Құрметті басшы (Dear Head)”. Similarly, when translated from Kazakh to English, the phrase “Аса құрметті Браун мырза (Deeply respected Mr. Brown)” would not be correct. Because there is an established tradition of the English language when translating such phrases, that is, it is “Dear Sir” or “Dear Mr. Shroeder” is translated. These examples prove the communicative activity of translation, that is, the translator needs to be aware of the culture of the two languages he is working with. Every translator must be able to work with both oral and written translation. To do this, the translator needs to know the basics and differences between these two types of translation [2, 46]. The most important requirement for interpreting is speed and accuracy. The faster the translator completes the translation, the more fruitful the result will be. To understand what linguistic problems a translator faces during the translation process, it is necessary to identify the main sections of the topic. First, let’s define the word “language.” Language is one of the fundamental concepts of

linguistics. However, today there is almost no absolute, unambiguous definition. But the definition of Karl Marx and Friedrich Engels, "Language is the validity of direct thought", is the most common in domestic linguistics. Also, according to Aleksandra Levitsko, language is a means of communication that shapes, conveys and informs people's thoughts. Also, a set of some units and rules of order of language use. Each of these scientists has different definitions that differ from each other. Common meaning - language emphasizes the relationship between people.

Sometimes people express their thoughts in different languages. Therefore, the work of translation is an important auxiliary tool that ensures the fulfillment of its communicative function. Translation is the remaking of a literary work from one language to another, an artistic work based on the original in another language [3, 63-67].

Translation plays a major role in the exchange of ideas between different peoples and serves as a transmitter of world culture. The term "translation" has many meanings. On the one hand, it performs the function of translating the content of the text from one language to another, and on the other hand, the results of this function. In his work, the translator satisfies not his personal need, but the social need. At the same time, it is guided not by personal reasons, but by societal reasons. A. F. Shiryayev "word opinion, a certain social order of meaning production according to" is the goal of the translation service. The product of the translation service is created according to the requirements of a one-sided, meaningful and social nature. It satisfies the need for constant communication between people who cannot speak the same language [4, 36].

In order for the translator to perform his functions correctly and consciously, it is necessary to know the purpose of his activity and the ways to achieve this purpose. This understanding is based on a deep familiarity with the field and language combinations used by the translator, general and special aspects of translation theory. It aims to understand the interrelationship of these languages, the ways and methods of translation, the choice of the necessary correspondence, the use of the most effective method of translation according to the conditions of the specific context, and the consideration of pragmatic factors that affect the course and result of the translation process [4, 98].

The general theory of translation provides the concept of translation norms, which appear as an assessment of the quality of translation. Linguistics of translation has theoretical and normative sections. The translator must first determine the purpose of his actions and look for ways to achieve this goal. For this purpose, the translator must be familiar with the theory of translation, including the field in which the translator works. Therefore, one of the most important tasks of the translator is to use a suitable method of translation that meets the conditions of the actual text and to find a list of pragmatic factors that influence the result of the translation process.

Translation quality is given by the level of semantic closeness of the translation to the original. Therefore, original texts and translations are given with genre-stylistic dependence and pragmatic factors influencing the choice of the translation version. These aspects determine the translator's strategy. The translation norm is formed as a result of five different normative requirements.

- normal amount of translation equivalent
- genre (stylistic) standards of translation
- norms of the translation language
- pragmatic norms of translation
- conventional norms of translation [5, 121-123]

Norms of translation equivalents are not variable parameters. Genre stylistic norms can be defined as a requirement for the translation to conform to the stylistic features of the text type. These standards require an alternative level. Translated texts are linguistic works in the translated language. For that, you need to know the norms. It can be defined as a requirement that ensures pragmatic norms and values of translation. The pragmatic terms of the translation act lead to a

complete refusal to comply with translation standards. In general, the original content is replaced by explanations and notes. Conventional norms of translation can be considered in the current situation as a requirement of closeness of the translation to the original. His skill is to replace the original as an act and perform various tasks during the implementation of the translation. The following terms are used in the definitions of the results of the translation process.

Adequate translation includes alternative translation, exact translation and free translation. Adequate translation is a good translation that evaluates the quality of the translation. It provides pragmatic tasks of the translation act.

An alternative translation is a representation of the content of a combination of levels of an alternative of another language original.

Verbatim translation - only the material logical part of the original text is expressed. It is quite possible that genre stylistic norms are left behind. In a literal translation, formal elements of the original are given, as a result of which norms are violated [6, 75].

During free translation, the original content is removed.

An interpreter must have oratorical skills. There is no such strict order in written translation. Because in written translation, every translator can think, read the text several times and determine the method of translation, because written texts have different styles. In addition, the subject of written translation practice considers grammatical and lexical aspects of translation.

In conclusion, translation is the most important tool of modern linguistics in studying the linguistic aspect of linguistic activity, and it is a means of communication between two people who speak different languages.

One of the most important tasks of the translator is to convey the content of the original as fully as possible, and it is very important that the contents of the original and the translation are identical.

Two types of equivalence can be distinguished;

1. Potentially successful equivalent (or strong equivalent)
2. Translation equivalent.

Potentially successful equivalence means maximum commonality of the content of texts in two dissimilar languages. By translation equivalence, we mean the closeness of meaning between the original and the translated text achieved by the translator during the translation process [7, 59].

The limit of translation equivalence is the ability to preserve the linguistic level of the original content of the translation as much as possible. But each individual translation achieves semantic closeness to the original at different levels and in different ways.

The difference in the system of the source language and the translated language and the text creation features of each of these languages limit the ability of the translation to fully preserve the content of the original at different levels. Therefore, translation equivalence is determined by different levels (types) of different elements of content meaning in the original. At any level of equivalence, translation can provide interlingual communication [8, 135-136].

Any text performs some kind of communication function: it informs some facts, expresses an emotion (mood), and establishes a connection between communicators.

Equivalence of type I

1 type of translation equivalence means the translation of only the part of the original content that constitutes the goal of communication (related to the goal). For example:

1. There may be chemistry between us which doesn't mix.
 - Екеүміздің мінезіміз үйлеспейтін шығар, бәлкім.
2. That's a pretty thing to say.
 - Ұялсаң етті.
3. Those evening bells, those evening bells,

How many a tale their music tells.

- Кешкі қоңыраулар, сол кешкі қоңыраулар
Сыңғырлары қанша ертегілер айтар

In the first example, the purpose of communication is to convey a variable meaning that forms the main part of the content. Here, the strong effect (or result) of the relationship succeeds in the account of artistic representation, which is similar to the interaction of human relationships with chemical elements. Such an indirect representation of the given message is not suitable in the translated language, so the translator has replaced it with a more figurative thought used in the translated language, but the communicative effect is preserved.

In the second example, the purpose of communication, that is, the purpose of thought, is to express the speaker's feelings to the person he is talking to. Here, the translator used a similar phrase in Russian to convey this purpose, but in the translation, its linguistic units do not correspond to those in the original.

In the third example, the common (general) function of the original, which the translator tried to preserve by all means, the poetic (poetic) effect based on sounds, rhyme, volume. In order to preserve it, the translator replaced the original message by searching for a poetic effect in the translated language.

As we can see from this example, the purpose of communication is a common part of the content of the thought being expressed.

For the relationship between the original and the translation, this type is typical:

- Incomparability of syntactic organization and lexical structure;
- The impossibility of connecting the original and the translation's vocabulary and structure based on semantic rewording or syntactic substitution;
- What we want to say is between the original and translated messages, on both sides lack of a clear logical connection, which means that it is a single thought;
- The content of the original and the translation is the least equivalent compared to all other translations that are considered equivalent [9, 45-48].

Equivalence of type II

The common part of the original and translation contents not only conveys the same communicative purpose, but also reflects the same linguistic contexts.

A situation is a combination of objects (a set) and objects to be described. Any text consists of messages about situations, whether real or imagined.

Compared to type 1, type 2 of equivalent, i.e. the type in which only the purpose of communication is preserved and translated, although it provides the content of the original in more detail, it cannot provide all the semantic elements of the original.

The difference between the analogy of a situation and the way it is described reflects a special relationship between language and thought and the actual thing being described. Of course, it is known that the situation itself and its signs are not included in the content of thought, only their mental images, that are, given in the form of certain information or message [10, 225].

Different ways of creating a message of the indicated type are combined with the similarity of the described situation. The commonality of their content is completely based on the extra-linguistic experience of the communicants. In order to see a person in a certain place from real experience, he must come there, be there. It can be concluded that these thoughts "he will not be there at all", "we rarely see him there" mean "one thought" [11, 49].

Type II equivalence is characterized by similarity of the same situation in the original and the translation, even though they are described in different ways. The basis of the semantic similarity of texts in different languages is the general nature of the relationship between language and extra-linguistic reality.

The 2nd type of equivalence is a translation that is not based on the closeness of the meaning of the translation to the original, the commonality of the meanings of the used linguistic tools.

For example:

1. She replied to the phone. – Ол телефонды алды.
2. You are not fit to be in a boat. – Саған қайыққа отыруға болмайды.
3. You see one bear, you have seen them all. – Барлық аю бір-біріне ұқсайды.

In these balanced examples, the syntactic structure of the original with many words in the different language thoughts does not find a direct correspondence in the translated text. At the same time, this group has more content commonality between the original and the translation than in type 1 equivalence. Let's compare these translations:

1. That's a pretty thing to say. – Ұялсаң етті.
2. She replied to the phone. – Ол телефонды алды.

In the first example, the story shows a completely different phenomenon with no real connection between the two. The only commonality between the original and the translation is that in both cases, the emotional (mood) relationship of the speaker to the remark made by the speaker is the same.

In the second example, the non-comparable linguistic means of the original and the translation describe the same thing, that is, by picking up the telephone (by picking up the telephone receiver), you can talk on the telephone. Although the story is presented here in different ways, it means the same thing.

Such thoughts are also called “conveying one thought with other words” in the spoken language.

For the relationship between the original and the translation, this type is typical:

- Incomparability of lexical composition and syntactic organization;
- Impossibility of connecting vocabulary and structure from the point of view of semantically changing the original and the translation or syntactic replacement;
- Maintaining the goal of translation communication, that is, maintaining the main function of thought, is a condition of equivalence;
- In translation, to maintain one situation that proves the logical connection between the messages of different languages, i.e. “conveying the same message” in both cases [12, 72-74].

The 3rd type of equivalence

As can be seen from the following examples:

1. Cleaning makes my sister bad tempered. –Үйді тазалау сіңлімнің көңіл күйін бұзады.
2. The city of Paris saw a cold winter last year. –Өткен жылы Париж қаласында суық болды.
3. That won't be good for you. –Соңы жақсылыққа апармайды.

When comparing the original and the translation of this type, the following features can be seen:

- 1) lack of parallelism of lexical composition and syntactic constructions;
- 2) The impossibility of syntactic substitution in connecting the original and translation structures;
- 3) preservation of the similarity of the situation and the goal of communication in the translation as in the original;
- 4) In the translation, preservation of the general concept, that is, concepts describing the situation in the original. In this case, the message in the original can be changed semantically differently in the translation.

In such cases, the relationship between the original and translation contents is grouped with formal-logical relations between concepts, meaning is the same, subordination is opposite, worship. The presence of such connections serves as additional indicators of the commonality of

polysemy in this type of original and translation. The commonality of the basic concepts means keeping the structures of the messages in which the same signs are chosen to describe the situation in the original and the translation. If in the previous types of equivalence the information about why the content of the original is reported and what is reported in the translation is kept, then in the 3rd type what is reported in the original is given [13, 57].

Within a single way of describing a situation, there can be different types of semantic separation. Basically, the choice of the semantic category in which the situation is stored does not completely determine the organization of the transmitted message. The semantic variability of the organization of thought delivery creates synonymous structures associated with considerable commonality of meanings. In this regard, in the 3rd type translation, there is complete matching of message structures, as well as the use of synonymous structures in the translation.

Any topic has an initial form in a sentence, both in Kazakh and English. But if we talk about theme and rhyme, then it is a known fact that not in all cases they may coincide in grammatical subject and predicate. This is most often found in the Kazakh language. Any chance of translating the text verbatim or part of it either leads to difficulties perception of this material, or to stylistic distortions.

In the process of translating words, it is usually necessary to make a choice between a number of different options. In this case, it is worth highlighting the three most important cases: 1) in the language in which translation occurs, there is no vocabulary similarity to any word of the original; 2) similarity appears defective, that is, it partly reflects the meaning of the word being translated; 3) different the meanings of the translated word, which has many meanings, are comparable to different words in language of translation, which to some extent defines them most accurately.

The main role in resolving issues of translation grammar is played by the conditions for its expression integral content together with parts of the form, the semantic function of which is formulated in contact with the content and directs the selection of funds and the requirements of the DP.

The difference in the grammar system of two or more languages and the resulting inadmissibility concretely represent the meaning of any grammatical type, is compensated by other means of words and grammar.

Inadmissibility of solving the problem of transmission possibilities in a certain number of examples from the largest context means the need to keep in mind the means of language in return divided or randomly selected parts that often turn out to be untranslatable.

People have been engaged in translation since very early times, and even then they were well aware of the need to communicate with and understand speakers of other languages. However, it is evident that the language of the first community was not the same. In such a situation, it is known that there were people who understood quickly, who could think quickly, who had good memory skills, who could understand the speaker and translate what he said, in order to establish relations between different groups of people.

Thus, it can be assumed that the original simple form of translation appeared before the appearance of writing. If so, there is reason to consider translation as one of the oldest professions.

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FAMILY AND WOMAN CONCEPT IN AZERBAIJAN AND ENGLISH LINGUISTICS

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Abstract

A more detailed study of the concepts of "family" and "woman" in Azerbaijani and English linguistic culture allows for a deeper description of the family values and gender roles formed by both societies through different development paths. The place and role of the family and women in both Azerbaijani and British societies have undergone certain changes over time. The concept of "family" and "woman" can really be understood as a historically formed and verbally expressed conceptual-linguistic unity. This wholeness is related to the most important areas of life, it is comprehensively thought through the means of language, it is socially and subjectively evaluated, and it actively and uniquely manifests itself in different directions.

These concepts have all the basic features inherent in the base concepts. Thus, the concepts of "family" and "woman" are expressed by ambiguous words, and in each of these meanings there is definitely a single concept of "family", "woman". That concept, in turn, is associated with the deictic system of language; it is included in the circle of organizing events; it operates in three directions; it creates smaller-scale concepts and individual-author extensions, that is, it acts as a basis for a wide range of metaphors and schemes the roots go back to the depths of the history of each nation. The concept of family is socially valued and socially characterized; at the same time, this concept has the ability to create its "antagonist".

Key words: concept, cognitiv, linguistic, social, metaforic, nation

AZƏRBAYCAN VƏ İNGİLİS LİNGVOKULTUROLOGİYASINDA "AİLƏ" VƏ "QADIN" KONSEPTİ

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Azərbaycan və ingilis lingvokulturologiyasında "ailə" və "qadın" konseptlərinin daha ətraflı tədqiqi, hər iki cəmiyyətin fərqli inkişaf yolu keçərək formalaşdırdığı ailə dəyərləri və gender rollarını daha dərin təsvir etməyə imkan verir. Həm Azərbaycan, həm də İngiltərə cəmiyyətlərində ailənin və qadının yeri və rolu zamanla müəyyən dəyişikliyə məruz qalmışdır. "Ailə" və "qadın" konsepti, həqiqətən, tarixən formalaşmış və şifahi şəkildə ifadə edilmiş məfhum-dil bütövlüyü kimi anlaşıla bilər. Bu bütövlük həyatın ən başlıca sahələri ilə bağlıdır, o, dil vasitələri ilə hərtərəfli düşünülür, sosial cəhətdən və subyektiv şəkildə qiymətləndirilir və fərqli istiqamətlərdə fəal və özünəməxsus şəkildə özünü göstərir.

Bu konseptlər baza konseptlərinə xas olan bütün əsas xüsusiyyətlərə malikdir. Belə ki, "ailə" və "qadın" konsepti çoxmənalı sözlərlə ifadə olunur və bu mənaların hər birində vahid "ailə", "qadın" məfhumu mütləq mövcuddur. Həmin məfhum da, öz növbəsində, dilin deyktik sistemi ilə əlaqələndirilir; insanın ən yaxın əhatəsini təşkil edən hadisələr dairəsinə daxil edilir; fəal, yaradıcı kateqoriya kimi üç istiqamətdə fəaliyyət göstərir; daha kiçik həcmli konseptlər, okkazonal və fərdi-müəllif genişləndirilmələri yaradır, yəni "ailə" və ailə üzvləri artıq metafor və sxemlərin geniş dairəsi üçün təməl kimi çıxış edir; onun kökləri hər bir xalqın tarixinin dərinliklərinə gedib

çıxır. Ailə məfhumu sosial cəhətdən qiymətləndirilir və sosial cəhətdən xarakterizə edilir; eyni zamanda, bu konsept özünün “antagonistini” yaratmaq bacarığına malikdir.

Ailə və qadın anlayışları Azərbaycan və İngiltərə kimi fərqli mədəniyyətlərdə mühüm sosial və mədəni əhəmiyyət daşıyır. Bu konseptlər hər bir cəmiyyətin formalaşdırdığı sosial dəyərlər, tarixi inkişaf və mədəni inanclarla dərin şəkildə bağlıdır. Azərbaycan cəmiyyətində ailə, milli kimlik və ənənələrin qoruyucusu olaraq qəbul edilir, qadın isə ailənin mənəvi dayağı və qayğıkeş ana kimi xüsusi yer tutur. İngilis cəmiyyətində isə ailə və qadının yeri gender bərabərliyi və fərdi azadlıq prinsiplərinə əsaslanır. Bu fərqlər hər iki ölkənin tarixən keçdiyi müxtəlif inkişaf yolları, hüquqi-sosial strukturları və mədəniyyətlərində ailə və qadına verilən dəyərin müxtəlifliyindən qaynaqlanır. Müasir humanitar elmdə “konsept” sözünü ilk dəfə rus mütəfəkkiri S.A.Askoldov (1870-1945) tətbiq etmişdir. Orta əsrlər dövrünün nominalistləri kimi, S.A.Askoldov da “fərdi təsəvvürü bütün soy həcmnin əvəzi” hesab edir. Lakin qədim alimlərdən fərqli olaraq, S.A.Askoldov konsepti fərdi təsəvvürlə eyniləşdirmir və onda “ümumilik, oxşarlıq” görür. Onun fikrincə, “konsept - düşüncənin törəməsidir, o da düşüncə prosesində eyni cərgədən olan çoxsaylı əşyaları əvəz edir” [Askoldov, 1928: s.35].

Azərbaycan və ingilis linqvokulturologiyasında “ailə” və “qadın” konseptləri hər iki cəmiyyətin tarixi, dini və sosial dəyərləri çərçivəsində oxşar və fərqli məzmunlar daşıyır. Azərbaycan cəmiyyətində ailə konsepti ənənəvi olaraq mədəniyyətin və milli kimliyin əsas dayağı kimi qəbul edilir. Azərbaycan Respublikası Konstitusiyasının 17-ci maddəsinə əsasən, ailə dövlətin xüsusi himayəsindədir və valideynlərin uşaqlara qayğı göstərməsi bir borc olaraq vurğulanır. Bu, ailə strukturunda övladların tərbiyəsi və onlara verilən dəyərin vacibliyini göstərir. Həmçinin qadınlar ailənin qorunması və gələcək nəsillərin tərbiyəsində əsas rolunu oynayan şəxslər kimi dəyərləndirilir. Qadın obrazı adətən “qayğıkeş ana”, “məhəbbətli həyat yoldaşı” kimi müəyyənləşir, bu isə qadınların ailə mərkəzli dəyərlərlə bağlanmasına səbəb olur. İngilis mədəniyyətində isə ailə konsepsiyası fərdiyyətçiliyə meyillidir və gender bərabərliyinə daha çox vurğu edilir. Bu cəmiyyətdə qadınlar karyera və şəxsi inkişafda daha müstəqil olmağa təşviq edilir. İngilis ailə modeli, sosial baxımdan cins bərabərliyi və qadınların fərdi hüquqlarının önə çəkildiyi bir çərçivədədir. Bu cəmiyyətdə qadınların ailə ilə yanaşı şəxsi və ictimai həyatda da müstəqil mövqelərə sahib olmasına geniş imkan yaradılır. Bu iki yanaşma, cəmiyyətlərin qadın və ailə ilə bağlı fərqli dəyərlərə malik olmasını göstərir. Belə ki, Azərbaycan cəmiyyətində ailə quruluşu və qadın rolu daha çox ənənələrə dayansa da, İngiltərədə qadınların sosial həyatda və ailə daxilində daha müstəqil olması dəstəklənir. Son illər aparılan yeni tədqiqatlarda konseptin ən fərqli təsnifatları təqdim olunur. Həmin təsnifatların birinin müəllifi V.İ.Karasikdir. O yazır ki, məzmun baxımından konseptlərin hamısını parametrik və qeyri-parametrik mental törəmə (forma) kimi bir-birinə qarşı qoymaq mümkündür. Parametrik konseptlər təsnifat kateqoriyaları kimi çıxış edir və “məkan”, “zaman”, “kəmiyyət”, “keyfiyyət” kimi kateqoriyaların müqayisəsi üçün tətbiq edilir. İkinci, qeyri-parametrik mental formalara konkret məzmun daşıyan konseptlər aid edilir [Karasik, 2001: s.77].

Azərbaycan və ingilis mədəniyyətlərində “ailə” və “qadın” konseptləri, mədəni-tarixi dəyərlərin, ictimai düşüncə və qanunvericiliyin təsiri altında formalaşaraq özünəməxsus xüsusiyyətlər qazanır. Tədqiqat işində biz “ailə” linqvomədəni konseptini nəzərdən keçiririk. D.S.Lixaçova görə, konseptlərin mənası dedikdə, “ünsiyyəti asanlaşdıran, insanla və onun milli mənsubiyyət, mədəni, ixtisas, yaş və digər təcrübələri ilə sıx əlaqədə olan bəzi mənə yerdəyişmələri, mətnə gizlədilmiş “əvəzləyicilər” və mənənin bəzi “imkanları” başa düşülür” (Lixaçov, 1993: s.5). Konseptlər müxtəlifdir. Bunlardan biri də ailə konseptidir. Ailə cəmiyyətin bir üzvü kimi həm ailə üzvləri arasında, həm də dövlət tərəfindən necə dərk edilir? Ailənin mentallığı insan beynində necə təsəvvür olunur? Bu konsept necə kateqoriyallaşır və dildə hansı vasitələrlə təzahür edir? Kateqoriyallaşdırmaq, yəni predmeti dərk və ya təsvir etmək, yəni salmaq deməkdir. “Kateqoriyalaşma kateqoriyaların mental təmsilçiliyidir. Bu təmsilçiliklə bağlı çoxsaylı nəzəriyyələr

var. Ən sadəsi odur ki, kateqoriya bizim koqnitiv sistemdə öz üzvləri olan konseptdir, bu üzvün mental təsviridir” (Veysəlli,2015: s.27). Bu mənada ailənin üzvləri də konseptdir. Ailə kateqoriyası beynimizdə başqa canlılarla (konsepti ilə) təmsil oluna bilmir. Biz bu obyektə rast gəlməklə beynimizdə anlama və kontekstdə uyğun təsəvvürün mental təsviri formalaşır: forması, həcmi, cəmiyyətdə rolu və funksiyası. Beləliklə,kateqoriyallaşma və konseptuallaşma dildə də ifadə olunur.

Ailə konsepti, yəni ailəni başa düşmək, dərk etmək, sadə şəkildə onu yola vermək hazırda cəmiyyəti düşündürən ən ümdə problemlərdəndir.

Məlumdur ki, konsept linqvokulturologiyanın obyektidir. Linqvokulturologiyanın əsas müddəalarını konsept yaradır. Hər bir konsept linqvokulturoloji modelləri əmələ gətirir. “Ailə” konseptinin də universal, mədəni, subkultur və s. layları özünü göstərir. “Ailə” sözünün mədəni-koqnitiv potensialı, bu konseptin inkişafı onun prototip mənalarını üzə çıxarır.

Ailə konseptinin linqvokulturoloji xarakteristikası dil şəxsiyyəti, kommunikativ fəaliyyət sahələri ilə bağlıdır. İnsanların ailə haqqında təsəvvürlərini, psixologiyasını dərinədən öyrənmək dil və mədəniyyətlərin xarakterik əlamətlərindəndir.“Ailə” anlayışı aşağıdakı kimi açılır: “AİLƏ ər-arvad, uşaqlar və digər yaxın qohumlardan ibarət olub birlikdə yaşayan insanlar qrupudur” (Bakı Şərq Qərb,2006:s.20). Nümunədəki tərif “Kiçik akademik lüğət”ndən verilir və ailə sözünün əsas nominativ mənasını ifadə edir. Bütün qalan mənalar bu mənadan törəyib. Verilən nümunədə “valideynlər”, “uşaqlar” və “birlikdə yaşayış” kimi toplu mənalı isimləri fərqləndirmək olar. “Yaxın qohumlara” gəldikdə isə bu əlamət son dərəcə amorf xarakter daşıyır və kiminsə obrazına konkret olaraq diqqət cəlb etmək imkanı vermir. Beləcə, bu “yaxın qohumlar” adı altında valideynlərin valideynləri, yəni baba və nənələrin nəzərdə tutulduğunu düşünmək mümkündür, lakin bu valideynlərin bacı və qardaşları da ola bilər. Digər tərəfdən, birlikdə yaşayan insanların statusu qabardılmaz. D.N.Uşakovun lüğət məqaləsi bir qədər başqa şəkildə qurulub ki, bu da intensionalın xarakterində əks olunmur:

“1. Valideynlər, uşaqlar, nəvələr və yaxın qohumlardan ibarət olub birlikdə yaşayan insanlar qrupu//məc. Ümumi maraqlar uğrunda sıx birləşmiş təşkilat, insanlar qrupu. 2. Bir erkək və bir neçə dişidən ibarət ali canlılar qrupu (zool)” Maraqlıdır ki, D.N.Uşakovda ailə sözü heyvanlarla bağlı işləndikdə “balalar” sözündən istifadə edilməsi əlaməti qeydə alınmır. Bu da tərifin qeyri-dəqiqliyinə səbəb olur. Ancaq təqdim edilən məqalələrin təhlili “ailə” anlayışının xeyli əlamətlərini təyin etmək imkanı verir (Uşakov,2001:s.45). Ehtimal ki, “yaxın qohumlar” yox, “valideynlər”, “uşaqlar” və “birgə yaşayış” vacib əlamətdir.

İngilis dilinin Oksford lüğətində family sözünün bir neçə mənası verilsə də, onların hamısı əsas nominativ mənə ilə bağlıdır, yəni birlikdə yaşayan qohumlardan söhbət gedir. Məsələn, birinci mənə “a group consisting of one or two parents and their children” (bir və ya iki valideyn və onların uşaqlarından ibarət qrup) (Oxford university press, 2000: s.45) kimi müəyyən edilir.

İngilis mədəniyyətində isə ailə konsepsiyası fərdi hüquq və bərabərlik prinsiplərinə əsaslanır. Qadınların iqtisadi, sosial və ictimai həyatda özünü təsdiq etməsi və daha çox müstəqil olması vurğulanır. Burada qadının rolu yalnız ailə çərçivəsi ilə məhdudlaşmır; qadın eyni zamanda karyera qurucusu, ictimai sahədə fəal bir şəxs kimi tanınır. Bu mədəniyyətdə istifadə olunan ifadələrdə, məsələn, “working mother” (işləyən ana), “independent woman” (müstəqil qadın) kimi ifadələr qadının sosial və iqtisadi müstəqilliyini vurğulayır. İngilis linqvokulturologiyasında ailə quruluşunda qarşılıqlı hörmət və gender bərabərliyi əsas qəbul edilir, burada ailənin tərkibində hər bir fərd həm də fərdi inkişafına yönəlib. Cəmiyyətdə qadınların yalnız ailə daxilində deyil, həm də ailədən kənarda özünü inkişaf etdirməsi, ictimai işlərdə fəal iştirak etməsi təbii qarşılanır. Beləliklə, Azərbaycan mədəniyyətində ailə və qadın ənənəvi dəyərlər üzərində formalaşaraq bir-birinə bağlılıq və himayə məfhumu üzərində dayansa da, ingilis mədəniyyətində qadınların daha çox fərdi müstəqilliyinə və bərabər hüquqlara malik olması vurğulanır. Bu, hər iki mədəniyyətin qadın və ailəyə fərqli yanaşmasını və bu mövzuların linqvokulturologiyada əksini tapma yollarını nümayiş

etdirir.

Azərbaycan mədəniyyətində ailə çoxəsrlik tarixi və milli dəyərlərin qoruyucusu hesab olunur və əsasən patriarxal sistemə əsaslanır. Azərbaycan dilində işlənən “ailə ocağı”, “ocaq başçısı” kimi ifadələr ailənin ata fiqurunun nüfuzunu göstərir. Ancaq ana fiquru, yəni qadın, evin mənəvi dayağı olaraq qəbul edilir və cəmiyyət içində ana obrazı müqəddəs bir mənə daşıyır. Bu məfhum Azərbaycan ədəbiyyatında və xalq yaradıcılığında da öz əksini tapmışdır, məsələn, ananın qoruyucu, ailəni bir yerdə saxlayan simvol kimi təqdim edildiyi folklor nümunələri və dastanlar kifayət qədərdir.

Konstitusiya da ailəni dövlətin mühüm müdafiə obyektlərindən biri kimi nəzərdə tutur. Bununla yanaşı, Azərbaycan qadınlarının ailə daxili məsuliyyətlərinə əlavə olaraq, ictimai və sosial həyatda daha fəal olmasına istiqamətlənən qanunlar da mövcuddur. Beləliklə, qadın cəmiyyətdə həm ailədəki ənənəvi rolu ilə, həm də ictimai həyatda fəal mövqeyi ilə seçilir. İngilis mədəniyyətində isə ailə və qadının rolu bərabərhüquqlu münasibətlər üzərində qurulmuşdur. Qadınların təhsil, karyera və ictimai həyatda müstəqil olmalarına dair dəstək verən institutlar və hüquqi sistem geniş inkişaf etmişdir. İngilis cəmiyyətində qadın və kişi eyni hüquq və məsuliyyətlərə malik fərdlər kimi qəbul olunur, bu da ailə daxilində uşaqların tərbiyə və qayğı işlərinin paylaşılmasına səbəb olur. İngilis dilində “equal partnership” (bərabərhüquqlu tərəfdaşlıq), “shared responsibility” (paylaşılmış məsuliyyət) kimi ifadələr ailənin strukturu və hər iki tərəfin eyni səviyyədə ailə işlərinə qatılması məfhumunu əks etdirir. Qadınların təhsilli və müstəqil olması burada “empowered woman” (güc qazanmış qadın) kimi ifadələrlə simvolizə olunur, bu da qadınların ailə daxilində sərbəst qərarlar verə bilməsini təşviq edir. Həm Azərbaycan, həm də İngilis cəmiyyətlərində müasir dövrün dəyişən sosial, iqtisadi və texnoloji şərtləri ailə və qadının cəmiyyətdəki rolunu da yenidən formalaşdırır. Azərbaycan mədəniyyətində ənənəvi qadın obrazı qorunsa da, qadınların təhsil alması və işləməsi geniş yayılmaqdadır, xüsusən şəhər yerlərində qadınlar ictimai sahələrdə və karyeralarında özlərini təsdiq edirlər. Bununla yanaşı, İngilis cəmiyyətində də ailə bağlılığı və ənənəvi dəyərlər əhəmiyyətli sayılır. İngiltərədə də ailə daxilində harmoniyanın qorunması və övladların ailə dəyərlərinə sadıq böyüməsi üçün səylər göstərilir.

Nəticə

Nəticə olaraq, hər iki cəmiyyət ailə və qadın konseptlərini fərqli çərçivədə qursa da, ümumi məqsəd ailənin qorunması və qadının həm ailədə, həm də cəmiyyətdə mühüm rol oynamasıdır. Hər iki yanaşma qadının dəyərini tanıyır və ona cəmiyyətdə layiqli mövqe verilməsinə çalışır. Bu, hər iki mədəniyyətdə ailə institutunun yenidən düşünülməsi və qadının rolunun genişlənməsi üçün əsaslı platforma yaradır. Bu mövzuya dair təhlillər göstərir ki, Azərbaycan cəmiyyətində qadın daha çox ailə çərçivəsindəki ənənəvi rolu ilə önə çıxırsa, İngiltərədə qadının ictimai və şəxsi inkişafına xüsusi diqqət yetirilir. Beləliklə, “ailə” və “qadın” konseptləri hər iki mədəniyyətin özünəməxsus sosial strukturlarını və dünya görüşünü əks etdirən mühüm göstəricilərdir. Bu fərqli yanaşmaların müqayisəsi mədəniyyətlərarası fərqləri dərk etməyə və hər iki mədəniyyətdə ailə və qadının yerini daha dərinlən anlamağa şərait yaradır.

“Ailə” və “qadın” mövzuları həm Azərbaycan, həm də ingilis ədəbiyyatında çox geniş işıqlandırılmış və müxtəlif dövrlərdə fərqli ədəbi cərəyanlarla təqdim olunmuşdur. Bu mövzular hər iki ədəbiyyatda insan münasibətlərini, cəmiyyətin dəyərlərini və fərdlərin həyatındakı mühüm anları əks etdirir. Azərbaycan ədəbiyyatında ailə və qadın obrazları çox vaxt ənənəvi və milli dəyərlərə bağlı şəkildə təsvir olunur. Klasik əsərlərdə qadın, əsasən, ana və həyat yoldaşı kimi, ailə daxilində birləşdirici, qayğıkeş bir sima olaraq önə çıxır. “Kitabi-Dədə Qorqud” dastanında ana obrazı ailə və yurd sevgisini təcəssüm etdirir, qadın burada ailənin müqəddəs bir üzvü, eyni zamanda, yurdun qoruyucusu və dayağ nöqtəsidir.

Çağdaş Azərbaycan ədəbiyyatında isə qadın obrazları daha çox fərdi hisslərə və sosial problemlərə toxunan əsərlərdə görünür. Anarın “Beş mərtəbəli evin altıncı mərtəbəsi” əsərində qadın obrazı ailə və ictimai münasibətlərdə üzləşdiyi çətinlikləri əks etdirir. Əsərlərdə qadın, həm

ailə daxilində, həm də sosial sahədə üzərinə düşən ağır məsuliyyətlər, emosional çarpışmalarla təqdim olunur. Bu, Azərbaycan ədəbiyyatında ailə və qadın rollarının həm milli ənənələrə, həm də dəyişən sosial mühitə uyğun necə inkişaf etdiyini göstərir.

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THE ROLE OF ARTIFICIAL INTELLIGENCE IN FOREIGN LANGUAGE LEARNING: EXPLORING CHATGPT'S POTENTIAL FOR ENHANCING SPEAKING AND LISTENING SKILLS

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ABSTRACT

This study explores the transformative role of artificial intelligence (AI), particularly focusing on ChatGPT, in enhancing speaking and listening skills in foreign language learning. As AI technologies become integral to education, understanding their impact on language acquisition is crucial. This research employs a mixed-method approach, involving surveys and interviews with students and educators to gather insights on their experiences with ChatGPT. The findings reveal that ChatGPT facilitates personalized learning by providing immediate feedback, engaging conversational practice, and offering access to a vast array of language resources. However, challenges such as reliance on AI and the necessity of balancing technology with human interaction are identified. This paper discusses the implications of these findings for language educators and suggests strategies for effectively integrating AI tools into language teaching methodologies. The study concludes that while ChatGPT presents significant opportunities for language learning, careful consideration of its limitations is essential for maximizing its benefits in educational settings. This research contributes to the ongoing discourse on the intersection of AI and education, particularly in the realm of language acquisition.

KEYWORDS: Artificial Intelligence, Language Learning, ChatGPT, Speaking Skills, Listening Skills

INTRODUCTION

Artificial intelligence (AI) is transforming numerous industries, with its use in education attracting significant focus. AI tools enable customized learning experiences, simplify administrative processes, and offer students instant feedback. These advancements are reshaping traditional educational paradigms, emphasizing the need for innovative teaching strategies. AI systems can analyze vast amounts of data, offering insights that enhance both teaching effectiveness and student engagement (Baker & Inventado, 2014). In the context of language learning, the integration of AI technologies presents unique opportunities and challenges. Language acquisition is inherently complex, requiring not only the understanding of grammatical structures but also the ability to engage in meaningful communication. As educators seek to address the diverse needs of learners, AI tools, particularly conversational agents like ChatGPT, are emerging as valuable resources for enhancing language skills (Gonzalez et al., 2023).

ChatGPT, developed by OpenAI, is a prominent example of a conversational AI model. Utilizing advanced natural language processing techniques, it generates coherent responses to user inputs, making it an effective tool for simulating conversations (Vaswani et al., 2017). Unlike traditional language learning applications, ChatGPT adapts to individual users' needs, offering personalized support in real-time. Its ability to provide instant feedback on language use makes it particularly beneficial for language learners who often lack opportunities for practice outside of the classroom. The versatility of ChatGPT allows it to serve various roles in language learning, from vocabulary enhancement to real-time conversational practice. Research indicates that interactions with AI can lead to improved language proficiency, especially in speaking and listening skills (Almarzooq et al., 2023). By engaging in dialogues with ChatGPT, learners can practice pronunciation, develop fluency, and gain confidence in their speaking abilities.

The use of AI in language education is becoming increasingly prevalent. Many educational institutions are beginning to incorporate AI tools into their curricula, recognizing the potential for these technologies to facilitate language acquisition. Studies have shown that AI-assisted learning can enhance student motivation and engagement, leading to improved language outcomes (Cheng et al., 2021). For instance, the ability to receive instant corrections and feedback from an AI tool helps learners identify their weaknesses and address them promptly. Furthermore, AI tools provide learners with access to diverse language inputs, such as different accents and dialects. This exposure is crucial for developing listening skills, as students are more likely to encounter a variety of speech patterns in real-world communication (Gonzalez et al., 2023). By interacting with ChatGPT, students can enhance their listening comprehension and become more adept at understanding spoken language in different contexts.

Speaking and listening skills are fundamental components of language learning. Effective communication requires not only the ability to express oneself verbally but also the capacity to understand others. Traditional language education often emphasizes reading and writing, leaving speaking and listening skills underdeveloped. However, the integration of AI tools like ChatGPT can address this gap by providing learners with opportunities for interactive practice. Engaging with ChatGPT allows learners to practice speaking in a low-pressure environment. They can initiate conversations, ask questions, and respond to prompts, all of which contribute to their speaking abilities (Ramesh & Zhang, 2023). This interaction fosters confidence, enabling students to become more comfortable using the language in various contexts. Additionally, ChatGPT can simulate conversations on different topics, allowing learners to practice speaking in diverse scenarios and build their vocabulary. Listening skills, equally essential for effective communication, can also be developed through AI-assisted learning. Interactions with ChatGPT require learners to actively listen and respond appropriately, promoting comprehension and critical thinking (Kohnke et al., 2023). This dynamic engagement enhances students' abilities to analyze spoken language, formulate responses, and participate in meaningful dialogues.

The primary objectives of this study are to assess the impact of ChatGPT on improving speaking and listening skills in university-level foreign language learners; to compare the effectiveness of AI-driven language practice with traditional instructor-led methods in developing communicative abilities; to analyze participants' self-reported experiences and perceptions of using ChatGPT for language learning; to identify potential strengths, limitations, and areas for improvement in integrating AI tools like ChatGPT into foreign language instruction; to explore the role of AI technology in fostering a balanced approach to language learning that combines innovative tools with traditional teaching methods.

While the benefits of AI in language learning are significant, it is essential to address potential challenges and ethical considerations. One concern is the quality and reliability of AI-generated content. Educators must guide learners to critically assess the information provided by AI tools and understand the importance of seeking clarification when necessary (Pikhart et al., 2022).

Moreover, there is a risk of over-reliance on AI tools, which may diminish opportunities for authentic interactions with peers and instructors. While ChatGPT provides valuable practice, students must also engage in real-life conversations to develop their language skills fully. Balancing AI-assisted learning with human interaction is crucial for a holistic language acquisition experience (Kohnke et al., 2023). The integration of AI, particularly tools like ChatGPT, in foreign language learning presents significant opportunities for enhancing speaking and listening skills. As educators navigate the evolving landscape of language education, it is vital to recognize the potential of AI to facilitate personalized learning and engagement. However, careful consideration of the challenges and ethical implications associated with AI is essential for maximizing its benefits.

Research questions:

1. How does ChatGPT facilitate the development of speaking skills in foreign language learners?
2. What are the measurable impacts of using ChatGPT on the listening comprehension abilities of foreign language learners?
3. What limitations and challenges arise from integrating ChatGPT into foreign language speaking and listening exercises, and how can these be addressed to maximize its effectiveness as a learning tool?

METHODS

This study adopted a quantitative method to assess the impact of ChatGPT on enhancing speaking and listening skills in foreign language learning. The primary data collection tool was a Google Forms questionnaire, administered to 20 students from first- to fourth-year in university. Participants engaged in an intervention program incorporating AI-driven language practice, with a focus on assessing improvements in their communicative abilities. The participants consisted of 20 university students across different years of study, aged between 17 and 24, enrolled in an English language learning program. The students were assigned to either an experimental group, which used ChatGPT for language practice. Initial assessments ensured experimental groups had comparable proficiency levels in speaking and listening.

Quantitative data from the Google Forms questionnaire were analyzed using descriptive statistics to identify changes in participants' self-perceived and objective language abilities. A paired t-test was applied to compare pre- and post-intervention results within group. Qualitative responses were coded thematically to capture students' experiences, perceived strengths, and limitations of using ChatGPT.

The analysis of data from Google Forms revealed significant improvements among the experimental group in both speaking and listening skills. On average, these students reported a 30% increase in their confidence. Listening comprehension scores also slightly improved by 50% in the experimental group.

Open-ended responses indicated that students found ChatGPT to be a valuable tool for language practice, citing benefits such as instant feedback, diverse conversational practice, and a low-pressure learning environment. However, some participants expressed concerns about AI's limitations, such as repetitive responses and the lack of nuanced cultural context compared to human-led conversations.

RESULT

Table 1. Demographic and General Information

Age	Percent %	Academic Year	Percent %	Gender	Percent %
17-18 years	20%	1st year	15%	Male	35%
19-20 years	40%	2nd year	15%	Female	65%
21-22 years	25%	3rd year	10%		
23-24 years	15%	4th year	60%		

The distribution of participants by age is as follows: 17-18 years – 20%, 19-20 years – 40%, 21-22 years – 25% – 15% and 23-24 years – 25% (see Figure 1). This age breakdown highlights the varying levels of language learning experience among participants, with each age group potentially having different perspectives on foreign language learning.

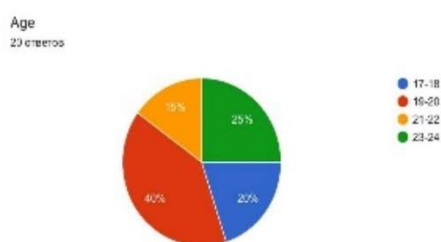


Figure 1

By academic year, the distribution is: 1st year – 15%, 2nd year – 15%, 3rd year – 10%, and 4th year – 60% (see Figure 2). This reflects the varying stages of students' language learning, where first-year students might have less experience compared to those in higher years, who are more advanced in their studies.

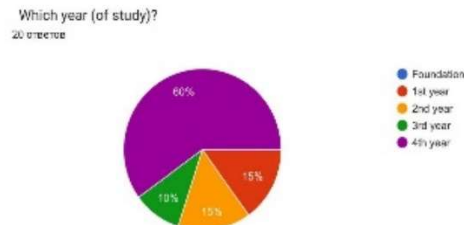


Figure 2

The gender distribution is male – 35%, female – 65% (see Figure 3), indicating a slightly higher proportion of male participants. These demographic details help in understanding how the results might differ across various groups, shedding light on language learning preferences and their interaction with AI technologies.

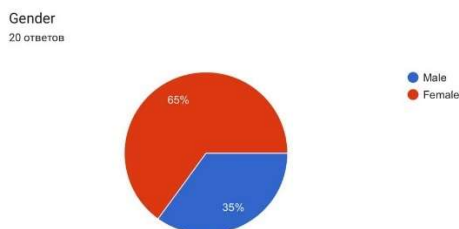


Figure 3

Table 2. Opinions on ChatGPT’s Performance

Response Accuracy	Percent %	Understanding Responses	Percent %
High Accuracy	35%	Fully Understood	30%
Satisfactory Accuracy	55%	Mostly Understood	40%
Low Accuracy	10%	Partially Understood	30%

Regarding the accuracy and correctness of ChatGPT’s responses, high accuracy was reported by 35%, satisfactory accuracy by 55%, and low accuracy by 10% (see Figure 4). These results suggest that while the majority of users found ChatGPT’s responses to be of good quality, a smaller group experienced less reliable outputs.

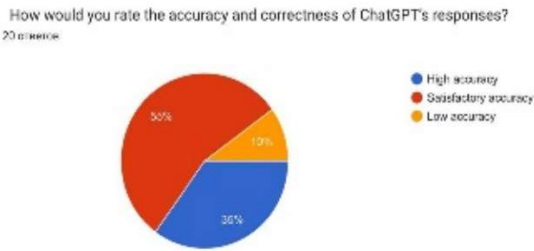


Figure 4

In terms of understanding the responses, fully understood was selected by 30%, mostly understood by 40%, and partially understood by 30% (see Figure 5). The majority of participants found ChatGPT's content to be comprehensible, although some still struggled with understanding, which might be due to the complexity or technical nature of certain answers.

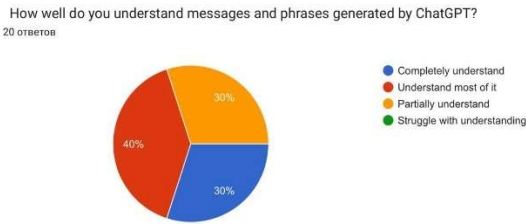


Figure 5

Table 3. Confidence and Skill Assessment

Speaking Confidence	Percent %	Improvement in Skills	Percent %	Perceived Improvement in Skills	Percent %
Very Confident	15.8%	Significantly Improved	30%	Yes	60%
Confident	31.6%	Improved	55%	No	40%
Somewhat Confident	42.1%	Slightly Improved	15%		
Not Confident	10.5%	No Improvement			

When assessing confidence in speaking a foreign language, very confident was reported by 15.8%, confident by 31.6%, somewhat confident by 42.1%, and not confident at all by 10.5% (see Figure 6). These results reflect a general sense of confidence among participants, with a significant portion still lacking full confidence in their speaking abilities.

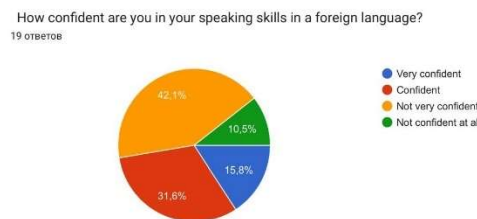


Figure 6

Regarding improvements in speaking skills after interacting with ChatGPT, significantly improved was reported by 30%, slightly improved by 55%, and no improvement by 15% (see Figure 7). This suggests that while half of the participants observed some improvement, a quarter of them did not feel any significant change in their speaking skills.

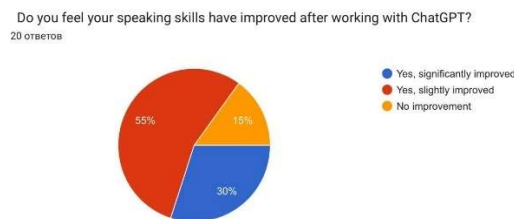


Figure 7

As for perceived improvement in speaking, yes was the response from 60%, while no was given by 40% (see Figure 8). These findings indicate that most participants felt their speaking skills benefited from ChatGPT, although there were still some who did not notice substantial progress.

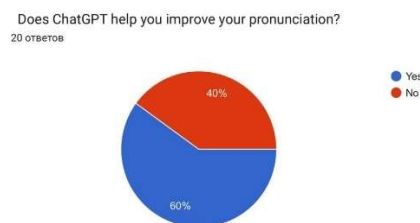


Figure 8

Table 4. Patterns of AI Technology Use

Frequency of Usage	Percent %	Effectiveness	Percent %
Daily	40%	Significantly More Effective	30%
Several Times a Week	35%	Relatively Effective	60%
Rarely	25%	Less Effective	5%
		Not Effective	5%

In terms of frequency of using ChatGPT for foreign language learning, daily use was reported by 40%, several times a week by 35%, and rarely by 25% (see Figure 9). These statistics show that while a significant portion of participants uses ChatGPT regularly, there is also a large group who uses it infrequently.

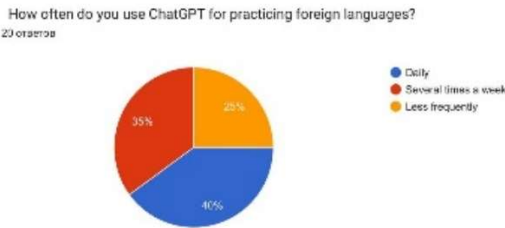


Figure 9

When asked about the effectiveness of ChatGPT compared to traditional exercises, significantly more effective was chosen by 30%, relatively effective by 60%, less effective by 5%, and not effective at all by 5% (see Figure 10). These results indicate that, for many, ChatGPT offers a more efficient learning method, although a portion of participants still finds traditional methods more useful. Also more than half of the participants have prior experience with AI tools, while the remaining portion has not engaged with such technologies.

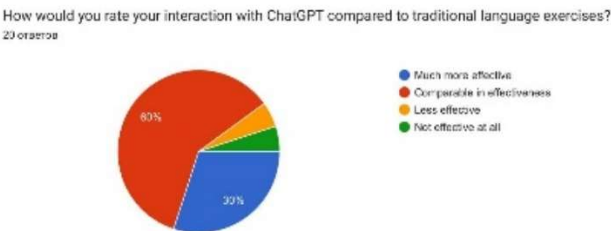


Figure 10

Table 5. Ease of Interaction and Communication

Helpfulness	Percent %
Very Helpful	45%
Sometimes Helpful	40%
Not Helpful	15%

Regarding the help provided by ChatGPT in speaking a foreign language, very helpful was selected by 45%, sometimes helpful by 40%, and not helpful by 15% (see Figure 11). While most participants found ChatGPT beneficial for language practice, there is still a notable portion who did not perceive its assistance as significant. These results suggest that while the majority of users found the platform user-friendly and helpful in language dialogues, some faced difficulties in communication.

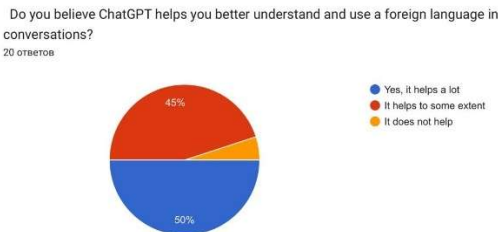


Figure 11

DISCUSSION

These research findings align with previous research on the role of artificial intelligence in foreign language learning. Scholars such as Baker and Inventado (2014), Almarzooq et al. (2023), Gonzalez et al. (2023), Sidorov (2019), Ivanova (2020), Akhmetova (2022), and Bekova (2021) have extensively focused on the effectiveness of AI platforms in enhancing learners' language skills.

These studies explored various dimensions, including AI's accuracy, user engagement, motivational impacts, demographic influences, and adaptability to individual learner needs, reflecting the complex interactions between AI tools and language acquisition processes.

From an objective standpoint, this study aligns with previous research on the role of AI in language learning, demonstrating that ChatGPT offers considerable potential to enhance speaking and listening skills. This is evident in the high levels of user satisfaction and perceived skill improvement among participants. Specifically, a combined 90% of participants rated the accuracy of ChatGPT's responses as high or satisfactory. This finding is consistent with Baker and Inventado (2014), who highlighted fluctuations in AI performance, although it indicates clear progress in technology's capabilities since their study, as only a minority of participants of last survey reported low accuracy (10%).

Globally, research like that of Gonzalez et al. (2023) underscores the importance of contextual clarity in AI interactions. The collected data shows that 70% of participants mostly or fully understood ChatGPT's responses, which aligns with their findings and highlights AI's capacity to facilitate effective communication, though challenges with more complex content remain evident for some users.

In terms of speaking skill improvement, recent research found that 60% of participants perceived positive changes in their abilities. This aligns with Almarzooq et al. (2023), who emphasized the link between regular engagement with AI tools and skill enhancement. However, the remaining percentage who reported limited or no improvement suggests that AI's effectiveness is influenced by individual engagement strategies.

Regarding confidence in using foreign language skills, latest study revealed a range of confidence levels, with 15.8% feeling very confident and 42.1% somewhat confident after using ChatGPT. This reflects Ivanova (2020)'s findings of varied confidence outcomes, suggesting that while AI can positively influence user confidence, its impact is uneven, with a significant portion still experiencing reservations.

In terms of AI's role compared to traditional learning methods, data indicated that 30% of participants found ChatGPT significantly more effective, and 60% considered it relatively effective. This supports Sidorov (2019)'s assertion that AI works best as a supplementary tool, as a minority in both studies favored traditional approaches or found them equally effective.

Bekova (2021) highlighted that the effectiveness of AI-driven learning platforms is closely tied to user engagement, perceived utility, and adaptability to individual needs. My findings reflect this perspective, with 45% of participants rating ChatGPT as very helpful for language practice, indicating strong engagement and perceived benefits, although some users reported less utility, suggesting the need for further customization.

Findings latest research also underscores the impact of demographics on AI engagement and utility, reflected in gender distribution and academic year differences. This observation aligns with Akhmetova (2022), who found that demographic factors often shape user experiences with AI technologies. Such parallels highlight the ongoing need to account for diverse user backgrounds when evaluating AI's role in language learning.

Finally, the study corroborates existing literature by demonstrating ChatGPT's considerable potential to enhance language skills. While there is strong evidence of user satisfaction and improvement, limitations such as confidence variability, comprehension challenges, and demographic influences underscore the need for targeted, adaptive approaches to fully leverage AI's capabilities in language education.

CONCLUSION

In conclusion, this study underscores the potential of integrating AI tools such as ChatGPT into foreign language education, specifically for enhancing speaking and listening skills among

university students. The results demonstrate that students who engaged in AI-driven conversational practice showed significant gains in confidence, fluency, and listening comprehension compared to those following traditional methods. The unique advantages of AI—such as instant feedback, diverse conversational scenarios, and low-pressure practice—make it a valuable supplement to language learning programs.

However, this study also reveals limitations in relying solely on AI, including repetitive interactions and limited cultural nuance. Therefore, while ChatGPT can effectively enhance communicative abilities, its integration with human-led instruction is essential to provide balanced, context-rich learning experiences. Moving forward, combining AI tools with traditional teaching methods offers a promising approach to maximizing language acquisition outcomes, paving the way for innovative, adaptive, and highly engaging educational practices. Future research should explore further refinement of AI capabilities to address its limitations and enhance its synergy with conventional language instruction.

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İngilis dilindən tərcümə prosesində semantik və leksik uyğunluqlar

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Xülasə

Tərcümə ünsiyyət vasitəsi kimi müxtəlif dillərdə danışan insanların bir araya gəldiyi vaxtdan meydana çıxmışdır.

Tərcümə müəyyən bir prosesin nəticəsidir, onu bir fakt kimi qəbul edirik. Bu prosesin nəticəsində bir dildə yazılmış mətnin əsasında ikinci bir dildə formaca yeni, məzmunca birinci mətnə yaxın bir mətn meydana gəlir.

Tərcümənin həddindən artıq çətin bir proses olmasına baxmayaraq, edilən tərcümə elə oxunaqlı və təbii olmalıdır ki, qarşıdakı insan onu rahat başa düşsün.

Bu baxımdan məqalədə də ingilis dilindən ana dilinə tərcümə zamanı, ingilis dilinin semantikasında onun çətinliklərinin aradan qaldırılması yollarından, ədəbiyyat və linqvistikada sinxron tərcümənin bəzi problemlərindən bəhs edilir. Məqalədə həmçinin müasir ingilis dilində tərcümənin müxtəlif növləri, onların semantikasi və ana dilinə tərcümənin leksik variantları da təhlil edilir.

Açar sözlər: İngilis dili, semantika, Azərbaycan dili, uzlaşmalar, tərcümə.

Semantic and lexical correspondences in the process of translation from English

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Summary

Translation has emerged as a means of communication since people speaking different languages came together.

Translation is the result of a certain process, we accept it as a fact. As a result of this process, based on the text written in one language, a new text is created in a second language in form, close to the first text in content.

Despite the fact that translation is an extremely difficult process, the translation made should be so readable and natural that the person in front of you can easily understand it.

From this point of view, the article also talks about the ways to overcome the difficulties in the translation from English to the mother tongue, in the semantics of the English language, and some problems of simultaneous translation in literature and linguistics. The article also analyzes different types of translation in modern English, their semantics and lexical variants of translation into the mother tongue.

Key words: English, semantic, Azerbaijani, agreement, translation.

**Семантические и лексические соответствия в процессе перевода
с английского языка**

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Резюме

Перевод появился как средство общения с тех пор, как люди, говорящие на разных языках, объединились

Перевод — это результат определенного процесса, мы принимаем это как факт. В результате этого процесса на основе текста, написанного на одном языке, создается новый текст на втором языке по форме, близкий к первому тексту по содержанию.

Несмотря на то, что перевод — чрезвычайно сложный процесс, сделанный перевод должен быть настолько читабельным и естественным, чтобы человек перед вами мог легко его понять.

С этой точки зрения в статье также говорится о путях преодоления трудностей при переводе с английского на родной язык, в семантике английского языка и некоторых проблемах синхронного перевода в литературе и лингвистике. В статье также анализируются различные виды перевода на современный английский язык, их семантика и лексические варианты перевода на родной язык

Ключевые слова: английский язык, семантика, азербайджанский язык, координация перевод

Giriş. Mətnə ifadə olunan referensial mənalara verilməsi zamanı məna tərcüməsinin uyğun olmaması tərcüməçinin əsas rastlaşdığı problemdir.

Məna vahidləri – morfemlər, sözlər, sabit söz birləşmələri – öz referensial mənalara ilə tam həcmdə uyğun olan 2 müxtəlif dil yoxdur.

Bunu xüsusən 2 müxtəlif dillərin - Azərbaycan və ingilis söz tərkibinin materialları əsasında nümayiş etdirmək olar. 2 dilin leksik vahidləri arasında semantik uyğunlaşmaların bütövlükdə 3 əsas tiplərə aid etmək olar.

- 1) Tam uyğunlaşma
- 2) Qismən uyğunlaşma
- 3) Uyğunlaşmanın olmamağı

Bu 3 tiplərə ayrı-ayrılıqda baxaq, tərcümənin nəzəriyyəsi və təcrübəsi üçün xüsusi maraq və çətinlik təşkil edən, 2 sonuncu tipi nəzərdə tutmalıyıq. [Bayramov:2008, 102]

Tərcümə prosesində semantik və leksik uyğunluqlar

Müxtəlif dillərin leksik vahidlərinin referensial mənası ilə bütöv həcmdə tam uyğunlaşması halları nisbətən azdır. Bu sözlər birmənalıdır, yəni 2 dildə ancaq bir leksik mənası var: onların sayı dilin leksikonunda olan ümumi söz cümləsi ilə müqayisədə nisbətən azdır.

Bura aşağıda göstərilən leksik qrupa məxsus olan sözlər aiddir.

- 1) Xüsusi və coğrafi adlar : Norman – Nomon, Moskva – Moscow, Polşa – Poland
- 2) Elmi və texniki terminlər, məs : Loqaritm – logarithm, Hidrogen – hydrogen, Proton – proton, Ekvator – equator, Voltmetr – voltmeter
- 3) Verilmiş 2 sözün semantikasına yaxın olan bəzi qrup sözlər, əksər ayların adı ilə bağlıdır: Məs : Sentyabr – September, Oktyabr – October, Noyabr – November Bura say kimi özünə məxsus söz qrupu aiddir: milyon – million.

Elə düşünmək olmaz ki, yuxarıda verilən qrupların bütün sözləri tam uyğunlaşmalar cərgəsinə aiddirlər.

Belə ki, əksər hallarda sözlər – terminlər çoxmənalılıqla xarakterizə olunurlar və başqa dildə bir yox, bir neçə uyğunluqları var. İngilis termini – power – fizikada - güc, qüvvə, enerji; - riyaziyyatda isə həmçinin dərəcə - mənalərini daşıyır.

Xüsusən texniki terminologiya fərqlənir; belə ki, Azərbaycan termini “kamera” – ingilis dilində chamber, compartent, camera (fotoaparət), tube (təkarin kamerası), cell (həbsxanada kamera – otaq).

Bir ölkəyə aid olan nadir və yaxud az məşhur olan adlar adətən birmənalı və tam uyğun olurlar. Məs: Oxlu kirpi – porcupine; Qızıl qaz – flamingo. Lakin yaxşı tanınmış heyvanların adları nəyinki zooloji terminlərə, hətta ümumi işlənən leksikaya daxildirlər və bununla çoxmənalılıq qazanırlar.

Məs: ingilis sözü “tiger” - “pələng” mənasından savayı bu mənalrı daşıyır. Qəddar insan, təhlükəli rəqib, davakar, xuliqan, dələduz.

Nadir hallarda 2 dildə çoxmənalı sözlərdə tam uyğunluğa rast gəlmək olar. Belə ki, Azərbaycan sözü “şir” ingilis sözü “lion” kimi bu mənalrı daşıyır: 1) nəhəng yırtıcı heyvan; 2) məşhur, dəb qoyan adam; 3) bürc və zodaik işarəsi.

Çox geniş yayılmış hallardan biri də 2 leksiki vahidlərinin müqayisədə uyğunluğudur. Hər dildə sözlərin böyük əksəriyyəti çoxmənalılıqla xarakterizə olunur, bununla belə bir dildə sözün mənalılarının sistemi, adətən başqa dilin mənalı sistemi ilə tam uyğun olmur.

Belə də müxtəlif hallar müşahidə olunur. Hərdən sözün məna dairəsi başqa dildə olan həmin sözün məna dairəsində də geniş olur.

Belə ki, Azərbaycan dilində “xasiyyət” ingilis “character” ilə belə məna kəsb edir.

1) İnsanın psixoloji xüsusiyyətlərinin cəmi 2) Möhkəm iradə, məqsədə çatmaqda iradə 3) Xüsusiyyət, keyfiyyət, nəyin isə orijinallığı. İngiliscə “character” – də elə bir məna var ki, o Azərbaycan sözündə yoxdur və Azərbaycan dilində ayrı sözlərlə verilir. 4) ad, şöhrət; 5) yazılı zəmanət, xarakteristika; 6) fərq, cizgi, əlamət, keyfiyyət; 7) məxsusiyyət; 8) ədəbi obraz, qəhrəman, pyesdə iştirak edən şəxs; 9) çap işarələri, hərf, simvol.

Geniş yayılmış hallardan biri də odur ki, 2 söz həm uyğun, həm də uyğun olmayan mənalı daşıyır.

Belə ki, Azərbaycan sözü “masa” və ingilis sözü “table” ancaq mebel əşyası mənasında uyğundurlar, lakin başqa mənalarda fərqlənirlər: Azərbaycan dilindəki masa sözünün “təam, qida” (“masa və mənzil”, “pəhriz masası”) və “müəssisə”, dəftərxanada şöbə (məs: tapıntı masası, pasport masası) kimi mənalı var. Hansı ki, ingilis “table” sözündə bu mənalı belə sözlərlə ifadə olunurlar: board, food cooking, diet and office, department. [Türkevər:2009, 402]

O biri tərəfdən isə ingilis dilində “table” sözü elə bir mənalı daşıyır ki, bunlar Azərbaycan dilində yoxdur və onlar belə sözlərlə verilir: lövhə, piletə, cədvəl, dağ yaylası və.s.

Bir qədər başqa hallar o zaman olur ki, 2 söz müxtəlif dillərdə öz referensial mənalı ilə uyğunlaşarsa, demək bu dillərin birində elə söz var ki, verilmiş anlayış növlərini təyin edir, amma başqa dildə belə bir söz olmur.

Belə ki, “mebel əşyası” mənasını daşıyan Azərbaycan sözü “masa” və ingilis sözü “table” tam uyğunlaşırlar, lakin masanın müxtəlif növlərindən biri olan “yazı masası” sözünü təyin etmək üçün ingilis dilində “desk” sözü var, o zaman ki, Azərbaycan dilində bu anlayış üçün söz birləşməsi – yazı masası işlətmək lazım olur.

Azərbaycan sözü “ev” ingilis sözü “house” “bina” və “sülalə” mənalılarında uyğundurlar. (məs. Romanovlar evi, - the House of Romanovs), lakin ayrı mənalarda uyğun gəlmirlər: Azərbaycan sözü ev, ocaq, yaşayış yeri mənası var, bu da ingilis sözü “home”la uyğun gəlir, həmçinin “müəssisə, idarə” mənası var, o da tərcümə olanda kontekstə baxılır:

1) uşaq evi – children’s və ya orphanage 2) ticarət evi – commercial firm 3) islahat evi (yeri) – reformatory 4) oyun evi – gambling house və ya casino 5) dəlixana – lunatic asylum

İngilis sözü "house"-un bir çox mənaları var ki, onlar Azərbaycan sözü "ev"-də yoxdur. Məs. parlament palatası (the House of commons).

Bir qədər ayrı xarakter daşıyan hallar var ki, onları başqa dillə müqayisədə bir dildə mənanın qeyri diferensiallığı adlandırmaq olar.

Belə ki, Azərbaycan dilində "əl və qol" sözü var, ona da ingilis dilində 2 söz uyğun olur- arm və hand, onlar da özlüklərində daha dar məna daşıyır: "arm" – yuxarı ətraf-çiyindən biləyədək, hand isə-bilək. Lakin Azərbaycan sözü "əl" bütöv ətraf deməkdir.

Analoji olaraq Azərbaycan sözü "ayaq"da bütöv aşağı ətrafda ingilis dilinin 2 sözü uyğundur- leg-ayaq, pəncə istisna etməklə və "foot"-pəncə.

Azərbaycan dilində "barmaq" sözünə insan bədəninin hissəsi mənasına ingilis dilində 3 söz uyğundur "finger"-əldə barmaq "thumb"-əldə baş barmaq və "toe"-insanların və heyvanların ayaqlarında barmaq. Belə analoji misallar çox gətirmək olar. Saat (watch, clock, alarmclock) Yorğan (blanket, quilt) Dam (dawn, evening glow, sunset) Velosiped (bicycle, tricycle) Yeməxana (dining-room, mess, canteen, refectory) Sıyıq (porridge, gruel) Rahat (comfortable, convenient) İmtina etmək (abstain) Özünü saxlamaq (refrain). [Bayramov:2008, 59]

Semantik cəhətdən diferensiya olunmayan ingilis sözləri

Azərbaycan sözləri ilə müqayisədə semantik cəhətdən diferensiya olunmayan ingilis sözləri var. Stove (soda, pilətə, mətbəx) Cold (zökəm, soyuqlama) Cherry (albalı, giləs) Strawberry (bağ çiyələyi, meşə çiyələyi) Story (hekayə, povest) Poem (şer, poema) Blue (mavi, göy) Stale (boyat, ağır hava) To wash (qab yumaq, paltar yumaq) To draw (aralamaq, çəkmək, örtmək)

Qeyd etmək lazımdır ki, söhbət sözlərin çoxmənalılıqlarından getmir demək olmaz ki, Azərbaycan sözləri əl və ayağın 2 mənası var və yaxud ingilis cherry-nin 2 müxtəlif albalı və giləs mənasını daşıyır. Yuxarıda qeyd olunmuş halda bu sözlərin ancaq 1 mənası var, lakin bu mənanın həcmi ayrı dildə olan uyğunlaşmalardan fərqli olaraq bütövlüklə genişdir.

Bu baxılan hal prinsipial olaraq o haldan fərqlənir ki, nə zaman hər hansı bir dildə olan bir sözün müxtəlif mənalarına başqa bir dilin müxtəlif sözləri uyğun gəlir. Məs: Azərbaycan dilində "nədən isə olmuş və yaxud xəsarət almış insan" mənasını daşıyan "qurban" sözünə ingilis dilində "victim" sözünə uyğundur, lakin Allaha gətirilən qurbanlıq bir əşya və ya heyvan və "könüllü nədənsə imtina etmək" mənasını daşıyan söz "Sacrifice" sözüdür.

Azərbaycan dilində olan "dəmir" və "çuqun" sözləri 2 müxtəlif metalların adı kimi izah olunur. Məs: dəmirin və çuqunun istehsalı ingilis sözü "iron" və "cast iron" (çuqun) kimi olan söz birləşməsi var.

Analoji olaraq Azərbaycan sözü "stul" (kətil) və "kreslo" ingilis sözləri "chair" və "armchair" uyğun gəlir.

Dilimizdəki "oğurlamaq, qaçırmək" ingilis sözü "Ridnap"- uyğundur, lakin qızın qaçırılmasına qaldıqda "abduct" feli işlədilir. [Türkevər:2009, 350]

Bu misallardan belə nəticəyə gəlmək olar ki, ingilis dili lazım olanda insan əlinin hər hansı bir hissəsinə işarə etmək üçün xüsusi sözlər işlədilməsinə imkan versin. Məs: çiyin, bilək, lakin Azərbaycan dilində semantiki cəhətdən diferensial olmayan "əl" sözü ingilis sözü "arm" və "hand" arasında olan fərqi dəqiqləşdirməyə imkan verir, ancaq ingilis dili isə bu fərqi dəqiqləşdirməyi – məcbur edir. Beləcə ingilis dilinin vasitələri ilə "albalı və giləs" arasında olan fərqi, yaxud "göy rəng və mavi rəng" arasında dəqiqləşdirmək olar.

Ancaq, belə bir diferensiasiya növünə ehtiyac olmayan halda ingilis dili oxucunun sərəncamına semantiki bölünməyən "cherry, blue" verir.

Belə ki, Azərbaycan dilindən ingilis dilinə "əl" tərcümə olunan zaman hər dəfə "arm" and "hand" arasında seçim etmək lazımdır. Məs: O, əlində kitab tutmuşdur cümləsində "hand" sözünün istifadəsini tələb edir. Lakin "O, əlində (qucağında) uşaq tutmuşdur" cümləsi isə "arm" sözünün istifadəsini tələb edir. "O əlindən yaralanmışdır" belə tərcümə oluna bilər – He was wounded in the arm.

Nəticə. Tərcümə üçün çoxmənalılıq kimi, belə hal o mənada, çətinlik törədir ki, semantik cəhətdən diferensial olmayan sözün verilməsi zamanı, mümkün olan uyğunluqlar arasında seçim aparmaq lazımdır.

Ümumiyyətlə tərcümə tarixi və prosesi mürəkkəb bir inkişafın nəticəsidir. Bu prosesdə informasiyanın ötürülməsi yolları çətin ziqzaqlardan keçir.

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ЭКОЛОГИЯ И ЯЗЫК: ИСТОРИЯ, ЗАИМСТВОВАНИЯ И СОВРЕМЕННОЕ СЛОВООБРАЗОВАНИЕ

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Аннотация: В статье исследуются особенности формирования экологической терминологии на примере английского и русского языков. Рассматриваются происхождение и эволюция терминов, заимствования из других языков, а также процесс словообразования новых понятий, связанных с экологией. Особое внимание уделено влиянию глобализации и роли английского языка как ключевого средства международной коммуникации в экологической науке и активизме. Анализируются примеры экологических терминов, которые используются для описания современных вызовов, таких как изменение климата, переработка отходов и устойчивое развитие.

Ключевые слова: экология, терминология, английский язык, русский язык, заимствования, словообразование, устойчивое развитие, изменение климата, глобализация, международная коммуникация

Экология как наука сформировалась относительно недавно, но её значение в современном мире растёт с каждым годом. Важной частью экологической дискуссии является терминология, которая отражает как историческое развитие экологического знания, так и современные вызовы. Сравнение терминологии в английском и русском языках позволяет проследить заимствования, словообразование и культурные особенности этих языков.

Термин "экология" происходит от древнегреческого слова *οἶκος* (*oikos*) — "дом, жилище" и *λόγος* (*logos*) — "учение". Этот термин был впервые предложен немецким биологом Эрнстом Геккелем в 1866 году для обозначения науки о взаимодействии живых организмов и их среды обитания. В английском языке слово *ecology* вошло в употребление в конце XIX века, сохранив греческие корни. В русском языке термин "экология" появился благодаря заимствованию из немецкого языка, что было связано с развитием науки в Европе.

С развитием экологии появились новые термины, отражающие изменения в научных взглядах и потребности общества.

Например: *ecosystem*, *biodiversity*, *sustainability*, "экосистема", "биоразнообразие", "устойчивое развитие". Эти термины были адаптированы через калькирование или транслитерацию.

Экологическая терминология активно пополнялась за счёт заимствований из разных языков, особенно в XX-XXI веках. Этот процесс отражает международный характер экологических проблем и научного сотрудничества. Ниже приведены примеры заимствований с указанием их происхождения и адаптации в английском и русском языках.

Многие термины имеют латинские или греческие корни, так как эти языки были основой научной лексики:

Ecology (греч. *oikos* — "дом" + *logos* — "учение") → "экология".

Climate (лат. *clima*, *-atis* — "наклон") → "климат".

Biology (греч. *bios* — "жизнь" + *logos* — "учение") → "биология".

Ecosystem (греч. *oikos* + *systema* — "целое, система") → "экосистема".

Anthropocene (греч. *anthropos* — "человек" + *kainos* — "новый") → "антропоцен".

В современном русском языке активно используются термины, заимствованные из английского. Эти слова зачастую сохраняют свою фонетическую или графическую форму, либо подвергаются незначительной адаптации:

Recycling → "рециклинг" (повторная переработка отходов).

Sustainability → "устойчивость" или "устойчивое развитие".

Carbon footprint → "углеродный след".

Renewable energy → "возобновляемая энергия".

Greenwashing → "гринвошинг" (манипулятивное позиционирование компании как экологически чистой).

Zero waste → "ноль отходов".

Overfishing → "перелов рыбы".

Biodiversity → "биоразнообразие".

В обратном направлении, хотя реже, экологическая терминология тоже заимствуется:

Tundra (тундра) — русское слово, вошедшее в английский и другие европейские языки.

Taiga (тайга) — уникальный термин для обозначения биома хвойных лесов.

Permafrost (вечная мерзлота) — калька с русского "мерзлота".

Термины, заимствованные из других языков, отражают специфику географических и культурных контекстов:

Monsoon (муссон) — из арабского *mawsim* ("сезон").

Mangrove (мангровые леса) — португальское *mangue* + английское *grove* ("роща").

Sahara (Сахара, пустыня) — из арабского *ṣaḥrā'* ("пустыня").

Savanna (саванна) — из испанского *sabana* ("равнина").

Современные экологические термины часто формируются на базе заимствований:

Ecotourism → "экотуризм" (из англ.).

Bioplastics → "биопластик" (из англ.).

Geoengineering → "геоинженерия" (из англ.).

Hydroponics → "гидропоника" (от греч. *hydro* — "вода" + *ponos* — "труд").

В английском языке процесс словообразования экологических терминов включает:

Композиты:

Carbon footprint — "углеродный след".

Eco-friendly — "экологически чистый".

Словосложение:

Greenwashing — "экообман".

Overfishing — "перелов рыбы".

Акронимы:

IPCC — Intergovernmental Panel on Climate Change (МГЭИК).

В русском языке словообразование экологических терминов происходит через:

Калькирование:

"Возобновляемая энергия" (*renewable energy*).

"Углеродный след" (*carbon footprint*).

Суффиксация и приставкация:

"Экозона" (от "эко-" и "зона").

"Биоразлагаемый".

Транслитерация:

"Рециклинг".

"Компост".

В условиях глобализации часто возникают трудности унификации терминов. Например, в русском языке используются как "экологичный", так и "экологически чистый", что может вызывать путаницу. В английском языке существуют термины с близким значением, например, *eco-friendly* и *sustainable*. Некоторые термины появляются в ответ на актуальные проблемы. Так, в английском языке с усилением экологической повестки возникли термины:

Climate crisis — "климатический кризис".

Zero waste — "ноль отходов".

В русском языке аналогично возникли термины "зеленая экономика", "углеродный налог". Современные экологические термины часто отражают новые концепции и технологии:

Upcycling (англ.) — повторное использование материалов с улучшением их качества.

"Экопоселение" (рус.) — населённый пункт, минимально воздействующий на природу.

Сравнение английской и русской терминологии подчёркивает универсальность экологических проблем и необходимость международного сотрудничества. В то же время различия в языках и подходах к словообразованию демонстрируют уникальность культурного восприятия экологии.

Понимание эволюции терминов помогает не только переводчикам, но и специалистам в области экологии, облегчая коммуникацию и способствуя более эффективному решению экологических проблем.

Английский язык занимает центральное место в международной экологии благодаря его статусу глобального языка науки и политики. Большинство экологических исследований, научных публикаций и международных соглашений (например, Киотский протокол, Парижское соглашение) составлены на английском языке. Это способствует распространению экологических идей и технологий, а также созданию универсальной терминологической базы.

Английский язык также играет важную роль в экологическом активизме, поскольку крупнейшие движения (например, Fridays for Future, Extinction Rebellion) используют английский для глобальной коммуникации. Большая часть новых экологических терминов, таких как *greenwashing*, *carbon footprint*, *net zero*, изначально создаётся на английском и затем адаптируется другими языками. Английский язык становится связующим звеном между учёными, политиками и общественностью, позволяя координировать усилия для решения глобальных экологических проблем.

Экологическая терминология является важной частью научного и общественного дискурса, отражая не только развитие экологической науки, но и глобальные вызовы, с которыми сталкивается человечество. Необходимость унификации экологической терминологии, а также внимание к особенностям перевода и адаптации терминов между языками, становится особенно актуальной в условиях глобальных экологических вызовов, таких как изменение климата, устойчивое развитие и управление природными ресурсами. Это требует не только точности и корректности в использовании терминов, но и постоянного совершенствования языковых и научных подходов.

Экологическая терминология является важным инструментом для эффективного решения экологических проблем и содействия международной коммуникации, а также способствует более глубокому пониманию экологических процессов в разных культурах и языках.

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Официальные письма в деловой и академической коммуникации

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Аннотация: В данной статье исследуются официальные письма в деловой и академической коммуникации. Определяется статистика документов, поступающих и исходящих из компании, а также устанавливается их характеристика. Помимо этого устанавливается форма отправки деловых писем и указывается их структура.

Ключевые слова: официальный, деловой, письмо, документ, клиент, работник, условие, классификация, сообщение, коммуникация.

Статистика подтверждает, что до 80% документов, поступающих и исходящих из компании, представляют собой деловую переписку. Даже самый обычный сотрудник сталкивается с большим количеством различных деловых писем. Существуют разные классификации официальных писем по разным основаниям. Типы писем различаются получателем и целью сообщения. Чтобы стимулировать продажи, потребителю пишут письмо – предложение о продаже; пишут письмо-запрос, чтобы получить информацию о потребительских предпочтениях; обращаются с письмом к клиенту, пытаются ускорить погашение кредита деликатным способом – кредитный контроль; они рассылают поздравительные письма, чтобы защитить контингент клиентов.

Контрактные документы, во избежание конфликта пишутся поставщику для четкого определения условий контракта; претензии – для получения возврата денег или замены товара. Работник получает информацию о вакансиях из письма о приеме на работу, дисциплинарных писем (для информирования и поощрения изменения поведения) и письма о сокращении. По тематическому признаку деловые письма делятся на письма, используемые при подготовке к заключению коммерческой сделки, используемые при выполнении условий договоров, и письма, целенаправленно решающие различные организационно-правовые вопросы. По функциональному признаку деловые письма делятся на инициативные письма – письма, составленные по инициативе адресата с определенной целью, а также ответные письма.

Кроме того, инициативные письма можно разделить на две группы - письма, требующие ответа (письмо-запрос, письмо-предложение, письмо-жалоба, письмо-заявление) и те, которые не требуют ответа (письмо-напоминание, письмо-предупреждение, письмо-уведомление, письмо-согласие).

В зависимости от получателя деловые письма делятся на циркулярные письма – письма, адресованные нескольким адресатам одновременно, и обычные письма – письма, адресованные конкретному получателю.

По принципу композиции деловые письма – односторонние, многоплановые, затрагивающие одну проблему и затрагивающие все сразу. Желательно подготовить письмо по проблеме. Если необходимо обратиться в организацию по нескольким разным темам, рекомендуется писать отдельные письма по каждой из них. Письмо может касаться сопутствующих вопросов. В настоящее время вопросы рассматриваются в структурных подразделениях организации, получающих письмо. По структуре различают следующие деловые письма:

Регламентированные (выполненные по заданному образцу) и нерегламентированные – содержащие авторский текст и оформленные в свободной форме, без фиксированного шаблона.

По форме отправки деловые письма могут быть: конвертные, отправленные в конверте, отправленные в электронном виде по электронной почте и факсимильные - отправленные по факсу.

Что должно быть указано в письменном запросе информации?

- 1) имя и фамилия запрашивающего;
- 2) если запрос подан юридическим лицом, также наименование юридического лица;
- 3) контактные данные запрашивающего (почтовый или электронный адрес, номер телефона или телефакса), чтобы обладатель информации мог удовлетворить запрос;
- 4) содержание запрашиваемой информации, либо вид или наименование документа, известные запрашивающему лицу реквизиты документа;
- 5) форма подачи информации.

Субъект информации регистрирует запрос информации в день его получения.

В зависимости от результатов расследования информационный офицер принимает одно из следующих решений:

- а) отказывается выполнить запрос;
- б) обеспечивает выполнение запроса;
- в) направляет запрос владельцу соответствующей информации.

Запрос информации обрабатывается в кратчайшие сроки, но не позднее 7 рабочих дней. Если эта информация теряет свою функциональность в течение этого периода, на запрос необходимо ответить немедленно, а если это невозможно, то не позднее 24 часов. В случаях, когда существует реальная угроза жизни, здоровью или свободе человека, информация, требующая определенного времени на поиск и подготовку, будет направлена в течение 48 часов (отдых, голосование, праздничные дни, не считающиеся рабочими днями). В случае неполноты или недостоверности запроса должностное лицо в течение 5 рабочих дней информирует запрашивающего о выявленных недостатках.

Запрашивающий не платит плату за получение информации при ознакомлении с информацией, копировании ее вручную или изготовлении копии с использованием собственных технических возможностей, а также в иных случаях, когда техническая помощь не оказывается.

Плата за получение общедоступной информации не взимается. За информационное обслуживание может взиматься плата при условии, что плата не превышает затраты на подготовку и предоставление информации.

Запрашивающий имеет право подать жалобу в суд или Уполномоченному по правам человека (Омбудсмену) соответствующей страны об отказе в исполнении запроса или его ненадлежащем исполнении. Субъект информации, исполняющий информационный запрос, разъясняет это право запрашивающему и указывает его в представленном ответе (информации).

По форме подачи запроса он может быть устным или письменным; в первом случае ответы респондента фиксируются исследователем, а во втором - самим респондентом.

В зависимости от способа общения с респондентом различают прямой опрос, при котором существует непосредственное общение исследователя и респондента, и неформальный опрос, при котором такое общение отсутствует. Вербальный, визуальный опрос называется интервью. Письменные и заочные опросы называются анкетными опросами.

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Abstract

Formal letters in business and academic communication.

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In this article examines formal writing in business and academic communication. The statistics of documents coming and going from the company are determined, and their characteristics are also established. In addition, the form for sending business letters is established and their structure is indicated.

Key words: official, business, letter, document, client, employee, condition, classification, message, communication.

Technical Sciences

Süni İntellektin İnkişafı: Maşın Öyrənməsi, Dərin Öyrənmə və Neyron Şəbəkələrinin Əlaqəsi

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Açar sözlər: süni intellekt, maşın öyrənməsi, dərin öyrənmə, neyron şəbəkələr, verilənlərin analizi, avtomatlaşdırılmış sistemlər

Ключевые слова: искусственный интеллект, машинное обучение, глубокое обучение, нейронные сети, анализ данных, автоматизированные системы

Key words: artificial intelligence, machine learning, deep learning, neural networks, data analysis, automated systems

Xülasə

Məqalə, süni intellekt, maşın öyrənməsi, dərin öyrənmə və neyron şəbəkələri arasındakı fərqləri və onların bir-biri ilə olan əlaqələrini incələyir. Süni intellekt (ii) geniş bir anlayışdır və insanın intellektual fəaliyyətlərini təqlid etmək məqsədi güdür. Maşın öyrənməsi (MO) ii-nin bir alt sahəsi olaraq, verilənlərdən öyrənmə və bu biliklərə əsaslanaraq qərar vermə qabiliyyətini inkişaf etdirir. Dərin öyrənmə (DO), daha mürəkkəb struktura malik olan neyron şəbəkələrinin təkamülü olaraq, böyük verilənlər üzərində daha yüksək səviyyədə təhlil və nəticə çıxarma qabiliyyəti təqdim edir. Neyron şəbəkələri isə insan beyninin quruluşuna bənzər şəkildə məlumatları təhlil edən hesablama strukturlarıdır və dərin öyrənmənin əsasını təşkil edir.

Giriş

İnsan intellektini təqlid edən sistemlər və alqoritmlər əsasında qurulmuş süni intellekt (ii) son illərdə mühüm inkişaflar əldə etmiş və müxtəlif sahələrdə tətbiq edilməyə başlanmışdır. Bu texnologiya təkcə elmi-tədqiqat sahələrində deyil, həm də gündəlik həyatda da geniş yayılmaqdadır. Süni intellekt, maşın öyrənməsi (MO), dərin öyrənmə (DO) və neyron şəbəkələri (NŞ) kimi alt sahələrdən ibarətdir. Lakin bu anlayışlar arasında qarışıqlıq yaranır və bu da onların necə əlaqələndiyini və fərqli olduqlarını anlamaqı çətinləşdirir. Bu məqalə, ii, maşın öyrənməsi, dərin öyrənmə və neyron şəbəkələri arasındakı fərqləri araşdıracaq və onların əlaqələrini izah edəcək.

Son illərdə süni intellekt (SI) sahəsində olan irəliləyişlər, insan beyni kimi mürəkkəb məlumat emalı sistemlərinin qurulması istiqamətində əhəmiyyətli bir addım atmışdır. Bu sahədə ən mühüm texnologiyalardan biri neyron şəbəkələridir.

Neyron şəbəkəsi nədir?

Neyron şəbəkələri, insan beyninin strukturu və funksiyalarını təqlid edən və məlumatları təhlil etmək üçün özünü öyrənən modellərdir. Bu şəbəkələr, çoxsaylı tətbiq sahələrində istifadə olunur və gələcəkdə onların inkişafı, süni intellektin daha yüksək səviyyələrə yüksəlməsini təmin edəcək. Süni intellekt inkişaf etməyə və həyatımızın müxtəlif sahələrinə inteqrasiya etməyə davam etdikcə, süni intellektlə bağlı qərarların və proqnozların başa düşülməsinə tələb artır. Süni intellekt sistemlərini insanlar üçün daha şəffaf və başa düşülən etmək üçün nəzərdə tutulmuş şərh edilə

bilən neyron şəbəkələri mühüm tədqiqat sahəsi kimi ortaya çıxıb. Bu tədqiqat məqaləsi neyron şəbəkələrində şərh edilə bilənliyin əhəmiyyətini araşdırır, mövcud yanaşmaları və çətinlikləri müzakirə edir və inam, etika və məsuliyyətli AI yerləşdirmənin qurulmasında şərh edilə bilən AI-nin rolunu vurğulayır.

Neyron şəbəkəsi hadisələri müəyyən etmək, müxtəlif variantları ölçmək və nəticələrə gəlmək üçün bioloji neyronların birlikdə işləməsini təqlid edən proseslərdən istifadə edərək insan beyninə bənzər şəkildə qərarlar qəbul edən maşın öyrənmə proqramı və ya modelidir. Neyron şəbəkəsi və ya süni neyron şəbəkəsi, insan beyninin necə işlədiyi modelinə əsaslanan hesablama "memarlığının" bir növüdür - buna görə də ona "neyron" adı verilmişdi. Onlar bir-biri ilə bağlı düşünlərdən, ya da "neyronlardan" ibarətdir ki, bunlar birgə işləyərək məlumatları emal edir və analiz edir. Neyron şəbəkələrinin əsas məqsədi nümunələri tanımaq və verilən məlumatlara əsasən proqnozlar verməkdir. Neyron şəbəkələri, əsasən, heyranediciliyə, klassifikasiyaya və proqnozlaşdırmaya yönəlmiş tapşırıqları yerinə yetirmək üçün istifadə edilir. Bu texnologiya, geniş məlumatları işləmə qabiliyyəti və müxtəlif tətbiqlərdə dəqiq nəticələr verməsi səbəbindən son illərdə əhəmiyyətli diqqət qazanmışdır. Başqa sözlə desək, neyron şəbəkələri "qovşaqlar" adlanan emal vahidləri toplusundan ibarətdir. Bu qovşaqlar beyindəki neyronların elektrik impulslarını bir-birinə ötürdüyü kimi məlumatları bir-birinə ötürür.

Neyron Şəbəkələrinin Əsas Prinsipləri

Neyron şəbəkələri maşın öyrənməsində istifadə olunur ki, bu da müəyyən təlimatlar olmadan öyrənən kompüter proqramları kateqoriyasına aiddir. Xüsusilə, neyron şəbəkələri dərin öyrənmədə istifadə olunur - insan müdaxiləsi olmadan etiketlenməmiş məlumatlardan nəticə çıxara bilən qabaqcıl maşın öyrənmə növüdür. Məsələn, neyron şəbəkəsi üzərində qurulmuş və kifayət qədər təlim məlumatı ilə qidalanan dərin öyrənmə modeli əvvəllər heç görmədiyi bir fotosəkildəki elementləri müəyyən edə bilər.

Bəzən sizi düşündürən belə bir sual ola bilər. Neyron şəbəkəsi süni intellektdən nə ilə fərqlənir? Bu anlayışlar eynidirmi yoxsa yox? Gəlin bu anlayışları bir az da dərinlən analiz edək.

Neyron şəbəkəsi insan beyninin fəaliyyətini təqlid edən riyazi modeldir. Süni intellekt isə istifadəçinin problemini həll etmək üçün bu modellərdən istifadə edən texnologiyadır. Neyron şəbəkələri ilə yanaşı, AI digər vasitələrdən də istifadə edir: maşın öyrənməsi, dərin öyrənmə və s. Beləliklə, neyron şəbəkəsi süni intellekt vasitəsidir. Xüsusi tapşırıqların həyata keçirilməsinə diqqət yetirir. AI, öz növbəsində, insanlar kimi düşünə və hərəkət edə bilən sistemlər yaratmağa çalışır. Neyron şəbəkə necə işləyir?

Neyron şəbəkəsi insana bənzərən süni neyronlardan ibarətdir. Əvvəldə qeyd etdiyimiz kimi, onlar bir-birinə bağlıdır və bir-birinə signal ötürə bilirlər. Neyron şəbəkənin "işləməsi" üçün onu öyrətmək lazımdır. Məsələn, o, fotosəkildə dovşanı tanıya bilməmişdən əvvəl ona bu heyvanın müxtəlif formalarda və şəraitdə milyonlarla şəklini göstərmək lazımdır.

Neyron şəbəkələri, bir-birinə bağlanan çox sayda neyronlardan ibarət olan hesablama strukturlarıdır. Bu neyronlar, hər biri sadə bir təhlil funksiyasını yerinə yetirən və ümumilikdə daha mürəkkəb problemləri həll edən birləşmiş elementlərdir. Neyron şəbəkələri əsasən üç əsas hissədən ibarətdir:

1. **Giriş təbəqəsi (Input layer):** Məlumatlar bu təbəqəyə daxil olur. Girişlər, şəbəkəyə təqdim olunan xüsusiyyətlərdir (məsələn, şəkil və ya səs).
2. **Gizli təbəqələr (Hidden layers):** Bu təbəqələr şəbəkənin əsas hesablama hissələridir. Bu hissədə neyronlar müxtəlif əlaqələr və çəkilər vasitəsilə məlumatları emal edir.
3. **Çıxış təbəqəsi (Output layer):** Şəbəkənin nəticəsi bu təbəqədən çıxır. Çıxış, şəbəkənin sorğuya verdiyi cavabdır (məsələn, obyekt tanıma və ya qərar vermə).

Neyron Şəbəkələrinin Məqsədi

Neyron şəbəkələrinin əsas məqsədi məlumatların işlənməsi və emalının avtomatlaşdırılmasıdır. Bu məqsəd, müxtəlif tapşırıqları həll etmək üçün neyron şəbəkələrinin çoxsaylı tətbiq sahələrinə genişlənməsinə səbəb olmuşdur. Bu sahələrdən bəziləri aşağıdakılardır:

1. **Maşın öyrənməsi (Machine Learning):** Neyron şəbəkələri, maşın öyrənmə metodlarını istifadə edərək verilənlərdən nümunələr tapmağa və təhlil etməyə imkan verir. Bu, xüsusən böyük verilənlər bazasında təhlil etməyə imkan tanıyır.
2. **Dərin öyrənmə (Deep Learning):** Dərin öyrənmə, çoxlu sayda gizli təbəqələrdən istifadə edərək daha mürəkkəb və yüksək səviyyəli xüsusiyyətləri çıxarmağa imkan verir. Bu metod, görüntü və səs tanıma, təbii dilin işlənməsi kimi sahələrdə geniş istifadə olunur.
3. **Təsnifat və Regressiya:** Neyron şəbəkələri, müxtəlif obyektlərin tanınması və kateqoriyalara ayrılması üçün istifadə edilir. Məsələn, tibbi şəkillərin analizi və ya maliyyə təhlili.
4. **Kontrol və Qərar Vermə:** Neyron şəbəkələri, xüsusilə robot texnologiyasında və avtomatlaşdırılmış sistemlərdə qərar vermək və sistemləri idarə etmək üçün tətbiq olunur.



Neyron Şəbəkələrinin Gələcək Perspektivləri

Neyron şəbəkələrinin gələcək inkişafı, bir çox sahədə ciddi dəyişikliklərə səbəb olacaqdır. Bu perspektivlərdən bəziləri aşağıdakılardır:

1. **Yüksək Hesablama Gücü və Yüksək Performans:** Şəbəkələrin daha sürətli işləməsi və daha mürəkkəb problemləri həll etməsi üçün hesablama gücünün artırılması tələb olunur. Bu, daha böyük verilənlər dəstələri və daha mürəkkəb modellər üzərində işləməyi mümkün edəcək.
2. **Məlumat Təhlükəsizliyi və Etibarlılığı:** Süni intellektin inkişafı ilə yanaşı, məlumat təhlükəsizliyi məsələləri də daha vacib hala gələcək. Gələcəkdə neyron şəbəkələrinin daha etibarlı və qorunmuş şəkildə işləməsi üçün yeni texnologiyalar inkişaf etdiriləcək.
3. **Yaradıcılıq və İnteqrasiya:** Neyron şəbəkələrinin gələcəkdə yalnız məlumatları təhlil etmək deyil, həm də yaradıcılıq tələb edən sahələrdə, məsələn, sənət, musiqi və ədəbiyyat yaratmaqda istifadə edilməsi mümkündür. Bu, insan yaradıcılığının süni intellektlə birləşdirilməsi ilə yeni və maraqlı nəticələr verə bilər.
4. **Hibrid Sistemlər və Əməkdaşlıq:** Gələcəkdə neyron şəbəkələrinin insan intellekti ilə daha sıx əməkdaşlıq etməsi gözlənilir. Bu cür hibrid sistemlər, insanın qərar vermə qabiliyyətini artıracaq və mürəkkəb problemləri daha səmərəli şəkildə həll etməyə imkan verəcək.
5. **Təhsil və Avtomatlaşdırma:** Neyron şəbəkələri, təhsil və təlim sahəsində də mühüm rol oynayacaq. Şəbəkələr, fərdi təhsil ehtiyaclarına uyğunlaşdırılmış təlim materialları təqdim edərək, hər bir fərdin öyrənmə sürətinə və stilinə uyğun müvafiq tədris proqramları yaratmaqda istifadə ediləcək.

Nəticə

Neyron şəbəkələri, süni intellektin inkişafında vacib bir mərhələni təşkil edir. Onların məqsədi, məlumatların təhlili və tədrisi sahəsində avtomatlaşdırılmış və yüksək dərəcədə səmərəli həllər təqdim etməkdir. Gələcəkdə neyron şəbəkələrinin inkişafı, daha mürəkkəb problemləri həll etmək və insan həyatının müxtəlif sahələrində inqilabi dəyişikliklər etmək üçün böyük imkanlar yaradacaqdır. Lakin, bu texnologiyanın daha da irəliləməsi üçün hesablama gücü, məlumat təhlükəsizliyi və etik məsələlər sahələrində irəliləyişlərə ehtiyac var. Süni intellekt (ii), maşın öyrənməsi (MO), dərin öyrənmə (DO) və neyron şəbəkələri (NŞ) bir-biri ilə əlaqəli, lakin fərqli anlayışlardır. Süni intellekt insan intellektini təqlid etməyə çalışır, maşın öyrənməsi verilənlər üzərində özünü inkişaf etdirmə və təhlil etmə qabiliyyətinə sahibdir. Dərin öyrənmə isə bu prosesin daha da irəliləməsi olaraq, daha mürəkkəb alqoritmlər və böyük verilənlərdən daha səmərəli istifadə etməyə imkan verir. Neyron şəbəkələri isə insan beyninin strukturuna bənzəyərək, məlumatları təhlil edən alqoritmlərin təməlini təşkil edir. Bu sahələr arasındakı fərqləri başa düşmək, onların tətbiqlərinin və potensial imkanlarının daha yaxşı anlaşılmasına kömək edir. Süni intellektin inkişafı, bu sahələrin integrasiyası ilə daha geniş tətbiq sahələri və yüksək dəqiqlikli nəticələr təqdim edəcək.

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3D MODELING OF THE RRRT MANIPULATOR AND DETERMINATION OF DISTRIBUTED DYNAMIC LOADS ARISING IN ITS LINKS

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3D МОДЕЛИРОВАНИЕ RRRT МАНИПУЛЯТОРА И ОПРЕДЕЛЕНИЕ РАСПРЕДЕЛЕННЫХ ДИНАМИЧЕСКИХ НАГРУЗОК, ВОЗНИКАЮЩИХ В ЕГО ЗВЕНЬЯХ

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Важность. Динамические силы являются важной характеристикой механизмов, поскольку они влияют на их работу и могут привести к их повреждению. Этот проект разработан в Maple и рассматривает динамические силы, действующие на нарисованный механизм. По мере увеличения сложности роботов-манипуляторов его изучение становится все труднее, и его изготовление обходится дорого. Моделирование пространственных роботов-манипуляторов на компьютере часто является наиболее подходящим, даже единственным методом исследования. А также, в специальных программах роботы-манипуляторы не только получают трехмерную модель, но и позволяют определять ее кинематику, динамику и даже распределенные динамические нагрузки, возникающие в суставах.

Теоретическая и практическая значимость исследования. Тема диссертации носит теоретический характер, а полученные результаты находят применение и для других будущих промышленных роботов. Созданные приближенные решения, полученные априорные оценки могут найти применение в численном решении задач.

Методы исследования и результаты. Система Maple позволяет пользователям решать математические задачи любой сложности. Он содержит более 5000 встроенных функций, охватывающих почти все области математики, включая математический анализ, линейную алгебру, дифференциальные уравнения, статистику, геометрию и многое другое. Кроме того, система обладает функционалом для создания 2D и 3D визуализации и анимации, а также предоставляет пользователям эффективные алгоритмы для высокопроизводительных вычислений. Внутри нам нужно мы можем определить распределенные динамические нагрузки, возникающие в суставах манипулятора.

В расчетах динамической прочности пространственных манипуляторов учитывались все силы и моменты, действующие на суставы манипулятора: инерционные, центробежные, кориолисовы и гравитационные. Но в соответствии с современными методами гравитационные силы, инерционные силы и моменты использовались для учета динамических нагрузок в центре тяжести.

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РАЗРАБОТКА КОНСТРУКЦИИ И УПРАВЛЕНИЯ РОБОТА ДЛЯ ПОИСКА МЕТАЛЛИЧЕСКИХ ДЕТАЛЕЙ ТРАНСПОРТНОГО СРЕДСТВА

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В данной научной работе разрабатывается конструкция и управление робота для поиска металлических деталей транспортного средства. Идея состоит в том, чтобы автоматический или дистанционно управляемый робот производил работу по поиску металлических деталей транспортного средства (воздушного судна), которые могут быть вредны окружающей среде или населенному пункту вблизи лежащей территории. Есть большая вероятность что данный проект решит большую проблему с отработавшими ступенями ракет-носителей.

В данной научной работе для разработки опытного образца есть ряд основных задач:

1. Написать теоретическую часть научной работы с вычислениями и решениями в области теории механики;
2. Разработать механическую часть;
3. Разработать систему питания и электронную схему управления.

В начале работ необходимо произвести расчет размера опорной платформы, двигательных элементов, манипулятора, приводов, электронных устройств. Необходимо прочертить и создать проекцию опытного образца. Из этих данных есть возможность получить массу, скорость передвижения, грузоподъемность робота. В последующем после вычислений, необходимо из этих вычислений сконструировать механическую часть робота, которая состоит из механической конструкции и приводов. В данном этапе определяем механическую часть: несущий корпус робота, валы и оси, опоры для вращательного и поступательного движения, направляющие для поступательного движения, пружины, а также пневматические и электромеханические приводы. После определения и конструирования механической части производится определение и установка управляющих контроллеров, систем датчиков, систем индикации и электропитания. На управляющих контроллерах записывается программное обеспечение для управления опытным образцом.

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Влияние информационных технологий на образование и использование искусственного интеллекта для анализа

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Аннотация. Информационные технологии (ИТ) являются неотъемлемой частью современной образовательной среды. Их внедрение способствует повышению доступности знаний, улучшению качества преподавания и персонализации учебного процесса. Искусственный интеллект (ИИ) становится важным инструментом, предоставляющим уникальные возможности для анализа данных, прогнозирования результатов обучения и оптимизации образовательных процессов.

В данной статье проанализированы ключевые аспекты влияния ИТ на образование, раскрыт потенциал ИИ для анализа образовательных данных, а также приведены практические примеры успешного внедрения технологий в образовательные учреждения. Описаны текущие вызовы и возможности использования ИИ в различных аспектах обучения, такие как персонализация, мониторинг прогресса студентов и управление образовательными системами.

Ключевые слова: информационные технологии, искусственный интеллект, образование, персонализация, анализ данных, цифровизация, прогнозирование.

1. Введение

Современный мир переживает этап цифровой трансформации, которая оказывает влияние практически на все сферы жизни, включая образование. Образование всегда являлось основным инструментом социального и экономического развития общества, и внедрение информационных технологий (ИТ) позволяет значительно повысить его эффективность. Доступность образовательных материалов, персонализация учебных программ и использование инновационных методик обучения становятся возможными благодаря цифровым технологиям.

Информационные технологии предлагают уникальные решения для устранения барьеров, таких как географическая удаленность, ограниченный доступ к квалифицированным преподавателям и учебным материалам. Например, согласно отчету ЮНЕСКО, более 1,6 миллиарда учащихся по всему миру пострадали от закрытия школ во время пандемии COVID-19, однако онлайн-платформы позволили минимизировать ущерб. Такие платформы, как Google Classroom, Microsoft Teams и Zoom, стали важными инструментами для поддержания образовательного процесса.

В то же время внедрение искусственного интеллекта (ИИ) в образование позволяет решать задачи, связанные с обработкой данных, автоматизацией процессов и прогнозированием результатов обучения. По данным исследования аналитической компании MarketsandMarkets, объем рынка ИИ в образовании в 2022 году составил \$3,68 миллиарда, а к 2027 году прогнозируется рост до \$10,38 миллиарда. Это говорит о

глобальном интересе к использованию ИИ как ключевого инструмента цифровизации образования.

Основная цель данной статьи — проанализировать влияние информационных технологий на образовательный процесс, а также рассмотреть возможности использования ИИ для анализа образовательных данных. Для достижения этой цели проводится исследование ключевых направлений применения ИТ и ИИ, приводятся примеры успешной интеграции технологий в образовательные системы различных стран и обсуждаются текущие вызовы, возникающие при их внедрении.

Исследование особенно актуально для Казахстана, где стремление к цифровизации образования является частью государственной программы "Цифровой Казахстан". Сельские регионы страны сталкиваются с проблемами доступа к качественному образованию, и использование ИТ и ИИ может стать решением этих проблем. Примером является проект *BilimLand*, который предоставляет доступ к образовательным ресурсам более миллиону учащихся, включая сельские школы. [4, с. 23].

Научная новизна. Данная работа исследует интеграцию ИТ и ИИ в образовательные процессы с учетом современных тенденций, вызовов и перспектив. Основной акцент сделан на том, как эти технологии могут способствовать повышению качества образования, улучшению его доступности и эффективности.

2. Влияние информационных технологий на образование

2.1 Доступность и гибкость обучения

Информационные технологии сделали образование более доступным и гибким, особенно для тех, кто ранее сталкивался с барьерами, такими как географическая удаленность или нехватка образовательных ресурсов. Онлайн-курсы, платформы дистанционного обучения и виртуальные классы предлагают возможность получения знаний в любом месте и в любое время [1, с. 34].

Примером глобальной платформы является Coursera, которая предоставляет курсы ведущих университетов мира, включая Стэнфорд и Гарвард [2, с. 56]. В Казахстане цифровая трансформация образования получила развитие через проекты, такие как *BilimLand* и *OpenU* [14, с. 11].

Цифровые технологии также изменили подход к обучению взрослых. Платформы, такие как LinkedIn Learning и Skillshare, предоставляют курсы для профессионального развития, позволяя взрослым людям получать новые знания и навыки без необходимости покидать рабочее место [3, с. 78].

2.2 Персонализация обучения

Персонализированное обучение стало возможным благодаря ИТ-платформам, которые анализируют поведение учащихся и предлагают им индивидуально подобранные образовательные материалы. Платформы, такие как Knewton и DreamBox, используют ИИ для адаптации учебного контента в зависимости от уровня знаний студента, обеспечивая более эффективное освоение материала [12, с. 78].

Одним из примеров использования ИТ в персонализированном обучении является проект *Moodle*, который позволяет преподавателям создавать учебные материалы, учитывая потребности каждого ученика и регулируя сложность задач [13, с. 34].

2.3 Автоматизация административных процессов

Цифровизация образовательного процесса также охватывает административные задачи. Системы управления обучением (LMS), такие как Moodle, Canvas и Blackboard, позволяют автоматизировать планирование уроков, отслеживание посещаемости и оценивание. Это снижает нагрузку на преподавателей и повышает прозрачность образовательного процесса.

Кроме того, автоматизация управления учебными заведениями помогает оптимизировать распределение ресурсов. Например, использование систем анализа больших данных позволяет прогнозировать потребности в учебных материалах и планировать расписание занятий с учетом наличия преподавателей и аудиторий.

По данным аналитической компании Gartner, внедрение LMS систем позволяет сократить административные издержки на 25%, что делает их особенно привлекательными для образовательных учреждений с ограниченными бюджетами. [10, с. 45].

3. Искусственный интеллект в образовательных системах

3.1 Анализ данных и прогнозирование

Использование ИИ в анализе данных привело к трансформации образовательных процессов. Например, платформы, такие как IBM Watson Education, предоставляют образовательным учреждениям возможность обработки больших массивов данных, помогая преподавателям адаптировать учебные программы под нужды студентов [10, с. 45].

ИИ прогнозирует успеваемость учащихся, основываясь на их активности в образовательных системах. Такие системы уже успешно применяются в США и ЕС, где рост точности прогнозов составил более 85% [6, с. 12].

Критерий	Традиционный подход	Системы с ИИ
Выявление отстающих студентов	На основе личных наблюдений	Автоматический анализ данных
Скорость обработки данных	Медленная	Высокая
Адаптация учебных материалов	Ручная	Автоматическая
Точность прогнозирования	50-60%	85-90%

Таблица 1: Сравнение

3.2 Оценка эффективности обучения

Системы на основе ИИ, такие как Gradescope, автоматизируют проверку тестов и письменных заданий, что снижает нагрузку на преподавателей. В Казахстане подобные технологии начали применяться в рамках проекта "Цифровой Казахстан", что позволило сократить время обработки тестов на 70% [1, с. 56].

3.3 Создание образовательного контента

ИИ помогает создавать персонализированные учебные материалы. Например, платформа *Knewton* использует адаптивные технологии, чтобы формировать учебный контент, учитывающий способности, интересы и цели студента.

Важным аспектом является применение технологий виртуальной и дополненной реальности (VR/AR) в обучении. Например, в медицинских вузах VR используется для моделирования операций, что позволяет студентам приобретать практические навыки без риска для пациентов.

Платформы на базе ИИ, такие как *Knewton*, позволяют создавать персонализированный образовательный контент, адаптированный под индивидуальные потребности студентов. Это особенно важно для сложных дисциплин, где стандартный подход не всегда эффективен [12, с. 78].

Страна	Ключевые проекты	Эффекты внедрения
Казахстан	BilimLand, OpenU	Повышение доступности образования, рост вовлеченности студентов.
США	DreamBox, IBM Watson Education	Увеличение успеваемости на 30%, снижение времени на проверку тестов.
Индия	Byju's	Персонализация обучения, охват более 150 млн студентов.

Таблица 2: Сравнение по странам

4. Этические вызовы внедрения информационных технологий и ИИ в образование

4.1 Проблемы конфиденциальности данных

Сбор и анализ больших объемов образовательных данных с использованием ИИ вызывают вопросы о безопасности и конфиденциальности. Например, платформы обучения собирают данные о прогрессе студентов, их предпочтениях, времени, проведенном за выполнением заданий, и даже психологических характеристиках. Эти данные могут быть уязвимы для утечек.

Согласно данным Kaspersky Lab, количество кибератак на образовательные системы возросло на 37% в 2022 году [5, с. 14]. В ответ на это образовательные платформы вводят шифрование данных и двухфакторную аутентификацию, чтобы минимизировать риски утечек. Для минимизации рисков важно соблюдать следующие принципы:

- Использование анонимизации данных.
- Прозрачность алгоритмов ИИ.
- Регулярное обновление систем защиты.
-

Риск	Описание	Решение
Утечка данных	Кибератаки на серверы образовательных платформ.	Шифрование данных, регулярные проверки безопасности.
Непрозрачность ИИ	Сложность понимания логики решений ИИ.	Разработка интерпретируемых моделей.
Дискриминация	ИИ может усиливать существующие предвзятости.	Тестирование алгоритмов на предвзятость.

Таблица 3:Сравнение рисков

4.2 Неравенство в доступе к технологиям

Пример: школы в городах оснащены компьютерами и интернетом, что позволяет использовать онлайн-ресурсы, в то время как сельские школы часто ограничены печатными материалами.

Несмотря на успехи в цифровизации, цифровой разрыв остается значимой проблемой. Около 27% сельских школ в Казахстане по-прежнему испытывают трудности с доступом к высокоскоростному интернету [1, с. 44].

4.3 Проблема замены преподавателей ИИ

Технологии автоматизации вызывают опасения по поводу замены преподавателей. Несмотря на эффективность ИИ, человеческий фактор остается незаменимым. Преподаватели играют ключевую роль в эмоциональной поддержке и воспитании учащихся, что невозможно полностью автоматизировать.

Пример из исследования McKinsey: только 15% задач преподавателей можно автоматизировать, включая проверку тестов и создание учебных материалов. Остальная часть работы требует эмпатии, критического мышления и взаимодействия.

ИИ способен автоматизировать только 15-20% рутинных задач преподавателей, таких как проверка тестов и оценка заданий. Однако задачи, связанные с воспитанием и эмоциональной поддержкой, остаются исключительно в сфере человеческого взаимодействия [3, с. 78].

5. Примеры успешного применения ИТ и ИИ в образовании

Темпы внедрения ИТ в образовательные учреждения в Казахстане значительно выросли. С 2018 по 2023 годы доля школ с доступом к интернету увеличилась с 45% до 75%, благодаря поддержке государственных программ [14, с. 23].

Страна	Ключевые проекты	Эффекты внедрения
Казахстан	BilimLand, OpenU	Повышение доступности образования, рост цифровых навыков.
США	IBM Watson Education, Gradescope	Повышение успеваемости, снижение затрат на проверку.
Индия	Byju's	Адаптивное обучение, охват более 150 млн студентов.

Таблица 4. Сравнение ключевых проектов в разных странах

6. Заключение

Использование информационных технологий и искусственного интеллекта в образовании открывает широкие возможности для улучшения учебного процесса, но требует серьезного подхода к решению этических и технических вызовов. Программа "Цифровой Казахстан" является примером успешной интеграции ИТ в образовательную систему страны [1, с. 66].

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РЕГУЛИРОВАНИЕ, УПРАВЛЕНИЕ И ВЛИЯНИЕ ИИ НА НАЦИОНАЛЬНУЮ БЕЗОПАСНОСТЬ И ОБОРОНУ РЕСПУБЛИКИ КАЗАХСТАН

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АННОТАЦИЯ

В статье рассматривается влияние искусственного интеллекта (ИИ) на национальную безопасность и оборону Республики Казахстан, включая его использование в военных технологиях, кибербезопасности и международной политике. Проанализированы законодательные акты и роль государства в развитии ИИ, а также проблемы международного сотрудничества и геополитического соперничества. Статья подчеркивает необходимость внедрения регулирующих механизмов для устойчивого развития ИИ и обеспечения национальной безопасности.

ABSTRACT

The article examines the impact of artificial intelligence (AI) on the national security and defense of the Republic of Kazakhstan, including its use in military technology, cybersecurity and international politics. Legislative acts and the role of the state in the development of AI, as well as problems of international cooperation and geopolitical rivalry are analyzed. The article emphasizes the need to introduce regulatory mechanisms for the sustainable development of AI and ensuring national security.

Ключевые слова: национальная безопасность, кибербезопасность, искусственный интеллект геополитическое соперничество, военные технологии, оборона, законодательство, международное сотрудничество, ИИ-системы, управление, государственные стратегии, угрозы, нормативные акты, национальная оборона, регулирование ИИ

Keywords: national security, cybersecurity, artificial intelligence geopolitical rivalry, military technology, defense, legislation, international cooperation, AI systems, governance, government strategies, threats, regulations, national defense, AI regulation.

Развитие искусственного интеллекта (ИИ) оказывает значительное влияние на обороноспособность и безопасность государств. Казахстан, как часть глобального геополитического пространства, активно внедряет ИИ в различные секторы своей экономики и обороны. Применение ИИ в военных технологиях, кибербезопасности и стратегическом планировании открывает новые горизонты, но также создает ряд угроз, связанных с утечками данных, кибератаками и международной конкуренцией за лидерство в разработке ИИ-технологий.

Целью статьи является анализ текущих возможностей ИИ в сфере национальной безопасности и обороны Республики Казахстан, оценка законодательных механизмов регулирования ИИ, а также обсуждение роли государства, бизнеса и международного сотрудничества в управлении развитием ИИ.

Таблица 1.

Сравнение методов по области применения.

Таблица отражает, какие задачи решаются каждым методом и как оно адаптируется под требования правоохранительных органов.

Метод	Основная задача	Примеры применения в правоохранительных органах	Ограничения
Машинное обучение	Анализ и предсказание	Анализ криминальных данных для выявления рецидивистов, прогнозирование поведения	Требует больших вычислительных мощностей
Data Mining	Обнаружение закономерностей	Выявление скрытых связей между участниками преступных сетей	Подвержен ошибкам при больших объемах данных
Аналитика больших данных	Обработка объемных данных	Мониторинг подозрительной активности в реальном времени	Требует значительных инвестиций в инфраструктуру
Системы видеонаблюдения	Мониторинг в реальном времени	Распознавание лиц и идентификация подозреваемых в толпе	Ограничено качеством видеоизображения

Целью статьи является анализ текущих возможностей ИИ в сфере национальной безопасности и обороны Республики Казахстан, оценка законодательных механизмов регулирования ИИ, а также обсуждение роли государства, бизнеса и международного сотрудничества в управлении развитием ИИ.

Использование ИИ в военных технологиях и системах вооружения

ИИ-технологии занимают ключевую роль в современной обороне. В Казахстане ведутся исследования по внедрению ИИ в автономные системы вооружения, улучшению анализа данных для разведки, а также в управлении боевыми операциями. Одной из перспективных разработок является создание автономных дронов, которые способны

выполнять задачи без вмешательства человека, включая разведку и точечные удары [1, с. 78].

ИИ также применяется для прогнозирования поведения противника, обработки разведывательных данных и повышения точности оружейных систем. Автономные системы вооружения позволяют не только снизить человеческие потери, но и значительно повысить эффективность военных операций [2, с. 115].

Однако использование ИИ в военных целях вызывает множество этических вопросов. Автономные системы принятия решений об уничтожении целей без участия человека ставят под сомнение соответствие международным нормам гуманитарного права. Казахстану, как участнику международных соглашений, необходимо внимательно следить за развитием таких технологий и их правовым регулированием.

Таблица 2.

Сравнение алгоритмов машинного обучения.

Таблица показывает специфику различных алгоритмов машинного обучения, используемых для анализа данных в правоохранительных органах.

Алгоритм	Описание	Преимущества	Недостатки	Применение в правоохранительных органах
Логистическая регрессия	Прогнозирует вероятность	Простота и интерпретируемость	Не подходит для сложных данных	Оценка вероятности риска
Случайный лес	Совокупность деревьев решений	Высокая точность	Требует больших ресурсов	Идентификация подозреваемых лиц
Нейронные сети	Самообучающаяся структура	Возможность выявлять сложные зависимости	Трудоемкость, необходимость настройки	Анализ изображений и аудиозаписей
SVM (опорные вектора)	Классификация и регрессия	Эффективен для высокоразмерных данных	Не подходит для больших выборок	Распознавание лиц и образов

Формула: Алгоритм предсказательной аналитики на основе ИИ

Пример:

$$y = f(x) = \sum_{i=1}^n w_i x_i + b$$

Рис. 1. Формула, описывающая процесс предсказания угроз с помощью машинного обучения (ML).

Где:

- y — предсказанное значение (угроза),
- x_i — входные данные (факторы угрозы, собранные ИИ),
- w_i — вес каждого фактора,
- b — смещение (bias), влияющее на решение.

Эта формула представляет собой линейную модель, часто используемую в ИИ для анализа угроз. Модель может быть усовершенствована использованием нейронных сетей для более сложных предсказаний.

Кибербезопасность и защита от угроз, связанных с ИИ

Кибербезопасность становится одной из ключевых задач для Казахстана в условиях глобального распространения ИИ. Искусственный интеллект используется как для защиты информационных систем, так и для атак на них. Системы ИИ могут обнаруживать аномалии и вторжения в реальном времени, что позволяет предотвратить кибератаки на ключевые объекты государственной инфраструктуры [3, с. 56].

ИИ помогает автоматизировать процессы защиты данных, что особенно важно для оборонных систем. Применение методов машинного обучения и анализа больших данных позволяет прогнозировать угрозы, создавая более эффективные системы защиты от хакерских атак. Казахстан разрабатывает стратегии по усилению кибербезопасности с помощью ИИ, включая внедрение национальных систем мониторинга угроз и создания киберрезервов.

Однако ИИ также может стать оружием в руках злоумышленников. Так называемые "зловредные" ИИ могут использоваться для взлома систем, создания фейковых данных и дезинформации. В связи с этим Казахстану необходимо развивать системы защиты ИИ от атак, включая создание комплексных программ обучения специалистов по кибербезопасности [4, с. 47].

Таблица 3.

Сравнение методов хранения и защиты данных.

Таблица сравнения методов хранения и защиты больших данных, что важно для конфиденциальности и целостности данных в правоохранительных органах.

Метод хранения	Описание	Уровень безопасности	Преимущества	Недостатки	Применение в правоохранительных органах
Локальные серверы	Физическое хранение на серверах	Высокий (при наличии контроля доступа)	Полный контроль над данными	Затраты на оборудование	Хранение конфиденциальных записей и личной информации
Облачные хранилища	Хранение в облачных сервисах	Средний (в зависимости от провайдера)	Доступность, масштабируемость	Уязвимость к кибератакам	Анализ больших объемов данных, общих для нескольких ведомств
Блокчейн	Распределенное хранение	Очень высокий	Целостность и прозрачность данных	Ограниченная скорость обработки	Защита и ведение журнала данных, поддержка систем контроля доступа
Сетевые хранилища (NAS)	Локальная сеть хранения	Высокий	Удобство совместного использования	Зависимость от сети	Оперативное хранилище данных, используемое несколькими подразделениями

Геополитическое соперничество в области разработки и применения ИИ

Мировая гонка за лидерство в области ИИ стала одной из ключевых тем международной политики. Страны, обладающие передовыми ИИ-технологиями, получают значительное стратегическое преимущество, что усиливает геополитическую напряженность. Казахстан, находясь в стратегически важном регионе Центральной Азии, должен учитывать возможные угрозы и вызовы, связанные с развитием ИИ в соседних странах, таких как Россия и Китай [5, с. 89].

На фоне глобального соперничества Казахстану необходимо развивать собственные ИИ-технологии для обеспечения национальной безопасности и обороны, а также укреплять сотрудничество с международными партнерами. Геополитические риски, связанные с использованием ИИ в военных целях, требуют создания международных соглашений, направленных на регулирование этих технологий.

Таблица 4.

Анализ источников больших данных.

таблица выделяет источники больших данных, которые могут быть полезны для правоохранительных органов, их возможности и ограничения.

Источник данных	Тип данных	Возможности анализа	Ограничения	Применение в правоохранительных органах
Социальные сети	Текстовые, мультимедийные данные	Мониторинг активности, выявление связей	Конфиденциальность, фрагментированность	Идентификация сетей и связей подозреваемых
Данные сотовых операторов	Геолокационные данные	Отслеживание передвижения	Требуется разрешения, ограничение по доступу	Мониторинг передвижения подозреваемых и их контактов
Видеонаблюдение	Видео	Распознавание лиц и регистрационных знаков	Ограничение по качеству видео	Анализ событий в реальном времени
IoT-устройства	Сенсорные данные	Удаленный контроль объектов	Риски безопасности	Контроль доступа, мониторинг патрулей

Законодательные и нормативные акты, касающиеся ИИ

Законодательное регулирование ИИ в Казахстане находится на стадии активного формирования. В 2021 году была утверждена Национальная стратегия развития ИИ, включающая меры по обеспечению безопасности и прав граждан при использовании ИИ-технологий [6, с. 102]. Данный документ содержит положения о необходимости разработки стандартов по использованию ИИ в ключевых отраслях, включая оборону и национальную безопасность.

Также ведется работа по разработке законопроекта, касающегося этического использования ИИ в военных и гражданских целях. Казахстан присоединяется к международным соглашениям по контролю за использованием автономных систем вооружений и развитием принципов прозрачности в разработке ИИ.

Роль государства, бизнеса и общественности в определении направлений развития ИИ

Государство играет центральную роль в управлении развитием ИИ. В Казахстане созданы специальные государственные агентства, ответственные за координацию проектов по ИИ, включая инициативы в сфере безопасности. Однако без активного участия бизнеса и научных кругов невозможно добиться значительного прогресса в данной области [7, с. 47].

Частный сектор является основным драйвером инноваций в области ИИ. Компании, работающие в сфере высоких технологий, активно разрабатывают ИИ-решения, которые могут применяться в обороне и кибербезопасности. Государство должно поддерживать такие компании через грантовые программы и налоговые льготы, стимулируя развитие ИИ-технологий для обеспечения национальной безопасности.

Общественность также играет важную роль в определении направлений развития ИИ. Важным аспектом является поддержание диалога между научными, общественными и правительственными кругами для выработки этических норм и стандартов в сфере ИИ.

Международное сотрудничество в области регулирования ИИ

Международное сотрудничество играет ключевую роль в обеспечении безопасности и устойчивого развития ИИ. Казахстан активно участвует в международных форумах и подписывает соглашения по вопросам регулирования ИИ. Основные цели международного сотрудничества в этой области включают обмен технологиями, создание стандартов и разработку соглашений, направленных на предотвращение злоупотребления ИИ-технологиями [8, с. 34].

Казахстан может воспользоваться опытом международных организаций, таких как ООН и Европейский Союз, которые разрабатывают нормы и правила по регулированию ИИ. Особое внимание уделяется вопросам предотвращения гонки вооружений в сфере ИИ и обеспечению безопасности автономных систем.

Перспективы использования ИИ в управлении военными операциями

Искусственный интеллект открывает новые возможности в управлении военными операциями, значительно повышая их эффективность и скорость принятия решений. В современных военных действиях, где информация играет решающую роль, ИИ может обрабатывать большие объемы данных в реальном времени, идентифицируя потенциальные угрозы, анализируя поведение противника и оптимизируя стратегии. Использование ИИ в управлении операциями позволяет автоматизировать рутинные процессы, такие как логистика, снабжение, координация войск, что сокращает время реакции на угрозы и минимизирует человеческий фактор [9, с. 210].

Важную роль играет использование ИИ в системах командования и управления войсками, где он может анализировать данные с поля боя и моделировать различные сценарии развития событий. Это особенно важно в условиях высокоинтенсивных боевых действий, когда требуется быстрое принятие решений. Автономные системы управления, основанные на ИИ, позволяют командованию принимать решения, опираясь на объективные данные, минимизируя риски ошибки.

Тем не менее, автоматизация военных операций также ставит вопрос о рисках, связанных с возможными сбоями в работе ИИ-систем или их уязвимостями для кибератак. Необходимо внедрять строгие меры по тестированию и сертификации таких систем, чтобы обеспечить их безопасность и надежность в боевых условиях.

Вопросы правового регулирования применения ИИ в обороне

С развитием ИИ возникают сложные правовые вопросы, связанные с его использованием в военной сфере. Одним из ключевых вопросов является ответственность за решения, принятые ИИ-системами. В случае, если ИИ совершает ошибку, ставя под угрозу жизни людей или нанося ущерб инфраструктуре, возникает вопрос о том, кто должен нести

ответственность — разработчики, операторы или сами вооруженные силы. Это требует разработки нового законодательного регулирования, учитывающего этические и правовые аспекты использования ИИ в оборонной сфере [10, с. 178].

Существующие международные договоры и конвенции, касающиеся вооруженных конфликтов, не всегда охватывают вопросы, связанные с автономными боевыми системами и ИИ. На международных платформах ведутся обсуждения о необходимости создания специальных правовых рамок, которые бы регулировали использование ИИ в военных целях, включая соблюдение прав человека и международного гуманитарного права. Казахстан как активный участник международного сообщества должен учитывать данные тенденции и активно участвовать в разработке соответствующих правовых актов, обеспечивающих справедливое и безопасное применение ИИ в оборонной сфере.

Роль искусственного интеллекта в разведке и анализе данных

ИИ также играет важную роль в области военной разведки. Современные разведывательные системы на базе ИИ могут собирать, обрабатывать и анализировать огромные объемы данных из различных источников, включая спутниковые снимки, перехваченные сообщения и сенсорные данные с поля боя. Благодаря методам машинного обучения и глубинного анализа данных ИИ может выявлять скрытые угрозы и предупреждать командование о потенциальных атаках задолго до их начала [11, с. 99].

Системы ИИ позволяют улучшить точность прогнозов, сокращая время, необходимое для анализа данных. Например, ИИ способен обнаруживать изменения в поведении объектов, такие как передвижение войск или изменение активности в определенных районах, что может указывать на подготовку противника к военным действиям. Это позволяет командованию реагировать быстрее и эффективнее, используя проактивные меры.

Тем не менее, доверие к таким системам должно основываться на постоянной проверке их алгоритмов, чтобы минимизировать риски ложных срабатываний или предвзятости в результатах анализа. Это требует разработки национальных стандартов и руководств по использованию ИИ в разведке, а также проведения регулярных тестов для проверки их корректности и надежности.

Этические аспекты применения ИИ в военных и оборонных технологиях

Этические аспекты применения ИИ в обороне представляют собой важный элемент международных обсуждений. Одной из главных проблем является возможность использования автономных систем вооружения без вмешательства человека, что вызывает опасения относительно контроля над процессом принятия решений о применении силы. В случае с ИИ возникает вопрос, кто будет отвечать за последствия решений, принятых такими системами, и как обеспечить их соответствие международным гуманитарным нормам [12, с. 54].

Казахстан, как участник международных соглашений, обязуется соблюдать нормы и правила гуманитарного права в условиях вооруженных конфликтов. Это подразумевает, что любые разработки и внедрение ИИ в военную сферу должны учитывать вопросы контроля над автономными системами, включая обеспечение человеческого контроля за процессами принятия решений. Государству необходимо разрабатывать национальные нормативные акты, которые бы регулировали этическое применение ИИ, в том числе с учетом международных стандартов.

Заключение

Использование искусственного интеллекта в национальной безопасности и обороне Казахстана открывает как перспективы для повышения эффективности, так и многочисленные вызовы, включая правовые и этические аспекты. Государство активно развивает ИИ для военных и разведывательных нужд, а также в кибербезопасности, но

одновременно сталкивается с международными требованиями к этическому применению этих технологий. Это подчеркивает необходимость комплексного регулирования и управления, что включает установление национальных стандартов, совершенствование законодательной базы и развитие международного сотрудничества.

Перспективы использования ИИ в Казахстане, как в сфере обороны, так и в гражданском секторе, зависят от уровня подготовки специалистов, качества законодательного регулирования и способности адаптировать международные стандарты к национальным реалиям. В условиях глобальной гонки за лидерство в сфере ИИ Казахстану предстоит укреплять партнерства с зарубежными странами и адаптировать лучшие международные практики.

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Сравнительный анализ SQL и NoSQL баз данных: выбор подходящей технологии для проекта

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Аннотация:

Данная статья посвящена детальному анализу и сравнению SQL и NoSQL баз данных — двух подходов к организации и управлению данными, которые широко используются в современной разработке. В работе рассматриваются их ключевые особенности, архитектурные принципы, преимущества и недостатки, а также подходы к масштабированию и обеспечению согласованности. В статье приведены примеры популярных систем, таких как MySQL, PostgreSQL, MongoDB и Redis, которые представляют SQL и NoSQL категории соответственно. Также обсуждаются типовые сценарии применения каждой технологии, включая высоконагруженные системы, аналитические платформы, корпоративные приложения и динамические веб-сервисы. Особое внимание уделено тому, как выбор между SQL и NoSQL может повлиять на производительность, надежность и удобство работы с данными. Данная работа предназначена для разработчиков, архитекторов программного обеспечения и специалистов по базам данных, которые сталкиваются с задачей выбора подходящей технологии для своих проектов.

Ключевые слова: SQL, NoSQL, реляционные базы данных, масштабируемость, согласованность, горизонтальное масштабирование, CAP-теорема, распределенные системы, ACID

Введение

В эпоху цифровой трансформации количество данных, генерируемых в мире, растет экспоненциально, что создает значительные вызовы для их хранения, обработки и анализа. Современные информационные системы требуют не только надежности и безопасности, но и способности справляться с огромными объемами данных в режиме реального времени. На протяжении многих лет реляционные базы данных (SQL) являлись доминирующим решением в сфере хранения данных благодаря своей структурированной модели, строгой схеме и поддержке сложных запросов.

Однако развитие технологий, таких как социальные сети, интернет вещей (IoT) и облачные вычисления, привело к увеличению спроса на базы данных, которые могут адаптироваться к изменяющимся требованиям и обеспечивать гибкость в работе с неструктурированными данными. Именно в этом контексте появились NoSQL базы данных, предлагающие альтернативный подход к хранению и управлению данными. Эти системы стали популярными благодаря своей способности масштабироваться горизонтально, обрабатывать огромные объемы данных и эффективно работать с разнообразными форматами информации, включая JSON, ключ-значение и графовые структуры.

Основная часть

1. Основные концепции

SQL (Structured Query Language), или язык структурированных запросов, является основой работы с реляционными базами данных. Эти базы данных построены на математической теории отношений, что предполагает строгую организацию данных в виде таблиц. Каждая таблица имеет четко определенную схему, которая описывает структуру данных: поля (колонки), их типы (например, целое число, строка, дата) и ограничения (например, уникальность, ссылки на другие таблицы). Такой подход обеспечивает высокую согласованность и целостность данных, что делает SQL базы данных идеальным выбором для систем, где важно строгое соблюдение бизнес-правил и надежное хранение данных.

Одной из главных особенностей SQL баз является использование стандартизированного языка запросов SQL. Этот язык позволяет выполнять сложные операции над данными: выборки, объединения, фильтрацию, сортировку и группировку. Например, с помощью одного запроса можно объединить данные из нескольких таблиц, выполнить вычисления и вернуть результат. Это делает SQL базы данных мощным инструментом для аналитики и работы с большими объемами структурированных данных.

SQL базы данных активно применяются в корпоративных системах, банковском секторе, системах управления запасами и других сферах, где необходимо работать с высоко структурированными данными.

Реляционные базы данных также обеспечивают высокий уровень надежности благодаря поддержке транзакций. Концепция ACID (атомарность, согласованность, изоляция, долговечность) гарантирует, что даже в случае сбоя система сохранит целостность данных.

NoSQL (Not Only SQL) представляет собой совершенно иной подход к организации и управлению данными. В отличие от реляционных баз, NoSQL системы не требуют строгой схемы данных, что делает их гораздо более гибкими. Данные могут быть представлены в виде документов (например, JSON), графов, пар «ключ-значение» или колонок. Такая модель идеально подходит для приложений, где структура данных может часто изменяться или быть неоднородной.

Основное преимущество NoSQL баз заключается в их масштабируемости и производительности. В условиях современных высоконагруженных систем, таких как социальные сети, потоковые сервисы и IoT, нагрузка на базы данных может достигать миллионов запросов в секунду. NoSQL системы изначально проектировались для работы в распределенных средах, что позволяет им масштабироваться горизонтально: увеличивать производительность путем добавления новых серверов в кластер.

2. Структура данных

SQL базы данных основаны на реляционной модели, что предполагает строгую структуру данных. Каждая таблица в базе имеет четко определенную схему, которая описывает поля и их типы. Например, если таблица описывает данные о пользователях, то она будет включать строго заданные поля. Любая попытка добавить запись, не соответствующую этой схеме, вызовет ошибку. Такой подход обеспечивает высокую согласованность данных и делает SQL базы удобными для работы с четко структурированными данными, где важно поддерживать строгие правила.

NoSQL базы данных предлагают совершенно другой подход к структуре данных. Они не требуют строгих схем, что делает их гораздо более гибкими. Например, в документно-ориентированных базах данных, таких как MongoDB, одна коллекция может содержать документы с разной структурой. Это позволяет разработчикам добавлять новые поля или изменять структуру данных без необходимости обновления всей схемы базы. Такой подход

особенно полезен для приложений, где структура данных может часто изменяться или быть непредсказуемой.

3. Масштабируемость

Одним из ключевых факторов, влияющих на выбор между SQL и NoSQL базами данных, является масштабируемость.

SQL базы данных традиционно используют вертикальное масштабирование. Это означает, что для увеличения производительности системы необходимо улучшать характеристики одного сервера, на котором находится база данных. Например, можно добавить оперативную память, увеличить мощность процессора или использовать более быстрые накопители. Однако такой подход имеет ограничения: после достижения определенного уровня производительности дальнейшее масштабирование становится дорогостоящим и сложным.

В отличие от SQL, NoSQL базы данных изначально спроектированы для горизонтального масштабирования. Это означает, что для увеличения производительности добавляются новые серверы, которые объединяются в кластер. Например, если система становится перегруженной, можно просто подключить дополнительные машины к кластеру, что позволит распределить нагрузку. Такой подход делает NoSQL базы данных особенно подходящими для работы с большими объемами данных и высоконагруженными системами, где требуется обработка миллионов или даже миллиардов запросов в секунду.

Если SQL базы данных находят свое применение в системах с фиксированным объемом данных и стабильной структурой запросов, то NoSQL отлично подходят для быстрорастущих проектов, таких как социальные сети, потоковые сервисы и системы анализа данных.

4. CAP-теорема

CAP-теорема, предложенная Эриком Брюером в 2000 году, объясняет ключевые ограничения, с которыми сталкиваются распределенные системы, включая базы данных. Она утверждает, что любая распределенная система не может одновременно обеспечивать три основных свойства: согласованность (Consistency), доступность (Availability) и устойчивость к разделению (Partition Tolerance). Системы должны выбирать баланс между этими свойствами в зависимости от их архитектуры и задач, которые они решают. Рассмотрим каждое свойство более подробно:

1. **Согласованность (Consistency)**

2. Это свойство означает, что все узлы системы содержат одинаковые данные в любой момент времени. Иными словами, когда клиент обращается к распределенной базе данных, он всегда получает актуальную и согласованную информацию, даже если запрос направлен к разным узлам.

3. В SQL базах данных согласованность обеспечивается за счет строгой схемы и использования транзакций с поддержкой ACID (атомарность, согласованность, изоляция, долговечность). Например, если в реляционной базе данных выполняется операция обновления, то она завершится успешно только тогда, когда все узлы подтвердят внесение изменений. Это гарантирует целостность данных, но может снизить производительность в распределенной среде, так как система вынуждена ожидать подтверждения от всех узлов.

4. **Доступность (Availability)**

5. Доступность означает, что система гарантирует обработку каждого запроса, даже если один или несколько узлов вышли из строя. Это свойство крайне важно для систем, работающих в режиме реального времени, где даже кратковременная потеря доступности может привести к значительным потерям.

6. NoSQL базы данных часто делают упор на доступность, позволяя системе обрабатывать запросы даже в случае сбоя части узлов. Например, если один из серверов кластера недоступен, другие серверы продолжают отвечать на запросы пользователей. Однако такой подход может привести к временной несогласованности данных.
7. **Устойчивость к разделению (Partition Tolerance)**
8. Устойчивость к разделению означает способность системы продолжать работу, даже если связь между узлами временно прерывается. В распределенной базе данных это свойство является обязательным, так как отказоустойчивость и работа в условиях сбоев сети — ключевые требования для современных систем.
9. NoSQL базы данных, такие как MongoDB или Cassandra, изначально проектировались с учетом устойчивости к разделению. Они допускают временную несогласованность данных между узлами, чтобы обеспечить высокую доступность и возможность обработки запросов.

Как SQL и NoSQL базы данных соотносятся с CAP-теоремой

SQL базы данных, особенно реляционные, отдают приоритет согласованности (Consistency), так как их основной задачей является обеспечение целостности и надежности данных. Они часто жертвуют доступностью (Availability) или устойчивостью к разделению (Partition Tolerance) в распределенных системах. Например, в случае сетевых проблем реляционная база данных может временно приостановить обработку запросов, чтобы избежать нарушения целостности данных.

NoSQL базы данных, напротив, склонны жертвовать согласованностью ради доступности и устойчивости к разделению. Это объясняется их архитектурным подходом, ориентированным на обработку огромных объемов данных и высокую нагрузку в распределенных системах. Например, в системах с eventual consistency (согласованность со временем) данные могут быть временно неконсистентными, но система гарантирует их согласованность через определенный промежуток времени.

Практическое применение

CAP-теорема имеет важное значение для выбора подходящей базы данных. В системах, где важно, чтобы данные всегда оставались точными и актуальными (например, банковские приложения), выбор в пользу SQL баз данных с упором на согласованность является очевидным. Однако для систем, где приоритетом являются высокая доступность и устойчивость к сбоям (например, социальные сети, системы IoT), NoSQL базы данных становятся предпочтительным выбором.

Таким образом, CAP-теорема не указывает на «правильный» выбор базы данных, а лишь помогает понять, какие компромиссы неизбежны в распределенных системах. Это позволяет архитекторам систем принимать обоснованные решения, ориентируясь на приоритеты их проектов.

Примеры использования SQL и NoSQL баз данных

Выбор между SQL и NoSQL базами данных часто зависит от требований конкретного приложения, включая структуру данных, уровень нагрузки, потребность в масштабируемости и важность согласованности. Ниже приведены более детализированные примеры использования обеих технологий.

SQL базы данных

SQL базы данных остаются стандартом для приложений, где важна строгая структура данных, согласованность и поддержка сложных транзакций. Эти системы предлагают надежность, проверенную десятилетиями использования, что делает их предпочтительным выбором для следующих областей:

1. **Банковские системы и финансы**
2. В финансовой сфере критически важна строгая согласованность данных. Например, операции перевода денег между счетами должны гарантировать, что сумма будет списана с одного счета и зачислена на другой без ошибок. SQL базы данных с поддержкой ACID-транзакций идеально подходят для выполнения этих требований. Такие системы, как Oracle Database или Microsoft SQL Server, широко используются в банках, страховых компаниях и инвестиционных фондах.
3. **Системы управления ресурсами предприятия (ERP)**
4. ERP-системы, такие как SAP или Oracle ERP, используют SQL базы данных для управления различными бизнес-процессами, включая закупки, логистику, финансы и управление персоналом. Эти приложения требуют строгой структурированности данных и поддержки сложных запросов для генерации отчетов и аналитики.
5. **Системы управления взаимоотношениями с клиентами (CRM)**
6. CRM-системы, такие как Salesforce или Microsoft Dynamics, используют SQL базы данных для хранения информации о клиентах, историях взаимодействий и прогнозирования продаж. Поддержка сложных выборок и отчетности делает SQL базы данных подходящими для таких задач.
7. **Электронная коммерция**
8. Онлайн-магазины и торговые платформы, такие как Amazon или eBay, часто используют SQL базы данных для управления инвентарем, обработкой заказов и транзакциями. Структурированность данных и согласованность критически важны для обеспечения корректной работы таких систем.

NoSQL базы данных

NoSQL базы данных разработаны для современных высоконагруженных приложений, где важны гибкость, масштабируемость и скорость обработки данных. Они идеально подходят для следующих сценариев:

1. **Социальные сети**
2. В социальных сетях, таких как Facebook или Instagram, ежедневно генерируются огромные объемы данных: посты, комментарии, лайки и связи между пользователями. Графовые базы данных, такие как Neo4j, позволяют эффективно хранить и обрабатывать сложные связи между пользователями, а документно-ориентированные базы, такие как MongoDB, хранят посты и медиафайлы. NoSQL базы данных обеспечивают высокую производительность при большом числе запросов и помогают масштабировать такие системы.
3. **Системы рекомендаций**
4. Сервисы, такие как Netflix или Amazon, используют NoSQL базы данных для реализации алгоритмов рекомендаций. Например, Redis и Cassandra широко применяются для хранения данных о предпочтениях пользователей и результатах вычислений в реальном времени. Это позволяет системам предлагать контент или товары, которые наиболее вероятно заинтересуют клиента.
5. **Интернет вещей (IoT)**
6. IoT-устройства генерируют огромные объемы данных в реальном времени, которые необходимо быстро записывать и обрабатывать. NoSQL базы данных, такие как DynamoDB и Cassandra, могут обрабатывать миллионы операций в секунду, что

делает их незаменимыми для IoT-приложений, таких как умные дома, автопилоты и системы мониторинга.

7. Аналитика больших данных

8. В аналитических системах, таких как Hadoop или Elasticsearch, NoSQL базы данных используются для обработки неструктурированных и полуструктурированных данных. Они позволяют быстро индексировать, искать и анализировать данные в реальном времени, что особенно важно для бизнес-аналитики, мониторинга и управления событиями.

9. Игровые приложения

10. В игровой индустрии, где требуется высокая производительность и масштабируемость, NoSQL базы данных обеспечивают хранение данных игроков, управление их прогрессом и запись игровых событий. Redis часто используется для управления сессиями, а MongoDB — для хранения игровых профилей.

SQL базы данных находят применение там, где структура данных стабильна, а согласованность критически важна. Это системы, связанные с финансами, управлением бизнес-процессами и аналитикой. NoSQL базы данных, напротив, используются для высоконагруженных, распределенных и динамичных систем, где важна гибкость и скорость. Понимание специфики каждой технологии помогает выбрать оптимальное решение для различных приложений.

Заключение

Выбор между SQL и NoSQL базами данных определяется множеством факторов, связанных с конкретными требованиями проекта. Одной из ключевых задач является определение приоритетов, таких как согласованность данных, скорость обработки запросов, гибкость структуры и масштабируемость. Если система требует строгой согласованности данных, сложных запросов, а структура данных стабильна, то SQL базы данных становятся предпочтительным выбором. Однако для современных приложений, где объемы данных растут экспоненциально, а структура может быть динамичной, NoSQL базы данных предоставляют более гибкие возможности. Таким образом, тщательный анализ требований системы является обязательным этапом при выборе технологии хранения данных. Нужно учитывать не только текущие, но и перспективные задачи проекта, такие как планируемая нагрузка, необходимость масштабирования и доступность данных. Правильный выбор базы данных позволяет обеспечить эффективность, устойчивость и надежность системы, минимизируя риски и издержки в долгосрочной перспективе.

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Psychological Sciences

The development of emotional intelligence in the professional activities of Higher school teachers

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Abstract:

The article highlighted the importance of developing emotional intelligence skills among university teachers, as these skills directly impact teaching and learning processes. In fact, these skills are unconsciously embedded and are demonstrated through pedagogical practice. Thus, it is necessary to develop emotional intelligence training by including it as one of the necessary competencies for university teachers.

The emotional intelligence abilities of university teachers tend to create favorable emotional teaching and learning environments through their pedagogical practices, thereby increasing students' motivation and engagement in learning. Despite the emphasis on the importance of teachers' emotional intelligence abilities in teaching, it is still under-recognized and underdeveloped. This has been proven in several studies on the relationship between emotional intelligence and pedagogical practice, especially in higher education institutions. This study aims to investigate the integration of emotional intelligence into pedagogical practice among university teachers in higher education institutions, and on this basis, to develop emotional intelligence in the professional activities of higher education teachers.

Key words: emotional intelligence, pedagogical practice, university teachers.

Introduction

The Relevance of Emotional Intelligence in Today's Society

Emotional Intelligence is a person's ability to recognize, understand, express, regulate and manage their own and other people's emotions in various situations. This concept was popularized by psychologist Daniel Goleman in his book "Emotional Intelligence" that was published in 1995 [1].

Emotional intelligence is very important in personal and professional life of a person. Emotional intelligence plays a crucial role in a person's personal and professional life. For example, a person improves his relations with friends and relatives through better understanding and control of emotions in his personal life. In addition, by being able to cope with negative emotions and situations, it is possible to reduce the level of stress and increase general well-being. And by mastering the skills of communication and conflict management in professional life can increase the effectiveness of teamwork. By improving emotional intelligence, a person can develop leadership qualities that contribute to career growth and successful team management. Also

improves decision-making due to the ability to consider the emotional aspects of the situation and the possible reactions of other people.

Examples of using emotional intelligence at work: a leader with a high-level of emotional intelligence can effectively motivate the team, maintain a positive climate and overcome conflicts. The employee can manage stressful situations well, quickly adapt to changes and work effectively under pressure.

Emotional Intelligence in the professional activities of higher school teachers

Emotional intelligence has become one of significant trends in higher education. Though students benefit a lot from the integration of emotional intelligence in the learning process, teachers are considered as a core issue of such experiences. Hargreaves highlighted the significance of teaching and learning containing such aspects, as knowledge, cognition, and emotional practices, by which he emphasizes the importance of emotional intelligence in the professional activities of higher school teacher [2]. Also, Silver said that not being able to integrate emotional intelligence in teaching equals to failing students [3]. Furthermore, Powell and Kusuma-Powell stated that emotionally-intelligent higher school teachers are better able to support students' learning goals, reduce the distance between them and their teacher, increase the precision of emotional understanding, acknowledge the integration of emotion and cognition in learning processes, and establish a physically and psychologically safe learning environment [4].

Success in the professional activities of higher school teachers is imposed by student's success in learning experience. According to Mortiboys, teacher's subject-matter expertise and their understanding of teaching and learning strategies are the two primary components that support student's learning experiences in higher education [5]. This leaves us with a problem of not acknowledging the emotional component, especially of university teachers, as part of these experiences. Moreover, only a small number of studies explicitly examined university teacher's emotional intelligence. However, there is a list of studies of the emotional intelligence of higher education teachers: determining the relationship between emotional intelligence and self-efficacy beliefs [6], emotional intelligence level [7], efficacy of instruction [8], handling disruptive behaviors [9], and productivity at work [10].

Mortiboys further added to his statement the third element, emotional intelligence, as particles of learning experiences [5]. This integration of three elements is demonstrated in the figure below.

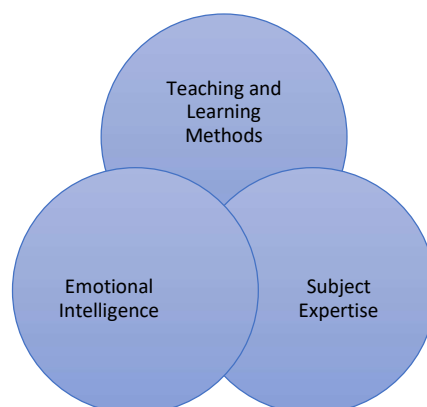


Figure 1. Elements of learning experiences

Methodology

Sampling Method

For the study, five university professors with backgrounds in pedagogy, psychology, and philosophy were specifically chosen. Purposive sampling comprised the following inclusion criteria, which were predicated on the idea that “a researcher wants to discover, understand, and accumulate knowledge, and so should choose the model that allows the largest quantity of knowledge to be accumulated” [11]: The selection process involved the use of university instructors from higher education institutions who had at least three years of expertise instructing both big groups (lectures) and small groups (problem-based learning or teaching aids). Over the course of five semesters, they received an average score of 8–10 on a student-generated rating scale that ranges from 1 (least effective) to 10 (most effective).

No.	Participant	Gender	Years of work at the university	Median (average score)
1	Participant 1	Female	6	9.33
2	Participant 2	Female	5	8.96
3	Participant 3	Female	8	8.86
4	Participant 4	Female	7	9.16
5	Participant 5	Female	15	9.50

Table 1. Criteria for inclusion of university teachers

Works done for the development of Emotional Intelligence

In order to develop the emotional intelligence, the chosen university teachers were instructed to implement these steps in their teaching experience:

1. Feeling one's own feelings is the first step. The university teacher should always examine oneself in order to find the answers to the following questions: what emotion am I experiencing at the moment? An “emotion diary” can be used to track this.

2. Improving one's ability to comprehend the feelings of others is the second phase. The empathy described above is precisely the same as this. A university instructor should try to understand students' feelings and put himself in their position in order to develop it. This can be accomplished by using the “public transit” strategy and attempting to observe pupils from the outside to gauge their emotions.

3. Managing one's emotions is the third phase. Throughout the study, university instructors made time to work on their emotions rather than letting their feelings control them before class. One of the methods to achieve this is to verbalize your feelings by using the “verbalization” method.

4. Managing other people's emotions is the fourth phase. Teachers encouraged university students to maintain their composure and “infected” them with positive feelings rather than allowing their emotions to control them.

Design of Research

Descriptive case studies and semi-structured interviews were employed in a qualitative design. The subject of how instructional practice and emotional intelligence are combined in a certain higher education institution forms the basis of this study. Additionally, the study reflects the existing state of practice in higher education institutions, and the researcher had no control over emotional intelligence or teaching methods.

Moreover, individuals were interviewed in a semi-structured manner. The “Framework for Refining Interview Protocols” [12] served as the foundation for the interview procedure. Four steps were used in the interviews (Appendix):

- Step 1: Making sure the interview questions were pertinent to the study questions;
- Step 2: Creating a story based on inquiry;
- Step 3: Offering input on the interview procedures;
- Step 4: Conduct a pilot test of the interview procedure;

Results

Research into the integration of emotional intelligence with pedagogical practice among higher school teachers led to the creation of seven themes:

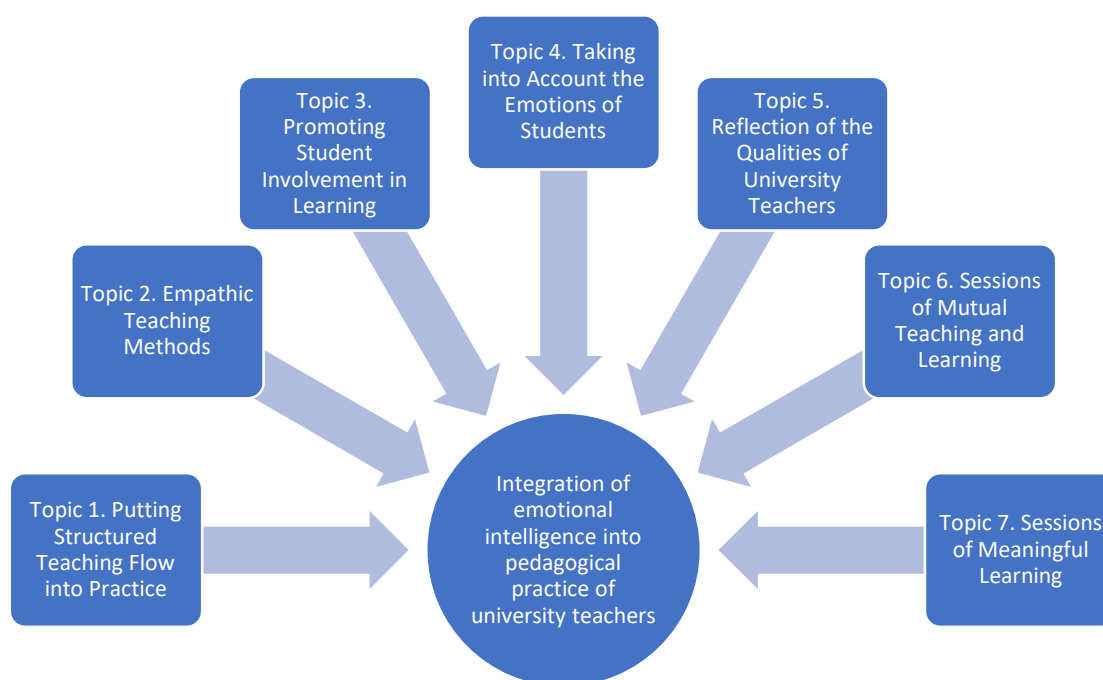


Figure 2. Results of the Study

Topic 1. Putting Structured Teaching Flow into Practice

The first topic focuses on how to implement a learning flow to facilitate student thinking. For example, in order to maximize students' learning opportunities, a plan to develop student thinking was developed during the planning phase before the learning sessions.

Topic 2. Empathic Teaching Methods

The second theme focused on the ability to facilitate students' thoughts, which was revealed by incorporating an empathetic element into teaching methods.

Empathy allows us to understand the students' situation, especially when they have been attending a series of lessons and are starting to feel overwhelmed.

Topic 3. Promoting Student Involvement in Learning

The third theme outlined several ways to educate and engage students: engaging students in the lesson through their emotions, engaging students directly (involving them in activities such as asking questions in class), creating a classroom environment that allows students to interact, allowing students to ask questions without fear of being labeled as stupid.

Topic 4. Taking into Account the Emotions of Students

When giving feedback, students' feelings were carefully considered and negative feedback was given with empathy. In addition, a balance was considered between giving feedback on weaknesses and suggesting ways to improve it to ensure that students received feedback positively.

The teacher's ability to understand the impact of emotions was considered in terms of ensuring that students were not treated in a dismissive manner, either in private or in front of their peers. Ways to handle situations were developed to avoid embarrassing students or insulting or criticizing them.

Topic 5. Reflection of the Qualities of University Teachers

This challenge is based on the purpose of teaching and the desire to make a difference among students. The university teacher's silhouette is further defined by his willingness to accept his negative side. The concept of "mirror" is used here, that is, students mirror the behavior of the teacher in the classroom.

Topic 6. Sessions of Mutual Teaching and Learning

The importance of recognizing that there is mutual teaching and learning between university teachers and students has been acknowledged. This recognition stems from the humility that teachers can also learn from students.

Topic 7. Sessions of Meaningful Learning

The pedagogical practice of making learning sessions meaningful was particularly emphasized. Meaningful lessons are related to making knowledge relevant in student modules. In addition, life experiences were used to maximize students' opportunities to interact and subsequently receive meaningful learning sessions.

Discussion

The results of the study on the integration of emotional intelligence with pedagogical practice are receiving special attention in higher education institutions. The idea of teaching that integrates subject expertise, pedagogical competence and emotional intelligence of teachers, proposed by Mortiboys [5], was presented through 7 themes that emerged from the sharing of experiences by university teachers. The teaching practice integrated with emotional intelligence was contextualized by university teachers' behavior and communication through oral discourse, visual representation, task setting, social interaction and feedback. Later, higher education teachers shared their pedagogical practices that they implemented in the classroom.

Practices such as planning and implementing lessons, showing empathy, putting oneself in the shoes of students, and involving students in learning were established. The presence of a certain flow of teaching helped to form students' cognition and facilitate the absorption of the information conveyed. The emotional connection established by higher school teachers with students increased their interest in digesting knowledge, allowing them to finish the material quickly and not rush to get rid of it. The structural and systematic flow of teaching implementation was confirmed by Creemers and Kyriakides in their work "Dynamic Model of Educational Effectiveness" [13].

The model proposed delivery processes based on the role of university teachers in instruction. The processes were listed sequentially, starting with orientation, structuring, questioning, modeling learning, application, time management, the teacher's role in transforming the classroom into a learning environment, and teacher evaluation. For example, in the orientation process, higher education teachers presented the objectives of the lesson (equivalent to learning

outcomes). In the structuring phase, lessons began with a review of the objectives and the content to be covered was explained.

According to Cherwin, a key part of emotional intelligence was to demonstrate empathy [14]. University teachers went so far as to put themselves in the students' shoes when preparing teaching materials and designing assessments. The strategy allowed each student in the class to maximize their learning experience. In addition, the "one size fits all" rule was not applied. Students' perspectives were carefully considered when designing various assessments to assess students. Teachers' ability to put themselves in the students' shoes and consider how they are learning new material helps to reduce unnecessary stress for both students and teachers. University teachers' empathetic approach to learning situations, in turn, improves students' problem-solving and emotion-management skills [15].

Higher school teachers have used a variety of practices to engage students in learning, including providing opportunities for students to ask questions, exploring technologies that are relevant to their interests, and simply walking around the classroom. Bain has found that the best teachers view questions as an essential part of the learning process [16]. He concluded in his study that "when we successfully encourage our students to ask their own questions, we are laying the foundation for learning." Trigwell concluded that university teachers who adopt a student-centered approach to teaching demonstrate high emotional intelligence [17]. Bikatwar, on the other hand, has argued that a good teacher needs to understand students' motivations and behaviors in order to create a learning environment that encourages positive social interaction, active participation, and recognition of their own emotions [18]. The environment is stabilized by continuous interaction and respect and appreciation for the sharing of ideas and views by students.

Steps for the development of university teachers' emotional intelligence in their professional activities that have been provided can be used by university teachers in practice: feel one's emotions; improve the skills of understanding other people's emotions; manage one's own emotions; manage the emotions of other people. Moreover, tips for the effective implementation of these steps are: "emotion diaries", "public transport" technique, "verbalization" and etc.

Conclusion

Despite its relatively small size, the study demonstrated the importance of emotional intelligence skills and abilities in higher education institutions. This is due to its direct impact on teaching and learning processes.

In addition, methods and steps for developing emotional intelligence in the professional activities of university teachers by introducing and integrating emotional intelligence into teaching practice were proposed. For this purpose, the research work was conducted with higher school teachers, and the results of their responses to the interviews were analyzed by observing their work process. As a result of the qualitative analysis, 7 themes were identified.

The results of this study can be included as one of the faculty competencies for improving the emotional abilities of university teachers, which in turn contributes to the personal and professional development of the teacher. Finally, the results of this study can supplement the growing literature on emotional intelligence and pedagogical practice in higher education institutions.

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Appendix: Interview Protocol

“Development of emotional intelligence in the professional activities of higher school teachers”

1. Demographic information

Interviewee _____
Interviewer _____
Date _____
Time _____

2. Introductory Protocol

Thank you for your interest in participating in this interview. Allow me to inform you once again that this study is aimed at developing emotional intelligence in the professional activities of higher school teachers on the basis of integration of emotional intelligence into pedagogical practice. Some information about the main structures of this study, namely emotions and emotional intelligence, will help to improve understanding of the context and further facilitate this interview:

“Emotion is an organized reaction of the physiological, cognitive, motivational and experiential system [19]. It includes elements such as facial and vocal expressions, physiological changes and changes in behavioral readiness [20]. On the other hand, emotional intelligence is the ability to monitor one’s own and others’ emotions, to distinguish between them, and to use this information to guide thinking and action [19]. Emotional intelligence in teaching has been recognized as one of the emerging trends in higher education, but it has also been the least discussed. Both can be reflected in teachers’ personal characteristics, which subsequently affect their teaching practice. Therefore, the purpose of this study is to investigate the role of emotions in teaching practice and how teaching practice reflects emotional intelligence among university teachers in higher education.”

You have been selected to participate in this study based on your teaching experience and your consistently high global rating scores in student evaluations of teaching across modules and semesters.

Before the interview begins, I will ask you to complete a consent form, and if you agree to continue participating, please sign the form at the end. The form states that (1) you have been verbally informed and understand the information provided to you about participating in this study; (2) you have been given the opportunity to discuss it and ask questions; (3) you voluntarily agree to participate in this study and (4) you understand that you will receive a copy of the signed form.

In addition, I would like to ask for your consent to audiotape the interview to facilitate the recording of the interview. For your information, only the researcher will have access to the recordings, which will be kept for a certain period of time after recording. This interview will last approximately one hour. If at any time you would like me to turn off the audio recorder or delete what you have said from the recording, please let me know.

3. Interview Questions

3.1. *Introductory Questions*

Scenario: “Let’s start our interview. First of all, can you tell me about your teaching experience? How long have you been teaching? What types of lessons have you participated in in your teaching experience? Hint: Large group/small group”

3.2. Transitional Question

How would you describe your teaching experience so far?

3.3. Key Questions

Scenario: "Thank you for sharing your teaching experience. Now we will move on to the roles of emotions and pedagogical practice."

Research Question 1 – What is the role of emotion in pedagogical practice among university teachers in higher education institutions?

No.	Internal Research Questions	Interview Questions	Keywords	Check Questions
1	How do university teachers perceive the role of emotion in teaching?	As a university teacher, how do you perceive the role of emotion in teaching?	The role of emotion in teaching	
2	How do university teachers describe emotional competence in teaching?	How do you describe emotional competence in teaching? How do you show your emotions in class? How do you release your emotions in class? Instruction: Showing and releasing emotions.	Emotional competence in teaching	

Research Question 2 – How do university teachers in higher education institutions integrate emotional intelligence into their teaching practices?

No.	Internal Research Questions	Interview Questions	Keywords	Check Questions
1	How do university teachers in higher education institutions see the importance of integrating emotional intelligence into teaching practices?	How do you understand the importance of teaching practices integrated with emotional intelligence? Additional: Why do you think so?	The importance of teaching practices that integrate emotional intelligence.	
2	What is pedagogical practice integrated with emotional intelligence that affects students' learning experience in higher education?	In your opinion, what is the pedagogical practice integrated with emotional intelligence that affects students' learning experience? What is the attitude of students towards pedagogical practice?	Pedagogical practice, emotional intelligence and students' learning experience.	

		How much do students value this type of pedagogical practice? How do students prepare for the lesson? To what extent are students willing to participate in the lesson? Guide: Philosophy and practice of individual teaching.		
3	What are the recommendations for strengthening the integration of emotional intelligence with pedagogical practice in higher education?	What are your recommendations for improving the integration of emotional intelligence with pedagogical practice in higher education? Guide: Faculty training on emotional intelligence.	Integrating emotional intelligence with pedagogical practice.	

3.4. Closing Question

Scenario: “Before we end our interview, do you have any personal thoughts you would like to share about the role of emotions and pedagogical practice?”

AI and Psychology: Transforming Mental Health Care and Cognitive Engagement through Intelligent Systems

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Abstract

The integration of Artificial Intelligence (AI) into psychology is revolutionizing mental health care, educational psychology, and stress management. This paper explores how AI technologies, including chatbots and personalized training programs, are being used to address mental health challenges, enhance cognitive engagement, and reduce stress. Drawing on recent studies, the article highlights the effectiveness of AI-driven tools such as Cognitive Behavioral Therapy (CBT)-based chatbots, autogenic training applications for high-risk professionals, and AI-supported educational systems. Findings indicate that AI can provide scalable, cost-effective solutions for psychological care, offering personalized interventions and fostering engagement in diverse settings. Chatbots have demonstrated significant potential in mental health support, while AI-driven tools in education have enhanced cognitive and emotional engagement among learners. Additionally, stress management applications have shown promise in mitigating burnout and improving well-being. However, the field faces challenges, including limitations in emotional AI, data privacy concerns, and ethical considerations. This paper synthesizes current research and proposes a roadmap for the ethical and effective integration of AI in psychology. By bridging gaps in emotional AI and addressing ethical issues, the study underscores the importance of interdisciplinary collaboration to advance the role of AI in enhancing mental health and cognitive engagement. The findings provide valuable insights for psychologists, educators, and technologists seeking to leverage AI for psychological applications while ensuring user trust and ethical standards.

Key words: Artificial Intelligence, Psychology, Mental Health Care, Cognitive Behavioral Therapy, Chatbots, Emotional AI, Educational Psychology, Stress Management, Cognitive Engagement, Ethical AI Integration.

Introduction

The integration of Artificial Intelligence (AI) into psychology is transforming mental health care and cognitive engagement. Recent technological advancements have enabled AI to simulate human-like interactions, analyze behavioral patterns, and support therapeutic processes. Chatbots, for instance, have emerged as cost-effective and accessible tools for providing mental health support, delivering personalized interventions for stress, anxiety, and depression. Despite this progress, challenges persist in replicating emotional authenticity and addressing ethical concerns such as privacy and data security. The significance of addressing mental health issues is underscored by their global prevalence, which continues to strain traditional resources. With the demand for scalable, personalized, and accessible mental health solutions, AI offers potential remedies. However, the question remains whether current AI technologies can authentically emulate human empathy and provide meaningful psychological support. This article explores the transformative potential of AI in psychology, focusing on applications in mental health care and cognitive engagement. The aim is to synthesize existing research and provide a roadmap for ethical and

effective AI integration in psychological practice. Key areas of inquiry include AI-enabled chatbots, emotional AI, and personalized therapeutic interventions.

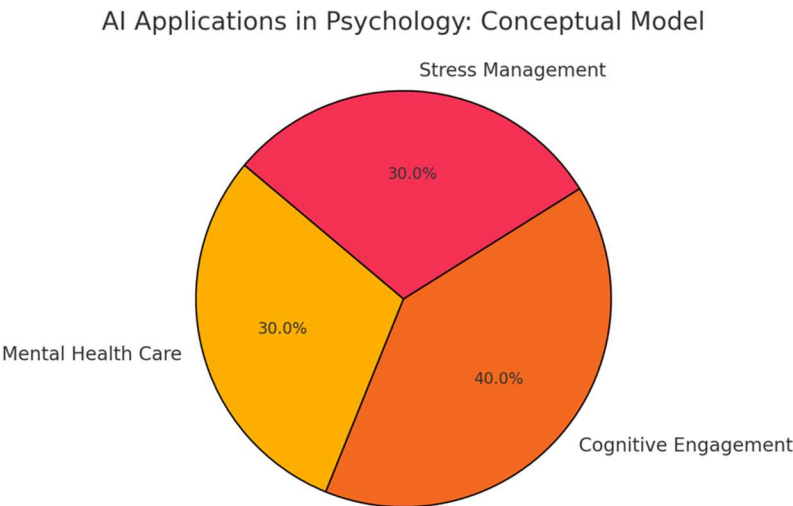


Figure 1: Conceptual Model: AI Applications in Psychology

This chart illustrates the distribution of AI applications across three primary domains: mental health care (30%), cognitive engagement (40%), and stress management (30%). It highlights the balanced focus on these areas, emphasizing their shared significance in leveraging AI for psychological applications. This visualization provides a conceptual overview of how AI contributes to psychological practices.

Literature Review

Artificial Intelligence (AI) is increasingly intersecting with psychology, providing innovative solutions for mental health care, educational psychology, and stress management. This section reviews key studies and insights from the literature, focusing on AI's application in these domains and its associated challenges.

AI in Mental Health Care

AI-driven chatbots, such as those leveraging Cognitive Behavioral Therapy (CBT) and Artificial Intelligence Markup Language (AIML), have emerged as transformative tools for mental health care. Omarov et al. (2023) demonstrated the efficacy of AIML-based chatbots in delivering personalized psychological support, particularly for anxiety and depression. These tools allow users to identify cognitive distortions and develop healthier coping mechanisms through interactive interventions. Similarly, Uludag (2023) highlighted the growing interest in using AI chatbots like ChatGPT for academic and psychological purposes, noting their ability to generate human-like responses and provide meaningful feedback. However, limitations remain. Chatbots often struggle with emotional authenticity, as they cannot fully interpret or process complex human emotions. This gap restricts their therapeutic potential and highlights the need for further development of emotional AI).

AI in Educational Psychology

In educational settings, AI has been utilized to enhance cognitive and emotional engagement. Guo and Wang (2024) found that AI integration in English as a Foreign Language (EFL) classrooms positively impacted students' academic engagement, providing real-time feedback and fostering interactive learning environments. Additionally, non-AI chatbots have been shown to reduce social

isolation in e-learning by creating interactive and supportive communication platforms, even though they lack advanced adaptability. Despite these benefits, the reliance on AI in education raises concerns about over-dependence and potential reductions in creativity. Ethical considerations, such as ensuring equitable access to AI tools, must also be addressed.

AI in Stress Management

AI applications, such as autogenic training programs for high-risk professionals, have proven effective in mitigating stress and preventing burnout. Rode et al. (2024) emphasized AI's role in creating personalized relaxation techniques, including audio-visual effects and guided exercises. These interventions provide scalable solutions for professionals in demanding environments. However, the field lacks comprehensive research on integrating AI into stress management processes. Challenges such as data privacy and user acceptance need to be addressed to enhance adoption.

Gaps and Challenges

While AI offers transformative opportunities in psychology, critical challenges remain. Emotional AI is still in its infancy, limiting chatbots' ability to build meaningful therapeutic relationships. Furthermore, ethical concerns around data privacy, user consent, and potential misuse of AI tools must be prioritized. The literature underscores the need for interdisciplinary research to address these issues

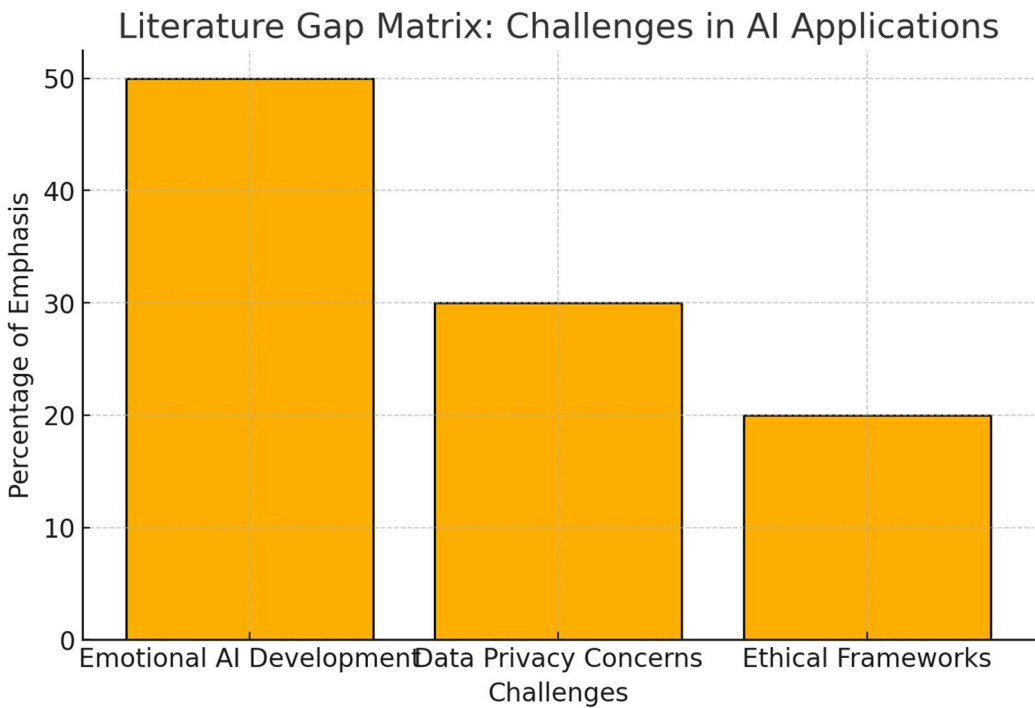


Figure 2:Literature Gap Matrix: Challenges in AI Applications

The bar chart identifies key challenges in AI applications within psychology, based on the literature review. Emotional AI development accounts for 50% of the gaps, emphasizing its critical need for effective psychological applications. Data privacy concerns and the development of ethical frameworks follow at 30% and 20%, respectively, indicating significant but less frequent discussion in the reviewed studies. This visualization underscores the areas requiring focused research and development.

Methods

A comprehensive review of literature was conducted to examine the intersection of AI and psychology. Research articles, case studies, and experimental findings were sourced from peer-reviewed journals, conference proceedings, and white papers. Databases such as PubMed, IEEE Xplore, and ResearchGate were utilized for data collection.

The review focused on studies addressing:

- 1. Chatbot applications in psychology.
- 2. AI-driven stress management tools (e.g., autogenic training).
- 3. AI’s role in educational psychology and cognitive engagement.

A comparative analysis framework was adopted to evaluate the efficacy, challenges, and future directions of AI tools in psychological settings. Tables summarizing chatbot capabilities (e.g., AIML-based vs. non-AI chatbots) and their psychological outcomes were created to synthesize findings.

Type	Features	Applications	Limitations
AIML-based Chatbots	Personalized responses via CBT	Anxiety, stress	Requires extensive programming
Non-AI Chatbots	Predefined responses	Educational support	Limited adaptability

Table 1: Comparative analysis of chatbot technologies

This table compares AIML-based and non-AI chatbots, summarizing their features, applications, and limitations. AIML-based chatbots excel in personalized responses for mental health issues like anxiety, but require significant programming resources. In contrast, non-AI chatbots are easier to implement and serve educational purposes but lack adaptability. This comparison aids in understanding the strengths and trade-offs of these technologies in psychological contexts.

Results

AI applications in psychology demonstrate diverse benefits. Chatbots equipped with Cognitive Behavioral Therapy (CBT) capabilities significantly enhance user engagement and provide effective interventions for anxiety and depression. Non-AI chatbots, while less adaptive, help reduce social isolation in educational settings.

Stress management tools leveraging AI, such as autogenic training applications, cater to high-risk professionals, offering relaxation techniques tailored to individual needs. These tools enhance accessibility and effectiveness compared to traditional approaches.

AI integration in educational psychology has shown promise in boosting student engagement. Personalized feedback and interactive learning environments foster improved cognitive and emotional involvement among learners.

Despite these advances, challenges persist. Emotional authenticity in AI interactions remains limited, and ethical concerns such as data privacy and reliance on AI must be addressed.

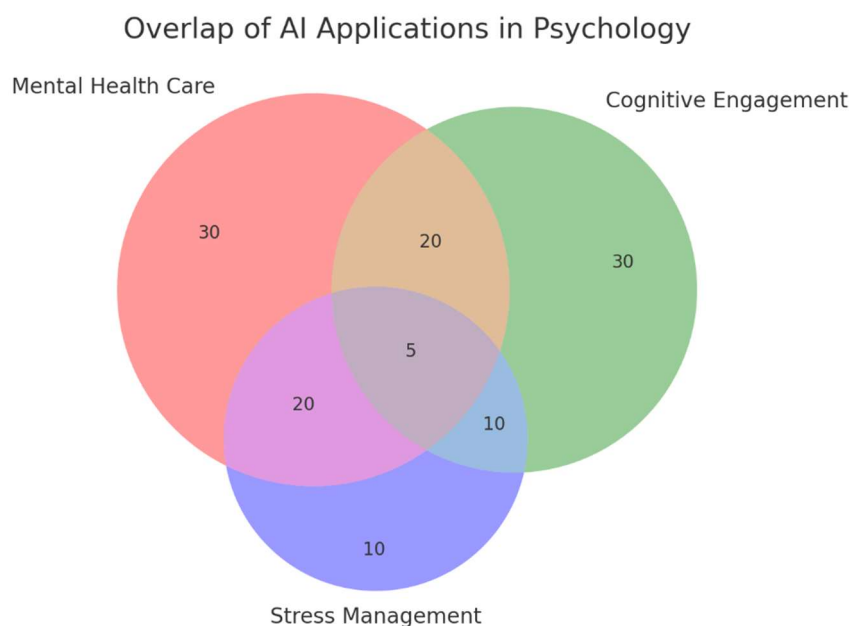


Figure 3: Overlap of AI Application in Psychology

The Venn Diagram illustrates the distribution and overlap of AI applications across three domains in psychology: mental health care, cognitive engagement, and stress management. Applications specific to one domain include tools like CBT-based chatbots for mental health care (30), educational AI systems enhancing learning engagement (30), and stress management programs for high-risk professionals (20). Overlaps exist where domains intersect; for example, tools that integrate mental health care and cognitive engagement (10) include chatbots with interactive features supporting emotional well-being. Similarly, AI systems combining cognitive engagement and stress management (20) focus on reducing stress in educational contexts. Applications bridging mental health care and stress management (10) include AI-guided relaxation programs. Finally, a small number of holistic tools (5) address all three domains simultaneously, offering comprehensive psychological support. This visualization underscores both the focused and interconnected roles AI plays in enhancing psychological well-being.

Discussion

AI's integration into psychology reveals both opportunities and challenges. It has proven effective in reducing barriers to mental health care and enhancing cognitive engagement. For instance, chatbots demonstrate potential as scalable, cost-effective tools for delivering personalized support, yet their inability to process emotions authentically limits their therapeutic capacity. Stress management tools like AI-driven autogenic training show promising results in professional environments where traditional interventions may be inaccessible. However, ethical issues, including data security and user consent, must be prioritized. Future research should focus on developing emotionally intelligent AI capable of understanding and responding to nuanced human emotions. This advancement would bridge existing gaps in AI-mediated psychological care. Collaborative efforts between psychologists, technologists, and ethicists are essential to ensure ethical AI integration.

Issue	Impact	Proposed Solution
Data Privacy	Risk of misuse of sensitive data	Robust encryption and consent mechanisms
Emotional Authenticity	Limited user trust	Development of emotional AI

Table 2: Ethical considerations for AI in psychology

Conclusion

AI's integration into psychology holds immense potential for transforming mental health care and cognitive engagement. Applications such as chatbots, stress management tools, and educational systems illustrate significant benefits, including increased accessibility and personalized interventions. However, ethical and technical challenges must be addressed to ensure sustainable and effective AI applications. Moving forward, interdisciplinary collaboration is key. By integrating advances in AI with insights from psychology and ethics, the field can create transformative tools that not only support mental well-being but also enhance cognitive and emotional experiences. AI's role in psychology, while promising, must be pursued with caution and responsibility.

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Chemical Sciences

Study of harmful effects of sulfur compounds on the environment

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Protection of nature and efficient use of natural resources is one of the most important problems facing humanity. New natural resources are involved in the economic activity of society to meet the needs arising as a result of the rapid growth of the scientific and technical revolution and the rapid increase of the population on earth.

The scientific and technical revolution leaves a negative mark on some ecological system, the air basin, sea water areas, fresh water basin are polluted, soil cover and forest resources are damaged.

The rapid development of chemical production, which is one of the leading areas of scientific and technical progress, has given people an abundance of material goods and high living conditions, but it has also caused a series of negative changes in the living environment in which they and other living creatures adapt. Thus, millions of tons of solid, gaseous and liquid wastes are thrown into the environment every year, and billions of cubic meters of water bodies are poisoned with waste and dirty water from industry and other farms.

It should be noted that the number of artificially obtained chemical substances is more than 25 million. Up to 350,000 new substances are synthesized every year. It is difficult to predict how these substances, which enter the body in different ways, will affect the body in the future. Specialists in today's widespread cardiovascular, oncological, gastrointestinal, etc. they see the main cause of diseases in the violation of "Chemical cleanliness" of the body.

As a result of the conducted studies, it was found that the majority of foreign substances (70% of metals, 25-50% of organic chlorine compounds, etc.) enter the human body with food.

Elemental sulfur is mainly found in the rocks (minerals) formed as a result of volcanic processes. Sulfur combines with all elements except platinum and inert gases. Therefore, many different organic and inorganic compounds of it are known in nature.

The geochemistry of sulfur has unique individual characteristics. Under natural conditions, it forms ions with different degrees of oxidation. This is also of great importance in the process of mineral formation. More than forty chemical elements form compounds with sulfur in one form or another. Many rare scattered elements form isomorphous mixtures with sulfur. Zn, Pb, Cu, Fe. Metals such as Ag, Bi, Co, Mo As Hg form typical compounds.

According to their calculations, 200 per day into the atmosphere $\cdot 10^6$ -and $365 \cdot 10^6$ up to tons of sulfurous compounds are thrown. In the anaerobic environment at the bottom of the ocean and sea, a part of the blown sulfur compounds is returned with the help of microbes. 200 as a result of this or other processes $\cdot 10^6$ H_2S and other sulfur compounds return to the atmosphere.

Organic sulfur compounds in the atmosphere and lithosphere undergo a series of complex transformations. Sulfur is oxidized and turns into two oxides of sulfur, then under the influence of strong oxidants and atmospheric water, it turns into sulfuric acid.

Part of the sulfur compounds that have fallen to the ground through rain and snow are absorbed by plants, and the other part enters the composition of rocks and settles. At the same time, part of sulfur returns to the atmosphere in the form of hydrogen sulfide, and part of it

returns to the seas and oceans through rivers. Thus, sulfurous compounds return to the hydrosphere in a complete cycle.

Recently, a change has been observed in the circulation of sulfur in the biosphere. This is caused by toxic gases released into the atmosphere during the application or production of sulfur compounds in many areas of the national economy.

The interest of scientists in synthesizing new types of sulfur compounds and their application in various fields of the national economy is increasing, and these compounds have insecticidal, disinfectant formoseptic properties. If we express the application of sulfur compounds in the national economy by multiplying numbers, in Western countries, sulfur is used in the form of approximately 50% in the form of fertilizers, 19% in pesticides and medicines, 4% in paper, 2% in metal and 2% in the oil industry.

In Azerbaijan, sulfur compounds are widely used in the synthesis process of pharmaceutical preparations. E.g. Ag streptocid, sulgin, sulfodimezin, etc.

Sulfuric acid is currently the most widely used industrial sulfur compound. The production of sulfuric acid shows the chemical potential of each country. If 1 thousand tons of sulfuric acid was produced in the USA in 1900, this number reached 70 thousand tons in 1986. By the end of the 70s, 6 thousand tons of sulfuric acid were produced in Canada, this number increased to 50 thousand in 1985. delivered to the ton. It should be noted that the main source of raw materials was sulfur and its derivatives obtained from the refining of petroleum products (98%).

As a result of the rapid development of the industry, the wide application of the products in agriculture and national economy makes it possible for compounds containing sulfur to fall into the environment.

According to calculations, 65 thousand tons of waste were thrown into the environment from sulfur production in the third quarter of the last century. Of these, 95% were sulfur anhydrides, which make up 80% of sulfur compounds entering the atmosphere. According to calculations, if there is no control, this figure was expected to reach 125.8 thousand tons in 2005.

In the course of research, it was determined that the sum of sulfur compounds artificially released into the environment in 2005 will equal the sum of sulfur in nature. However, it is predicted that the sulfur compounds formed in the highly developed production areas of some regions differ from the sulfur compounds found in nature.

Sulfuric anhydride is the most common gas released into the atmosphere. It has a negative effect on the human body. Sulfuric anhydride increases due to sulfur gases contained in toxic gases released into the atmosphere during the burning of liquid and solid fuels, from boilers, power plants, production furnaces, combustion of components in internal combustion engines, and during some chemical processes. 50% of the emission of sulfur anhydride in the atmosphere from these processes is caused by the burning of solid fuels, 40% by petroleum products, and 10% by the metallurgical industry. Recently, the ratio of the use of liquid fuels in the total electricity fuel balance around the world has increased greatly.

Solid fuels contain inorganic (free sulfur, sulfides, sulfates) compounds, and organic compounds include mercaptans, thiophene and thiophalin sulfide derivatives). Sulphate-containing fuels pass into the sol form during combustion and do not play any role in the formation of sulfur anhydrides. Fuels containing elemental and sulphide sulfurs form complete fuel sulfur anhydride in the presence of oxygen in special boiler rooms. At this time, 2 grams of sulfur anhydride are obtained from 1 gram of sulfur.

Since the production and processing of compounds containing sulfur are not the same in different countries of the world, the amount of sulfur anhydrides released into the atmosphere is also different.

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PHARMACEUTICAL INDUSTRY RAW MATERIALS CORRELATIONS BETWEEN STRUCTURE AND BIOLOGICAL ACTIVITY

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In the era of rapid development of the world, the demand for the products of the pharmaceutical chemical industry is increasing day by day. The development of this field has the following characteristics:

- ***High requirements are placed on the purity of the products produced in the pharmaceutical chemical industry.***

The vast majority of drugs produced in the pharmaceutical chemical industry are intended for oral administration. Since there are a significant number of medicinal preparations of the mentioned type, high requirements are placed on the purity of the manufactured products. Also, in addition to high chemical purity, compliance with the rules of high sterilization during packaging is also required for medicinal preparations, which make up a wide list intended for subcutaneous, intramuscular and intravenous injections.

- ***Products produced in small quantities within medicinal preparations*** (from several tens of kilograms to hundreds of tons per year).

The fact that these types of medicinal substances are produced in small quantities is due to the fact that their therapeutic effect is limited. Only a relatively small number of them are used in various diseases. These include sulfanilamide, salicylic, anti-tuberculosis, hormonal drugs, etc. includes

- ***Loss of primary raw materials used in the production of medicinal products.***

The main reason for the large loss of primary raw materials and various materials used in the production of medicinal preparations is explained by the complexity and multi-stage synthesis of most of them. For example, the cost of raw materials included in the cost of antibiotic production is about 60%. For the production of synthetic drugs, this indicator is about 80-85%.

For example, more than 130 tons of raw materials need to be processed to synthesize 1 ton of synthetic synthomycin antibiotic, and more than 400 tons of raw materials to synthesize 1 ton of synthetic papaverine. The loss of raw materials occurs more frequently in the processes of synthesis of medicinal substances with the separation of alkaloids and glycosides from some medicinal plants.

More than 600 tons of raw materials need to be processed to synthesize ephedrine hydrogen chloride from 1 ton of "desert ephedra" plant.

- ***The fact that the nomenclature of medicinal substances is updated relatively quickly.***

- ***Due to the high profitability of the production of medicinal products, the justification of the newly built enterprises of the pharmaceutical chemical industry for a short period (one to two years).***

- ***In factories and enterprises of the pharmaceutical chemical industry, all products of refined organic synthesis must be put into ready (dosed) dosage forms from the processing process.***

In connection with the above-mentioned features, the chemistry of the pharmaceutical industry places high demands on the quality of raw materials and semi-finished products used, containers and packaging materials, as well as equipment (automatic lines for filling, packaging and capping, sterile conditions, etc.).

Production processes of synthetic drugs are based on the processing of chemical raw materials and semi-finished products provided by chemical, cokebenzene, oil, forestry and other industrial enterprises. At the same time, in a number of cases, it performs in the process of preparing a number of semi-finished products that are not produced in chemical industry plants and are not large enough in terms of volume.

The primary raw materials used in the synthesis process for the production of medicinal substances are chemical compounds, which form the basis of the final products. A large number of various auxiliary substances (acids, alkalis, solvents, catalysts) are usually involved in chemical synthesis, along with primary raw materials.

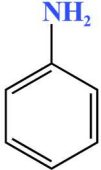
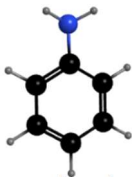
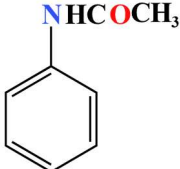
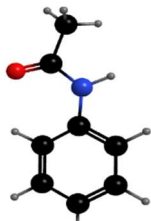
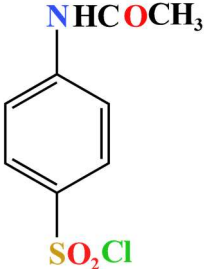
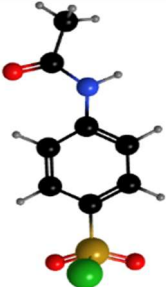
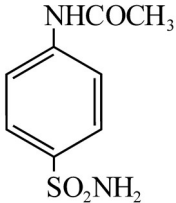
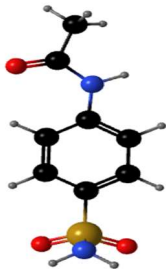
The substances supplied to pharmaceutical chemical plants as primary raw materials - the primary products obtained after the primary complex transformation are called intermediate products (aniline, nitrobenzene, phenylurethyl, sulfochloride, ethylacetate, paraphenethedin, etc.), as a result of the primary complex chemical processing of the raw materials - the path from the raw materials to the finished product can be divided into three stages :

1. Coking of hard coal, benzene, phenol, naphthalene, etc. purchase
2. Conversion of raw materials into intermediate products after processing, chlorobenzene, nitrobenzene, aniline, etc. purchase
3. Obtaining medicinal substances from intermediate products (white streptocid, disulfan, etc.).

Medicines are substances that can be used in the treatment and prevention of various diseases in medical practice due to their physical and chemical properties.

Pharmaceutical chemical preparations are individual chemical compounds, their composition and structure are usually synthetic medicinal substances that can be expressed by a specific chemical formula. If the medicinal product consists of several different compounds, then each of them, in turn, is an individual chemical compound that can be determined by a specific chemical formula.

For example, let's follow the production stages of a common drug such as white streptocid:

 <i>Aniline</i>	 <i>Chemical industry</i>
 <i>Acetanils</i>	 <i>Chemical industry</i>
 <i>Para-acetaminobenzene Sulfoxlorid</i>	 <i>Pharmacological-chemical industry</i>
 <i>Para-acetaminobenzene Sulfamide</i>	 <i>Pharmacological-chemical industry</i>

It is clear from the above scheme that as a result of a series of successive chemical transformations of the benzene molecule, which is the conversion product of the primary raw material, the necessary structure of the final product is formed - sulfanilamide (white streptoside).

Medicines have different effects on the body depending on their chemical composition and structure. The nature of their actions in the body mainly depends on the state of the patient's central nervous system. The effect of the same drug given to the patient varies depending on the form of administration and the psychological state of the patient.

The same drug introduced into the body in one way or another (orally, intravenously or intramuscularly) causes different effects (penetrates into brain tissue, is retained by the kidneys or liver, affects only the nerves and muscles of the heart, affects pathogenic microbes). happens.

Medicines are divided into causative and symptomatic. The first group of drugs acts directly on the main causes of the disease and causes it to disappear. For example, acrixine acts on the causative agent of malaria, cardiac preparations restore the normal strength of the heart muscle. The second group of drugs, without eliminating the causes of the disease, only destroys

the deviations from the norm created by it in the body. For example, aspirin lowers the temperature or pyridone relieves neuralgic pain.

Therefore, medicinal preparations, regardless of their nature, are foreign and toxic to the body. Their correct dosage is very important. Usually, when determining the dose: the dose necessary for a therapeutic effect should be as low as possible toxic.

There is a certain regularity between the chemical structure of the medicinal substance and its effect on the body. For example, the introduction of halogen, amine, hydroxyl, carboxyl groups into the applied hydrocarbon molecule gives it completely different pharmacological properties. The change of the latter also depends on the nature of the hydrocarbon radical - whether it is aliphatic, aromatic or heterocyclic.

It should be noted that not all regularities in the field of the structure and pharmacological effects of medicinal substances have been revealed. However, scientists working in the field of pharmaceutical chemistry or pharmacology have managed to identify some general patterns.

For example: the vast majority of narcotic drugs belong to fatty hydrocarbons;

Medicinal preparations from the group of antipyretics belong to the aromatic series of hydrocarbons.

Unsaturated compounds are more active than saturated compounds;

The activity of the isostructural isomer of the same substance is more active than the compounds with a linear structure;

The presence of the hydroxyl and amino groups of drugs containing an aromatic ring increases the therapeutic activity of the compound, while individually each of these groups often has a toxic effect on the body;

The relationship of optical isomers to the body is different;

Compounds with a stable chemical composition are less toxic to the body and have a weaker effect on the living organism, while compounds with molecules with higher chemical activity are more toxic and more active due to their pharmacological effect.

The general laws established between the structure of medicinal substances and their pharmacological effects allow chemists and pharmacologists to obtain medicinal substances with desirable properties and especially great therapeutic effect through systematic research.

Expanding medical networks, increasing the number of doctors, and wide-ranging measures implemented in the field of health education lead to an increase in the demand for medicines, despite the decrease in morbidity.

With the emergence of chemical therapeutic drugs, especially sulfanilamide drugs, the main adaptation of microorganisms to a certain drug was discovered. Based on natural selection During the use of the most commonly used chemotherapeutic drugs, strains of resistant pathogenic microorganisms arise, develop gradually, and the treatment of the disease becomes increasingly difficult..

Thus, one of the important factors in the development of the pharmaceutical chemistry industry is the continuous acceleration of the process of drug innovation. At the same time, mass use of new therapeutic agents is often considered a prerequisite for the creation of other new drugs. For example, the mass use of streptocid, sulfide, penicillin, streptomycin and other drugs for the treatment and prevention of infectious diseases has led to the emergence of new forms of bacteria resistant to sulfonamide compounds and antibiotics.

After that, in front of the pharmaceutical chemical industry a new series - tetracyclic antibiotics with a wider spectrum of action, as well as a new pyrimidine series of sulfonamide compounds, anti-tuberculosis drugs (ftivazid, isonicotinic acid hydrazide, streptomycin) has emerged as an urgent task to find and produce.

Later, new drugs (cycloserine, saluside, ethoxide, erythromycin, etc.) were required to affect the resistant forms of the tuberculosis pathogen. Frequent use of sleep, painkillers and other drugs causes addiction to them.

Synthesizing a new drug substance is a long process that requires excellent knowledge. Chemists collaborate with pharmacologists to synthesize various chemical compounds. All of them are subjected to long-term systematic testing on microorganisms (on models) and various organisms. After that, the technologists prepare the production rules, and the regulatory production of medicinal substances for clinical trials is allowed.

Synthetic preparations should be as chemically pure as possible, their composition and structure should be stable.

In recent years, due to the rapid development of the chemical industry and industrial microbiology, science and technology, almost all countries of the world have undergone important changes towards an increase in the number of pharmacological articles placed in publications and journals related to this field.

There is a certain regularity between the chemical structure of the medicinal substance and its effect on the body. For example, the introduction of halogen, amino, hydroxyl, carboxyl groups into the applied hydrocarbon molecule gives it completely different pharmacological properties. The change of the latter also depends on the nature of the hydrocarbon radical - whether it is aliphatic, aromatic or heterocyclic.

SUMMARY

The purity of the products produced in the pharmaceutical chemical industry must be high. Synthetic preparations should be as chemically pure as possible, their composition and structure should be stable. The synthesis of various medicinal preparations for the treatment and prevention of diseases is one of the main issues.

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Көзі нашар көретін балаларға химия пәнінен инклюзивті білім беру

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Abstract:

This article addresses the issue of inclusive education in chemistry for students with visual impairments. The importance of using specialized teaching methods and tools for students with visual impairments in the modern educational system is growing. The article discusses inclusive approaches to teaching chemistry, along with methodological tools and educational technologies designed for visually impaired students. Additionally, it highlights the pedagogical strategies necessary for effective chemistry instruction, the role of teaching resources, and the support required from teachers to facilitate learning for students with visual impairments. The article proposes new methods and solutions to expand the educational opportunities of visually impaired students in inclusive education, aiming to enhance their interest in scientific subjects.

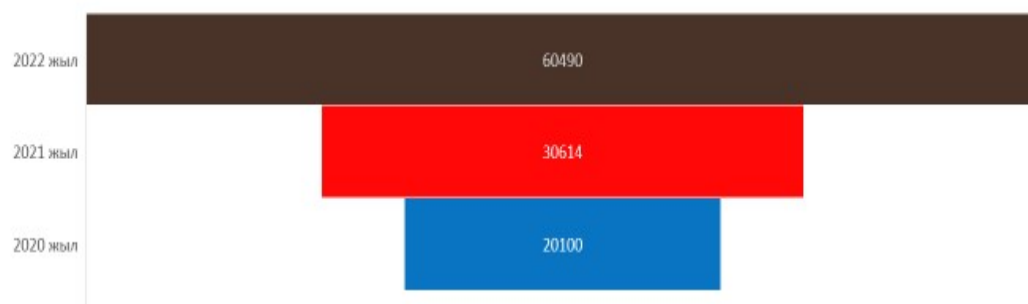
Keywords: inclusive education, visually impaired students, chemistry subject, specialized teaching methods, educational technologies.

Инклюзивті білім беру – бұл білім беру процесіне барлық балалардың, соның ішінде ерекше қажеттіліктері бар балалардың қатысуын қамтамасыз ету. Химия пәні, өзінің табиғаты бойынша абстрактылы және практикалық дағдыларды талап ететін ғылым ретінде, көзі нашар көретін балалар үшін ерекше қиындықтар туғызады. Көзі нашар көретін балалардың оқу процессінде қолайлы жағдай жасау, және олардың білім алу мүмкіндіктерін кеңейту - инклюзивті білім берудің басты мақсаттарының бірі болып табылады.

2020 жылы дәрігерлердің медициналық тексерулері нәтижесінде 60 490 оқушының көру қабілеті нашарлағаны анықталды. Бұл көрсеткіш 2020 жылмен салыстырғанда үш есе өскенін көрсетеді (1-сурет).

Өкінішке орай, Қазақстанда 2022-2024 жылға дейінгі көру қабілеті нашар балалар санының статистикасы толық қолжетімді емес. Дегенмен, қолда бар мәліметтерге сәйкес, көру қабілеті нашар балалар санының өсуі байқалады. 2024 жылы қазақстандық офтальмологтардың мәліметі бойынша, мектеп оқушыларының 70-80%-ының көру қабілеті нашарлаған [1].

1-сурет. Қазақстанда көзі нашар көретін балалар саны



Көзі нашар көретін балалардың оқу қажеттіліктері көпқырлы болады. Олардың оқу стилдері, жиі тактильді және аудиалды әдістерді қажет етеді. Көру қабілеті шектеулі балалар визуалды ақпаратты қабылдауда қиындықтарға тап болады, бұл химия пәніндегі абстрактылы тұжырымдар мен концепцияларды түсінуге кедергі келтіреді. Көзі нашар көретін балалардың білім алу процесінде инклюзивті әдістер мен адаптациялардың маңызы зор болады. Оларға көбінесе тактильді және аудиалды материалдарға негізделген оқу стратегияларын пайдаланылатыны белгілі. Тактильді элементтерді енгізу, мысалы, химиялық реакцияларды тактильді түрде көрсету, оларды ақпаратты қабылдауды жеңілдетеді. Кішігірім зерттеулер көрсеткендей, тактильді материалдар мен аудио ресурстарды пайдалану, көзі нашар көретін балалардың оқу мотивациясын және қатысуын арттыруға көмектеседі деген пікір бар [2].

Сонымен бірге, көзі нашар көретін балалардың оқу процесінде кездесетін кедергілерді анықтау маңызды. Өкінішке орай, көзі нашар көретін балалар жиі білім беру жүйесінде кемсітушілікке ұшырайды, себебі мектептерде олардың қажеттіліктерін ескеретін арнайы материалдар мен ресурстар жоқ [3]. Қазіргі уақытта, мұғалімдердің инклюзивті білім беру әдістерін меңгеруі де маңызды мәселе болып табылады. Көптеген мұғалімдер көзі нашар көретін балаларға арналған әдістемелер мен құралдармен таныс емес. Осы мәселені шешу үшін, инклюзивті білім беру жүйесі білім беру ортасын барынша қолайлы етуге бағытталуда. Инклюзия – бұл тек білім беру жүйесіне балаларды енгізу емес, сонымен қатар олардың әлеуметтік интеграциясын қамтамасыз етуде. Инклюзивті білім беру балаларға индивидуалды тәсілдемелерді қолдануды талап етеді, бұл олардың ерекшеліктеріне сәйкес оқыту стратегияларын қолдануға мүмкіндік беруде [4].

Соның ішінде индивидуалды оқыту – бұл инклюзивті білім берудің негізгі компоненттерінің бірі болып табылады. Оқытуды ұйымдастыруда индивидуалды тәсілдемелерді қолдану, олардың оқу процесін тиімдірек етеді. Әрбір балаға жеке оқу жоспарын жасау, оның ерекшеліктері мен қабілеттерін ескере отырып, оқу материалдарын бейімдеу керек [5].

Инклюзивті білім беру үшін қолайлы орта қалыптастыру, балалардың оқуға деген ынтасын арттыру үшін маңызды. Автордың ойы бойынша, мектептерде көзі нашар көретін балаларға арнайы оқу құралдары мен технологиялар ұсыну, олардың оқу мүмкіндіктерін кеңейтуге жағдай жасау керек деп санайды [6].

Химия пәнін оқытуда инклюзивті әдістерді қолдану ерекше мәнге ие деп ойлаймыз. Тактильді материалдарды (мысалы, 3D модельдер) қолдану, сондай-ақ сыныпта визуалды емес оқу құралдарын қолдану көзі нашар көретін балалар үшін білім алу процесін жеңілдетеді.

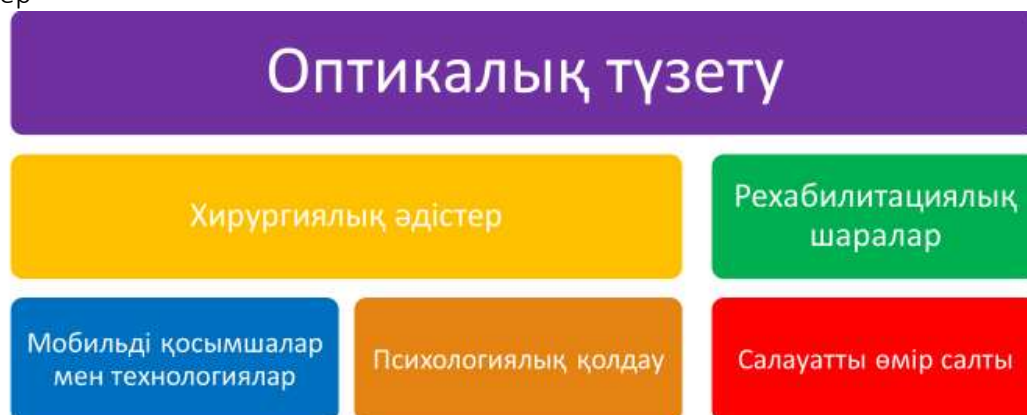
Химия сабақтарында инклюзивті әдістерді қолдану барысында тактильді және аудиовизуалды материалдарды пайдалану ерекше маңызға ие. Мысалы, химиялық элементтердің тактильді модельдері мен тәжірибелік жұмыстар, көзі нашар көретін

балаларға материалды түсінуді жеңілдетеді. Зерттеушілердің пайымдауынша, тактильді материалдардың оқу процесіндегі рөлі өте маңызды, себебі олар балалардың эксперимент жасау қабілетін арттырады [7]. Мысалы, көзі нашар көретін оқушылар әдетте негізгі мектептерде білім алады және ғылыми эксперименттер жүргізу үшін көзі жақсы көретін серіктесімен жұптасып жұмыс жасайды. Ғылыми ұғымдарды оқыту көбінесе сызбалар арқылы жүзеге асады, сондықтан ол көзі нашар көретін оқушыларға бейімделусіз және нақты сипаттамасыз қол жетімді болмауы мүмкін. Экспериментте белсенді қатыса алмауы олардың оқуға қол жеткізу мүмкіндігін шектеп, пәнге деген қызығушылықты төмендетуі мүмкін. Оқушылар ғылыми ұғымдарды өздерінің көретін құрдастары сияқты оңай түсіне алады, бірақ олардың оқуына қол жетімділіктің болмауы және жаңа ұғымдарды үйренуге көбірек уақыт қажет болуы кедергі жасайды.

Мысалы, химия бойынша білім берудің көп бөлігі эксперименттерді қамтиды және оларды 7-11 сынып оқушылары үшін қолжетімді ету өте қиын болуы мүмкін. Дегенмен, химиялық процестер мен реакцияларды бақылау үшін көруден басқа сезімдерге сүйенетін кейбір тапқыр шешімдер табылды. Титрлеудің соңғы нүктесін анықтау үшін пиязды пайдалану қызықты мысал болып табылады. Натрий гидроксиді пияздан өткір күкірт қосылыстарының түзілуін және бөлінуін тежейді және ерітіндіні тұз қышқылымен бейтараптандыру күшті пияз иісін шығарады. Бұл экспериментті 7-11 сынып оқушыларына оңай бейімдеуге болады және көретін оқушылар үшін түрлі-түсті көрсеткіштерге қызықты (иісі болса да) балама ұсынады. Сондай-ақ түрлі-түсті индикаторлардың кең ауқымын пайдалана отырып, титрлеудің соңғы нүктесін анықтау үшін қарапайым телефон қолданбасы әзірленді. Бағдарламалық құрал еркін қол жетімді, ол қол жетімділікті арттырады және берілген реакцияның соңғы нүктесі дыбыс немесе діріл арқылы сигнал береді. Иіс сезу өзгерістері органикалық молекулалардың белсендірілген көмірге адсорбциясы концепциясын көрсету үшін және эфир түзілу кинетикасын зерттеу үшін де пайдалануға болады [8].

Жоғарыда айтылған ақпаратқа сүйенсек, топтық жұмыстар мен интерактивті тапсырмалар көзі нашар көретін балалардың оқу мотивациясын арттырады. Оқу процесінде балалардың бірігіп жұмыс істеуі, бір-бірінен үйрену мүмкіндігін береді, бұл өз кезегінде олардың әлеуметтік дағдыларын дамытады.

2-сурет. Баланың көру бұзылуларын түзету және бақылау үшін әртүрлі әдістер мен тәсілдер



Баланың көру бұзылуларын түзету және бақылау үшін оптикалық түзетулер әдісі қолданылады.

Біріншіден көзілдіріктер көру қабілетін түзетудің ең кең таралған әдісі. Көзілдіріктер түрлі ақауларды (мысалы, миопия, гиперопия, астигматизм) түзету үшін қолданылады. Сонымен бірге контакт линзаларын көзілдіріктерге балама ретінде және көздің бұзылуын

түзетуде жиі қолданылады. Олар косметикалық және функционалдық артықшылықтарға ие[9].

Екіншіден хирургиялық әдістерді қолдануға болады. Рефракциялық хирургия миопия, гиперопия және астигматизмді түзету үшін лазерлік хирургия (LASIK, PRK) сияқты әдістер қолданылады. Бұл әдістер көздің формасын өзгертеді, нәтижесінде көру қабілетін жақсарады. Катаракта диагнозы қойылған балаларға операциясы жасалып, көздің линзасы ауыстырылады.

Үшіншіден рехабилитациялық шаралар қарастырылған. Көру терапиясы: Арнайы жаттығулар мен тапсырмалар, соның ішінде көзді жаттықтыруға бағытталған шаралар, балалардың көру қабілетін дамытуға көмектеседі. Бұл әдіс көбінесе көздің жалпақшылығы (амблиопия) мен страбизм (көздің қисайуы) үшін пайдаланылады. Тактильді оқу материалдары: Көзі нашар көретін балаларға арналған оқу материалдары мен ресурстары, мысалы, тактильді карталар мен құралдар.

Төртіншіден мобильді қосымшалар мен технологиялар жатқызуға болады. Көздің денсаулығын бақылау қосымшалары: Бұл технологиялар балалардың көру қабілетін бақылауға және қажетті түзетулерді уақтылы жасауға көмектеседі. Технологиялық көмекші құралдар: Дисплейлер, үлкейткіштер мен арнайы бағдарламалар, көзі нашар көретін балаларға ақпаратты жеңілдетуге және оқу процесін жеңілдетуге көмектеседі[10].

Бесіншіден психологиялық қолдау қарастырылу қажет. Психологиялық кеңес: Көру қабілетінің бұзылуына байланысты балалар мен ата-аналарына психологиялық қолдау көрсету маңызды. Бұл, әсіресе, балалардың өзін-өзі бағалауын және әлеуметтік интеграциясын арттыру үшін қажет.

Сонымен бірге салауатты өмір салты оң әсерін береді деп ойлаймыз. Дұрыс тамақтану: Көру қабілетінің денсаулығы үшін маңызды. Витаминдер мен минералдарға бай тағамдар (мысалы, А витамині, Омега-3) көрудің нашарлауын болдырмауға көмектеседі. Көзге арналған жаттығулар маңызды шара болып табылады. Көздің шаршауын болдырмау және көру қабілетін жақсарту үшін жаттығулар жасау керек. Баланың көру бұзылуларын емдеуде кешенді тәсілдер мен әртүрлі әдістерді қолдану тиімділікті арттырады [11].

1 кестеден жоғарыда айтылған деректерді жинақтап көруге болады.

Кесте-1. Жиі қолданылатын әдістер және олардың пайыздық көрсеткіштері.

Әдіс	Пайыз (%)
Көзілдірік	40
Контакт линзалары	25
Рефракциялық хирургия	15
Көз терапиясы	10
Тактильді материалдар	5
Психологиялық қолдау	5

Жас балалардың жас ерекшеліктеріне байланысты көздің даму кезеңдері әртүрлі болады. 2 кестеде көру қабілеттерінің дамуына байланысты әр кезеңде өзіне сай жағдай жасау керек[11].

Кесте-2. Көру қабілетінің даму кезеңдері.

Жас тобы	Көру қабілетінің даму пайызы
0-1 жас	10%
2-3 жас	30%
4-5 жас	50%
6-7 жас	70%
8-9 жас	85%
10-12 жас	90%
13-15 жас	95%

ҚОРЫТЫНДЫ

Көзі нашар көретін балаларға химия пәнінен инклюзивті білім беру олардың білімге деген қызығушылығын арттырып, өздеріне деген сенімділігін нығайтады. Мұндай білім беру тәсілдері балалардың әлеуетін ашуға, олардың қоғамның белсенді мүшесі болуына ықпал етеді. Инклюзивті білім беру арқылы әр балаға білімге тең қол жеткізу мүмкіндігін ұсыну – қазіргі заманғы білім беру жүйесінің басты мақсаты болып табылады.

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Veterinary Sciences

Selection of primers for Cyt B gene to detect adulteration of meat products by PCR

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The growth in food production is accompanied by an increase in food adulteration, especially in the meat and fish industries. Adulteration involves the addition of substandard ingredients or breaches of standards, thereby endangering health and misleading consumers. Losses from such activities range from \$10 to \$40 billion per year, and meat products are the most commonly targeted for adulteration due to their high cost and demand. Examples of such offences include replacing meat raw materials with vegetable or starch additives, which violates consumers' right to accurate information.

The study aims to develop primers for the Cyt B gene in various animals and birds to detect adulteration of meat products by PCR. This method is the most accurate and reproducible for analysing species composition even in small quantities of raw materials. Modern modifications of PCR allow the analysis of both DNA and RNA, significantly expanding its capabilities.

Mitochondrial DNA (mtDNA), especially the Cyt B gene, due to its high conservativeness, is widely used to determine the origin of meat, including processed products. Immunological methods such as agglutination reaction, precipitation reaction, diffusion precipitation reaction and ELISA are of limited use, especially in the case of small additions of foreign raw materials or in the case of heat treatment. However, ELISA is suitable for the analysis of raw semi-finished products.

A phosphoamide-based DNA/RNA synthesiser ASM-800ET (Bioset, Russia) was used for primer synthesis. The synthesis steps included removal of protecting groups, activation, 5'-OH blocking, oxidation and removal of protecting bases, after which oligonucleotides were precipitated, purified and analysed by electrophoresis.

For DNA isolation from muscle tissue, cell lysis in STE-buffer with proteinase K and SDS, extraction with chloroform, ethanol precipitation, and subsequent dissolution in water or TE-buffer for storage at -20°C were performed.

Fragments of the Cyt B gene of roe deer, red deer, cattle and sheep were selected for species identification. Nucleotide sequences of mitochondrial DNA from the NCBI database showed sizes ranging from 11.4 to 16.5 thousand base pairs. Analysis confirmed interspecific genetic variation in the Cyt B gene, with sequence identity ranging from 66.67-88.20%. These data confirmed the suitability of the selected fragments for species identification. For 4 species of wild and farm animals, primer design was carried out using the Lasergene 6 programme (DNASTAR). The designed primers provide amplification of 400-500 base pairs long, which varies depending on the species.

Primers were synthesised that show high specificity to target regions of the Cyt B gene, allowing them to bind exclusively to unique sequences. This ensures that amplification only occurs at target sites, minimising the risk of non-specific amplification. The forward and reverse primers were designed to amplify gene regions ranging in size from 100 to 500 base pairs. The length of the primers varied from 18 to 25 nucleotides.

The quality of isolated DNA from meat samples was tested using primers amplifying fragments of the Cyt B gene, with amplified fragment sizes ranging from 100 to 500 base pairs. Roe deer, red deer, cattle and sheep meat samples were used to optimise the isolation protocol. DNA obtained from meat from these animals was of high quality and met purification standards. The size of DNA from fresh meat was up to 500 base pairs.

Thus, optimal fragments of the Cyt B gene were selected and highly specific primers were developed to create a PCR test system capable of accurately identifying the species identity of meat and other biomaterials.

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Architecture

ВЗАИМОДЕЙСТВИЕ ЦВЕТА И ПЛАСТИКИ В АРХИТЕКТУРЕ АСТАНЫ, КАЗАХСТАН

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Аннотация

В статье исследуется роль цвета и формы в архитектуре, подчеркивая их важность, для создания художественного эффекта в городской среде. Обсуждаются принципы формирования архитектурной среды, включая использование массы, пространства, пластики, фактуры поверхностей и цвета. Выделена роль цвета и формы в эстетической ценности архитектурных произведений. Анализируются тенденции эволюции эстетики архитектуры и минималистская эстетика архитекторов и дизайнеров. Особое внимание уделяется взаимодействию цвета и пластики в создании эмоциональной атмосферы и визуального воздействия в архитектуре, подчеркивая важность их гармоничного сочетания для интеграции в окружающую среду.

Научное исследование включает в себя анализ архитектуры города Астана, с использованием методов опроса, сравнения и аналогии. В результате данного исследования были выявлены предпочтения жителей города относительно формы и пластики архитектурных объектов города. Анализ позволил определить восприятие и оценку жителями Астаны различных архитектурных стилей, элементов и композиций, а также выявить тенденции и предпочтения в их представлении об архитектурной среде.

Ключевые слова: цвет, эмоциональное воздействие, цветовые закономерности, дизайн, цветовое восприятие, архитектура Астаны

Введение

Современные города являются сложными архитектурными системами, в которых форма и пластика архитектурных объектов играют ключевую роль в формировании облика и визуальной идентичности. Особенно это актуально для столичных центров, таких как город Астана, где динамичный процесс городского развития и строительства новых объектов требует постоянного анализа, оценки предпочтений и ожиданий жителей по отношению к архитектурной среде.

В этом контексте город Астана, столица Казахстана, является примером города, активно развивающегося и стремящегося к созданию современной и уникальной архитектурной обстановки. Процесс формирования архитектурной среды Астаны вызывает интерес и требует внимательного изучения предпочтений и ожиданий жителей в отношении формы и пластики зданий.

Целью данного исследования является анализ предпочтений и ожиданий жителей города Астана в отношении формы и пластики архитектурных объектов. Для достижения этой цели анализируются литературные источники, даются определения терминам, применяются методы опроса, сравнения и аналогии, описанные в методологии, позволяющие выявить основные тенденции в восприятии и оценке архитектурной среды города. Представленные методы будут расписаны в главе «Анализ данных».

Полученные результаты могут быть использованы в практической деятельности городских властей и архитектурных организаций для разработки стратегий городского планирования, а также в процессе проектирования новых архитектурных объектов с учетом потребностей и предпочтений населения. Таким образом, исследование имеет важное значение для развития городской среды и повышения качества жизни горожан.

Литературный обзор

Цвет – одно из средств формообразования. Цвет окружающей среды воспринимается как свойство объемно-пространственной формы наряду с другими её свойствами: геометрическим видом, величиной, положением в пространстве, массой, фактурой и светотенью (Ситникова, 2009).

Цвет – это один из ключевых факторов, которые участвуют в формировании образа архитектурного объекта. С помощью цвета можно не только выделить объект и сделать его самым заметным, но и создать акцент на самом уникальном, что есть в архитектуре и дизайне – объемно-пространственные элементы. Цвет помогает эффективно и легко «объединить» разные по составу, виду и функциям здания. Цвет всегда оказывается не только уместным, но и незаменимым в любой архитектурной и дизайнерской типологии (Солманидина & Шепталина, 2019)

Всё окружающее нас в природном или искусственно созданном пространстве имеет определенный цвет. Всё созданное природой, обычно считается гармоничным: естественные цвета, их сочетания и принадлежности определенным формам, циклы цветовой изменчивости, связанные со сменой времен года (Ситникова, 2009).

Использование цвета в архитектуре города основывается на цветной концепции города, его композиционной целостности. Важно отметить эту тенденцию как актуальную профессиональную задачу архитекторов и дизайнеров. Пространственное цветовое поле города призвано помогать человеку различать здания, районы, ориентироваться в городском пространстве, создавать зрительный комфорт (Ситникова, 2009).

Цвет и форма – непреходящие категории живописи, дизайна, архитектуры. В каждом из этих сфер творчества идет вечный диалог между названными категориями, отражающий конкретные предпочтения общества в отношении к ним, его эстетические ориентиры, в определенный отрезок времени.

Форма, пространство и цвет – важнейшие, неразрывно связанные и взаимообусловленные категории творчества, что сегодня уже нет необходимости доказывать. Цвет способен вызывать у зрителя эмоциональные реакции и эстетические переживания, позволяет ориентироваться в пространстве, изменять визуальное ощущение архитектурной формы, влиять на ее тектонику. Цвет в архитектуре значительно активизировался в начале XX века, усложнилось отношение к цвету, связанное с его семантикой и эволюцией окружающей среды. Эти перемены вызвали к жизни новую колористику архитектурных произведений.

Цвет неразрывно связан с формой, он способен выделить форму из окружающей среды, придать ей визуальную значимость. В искусстве и архитектуре, категория формы относится к структуре, расположению и сочетанию элементов и частей композиции, которые составляют единое целое.

В труде А.В. Ефимова (2014) говорится, что *«форма произведений пластических искусств – это совокупность приемов и средств, используемых мастером, это плоскостная или объемно пространственная выраженность объекта, информирующая о его сути, вызывающая у зрителя определенные эмоции, эстетические переживания, мысли и мнения. Она характеризуется целостностью и дробностью, статичностью и динамичностью, монолитностью и пространственностью, величиной, масштабностью и другими свойствами»*.

Формы без цвета не существует. Проблема цвета всегда беспокоила людей. Люди стремились не только понять, но и ответить на вопрос, почему один цвет воспринимается красивее и интереснее, чем другие, искали гармонии в сочетании разных цветов и их оттенков (Солманидина & Шепталина, 2019).

Архитектура призвана удовлетворять широкий спектр человеческих потребностей: от утилитарных до высших социально-культурных. Возникающие при ее восприятии виды эмоциональных переживаний зависят от того, с какой позиции (скажем, познавательной, эстетической или нравственной) оценивается конкретный архитектурный объект. Создание архитектурной среды по этим законам способствует усилению ее эмоционального воздействия. Повышение качества архитектуры, в том числе и эстетического, становится все более настоятельной потребностью нашего общества и выходит на уровень первоочередных задач архитектурного творчества.

Цвет всегда влияет на настроение человека. Архитекторы и дизайнеры никогда не используют цвета случайным образом. Цвет служит для обеспечения необходимой атмосферы. В этом заключается его использование не в качестве указательного элемента. Использование цвета в архитектуре – одна из самых сложных проблем (Солманидина & Шепталина, 2019).

Примером влияния архитектуры на состояние человека может служить открывшееся в 2007 году крыло «Ли-Чин Кристал» Королевского музея Онтарิโอ в Торонто. Оно представляет собой крупное сооружение из стекла и стали с четкими контурами, в котором чувствуешь себя так, словно теряешь равновесие и ориентацию. Прохожие негативно оценили и избегают открытого, продуваемого пространства около здания, которое, кажется, шатается. Многие высказывали опасения о возможном падении сосулек с отвесных крыш (Раздрогоина, 2022).

Также интересна и физиология цвета. По своей природе цвет является излучением. В связи с этим различные цвета и их оттенки имеют разную длину волны. Когда глаз человека воспринимает цвет, тут же передается сигнал в мозг. Он начинает активно передавать сигналы всей нервной системе. Теплые цвета всегда имеют большую длину волны. Следовательно, если длина волны больше, это значит, что требуется затрата большого количества энергии (Солманидина & Шепталина, 2019).

Для достижения определенного художественного эффекта в городской среде в целом имеет значение не столько обращение к определенному средству или группе средств, сколько умелое использование их совокупности. Возможность разных средств формирования городской среды дополнять друг друга основана на том, что группы средств отличаются определенной силой выразительности, диктующей предпочтения при их применении. В архитектурной теории сложился стереотип представлений о значимости той или иной группы архитектурных средств в композиции (Позднякова, 2014). А.В. Иконников (1990) указывает, что *«отношение массы и пространства, способ, которым приведены к устойчивому равновесию формы взаимосвязи частей организованного, расчлененного пространства, соотношения величин и ритм чередования пространственных членений и материальных элементов – главные средства архитектурного языка. Их дополняют пластика и фактура поверхностей, их цвет»*.

Какие бы элементы архитектурной пластики не применялись при создании городской среды, какими бы средствами не решалось ее формирование, какую бы идею не развивал архитектор, всегда реализуется целевая установка на создание гармоничной среды. Гармоничность – свойство, интегрирующее взаимодействия разнородных впечатлений в совершенном произведении архитектурного искусства и реализуется при соблюдении следующих принципов формирования целостной архитектурной среды – повторяемость, соподчиненность, соразмерность, уравновешенность, единство (Шимко, 1990).

В теории архитектуры есть понятие архитектурной формы. Оно подразумевает определенную систему организованных элементов произведения архитектуры, связанную с ее функционально-конструктивной основой, которую мы воспринимаем зрительно. Такая система обладает эстетической ценностью, несет эмоциональный заряд, обладает смысловым содержанием. Архитектурной форме постоянно сопутствует цвет – объективное свойство всех окружающих нас предметов. В произведении архитектуры расположение цветовых масс часто зависит от его геометрии, а выбор конкретных цветов и их гармонизация обусловлены природным окружением, функциональным и социально-культурными факторами (национальной символикой, предпочтением людей). Как средство архитектуры цвет взаимодействует с такими категориями, выявляет форму, объем, пространство, тектонику, масштаб, ритм и др. Взаимодействуя, они вносят идею, контекст в эстетическую ценность архитектурного произведения, раскрывая его смысл и информативность (Ситникова, 2009).

Эстетика архитектуры приобретает все более зыбкий, динамический характер, приближаясь к медийным образам. В статье «„Мерцательность“ как принцип репрезентации современной архитектуры» К.О. Вытулева (2018) отмечает, что в новейшей архитектуре такие качества, как неоднозначность, слоистость, неточность, случайность и т.п., часто становятся художественными и смысловыми знаками новой эстетики фасада, как некогда регулярные орнаменты, логотипы или иные средства символической коммуникации (Дуцев, 2018).

«Процесс художественного формообразования – мощный культурный фактор структурирования мира, осуществление средствами искусства общих целей культурной деятельности человека – преобразование хаоса в порядок, аморфного – в целостное. В этом смысле понятие художественной формы используется в эстетике как синоним произведения искусства, как знак его самоопределения, выразительно-смысловой целостности», – пишет О.А. Кривцун (Дуцев, 2018).

Проблема пластической целостности в архитектуре может быть рассмотрена по крайней мере в двух взаимосвязанных смыслах:

- в аспекте совместной эволюции архитектуры и всей пластической традиции искусства, соотнесенности с художественной культурой в целом;
- в аспекте формирования авторской пластической модели архитектора-художника, созвучной времени.

Проблема целостности в архитектуре связана со многими факторами, но вопрос пластической состоятельности, который в снятом виде несет отпечаток всей многоосновной системы зодчества, представляется первостепенным как критерий художественного совершенства. Состоятельностью, на наш взгляд, обладает художественное целое произведения, выражающее авторское начало или художественную традицию. В этом плане актуален вопрос фиксации пластических трансформаций, которые через языки искусства и многообразие импульсов ведут к новым целостным значениям и их проявлениям (Дуцев, 2018).

Рассмотрим на примерах мировой архитектуры версии интегральных взаимодействий в системе взаимно пересекающихся, сплетающихся и пульсирующих художественных мотивов. Анализ пластических проявлений проведем в зависимости от акцентов, сделанных архитекторами по следующим уровням: поверхности фасада, объемной формы здания, общего впечатления, производимого архитектурой. Сегодня форма тяготеет к скульптуре, а плоскость обретает самостоятельный художественный строй вопреки расположению исконных элементов здания (Дуцев, 2018).

Самоценная поверхность фасада – одна из коренных традиций архитектуры, достигшая своих высот в ордерных системах, в традиционной и национальной архитектуре, в

декоративных приемах модерна и периода эклектики. Лозунг А.Лооса (2018) «Орнамент и преступление» породил сильные сомнения в дальнейшей судьбе декорации фасада. Однако в актуальной архитектуре идея орнамента жива и проявляется в форме различного рода паттернов поверхности: перфорации, принтов, суперграфики. «Орнаментация» позволяет избежать ожидаемых элементов фасада: оконных и дверных проемов, а также известных атрибутов ордерной эстетики. Такой архитектурный камуфляж сообщает цельность объему, позволяя говорить крупным композиционным массам, что является существенным шагом к иному прочтению архитектурного масштаба (Дуцев, 2018).

Пожалуй, в еще большей степени, чем поверхность фасада, эволюционирует форма здания. Здания-скульптуры имеют свою традицию, более того, архитектура и скульптурная пластика во многом следуют единой природе пространства и формы. Переход от приоритета фасадной плоскости к значимости объема ярко обозначился в начале XX века. Активное освоение категории пространства и пространственности разбудило сильный архитектурно-художественный потенциал всех пластических искусств, став прочным основанием художественного синтеза (Дуцев, 2018).

Пластика образа и впечатления не подлежит анализу, сопровождая вызревание замысла архитектора и отклик адресата: его непосредственные ощущения, эмоции и воспоминания. «Образ, в котором все элементы формы согласованы друг с другом и с содержанием, называется когерентным. Именно такие, когерентные образы до глубины души волнуют людей, не лишенных эстетического чувства», пишет в статье «Когерентные города» К.Лидин (2013). В архитектуре к таким факторам эмоционально-чувственного общения с человеком можно отнести, прежде всего, цвет, фактуру материала, свет и воздействие других естественных феноменов (Дуцев, 2018).

Пластические ракурсы творчества З. Хадид раскрываются в большинстве ее произведений: Национальный музей искусства XXI века MAXXI в Риме (2010), главное здание завода BMW в Лейпциге (Германия, 2005), трамплин Bergisel в Инсбруке (Австрия, 2002) и др. Во всех центральным мотивом выступает категория движения, обуславливающая скульптурность, строение, текучесть форм, слияние с рельефом и другие известные приемы мастера. Дигитально-параметрическое выражение силового поля стало общим кредо для мастера и ее ближайшего коллеги и соавтора П. Шумахера (Дуцев, 2018).

Минималистская эстетика произведений Э. Соуто де Моура, унаследованная от его ближайшего коллеги Алваро Сиза Виейра, не исключает художественной коммуникации и привязки к месту. Такое сочетание может показаться удивительным, так как минимализм в искусстве чаще всего мыслится заведомо очищенным от смыслов вне понятия контекста (Дуцев, 2018).

Пластическими основаниями архитектурных пространств С. Холла служат естественные мотивы, непосредственно переживаемые посетителем. Архитектор работает с впечатлением и процессами бессознательного вчувствования в среду. Подход мастера трактует архитектуру как «звено между идеями, философиями, светом, пространством, надеждами и материальностью мира» – архитектор интегрирует концепты, образы и пространства в единое художественное целое. Холл использует авторский метод акварели для изучения «феноменологического измерения» архитектуры, рассматривая одиннадцать разновидностей феноменов (Дуцев, 2018).

Взаимодействие между цветом и пластикой в архитектуре представляет собой существенный аспект формирования визуального и эмоционального воздействия архитектурных объектов. Анализ различных архитектурных конструкций указывает на то, что это взаимодействие между цветом и пластическими характеристиками имеет значительное значение для создания уникальных архитектурных образов и эмоциональной атмосферы. Цветовые решения не ограничиваются декоративными функциями, а становятся средством

выражения концептуальных идей архитектурного проекта. Пластическая форма, в свою очередь, определяет основные характеристики здания, такие как его объем, структура и пространственные свойства. Взаимодействие между цветом и пластикой способствует созданию гармоничного и эстетически приятного визуального образа, способного вызывать различные эмоциональные реакции и ассоциации у наблюдателя. Правильно выбранные цветовые решения могут также способствовать интеграции архитектурного объекта в окружающую среду.

Для анализа архитектурного образа с целью выявления его гармонии и эстетической ценности планируется применение специализированных методов исследования. Подробное описание этих методов будет представлено в разделах «Методология» и «Анализ данных».

Методология

Данное исследование основано на применении как общенаучных, так и эмпирических методов. Общенаучные методы, включающие анализ литературы, классификацию и аналогию, используются для систематизации и понимания концепций и явлений в архитектуре. Эмпирические методы, такие как сравнительный анализ, наблюдение и описание, применяются для сбора и анализа конкретных данных и явлений.

Метод классификации включает в себя составление систематизированного списка различных типов фасадов зданий на основе критериев, таких как материал, свойства, методы производства и применения. Это позволяет упорядочить информацию и выявить общие закономерности в развитии материалов для архитектурных конструкций.

Анализ литературы, приведенный выше, проводится путем изучения научных и технических источников, таких как научные статьи и книги, с целью освещения концепций цвета и формы в архитектуре. Этот метод позволяет ознакомиться с существующими знаниями и идеями, связанными с темой исследования.

Метод аналогии применяется для выявления сходств между различными явлениями или объектами на основе определенных признаков. В контексте данного исследования, аналогия используется для обнаружения сходств между архитектурными элементами или материалами и другими объектами или явлениями, что может способствовать более глубокому пониманию их свойств и характеристик. Далее подробно все методы будут описаны в главе «Сбор данных».

Сбор данных

Сбора данных в рамках исследования, посвященный теме «Взаимодействие цвета и пластики в архитектуре», включает в себя разнообразные общенаучные и эмпирические методы, которые были описаны в методологии. Среди них важно выделить анализ существующих проектов, проведение опросов, изучение научной литературы, а также создание классификации и аналогии.

Этапы сбора данных включают в себя:

1. Анализ литературы: осуществлено систематическое изучение научных публикаций, включая статьи, книги и научные исследования, охватывающих аспекты взаимодействия цвета и пластики в архитектуре. Этот этап позволяет сформировать обзор существующих знаний и подходов к данной теме.

2. Создание классификации: применяется метод классификации для систематизации и организации полученной информации. В рамках этого анализа разработана классификация данных по различным критериям, таким как материалы, цвета и другие факторы. Этот этап позволяет структурировать данные и выделить основные группы или категории для дальнейших исследований.

3. Составление опроса: проведите опросы среди горожан или гостей города Астана. В ходе опроса будет выявлено их мнение о том, как цвет влияет на их восприятие архитектурного объекта, какие эмоции возникают при взаимодействии с объектами определенных цветовых решений, а также как они оценивают влияние цвета на общую атмосферу окружающего пространства. Данный этап позволит собрать эмпирические данные о восприятии и взаимодействии с цветом в архитектурной среде непосредственно от пользователей и специалистов в данной области, что обогатит исследование более глубоким пониманием влияния цвета на архитектурные формы и пространства.

4. Аналогия и сравнительный анализ: этап аналогии и сравнительного анализа предполагает исследование сходств между различными явлениями или объектами на основе определенных критериев. С использованием ранее созданной классификации по различным характеристикам, таким как состав материалов, можно провести сравнительный анализ для выявления сходств и различий между объектами архитектуры. Например, путем анализа классификации материалов можно выделить сходства в использовании определенных материалов в архитектуре, а также выявить различия в их эстетических и функциональных характеристиках. Этот этап позволяет углубить понимание взаимосвязи между цветом и пластикой в архитектуре путем обнаружения общих закономерностей и особенностей в их применении и воздействии на окружающее пространство.

5. Наблюдение: после выполнения практического анализа был выбран участок в городе Астане для проведения исследования. Для этой цели выбраны районы Нура и Сарыарка, вдоль улицы Сыганак и Республика. В рамках исследования осуществляется наблюдение за зданиями, расположенными в различных районах указанных улиц, с целью оценки их архитектурных особенностей, использования цветовых решений и визуального воздействия на окружающее пространство. Данное наблюдение направлено на сбор эмпирических данных о взаимосвязи цвета и пластики в архитектуре на конкретных примерах объектов городской среды, что позволит получить более конкретное представление о реальных проявлениях этой взаимосвязи.

Анализ данных

Проведён анализ данных анкетирования, в ходе которого приняли участие 50 респондентов. Анкетирование разделено на 3 блока. В результате анкетирования было установлено отношение и предпочтения жителей города Астана к архитектуре города. В результате анкетирования мы пришли к следующим выводам:

Блок 1

1. Вы проживаете в Астане?

83% респондентов ответили на этот вопрос да, 17% ответили нет. Анкетирование проводится в основном среди жителей Астаны, так как будет рассматриваться здания этого города (таблица 1).

Таблица 1

Город проживания респондентов		
Варианты ответов:	%	Человек
да	83	42
нет	17	8

2. Ваш возраст?

Данный вопрос был на ориентировку возрастных категорий. Больше всего, 72% респондентов оказались 18-30 лет возрастной категории (таблица №2).

Таблица 2

Возраст респондентов		
Варианты ответов:	%	Человек
До 18	4	2
18-30	72	36
31-50	20	10
Старше 50	4	2

Блок 2

1. Влияет ли внешний вид зданий на восприятие его формы и структуры?

98% респондентов ответили Да. Данный результат говорит о том, что подавляющее большинство респондентов считают, что внешний вид зданий оказывает влияние на восприятие их формы и структуры. Это указывает на значительное влияние эстетических аспектов на восприятие архитектурных объектов(таблица №3).

Таблица 3

Результаты по 1 вопросу в анкетировании блока 2		
Варианты ответов:	%	Человек
Да, влияет	98	49
Нет, не влияет	2	1

Такой ответ может быть объяснен несколькими факторами:

Эстетика и визуальные аспекты: Люди могут быть более склонны к оценке или восприятию здания как органичного и привлекательного, если его внешний вид соответствует их представлениям о привлекательности или гармонии.

Символическое значение: Внешний вид здания может нести символическое значение или идеологическую нагрузку, которая влияет на то, как его воспринимают люди. Например, здания, имеющие символическое значение для определенной культуры или истории, могут восприниматься по-разному.

Функциональность: Внешний вид может также подчеркивать функциональные аспекты здания. Например, здания, спроектированные с учетом энергоэффективности или удобства для пользователей, могут восприниматься как более привлекательные или функциональные.

Контекст окружения: Окружающая застройка и ландшафт также могут оказывать влияние на восприятие внешнего вида здания. Здание, которое гармонично вписывается в свое окружение, может восприниматься более благоприятно.

2. Какие цветовые схемы в архитектуре вы предпочитаете?

Ответы на этот вопрос в таблицы №4 указывают на то, что большинство респондентов, точнее 58%, предпочитают нейтральные и пастельные цветовые схемы в архитектуре. Меньше всего предпочитают контрастные сочетание в архитектуре.

Таблица 4

Результаты по 2 вопросу в анкетировании блока 2

Варианты ответов:	%	Человек
Яркие и насыщенные	16	8
Нейтральные и пастельные	58	29
Контрастные	12	6
Монохромные	14	7

Это может быть обусловлено несколькими факторами:

Универсальность и гармония: Нейтральные и пастельные цвета часто воспринимаются как более универсальные и гармоничные, что может быть привлекательным для большинства людей. Они создают спокойную и приятную атмосферу.

Временная устойчивость: Такие цветовые схемы могут быть более устойчивы к изменениям моды и времени, поскольку они менее подвержены быстрой устареваемости. Это важно при выборе цветовых схем для зданий или помещений, которые будут существовать на протяжении многих лет.

Способность к адаптации: Нейтральные и пастельные цвета могут легко адаптироваться к различным стилям и дизайнерским решениям. Они могут сочетаться с разнообразными материалами и текстурами, что делает их универсальными в использовании.

Психологический эффект: Эти цвета могут также оказывать благоприятное воздействие на эмоциональное состояние людей, создавая ощущение уюта, спокойствия и комфорта.

3. Какие аспекты в архитектуре вы считаете наиболее необходимыми для достижения хорошего визуального эффекта?

Ответы на данный вопрос указывают на то, что значительная часть респондентов считает сбалансированное сочетание аспектов в архитектуре наиболее необходимым для достижения хорошего визуального эффекта. Но тем не менее связь с окружающей средой и ландшафтом считают не мало важной (таблица №5).

Таблица 5

Результаты по 3 вопросу в анкетировании блока 2

Варианты ответов:	%	Человек
Сбалансированное сочетание цветов и форм	38	19
Подбор подходящей текстуры и оттенков	14	7
Архитектурные детали и композиции	12	6
Связь с окружающей средой и ландшафтом	36	18

Это может быть обусловлено следующими причинами:

Гармония и пропорции: Сбалансированное сочетание различных архитектурных элементов, таких как формы, линии, цвета и текстуры, помогает создать визуальную гармонию и пропорции, что важно для эстетического восприятия.

Концептуальная целостность: Сбалансированное сочетание аспектов архитектуры способствует созданию концептуальной целостности проекта, придающей ему ясность и связность.

Учет контекста и окружения: Хороший визуальный эффект в архитектуре также зависит от умения сбалансировать дизайн с окружающим ландшафтом и архитектурным контекстом, чтобы здание или сооружение вписывалось в свою среду гармонично.

Использование света и тени: Сбалансированное использование света и тени может подчеркнуть формы и текстуры здания, создавая динамичные и привлекательные визуальные эффекты.

Инновационный дизайн: Хороший визуальный эффект может быть достигнут через инновационные архитектурные решения, которые сочетают в себе сбалансированный подход к формам, материалам и функциональности.

4. Какие эмоции вы испытываете при взаимодействии с архитектурными объектами различных цветов? (рис.1)

Пример:



Рисунок 1. Яркое здание «Дом контейнер»
(Источник: www.artofit.org)

Ответы, в которых 52 процента респондентов упоминают эмоцию «креатив», указывают на то, что для большинства людей взаимодействие с архитектурными объектами различных цветов вызывает чувство творческого вдохновения и креативности (таблица №6).

Таблица 6

Результаты по 4 вопросу в анкетировании блока 2

Варианты ответов:	%	Человек
Умиротворение	0	0
Вдохновение	14	7
Уют	6	3
Напряжение	28	14
Креатив	52	26

Стимуляция воображения: Яркие и необычные цветовые решения могут стимулировать воображение и вдохновлять на новые идеи и концепции. Они могут вызывать ассоциации с чем-то необычным и уникальным, что способствует креативному мышлению.

Экспрессия и самовыражение: Цвета могут быть средством выражения индивидуальности и креативности. Яркие и нестандартные цветовые решения могут быть использованы для создания уникального образа здания или сооружения, выражающего определенные эмоции или идеи.

Ассоциации с искусством и дизайном: Многие люди ассоциируют яркие цвета с искусством и дизайном, что может вызывать положительные эмоции и вдохновлять на творческие эксперименты.

Привлекательность и уникальность: Архитектурные объекты с необычными цветовыми

решениями могут привлекать внимание своей уникальностью и оригинальностью, что вызывает положительные эмоции у людей.

5. Влияет ли использование пластичных форм для захвата вашего внешнего объекта?(рис.2)

Пример:



Рисунок 2. Здание необычной формы «Башня Марко Поло»

(Источник: www.losko.ru)

Ответы, в которых 56 процентов респондентов утверждают, что использование пластичных форм влияет на захват внешнего объекта, указывают на значительное влияние такого подхода на восприятие архитектурного объекта (таблица 7).

Таблица 7

Результаты по 5 вопросу в анкетировании блока 2

Варианты ответов:	%	Человек
Да, влияет	56	28
Влияет не сильно	34	17
Нет, не влияет	10	5

Вот несколько причин, по которым это может быть:

Эстетическое воздействие: Пластичные формы могут создавать более динамичный и привлекательный внешний вид, что привлекает внимание и вызывает положительные эстетические эмоции у наблюдателей.

Инновационный дизайн: Использование пластичных форм часто ассоциируется с инновационным и современным дизайном, что может делать объект более привлекательным для людей, особенно для тех, кто ценит современные архитектурные решения.

Индивидуальность и уникальность: Пластичные формы могут придавать объекту уникальный и индивидуальный облик, что делает его запоминающимся и выделяющимся среди других объектов.

Динамичность и движение: Пластичные формы могут создавать впечатление движения или динамичности, что делает объект более живым и интересным для восприятия.

Визуальный контраст: Пластичные формы могут также создавать интересный визуальный контраст с окружающей средой или другими объектами, что привлекает внимание и вызывает интерес.

6. Какие эмоции вызывают у вас использование ахроматических цветов, с использованием наименьшего количества ярких цветов в архитектуре?(рис.3)

Пример:



Рисунок 3. Здание классического стиля «Дом с химерами»
(Источник: www.nathoncharova.livejournal.com)

Результаты опроса, в которых 82 процента респондентов отметили положительное влияние использования ахроматических цветов с минимальным количеством ярких цветов в архитектуре(таблица 8).

Таблица 8

Результат по 6 вопросу в анкетировании блока 2

Варианты ответов:	%	Человек
Положительно	82	41
Отрицательно	18	9

Результаты могут быть объяснены с позиции психологии цвета и эмоций. Ахроматические цвета (черный, белый, серый) ассоциируются с такими эмоциями, как сдержанность, элегантность, сдержанность и эстетика. Их использование может создавать ощущение уверенности, стабильности и спокойствия. Сочетание ахроматических цветов с минимальным количеством ярких цветов может подчеркнуть гармонию, простоту и уравновешенность в дизайне. Минимальное использование ярких цветов может служить акцентами, привлекающими внимание к определенным архитектурным деталям или областям. Из практической точки зрения, ахроматическая палитра также может быть более универсальной и подходить для различных стилей и типов архитектуры. Она обладает временной устойчивостью и может быть более легко адаптирована к изменяющимся вкусам и требованиям.

7. Какие здания в г. Астана вам больше кажутся привлекательными?

Для определения привлекательности архитектурных объектов были выбраны жилые комплексы, среди них Парижский квартал, Akbulak Riviera, Citylake, Северное сияние, в Астане. Ответы на вопрос о предпочтении привлекательных зданий в городе Астане указывают на то, что 44 процента респондентов выбрали первый вариант (таблица 9).

Таблица 9

Результат по привлекательности зданий города Астана

Варианты ответов:	Рисунок	%	Человек
Вариант 1		44	22
Вариант 2		14	7
Вариант 3		36	18
Вариант 4		6	3

Это может указывать на то, что данное здание обладает определенными характеристиками или архитектурными особенностями, которые делают его наиболее привлекательным для значительной части опрошенных.

8. Какие формы зданий в г. Астана вам импонируют?

Для определения импонирующих форм зданий были выбраны ЦКЗ Казахстан, Highvill Ishim, Бұқар жырау, Сулу. Ответы, в которых 42 процента респондентов выбрали первый вариант – необычную форму здания, ЦКЗ Казахстан, указывают на то, что значительная часть опрошенных предпочитает архитектурные объекты с оригинальным и уникальным дизайном (таблица №10).

Таблица №10. Результат по 8 вопросу в анкетировании блока 2

Варианты ответов:	Рисунок	%	Человек
Вариант 1		42	21
Вариант 2		22	11
Вариант 3		14	7
Вариант 4		22	11

На основании полученных данных можно сделать вывод о том, что здания необычной формы оцениваются как более привлекательные визуально. Во-первых, нестандартная архитектурная форма может привлечь внимание из-за своей уникальности и необычности, что вызывает интерес и восхищение у наблюдателей. Во-вторых, нестандартные формы могут быть ассоциированы с инновациями, современностью и креативностью, что создает положительное впечатление и усиливает восприятие привлекательности здания. Также важную роль играет контекст окружающей среды и архитектурные элементы, которые могут подчеркивать уникальные черты здания и делать его более выразительным среди других сооружений.

9. Опишите здания, которые вам нравятся

Многие на это вопрос затруднились ответить. Но из предоставленных ответов можно выделить следующие предпочтения и критерии при выборе зданий, которые нравятся:

Необычность и привлекательность: Люди ценят здания, которые привлекают внимание своей необычностью и привлекательностью.

Уникальность и современность: Важным является сочетание современного дизайна с уникальными архитектурными решениями.

Гармония с окружающей средой: Здания должны гармонично вписываться в окружающую среду и учитывать естественные ландшафтные особенности.

Использование инновационных материалов и технологий: ценится использование новейших материалов и технологий в строительстве.

Оригинальная архитектура: Люди предпочитают здания с оригинальной архитектурой,

которые выделяются из общего массива.

Высокие здания с панорамными окнами: Высокие здания с панорамными окнами привлекают внимание и обеспечивают великолепные виды.

Готические элементы: Некоторые люди ценят здания с элементами готики и сдержанной цветовой гаммой.

Сдержанная детализированность: некоторые предпочитают здания со сдержанной детализированностью.

Яркие оттенки и необычные формы: Люди также могут привлекаться к зданиям с яркими оттенками и необычными формами.

Элементы местной культуры и традиций: упоминается предпочтение к зданиям, которые отражают местную культуру и традиции, такие как мечеть «Хазрет Султан».

Выбор зданий основан на их необычности, привлекательности, уникальности архитектурных решений, гармонии с окружением, использовании новых технологий и материалов. Также важны оригинальность, высота зданий с панорамными окнами, готические элементы, сдержанная детализация, яркие оттенки и отражение местной культуры. Эти факторы определяют привлекательность зданий и их популярность.

Блок 3

В третьем блоке исследования с помощью опроса было проведено сравнение двух зданий различных архитектурных стилей, расположенных в городе Астане. Использовался метод сравнения и аналогии, который позволил выявить сходства и различия между выбранными объектами. Этот подход позволил более глубоко и систематически проанализировать влияние стиля и цвета на восприятие архитектурных форм в городской среде.

1. Какого стиля архитектура г. Астаны вам нравится?

При сравнении двух зданий разных стилей респонденты дали практически одинаковые ответы, с разницей в четыре ответа в пользу здания современного стиля(таблица №11).

Таблица 11

Результат сравнение архитектуры разных стилей

Варианты ответов:	Рисунок	%	Человек
Вариант 1		54	27
Вариант 2		46	23

При сравнении зданий разных стилей, большинство отдает предпочтение современной архитектуре, что подчеркивает актуальность и востребованность современных архитектурных решений среди населения.

2. Какая цветовая гамма архитектуры Вам больше нравится?
При сравнении цветовой гаммы двух зданий респонденты в этом вопросе тоже дали практически одинаковые ответы, с разницей в два ответа в пользу здания современного стиля(таблица №12).

Таблица 12

Результат сравнение цветовой гаммы зданий			
Варианты ответов:	Рисунок	%	Человек
Вариант 1		48	24
Вариант 2		52	26

Несмотря на небольшую разницу в предпочтениях, большинство опрошенных отдают предпочтение современной цветовой палитре, включающую нейтральные и монохромные оттенки, что подтверждает актуальность и популярность современных цветовых решений в архитектуре.

3. Какие эмоции у Вас вызывает это здание?
Было выбрано здание, расположенное на улице Республика в городе Астана(рис.4). Данное здание представляет собой образец классического стиля и выполнено в светлых тонах со множеством декоративных элементов.



Рисунок 4. Здание по проспекту Республики
(Источник 2ГИС)

Из предоставленных ответов можно выделить следующие эмоции и впечатления, вызываемые зданием:
Пресный и плоский: Негативные эмоции, связанные с отсутствием интересных деталей или характера.
Советское время: Ассоциации с эпохой Советского Союза, что может вызывать ностальгию или отрицательные эмоции, связанные с этим периодом.
Злость: хочется выдрать вывески: Негативные эмоции, возможно, вызванные нежеланием видеть коммерческую рекламу на здании.

Визуальный шум: Восприятие здания как чего-то многошумного, наверное, из-за наличия разнообразных деталей или рекламы.

Чувство спокойствия и уверенности: Позитивные эмоции, связанные с симметрией, четкими линиями и лаконичным дизайном.

Старьё: Негативные эмоции, связанные с восприятием здания как устаревшего или старомодного.

Уют: Положительные эмоции, связанные с ощущением комфорта и уюта, которые может вызывать здание.

Роскошь: Положительные эмоции, указывающие на восприятие здания как роскошного и престижного.

Негативная. Устаревшая классика: Отрицательные эмоции, связанные с восприятием здания как устаревшего и несовременного.

Минималистическая классика: Положительные эмоции, связанные с простотой и элегантностью дизайна.

Какой-то шум: Негативное восприятие здания как шумного или беспорядочного.

Положительные, только изменить баннер: Положительные эмоции, но с предложением изменить какой-то аспект здания (в данном случае - рекламный баннер).

Качество: Положительное восприятие здания, связанное с его качеством.

4. Какие эмоции у Вас вызывает это здание?

Было выбрано здание, расположенное на улице Сыганак в городе Астана. Данное здание представляет собой образец современного стиля и выполнено в нейтральных серых тонах(рис.5).



Рисунок 5. Здание по улице Сыганак

(Источник: 2ГИС)

Вопрос был в открытой форме. Из анализа ответов частыми были:

Современность: это общее впечатление, которое вызывает здание у нескольких человек.

Строгость и возвышенность: Несколько участников отметили холодность, серость, но при этом также указали на строгость и возвышенность здания.

Минимализм и простота: Несколько участников отметили монохром, минимализм, простоту здания.

Спокойствие и стабильность: Несколько участников упомянули спокойствие, стабильность в контексте этого здания.

Исходя из этого сравнения, если сравнивать по всем параметрам, здание современного стиля кажется более привлекательным. Оно обладает современным дизайном, который ориентирован на функциональность и инновации, а также его цветовая гамма и формы способствуют вызову положительных эмоций, таких как спокойствие и чувство современности.

После анализа результатов опроса была разработана классификация материалов, используемых для облицовки фасадов зданий, с учетом их характеристик, таких как цветовые особенности, уровень эластичности и другие параметры (таблица №13). Эта классификация предназначена для более систематического и удобного распределения материалов в зависимости от их свойств и характеристик, что способствует эффективному

анализу и выделению основных трендов и особенностей в использовании материалов для архитектурных конструкций.

Таблица 13

Классификация внешнего вида зданий города Астана		
№	Вид фасада	Цвета
1	Фасадная кассета	Разноцветный, в основном серый, белый
2	Деревянные панели	Цвет под дерево
3	Клинкерная плитка	Под кирпич, серый
4	Фиброцемент	Разноцветный, в основном серый, белый, оранжевый
5	Вспененный сайдинг	Разноцветный, в основном серый, белый
6	Фасадная доска из ДПК	Серый, белый, под дерево
7	HPL панель	Серый, белый и т.д.

По данным классификации цвета материалов фасада можно разделить на ахроматические, такие как серый, белый и оттенки, и цветные(яркие) в небольших количествах. Это свидетельствует о тенденции использования универсальных и гармоничных цветовых решений в архитектурных проектах, которые могут интегрироваться в различные стили и окружающую среду. Это подтверждает ответ респондентов в таблице 4, при выборе предпочитаемых цветов, и таблице 12, при сравнении двух зданий. Отсутствие ярких или высококонтрастных цветов подчеркивает стремление к сбалансированному и умеренному дизайну, который сочетается с окружающей архитектурой и природным ландшафтом. В целом, представленные цветовые вариации отвечают требованиям эстетики, функциональности и гармонии в архитектурном проектировании.

Заключение

Полное исследование гармонии между цветом и пластикой в архитектуре представляет собой значимый аспект, подтвержденный как анализом литературных источников, так и результатами опросов среди жителей города. Работы известных архитекторов и дизайнеров часто служат примерами успешного воплощения этой гармонии, подчеркивая важность внимательного подхода к сочетанию этих двух элементов в создании архитектурных произведений. Анализ данных, полученных от жителей города, дополняет эту картину, предоставляя информацию о предпочтениях и восприятии широкой аудитории. Таким образом, углубленное изучение этого вопроса позволяет лучше понять и оценить роль гармонии цвета и пластика в формировании визуальной эстетики архитектуры.

В исследования можно отметить, что проведенный анализ архитектуры города Астана на основе опроса и сравнения позволил выявить предпочтения жителей по форме и пластике архитектурных сооружений. Результаты сравнительного анализа показали, что существует определенное предпочтение в пользу зданий современного стиля. Этот факт основан на учете нескольких важных параметров, включая характеристики цветовой гаммы, стиль и форму зданий. Представленные данные указывают на существенное влияние современных архитектурных решений на эстетические предпочтения современного общества, что подчеркивает актуальность и значимость современного дизайна в контексте архитектурного творчества. Несмотря на разнообразие архитектурных стилей, визуальный образ города сохраняет гармонию и эстетическую привлекательность для его жителей. Полученные результаты могут быть полезны среди начинающих архитекторов и дизайнеров для архитектурного проектирования и развития городской среды с учетом предпочтений и

ожиданий жителей. Дальнейшие исследования в этой области с помощью дополнительных анализов зарубежной архитектуры могут помочь углубить понимание влияния архитектурных решений на общественное восприятие и комфортность городской среды.

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Culturology

THE ROLE OF SILK SCREEN PRINTING IN MODERN ART: THE INTERWEAVING OF TRADITION AND INNOVATION

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Abstract. Silk screen printing is a method of printing images on fabric and other materials which is part of modern fine art. This study analyzes the role of silk screen printing in modernity, the interweaving of tradition, and innovation processes. The technical features of silk screen printing and innovations in the creative process, as well as its significance and influence in society, were considered. The article will show the formation of the relationship between traditional methods and modern use of this type of art.

Keywords: Silk screen printing, graphics, print art, fine arts, arts and crafts, tradition, innovation, technology, modern art.

Introduction

Silk screen printing is an art form that has a centuries-old history, but has taken a special place in modern fine arts and design. The role of silk screen printing in the field of art in the second half of the twentieth century was recognized as a creative tool and used in many areas of art. Although, this method was initially used only as a fabric printing technology, later widely used in the visual arts, graphics, and commercial arts. Today, the interweaving of tradition and innovation is visible in the art of silk screen printing. Under the influence of technological advances, this technique has opened up new opportunities and gained its place in art and arts and crafts.

1.The place of silk-screening in contemporary art

The history of silk screen printing relates to the countries of Ancient Asia, especially China and Japan. In modern times, this technique has been used in many countries of the world and has become part of art and production. The development of silk screen printing in Kazakhstan has also become an important part of National Art and culture. The development of technology and the introduction of new directions in creativity had a significant impact on the evolution of silk screen printing. The combination of traditional methods and modern technologies plays an important role to this day [1].

2.The interweaving of tradition and innovation

In modern visual art, silk screen printing has a special place. This technique is being used for artistic and commercial purposes, expanding the boundaries of graphics and print art. Through silk screen printing, many works of art and design projects are created, in which the aesthetic appearance, color harmony, uniqueness of composition, and content play an important role. In modern art, silk screen printing has become a part of graphics and visual art. The main feature of this method is that it allows you to create a large number of products, and each of the images will have its characteristics and meaning. Silk screen printing occupies a special place in decorative and applied art and design art. In Kazakhstan, silk screen printing has become especially popular in

recent years. Modern artists and designers are using this method, combining tradition and innovation [2].

The technique used in traditional silk screen printing is mainly focused on manual techniques and the use of special sets and paints. Today, the technology of silk screen printing has reached a new level (figure №1). Digital printing, computer graphics, the emergence of new paints and materials – all this recreated silk screen printing from an innovative point of view. New technologies and modern tools have given traditional silk screen printing a new character, and originality and expanded its capabilities (figure №2). For example, through computer graphics and digital print media, many works are printed in high quality in a short time.

In silk screen printing, the relationship between tradition and innovation is realized in two ways:

1. Combination of classical techniques and new technologies. In this direction, artists and designers use modern tools and technologies, while maintaining traditional methods. For example, handmade design elements and digital tools are combined to create new and unique creations.

2. Combination of national motifs and modern aesthetics. The art of silk screen printing in Kazakhstan reproduces national motifs and combines them with modern trends. Through the technology of silk screen printing, works are emerging that represent national art in modern artistic ways.

The introduction of innovative technologies in silk screen printing has opened up new opportunities in art. The combination of traditional methods and digital technologies contributes to the formation of new creative methods in modern art. New technologies used in contemporary silk screen printing have made major changes in imaging and printing processes compared to traditional methods. For example, digital printing, computer graphics, and the use of multimedia elements have significantly expanded the possibilities of silk screen printing (figure №3). This interweaving brought new works where art and technology combined [3].

3. Development of silk-screening in Kazakhstan

In Kazakhstan, silk screen printing has become especially popular in the field of Arts and crafts and design in recent years. Kazakh artists and designers are using this technique in new directions, combining national traditions and modern trends. (figure №4). This trend marks the transition of culture and art to a new stage of development. The wide recognition and development of this art form in Kazakhstan is a bridge between national art and world art [4].

Conclusion

In conclusion, the art of silk screen printing is widely developed in Kazakhstan. Silk screen printing is a unique technique that occupies an important place in modern art, combining tradition and innovation. This method has undergone many changes throughout its history, but its creative and cultural significance has remained unchanged. New technologies have a great influence on the development of silk screen printing, which, in turn, allows it to be used in various fields of art. In the field of art and Applied Arts in the country, this method contributed to the rise of culture and art to a new level. Kazakh artists and designers took silk screen printing to new heights, synthesizing national traditions and modern trends. As a result of these changes, new creative opportunities appeared. Through the combination of modern technologies and traditions, silk screen printing is reaching a new level.

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Application:



Figure №2, Ns404-esu 4 Color 4-Way Mechanical Silk Screen Printing Machine

Figure №1, Special effects for silkscreen printing	

 Figure №3, Panorama: Crystal Print, printing on t-shirts	 Figure №4, T-shirts designer Dusshanova A.

Political Studies

THE INFLUENCE OF POLITICAL CULTURE ON STRENGTHENING DEMOCRATIC VALUES IN KAZAKHSTAN

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Annotation. The main purpose of the article is to demonstrate the influence of the study of political science on public life, to dwell in more detail on the phenomenon of political culture, which, being the main lever of government at the state level, does not find much popularity among the citizens of Kazakhstan.

One fact has remained unchanged for thousands of years: politics has a direct impact on the nature of public administration and the life of the population as a whole. Man as an element of society tends to evolve and, oddly enough, politics is part of this development, eventually becoming an inseparable link of the cultural heritage of mankind. Humanity has always strived to achieve freedom and the right to choose in everyday life. Based on the above, it becomes clear why political education is receiving due attention in all democratic countries today.

Political education is characterized by basic principles such as: the historical internal and external experience of countries, the legislative component and state structural features. Nowadays, political science is becoming one of the main attributes of political education of the population due to the fact that in order to understand the process of state reforms in the general dynamics of the country's development, a person must understand the main aspects and bases of political changes in order to assist the state and realize their rights and freedoms. It is the awareness of the people of their historical values that is a sign of the health of the nation and an incentive for the evolution of society. All this ultimately leads to an understanding of what is needed for an effective and directed process of political development of the country, the main vectors, the system of competencies for the successful formation and functioning of the country's political institutions of public administration.

The study of politics has two foundations: the first is based on the basis of Political Science, and the second is based on the theory of the organization of political activity [1].

As an example of how political education lays the foundations for conducting moral, following democratic principles of political activity, one can cite prominent historical figures of Kazakhstan in the first half of the 20th century – representatives of the Alash-Orda movement. The autonomy they created in 1917 somehow managed to "survive" against the background of clashes between the white movement and the Bolsheviks during the Civil War, which demonstrates the high level of their political education and pure legal culture. The political decisions made by the Alash Horde significantly increased the chances of the Kazakhs gaining independence, affecting the further historical path of the Kazakh state.

The direct dependence of the political system on the level of political education can also be traced through examples of historical coups d'etat and mass movements. A striking example is the national movements of the peoples of Central Asia in the XVII-XX centuries against the

political reforms of the tsarist authorities, which in itself contributed to the formation of the political consciousness of the involved masses of nomads, the poor and the middle class. Certain representatives of the intelligentsia, thanks to their colossal political experience, had the ability to awaken national consciousness, thereby achieving greater impact of the population in the fight against the tsarist colonialists. When analyzing these dependencies from the formation of political literacy of the masses to direct conscious actions in the political arena of the country, the connection between political education and the political system as a whole is traced.

Traditionally, the term political culture is understood as a reflection of the general cultural prism of the country with all its inherent elements of the political consciousness of the population, national values that originated on the ethnic platform of the emergence of the state. These aspects directly explain why the population is able to accept certain political changes, the general political mood of citizens and their direct participation in the political life of the country. Taking into account the attitude of political culture to the conservative mechanisms of the political system, it makes sense to focus on the fact that in the process of transformation of the political regime, it changes much more slowly than its other components, such as political relations and the political organization of society [2].

This is due to the fact that in the event of a change in the dominant culture in society, political values and ideas deeply rooted in society are violated.

In the post-Soviet space, political culture began to take shape in the early 90s, after the collapse of the USSR [3]. And approximately all former Soviet republics have passed the same stage. The relatively low level of socio-political consciousness, ignorance of the peculiarities of Kazakhstan's political culture in comparison with other countries are due to globalization trends. The fact that Kazakhstan, throughout almost its entire history, was the birthplace of the Turkic nationality, and subsequently of the Kazakh statehood, the territory on which centuries-old colonization was carried out, laid the foundation of its political culture. That is, the political culture of Kazakhstan is a kind of symbiosis of various subcultures [4].

It is safe to assume that the political institutions of the republic comply with international norms and standards. This is confirmed by the country's tight integration into the world community and the absence of any complaints on the part of the latter regarding the quality of democracy in Kazakhstan. Kazakhstan is a member of many international organizations. In recent years, the country's political apparatus has signed many important international agreements within the framework of the United Nations. The Constitution contains the norms and rules of democracy and individual freedom. And yet, although the political and legal field of Kazakhstan absolutely complies with the norms of foreign countries, in particular, Western ones, insufficient practical implementation of reliable laws remains a serious problem [5].

At the same time, the position has been repeatedly indicated that "there is no blind adherence to external standards" – Kazakhstan's political institutions will retain their specifics and will never completely copy European ones. This ensures their compliance with the norms of national political culture.

We cannot ignore our peculiarities related to traditions, religion, and family values. To this day, they are decisive in the Kazakh society. It is impossible to force the adoption of a law allowing, for example, same-sex marriage. This is alien to our society, our people, traditions, and religion. Or, say, the law on alternative military service. This law has not even been adopted in all European countries. Kazakhstan has partially managed to preserve its identity, while at the same time using the European experience, the European way.

Speaking about the level of socio-political consciousness in Kazakhstan, it should be noted that our population is not completely apolitical, it is inclined to form parties, participate in parliament, make decisions, etc. Therefore, the national character of our people is not indifference to politics at all. No, political institutions are at odds with the desire and culture of

the people. The current powerful political institutions serve only to suppress the political will and culture of the Kazakh people.

One of the reasons today is the lack of proper cooperation between our political institutions, the lack of political literacy, and, as a result, the reluctance of citizens to get involved in the political process. The level of public confidence in political institutions, primarily the institution of the presidency and institutions of the security sector, is assessed ambiguously.

The majority of citizens record the low effectiveness of political institutions in solving regional problems. And political institutions are stable in theory. The traditions of the "government –constructive opposition" relationship are unstable, and there is a high level of corruption.

The immediate presence, characteristics and level of social and cultural values have an impact on the speed, type and characteristics of political changes in the country. The involvement and increased participation of society in political life in Kazakhstan today depends on many factors.

It should be recognized that in the short term, many factors are not subject to immediate implementation, since the main counterparty is the modern way of political consciousness in society, which implies a low level of participation of subjects of the population in the political life of the country. The ubiquitous postulate of the population that "everything will be solved without us" and "nothing will depend on me" in themselves strengthen the passive mood and the lack of any participation of the people in political life.

That is why the mechanism of stimulating public participation in political life is very important for the formation and maintenance of democratic institutions, in which subjects will assist the political regime at the voting stages. People are more likely to be civic-minded if they are not confident that their daily routines will not conflict with alarming current events in the country.

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Евразийский экономический союз: направления и перспективы сотрудничества

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Аннотация

В данной статье анализируются основные направления ЕАЭС, сотрудничество между странами-участниками, уделяется внимание социальным аспектам интеграции, развитие сотрудничества с другими регионами и международными организациями. Рассматриваются ряды проблем и вызовов, перспектив развития. В конце приводится заключение.

Ключевые слова: ЕАЭС, рынок, перспектива, интеграция, сотрудничество, ЕС

Евразийский экономический союз был создан в 2015 году с целью углубления экономической интеграции между его членами. В его состав входят пять стран: Россия, Казахстан, Беларусь, Армения и Кыргызстан. ЕАЭС представляет собой уникальную модель интеграции, которая сочетает в себе элементы как экономического, так и политического сотрудничества. В данной статье рассматриваются основные направления деятельности ЕАЭС, а также перспективы его развития и сотрудничества с другими странами и регионами.

Основные направления сотрудничества в рамках ЕАЭС:

1) Экономическая интеграция.

Одним из ключевых направлений деятельности является создание единого экономического пространства, которое предполагает свободное движение товаров, услуг, капитала и рабочей силы. Это достигается через Устранение торговых барьеров. В рамках ЕАЭС страны-участницы стремятся к снижению или полному устранению таможенных пошлин и квот на взаимную торговлю. Это позволяет увеличить объемы торговли между государствами и улучшить доступ к рынкам.

Также ЕАЭС работает над формированием единого рынка, который включает в себя гармонизацию законодательства, стандартов и норм. Это позволяет упростить ведение бизнеса и повысить конкурентоспособность товаров и услуг.

Стоит упомянуть, что ЕАЭС активно развивает инвестиционное сотрудничество между государствами-участниками. Страны ЕАЭС поощряют создание совместных предприятий, что способствует привлечению инвестиций и обмену технологиями. В рамках ЕАЭС реализуются крупные инфраструктурные проекты, такие как строительство транспортных коридоров и энергетических объектов, что способствует развитию экономики региона.

Энергетика является важной составляющей экономики стран ЕАЭС. Страны ЕАЭС работают над созданием единого энергетического рынка, что позволит оптимизировать использование ресурсов и повысить энергетическую безопасность. Также обсуждаются проекты по развитию возобновляемых источников энергии, что соответствует мировым трендам по переходу на устойчивые источники энергии.

Уделяет внимание и социальным аспектам интеграции. Проводится работа над созданием единого образовательного пространства, что позволит студентам и специалистам получать образование и проходить стажировки в других странах союза.

Разрабатываются механизмы социальной защиты трудящихся, что способствует улучшению условий жизни населения.

Одной из перспективных задач ЕАЭС является расширение его состава. В настоящее время ряд стран проявляет интерес к вступлению в союз. Например, Узбекистан и Таджикистан рассматривают возможность участия в ЕАЭС, что может значительно увеличить экономический потенциал союза и расширить его влияние в регионе.

ЕАЭС стремится к углублению интеграции между государствами-участниками. Это может включать:

Создание единого финансового рынка: Разработка совместных финансовых инструментов и механизмов, что позволит улучшить доступ к финансированию для бизнеса и населения.

Углубление сотрудничества в области науки и технологий: Совместные научные исследования и разработки могут способствовать инновационному развитию стран ЕАЭС.

ЕАЭС активно развивает сотрудничество с другими регионами и международными организациями. В рамках инициативы «Один пояс, один путь» ЕАЭС рассматривает возможность совместных проектов с Китаем, что может способствовать развитию инфраструктуры и торговли.

Несмотря на существующие политические разногласия, ЕАЭС заинтересован в развитии экономических связей с ЕС, что может открыть новые возможности для торговли и инвестиций.

Несмотря на достижения, ЕАЭС сталкивается с рядом проблем и вызовов, которые могут повлиять на его дальнейшее развитие:

1) Политические разногласия: Различия в политических системах и внешнеэкономических курсах стран-участниц могут затруднять процесс интеграции.

2) Экономические дисбалансы: Разные уровни экономического развития стран ЕАЭС могут создавать напряженность и препятствовать углублению интеграции.

3) Влияние внешних факторов: Геополитические изменения и экономические кризисы могут негативно сказаться на сотрудничестве в рамках ЕАЭС.

Евразийский экономический союз представляет собой важный инструмент для углубления экономической интеграции и сотрудничества между странами Центральной Азии и Восточной Европы. Основные направления деятельности ЕАЭС включают экономическую интеграцию, инвестиционное сотрудничество, энергетическое взаимодействие и социальные аспекты. Перспективы развития союза связаны с расширением его состава, углублением интеграции и сотрудничеством с другими регионами. Однако для успешного функционирования ЕАЭС необходимо преодоление существующих проблем и вызовов, что требует политической воли и согласия всех участников.

THE ROLE OF STATE REGULATION IN ENSURING SUSTAINABLE DEVELOPMENT OF THE MINING AND ENERGY SECTOR

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Annotation

The article analyzes the theoretical aspects of state regulation of mining and energy enterprises, considers the tasks, areas of control and international experience that may be useful for adaptation in Kazakhstan. Attention is paid to key areas such as licensing, emission monitoring, waste management and land reclamation, as well as the integration of innovative technologies for sustainable development.

The mining and energy sectors of Kazakhstan play a key role in the country's economy. According to the Ministry of Energy of the Republic of Kazakhstan [1], the share of electricity generated by coal-fired power plants exceeds 70%, making the country dependent on the coal industry. However, the intensive exploitation of natural resources is accompanied by significant environmental and social problems: greenhouse gas emissions, water pollution and waste accumulation.

These challenges are particularly acute for the Ekibastuz region, home to the country's largest coal mines and power plants. Improving government regulation mechanisms is essential to achieving sustainable development goals, increasing resource efficiency, and minimizing environmental damage. This article analyzes key aspects of government regulation and prospects for applying international experience in Kazakhstan.

The main tasks of state regulation

State regulation of industrial activity is a multi-faceted process, including the management of natural resources, environmental impact and socio-economic consequences. The main tasks of regulation can be divided into several key areas.

Ensuring environmental safety

Environmental safety is a top priority within the framework of state regulation. In the mining and energy industries, this is achieved through:

1. Setting standards for emissions and discharges of pollutants. For example, coal-fired thermal power plants in the Ekibastuz region are required to comply with strict limits on emissions of carbon dioxide and sulfur oxides.
2. Developing monitoring and reporting systems. Government agencies require businesses to provide real-time data on emissions and discharges, which allows for prompt detection of violations.
3. Monitoring the implementation of environmental protection measures. This includes the restoration of damaged ecosystems, waste minimization, and the use of environmentally friendly technologies.

Rational use of resources

The limited availability of natural resources requires strict control over their extraction and use. The tasks of state regulation include:

- management of mineral extraction to prevent their depletion;
- creating incentives for recycling and reusing waste such as ash and slag [2];
- implementation of technologies that increase energy efficiency.

An example is the ash and slag recycling project in Ekibastuz, where waste is used to produce building materials, which reduces the load on landfills [3].

Stimulating the implementation of environmental technologies

The state uses economic instruments such as tax incentives, subsidies, and grants to reduce its negative impact on the environment. These incentives encourage companies to switch to modern technologies, including automating emission monitoring and waste recycling processes.

Reducing social risks

Mining and energy companies' activities directly affect the population's health. State regulation is aimed at:

- reducing air and water pollution levels, which reduces the risk of disease;
- ensuring safe working conditions for employees of enterprises.
- development of social infrastructure in industrial production regions.

In Ekibastuz, as in other industrial centres, social programmes should include improving health care and informing the population about possible risks.

State control over the activities of mining and energy enterprises covers a wide range of activities aimed at minimizing their negative impact on the environment, rational use of natural resources and ensuring sustainable development. This section examines key areas of control in detail, including licensing, emission monitoring, waste management, land reclamation and emergency preparedness.

Licensing and permitting activities

Licensing is the most important instrument of state control, ensuring that the activities of enterprises comply with environmental standards from the moment of their establishment.

1. Licensing process

- Companies are required to undergo an environmental impact assessment procedure [4]. This document includes an analysis of potential risks to ecosystems, human health and resources.
- Businesses must submit a plan of measures to prevent or minimise harm, as well as a waste management strategy.

2. Emission and discharge permits

- Licenses include limits on emissions of carbon dioxide (CO₂), sulfur oxides (SO₂) and particulate matter. For example, for the Ekibastuz coal mines, these limits are formed based on an analysis of the environmental situation in the region.
- The quality of wastewater discharged into water bodies is monitored. Companies are required to equip treatment facilities with modern filters and control systems.

3. Monitoring compliance with license terms

- Regular inspections verify compliance with the licence conditions. In case of violations, such as exceeding emission limits, fines or suspension of operations are provided.

4. Features for Ekibastuz

- The region is home to enterprises whose activities have a high environmental impact. Licensing is becoming an important tool for preventing environmental degradation and requires stricter control over compliance with the conditions.

Monitoring of emissions and discharges

Emission monitoring is the systematic process of tracking the levels of air, water and soil pollution from industrial enterprises.

1. Automation of monitoring

- Modern enterprises are required to install automated emission control systems that record data in real time and transmit it to state environmental services.

- At Ekibastuz enterprises, such as GRES-1 and GRES-2, these systems monitor the volumes of emissions of greenhouse gases (CO₂), nitrogen oxides (NO_x), sulfur dioxide (SO₂) and dust.

2. Data collection systems

- Monitoring involves recording emissions data for each facility. This data is used to create reports that are analyzed and verified by government inspectors.

- Government agencies conduct regular checks to compare data with standards.

3. Water quality control

- Coal mines and energy companies in the region are required to purify wastewater before discharging it into natural water bodies.

- To prevent groundwater pollution, the state requires regular analysis of the composition of wastewater and the condition of hydraulic structures.

4. The role of monitoring in Ekibastuz

- The high concentration of coal dust and toxic emissions in the region makes monitoring an important element in preventing environmental disasters.

Waste management

Mining and energy industry waste, such as ash and toxic substances, pose a significant threat to the environment. State control in this area is aimed at minimizing their volumes and ensuring safe storage.

1. Waste categorization

- Waste is classified by its degree of danger, which allows the state to establish special requirements for its disposal. For example, ash and slag from the Ekibastuz Thermal Power Plant are classified as low-hazard but require a special approach to storage due to their large volumes.

2. Waste recycling

- The state encourages the use of secondary resources. For example, ash and slag can be processed to produce cement, building blocks and road surfaces.

- Within the framework of the state waste recycling program in Kazakhstan, only 10% of ash and slag is recycled, which requires an increase in the scale of such initiatives [1].

3. Polygon storage

- State standards require that landfills be equipped with special protective barriers to prevent toxic substances from leaching into the soil and groundwater.

- In Ekibastuz, ash storage sites occupy significant areas, which creates a burden on the environment.

4. Incentives for businesses

- The introduction of tax incentives for enterprises implementing waste recycling technologies helps reduce the burden on ecosystems.

Land reclamation

Lands disturbed by mining operations require restoration to prevent degradation and return them to economic use.

1. Requirements for reclamation

- Enterprises are required to carry out land reclamation after completion of mining operations. This includes soil restoration, planting of plants and creation of recreational areas.

- Example: in Ekibastuz, part of the quarries were converted into artificial reservoirs, which improved the environmental situation in the region.

2. Stages of reclamation

- Technical reclamation: includes filling quarries and leveling the landscape.
- Biological reclamation: includes restoration of flora and fauna.

3. Monitoring of implementation

- State inspections check the implementation of reclamation projects and the quality of restored lands.

4. Problems and challenges

- In Ekibastuz, the rate of reclamation remains insufficient due to a lack of funding and the scale of disturbed areas.

Emergency preparedness

Enterprises are required to develop plans for the prevention and elimination of accident consequences. State control in this area includes:

1. Development of emergency plans

- Plans must include a risk assessment, a list of measures to prevent accidents and personnel actions in emergencies.

2. Provision of protective equipment

- Companies are required to install toxic spill prevention systems, such as containment tanks and emergency shutdown systems.

3. Personnel training

- The state requires regular training of employees on actions in emergencies.

4. Readiness checks

- Inspections check that emergency plans comply with regulatory requirements and that personnel are ready to implement them.

State regulation of mining and energy enterprises in Kazakhstan requires modernization taking into account international experience. For regions such as Ekibastuz, the priority areas are:

- 1) Implementation of emission trading systems.
- 2) Development of waste recycling programs.
- 3) Strengthening automated emission monitoring.
- 4) Attracting private investment to finance environmental projects.

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Historical Sciences

TRADE-ECONOMIC COOPERATION BETWEEN THE TURKIC STATES OF CENTRAL ASIA AND ARMENIA

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Summary

In the early 1990s, following the collapse of the Soviet Union, several countries, including the Turkic states of Central Asia and the South Caucasus republics, gained the opportunity to achieve their independence. Seizing this opportunity, the states of both regions initially focused on developing political-diplomatic, trade-economic, and cultural-humanitarian cooperation with neighboring countries as well as with other former Soviet Union states, aiming to improve their internal and external situations through a variety of initiatives.

This article discusses the cooperation between Armenia and, in particular, Kazakhstan, highlighting the meetings held and the agreements signed between the two countries.

Keywords: Kazakhstan, Central Asia, Armenia, cooperation, trade-economic

After the dissolution of the Soviet Union, the long-established trade-economic, scientific-technical, cultural-humanitarian, and other relations among the former Soviet states changed drastically. This led to a decrease in production volumes, rising inflation, and the development of political and economic relations in a new direction. The republics, accustomed to the rigid regime of the Soviet Union for decades, began to pay serious attention to cooperation in order to regulate their internal and external situations and to develop relations between states after gaining independence.

In the early 1990s, the situation in Armenia, one of the republics of the South Caucasus, was not very promising. The newly gained independence, a weak domestic economy, and many external factors were apparent in various sectors of the country. While part of the Soviet Union, Armenia, like other republics, had internal relations and cooperation within the union. However, after gaining independence, Armenia started taking steps, making visits, and signing declarations to develop political, trade-economic, cultural-humanitarian, and other relations with both regional and other former Soviet countries.

One of the former Soviet Union republics with which Armenia established cooperation was Kazakhstan, a Turkic state in Central Asia. Diplomatic relations between the two countries were established in August 1992, and an example of this cooperation is the Armenian Embassy, which began its activities in Kazakhstan in October of the same year. Over the past 30 years, both sides have focused on the development of trade-economic and cultural-humanitarian cooperation, successfully establishing mutually beneficial political and economic priorities aimed at promoting bilateral and multilateral interests in both the South Caucasus and Central Asia regions.

One of the initiatives aimed at the development of relations between Kazakhstan and Armenia was the signing of the Treaty of Friendship and Cooperation on September 2, 1999, which recently celebrated its 25th anniversary. During negotiations, key regional and international issues were

discussed, and perspectives for strengthening cooperation in trade-economic, transport-logistics, agriculture, cultural-humanitarian, and digitalization areas were explored. The development of bilateral relations was reflected in the significant increase in trade turnover, which grew 2.4 times by the end of 2023.

One example of meetings between Armenia and Kazakhstan is a joint statement signed on April 15, 2024, aimed at strengthening cooperation and reducing ongoing tensions between the two countries. During the diplomatic talks, both sides demonstrated their readiness to overcome past historical grievances and chart a new course for cooperation. Additionally, Kazakhstan's President Tokayev emphasized that signing a peace treaty between Azerbaijan and Armenia would help further strengthen mutual relations and contribute to the establishment of peace in the South Caucasus.

Armenia's political-diplomatic relations with Turkmenistan, another Turkic state of Central Asia, were established in 1994 with the opening of the Armenian Embassy in Turkmenistan. Today, Armenia and Turkmenistan maintain relations in various fields, including science, culture, trade-economic, and political-diplomatic. In March 2024, a meeting was held between the foreign ministers of Armenia and Turkmenistan, during which discussions focused on future joint initiatives, particularly in the trade-economic sector, with a special emphasis on energy development. While relations between the two countries were initially centered around the energy sector, over time, cooperation has expanded, with regular two- and three-party meetings being held. However, political cooperation remains less attractive for both sides. Therefore, the initiatives undertaken by both states mainly focus on the energy sector and science-education.

In summary, it is possible to examine the examples of relations between Armenia and the Turkic states of Central Asia, analyze the reasons for their development, and understand the underlying goals. In particular, from the perspective of Azerbaijan's national interests in the South Caucasus region, it is essential to continuously study and monitor these relations and processes. The exploration of political, trade-economic, cultural-humanitarian, and other relations between the republics, as well as future plans, is a highly relevant topic in today's world.

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Кеңес өкіметінің орнауы және оның билік-басқару мекемелерінің қызметі (Сырдария және Жетісу облыстары бойынша)

Установление Советской власти и деятельность ее властно-управленческих учреждений. (по Сырдарьинской и Семиреченской областям)

The establishment of Soviet power and the activities of its power and administrative institutions. (in Syrdarya and Semirechensk regions)

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Аңдатпа. Бұл Мақалада бұрын жарияланбаған құжаттық деректер жариялана отырып Сырдария және Жетісу облыстарында кеңес өкіметінің орындауының кейбір әдістері зерттелген.

Аннотация. В данной статье исследованы на основе ранее не опубликованных материалов некоторые проблемы Установления власти Советов в Сырдарьинской и Жетысуской области.

Abstract. This article researched about documentary manuscripts which didn't published earlier, the some problems was established soviet government in Syrdaria and Jetisu regions.

Түйін сөз: кеңес өкіметі орнауының ерекшеліктері, Сырдария, Жетісу облыстары, билік.

Ключевые слова: проблема установления власть советов, власть, в сырдарьинской и жетысуской области.

Keywords: Syrdaria and Jetisu regions, problems was established soviet.

Түркістанда большевиктердің билікті күштеп тартып алуы оның жергілікті жерлерде орнауының өзіне тән ерекшеліктері, кеңестер мен қазақ заялыларының арасындағы байланыс, текетірес т.с.с. дүниелерге талдау жасауды өзімізге мақсат етіп қойғанымыз жоқ. Бұл ізденісте біз Түркістанда және Қазақстанда Кеңес өкіметінің билік құрған алғашқы жылдарында олардың билік-басқару мекемелерінің жергілікті жерлердегі қызметінен жан-

жақты хабар бере алатын құжаттардан үзінді келтіре отырып, оларға жергілікті байырғы тұрғындардың билікке қатысы мен көзқарастарын т.с.с. бізге бұрын түсініксіз, бұлдыр болып келген жайыттардан хабар аламыз және оларға талдау жасап өз пікірлерімізді түйіндейміз.

Сонымен, большевиктердің өлкедегі билікке келуі және оны жергілікті халық қалай қарсы алды, ол революцияға қатысы қандай деңгейде болды? Осы мәселе төңірегінде М. Дулатовтың «кім дос, кім қас?», А. Байтұсыновтың өзінің белгілі мақаласында Қазан революциясын қазақ халқының қалай қарсы алғаны жөнінде өз бағасын беріп, сонымен қатар большевизмді қабылдауға 1917 жылы қазақ қоғамы дайын емес еді және оның мәнін түсіне алмады деген тұжырымдарын жасағаны белгілі.[1] Міне, сондықтан да Ташкент қаласында Қазан революциясы жүріп жатқан күндері, яғни большевиктер өлкедегі билікті күштеп тартып алу мақсатында Коровиченко әскерімен соғыс жүргізіп жатқан уақытта бұл оқиғаларға куәгер болған М. Шоқай 1917 жылғы естеліктерінде: «Түркістанда, жергілікті халықты билеу үшін көшелерде шайқас жүріп жатқанда олар бейтарап көрермен болып қалды. Большевиктердің Уақытша Үкіметке қарсы жүргізілген осы күресті: бізге Түркістандықтарға қатысы жоқ, орыс партиялары арасындағы әдеттегі ішкі қақтығыс деп қараған қандастарымыз да көп еді», [2] – деп сол күндердегі Түкістандағы жергілікті мұсылман халықтарының қазан революциясын нем құрайлы дәрежеде қабылдап қатысқандығы жөнінде сипаттап жазды.

1918 жылдың ақпынында (Қазан рев. іле - шала) С. Қожанов «Бірлік туы» газетінде өзінің «өзіміздің большевик сенгендерге» атты мақаласында болған қазан революциясына өз пікірін білдіріпті. Мақалада: Социалистік партияның құрылу тарихына, бағдарламасына талдау жасай келіп, «социал-демократ партиясы еуропада туған партия. Сол себепті оның программасы да еуропаның тіршілігіне үйлесімді» - деп жазып, - еуропада завод, фабрика өркен жайып дамыған, ол қоғамда тап күресінің бар екендігіне және ол қоғамда саналы түрде өтіп жатқандығына тоқталып, қазақ қоғамы тұрмақ, тіпті Ресейдің өзі әлеуметтік және экономикалық революция жасауға дайын емес еді деген тұжырым жасайды. [3]. Айта кету керек бұл пікір осы күнге дейін өз құндылығын жойған жоқ.

Петроградта жеңіске жеткен қазан революциясы нәтижесінде саяси билік басына Кеңес өкіметі мен большевиктер партиясы келді. Ал бұрынғы Ресей империясының отарлы аймығы ретінде қаралған Қазақстан мен Түркістан өлкелері сияқты елдер бұл жолмен жүру сөзсіз міндетті саналды. Түркістан ген-губернаторлығына қарған Сырдария облысында Кеңес билігі Жетісу облысындағыдай қарулы жолмен емес, бейбіт жолмен өтті. (Мұны теріске шығаруға болмайды). Бірақ, оның кейбір ерекшеліктері болғаны жөнінде тоқтала кеткенді жөн көрдік.

“Бірлік туы” газеті Сырдария облысында Кеңес өкіметін орнату уақытында “Қызыл гвардияның” жергілікті жерлерде төмендегідей әдістерді қолданғаны жөнінде хабар берген. Онда: “Шымкенттен келген адамдар; Торғай облысының Шалқарынан бірталай Қызыл гвардия келіп, қамал (қоршап) қылып жатыр дейді. Бір миллион сом бересіңдер, болмаса шаһардың тас-талқанын шығарамыз деген. Онан кейін не болып жатқанынан хабар жоқ” [4] делінген.

Әулиеата уезінде үкімет билігін “бейбіт” түрде алғандар туралы газет былай көрсетті: “Әзімхан мырза Орынборға жалпы қазақ-қырғыз съезіне кеткен соң, Меркіден Төреқұл Жанұзақ баласы дейтін бір переводчик келіп, мехкеменің мүшелерін қуып, өзіне ерген адамдардан мүше сайлап, бір қатар надан халықты артына ертіп, солдаттарға қосылды һәм “Киргизский Советті” большевик деп жар қылды. Көп ұзамай-ақ қазақ-қырғыз мехкемесі “Совет солдатских, рабочих, депутатов” мехкемесіне тапсырылды. Өздері билікті қолдарына алып алған соң, жұмысты бөлуге барған кісілерді де кіргізбей, һәр уақыт жұмыстары жасырын жүрді”, – деп жазды одан әрі, олардың атқарған жұмыстары туралы: “Бұл “Ел қамқорларының халыққа айтып тұрған пайдасы, қала ортасынан бір жақсы нөмірді таңдап

алып, жиылып, бірнеше пиво шөлмегін босатты. Мұнан басқа басты істеген істері мыналар: 1) Қазақ-қырғыз мехкемесін солдаттарға қосты. 2) Өз дегеніне жүріп, өз арттарынан ерген һәм түн ортасына дейін отырып, қызара-бөрткендерден қазақ-қырғыз мехкемесіне мүшелер сайлап алды. 3) Біздің қазақ-қырғызға автономия керек емес, халық надан деп елді азғырды. 4) Әзімхан Кенесарин Орынборға жалпы қазақ-қырғыз съезіне хан болып сайлануға кетті деп солдаттарға шақты” [5] – деп көрсетті.

Большевиктерге қосылып ұлттық мүддені аяқ асты еткен қазақтардан аз да болса “большевиктердің” шыға бастағаны туралы газет: “Большевик ауруы жақын арада қазаққа да жұғып келеді. Қай жерге барсақ да, ел арасынан бірсыпыра большевиктер шығып, қазақ тіршілігіне де бір үлкен өзгеріс жасауға, сөйтіп, барлық бай мен кедейді теңгеріп, біздің қазақ арасында орыстардағыдай “ұжмақ” орнатпаққа ыждикат қылып жүргендер көрінеді”, – деп, олардың кімдер екендігі туралы: “Бұрынғы хукімет өзіне жолдастыққа қай қайдағы парақор азғындар мен ең сатқын сұрқияларды ғана таңдап алатын еді. Бұ күндегі большевиктердің де істеп отырғаны шамасы дәл соның өзі... Осы күні жұқтырып жүргендер болса, олар өзі бұрыннан дені дұрыс емес жарым жандар. Мұны һәр жерде халық өз арасынан шыққан “большевиктерін” көріп жүр”, [6] – деп жазды. Сондай-ақ, Қазақтан шыққан “большевиктерге” газет төмендегідей мазмұнда баға беріп көрсеткен: “Әулиеата қазақ-қырғыздары мұжықтар зорлығынан бір, өз большевиктерінен екі, ашаршылыққа үш ұшырап, өте жүдеулі. Жақында Ташкентке үш вагон астық келіп еді... Әулиеата уәкілі зорлап жүріп екі вагон астық алған екен, онда да большевиктер бастығы Колесов тартып алып қойып, Әулиеата большевиктерін есіне де алмапты. Сірә, біздің қазақ-қырғыз “большевиктері” өзі үлкейгені болмаса, елге пайда келтірерліктей, басқа жерлердің большевиктеріне өтімі өтпейтін көрінеді”. [7]

Сол тұстағы әлеуметтік өмір жағдайы тым төмен, саясаттан ешқандай хабары жоқ, қарапайым қазақ өмірінен хабар бере алатын «Бірлік туынан» алынған мынадай мақаладан байқай аламыз. Уақиға Ақмешіт уезіне қарасты болыстықтың екі ауыл арасында “Жесір дауы” айналасында өрбиді. Бірінші ауыл тұрғыны Қожабегім деген кісі қазақ жолымен Арысты деген қызды жастайынан өз ауылдасына атастырып қояды. Атастырып қойған жігітке Арыстыны ұзатар кезде Арысты атастырған күйеуін ұнатпай, екінші ауылдың Тіллә деген ақсақалдың ұлын ұнатып, қыз бен жігіт сөз байласып, қашып кетеді. Бұған намысы келген, қорланушы бірінші ауылдың адамдары туған-туыстарын жиып, және күші басым болу үшін жұмысшы және солдат комиссариатына шағым жасайды: “Өзі азырақ орысша білетін еді “товарищ”

деп көпке қарай айтқан екен, солдаттардың құлағына жағып кеткен бе, “айтқанын орнына келтіріп бер” деп қасына Совет он солдат қосып беріпті... Бұрын-соңды мұндай жесір дауына жарақтанып (қаруланып), солдат шыққанын көрген қазақ баласы жоқ еді”. Мұны естіген қыз бен жігіт тез арада жасырынып қалаға қашып кетеді. Келген қуғыншы солдаттар жігіттің әкесін ұрып-соғып, тепкіге жығады. “Екі қойын сойып, сандығындағы майын алып жеп, көп талам-таражға ұшыратты... Тіллә бейшара аппақ сақалымен солдаттардан қорқып, жас баладай жүгіріп алдарына түсіп, шаһарға келіп баласын да, келінін де тауып береді. Бұларды солдаттар алып, комиссариатқа тапсырады. Ақмешіт шаһарында “комитеттікке” сайланған большевик болып, қара қылды қақ жарып “әділдік жүргізіп тұрған үш-төрт оқыған қазақ жігіттері кірісіп “бұларды қазақ жолымен бітіріп қоямыз” деп комиссар алдынан сұрап алып шығады. Былай шыққан соң мына жағына жандары қалатын болса, пұлмен қалатынын білдірткен. Өздері қорқып, зәресі ұшып тұрған сорлыларға: мына тұрған солдаттарды білесіңдер ме? бұлар “большевик”. “Больше” деген орыстың үлкені “Бек” дегеннің мағынасын да өздерің білесіңдер. Сендер түгілі хуқметті орнынан алдырып жүрген дәулер осылар” деп қойыпты... Ана жағына барып: “Солдаттарға арқа сүйеп қайқия бермендер... Солдат кіріскен істің ақыры жаман болады. Жетісудағы қазақ-қырғыздарды былтырдан бері

қоймастан қырып жатқан осы солдаттар. Бұлардың өздерінді аман қоятандарына қарсы келіп, қой дейтін ешкім жоқ”. Осы арада екінші жақ “комитет” мүшелері істі бітірсе ақша беретінін білдіреді. Одан әрі газет: “Соған ғана қарап отырған “комитет” мырзалары “әділдіктерін” құрып жібереді... Сөйтіп, Тәллә байғұс жеті мың төлеу төлеп, екі мың пара беріп, бір мың қалаға расход болып, он мың сом шығынданып бітімге жетті” деп – газет былай қорытынды жасайды: “Сөйтіп теңдік іздеген жас, он мың соммен қолы жетіп отыр. Біздің қазақтың мынау қалың мал төлеп жасынан құда болып қоятынын қоймаса, ол әділетті әдемілеп орындайтын “большевик” мырзалар түгел тұрса, қазақ жігіттері әуелі, он мың сом тауып алуы тиіс болатын түрі бар. Жұрттың енді қашан “әділдігі” асқынған қазақтан шыққан “большевик” мырзалар қашан тағынан таярын болжау қиын” [8] делінген.

1917 жылдың 15 қаңтарында Ташкентте Түркістан өлкелік шаруалар съезі болғаны белгілі. (Онда қазақ мәселесіне қатысты бар жер және автономия мәселелері де қаралған болатын). Осы съезге “Қазақ депутаттар Кеңесі” атынан С. Қожанов, А. Мангелдин сияқты қазақ өкілдері де қатысқан болатын. Бұл съезге қатысқан басқа да қазақ делегаттары туралы А. Маметов “Ноғай қамқор” атты мақаласында: “Ташкентте 15-ші январьда болған крестьян съезінде “Аральский море” қазақтарының делегатымыз деген бір топ қазақтарды көрдім. Бұлардан бұл съездің болатынын қайдан білдіңіз, кім бастап алып келді? деп сұрап едім, олар: Хасен Сабыров деген бір ноғай; “большевиктерге айтып қал-жағдайыңызды түсіндіріп, аш-арықтарыңызға жәрдем беремін, орыстармен теңеліп-теңгертемін” деген соң еріп келдік дейді. Ол ноғайын көріп, оның қолынан еш нәрсе келмейтінін, тек алдауына еріп алданып жүрсіндер деп айтып қарағандар болып еді. Бірен-саран тыңдағандары болса да көбі бір қатар оқығандарынан пайда көре алмай, өзі келіп қалған сорлы қазақ: “Сіздердің сөздеріңіз жақсы, бірақ береріңіз жоқ, қатын балаларымыз шырылдап аштан өлейін деп жатыр, бізге кім тамақ берсе сол жақсы” деп тыңдағылары келмеді. Аш қадірін тоқ біле ме, айтып тұрса олардікі де жөн. Хасен Сабыровтың кім екенін, қолынан не келетінін тұтқан жол – жобасының қандай пайдасы, қандай зиян екенін қазақ қайдан білсін” деп мақала авторы Х. Сабыровты 1913 жылдан білетінін және ала аяқ екендігін айта келіп: «Енді бұл заманға келгенде большевиктерге агент болып, өздері аштықтан ақылынан адасып отырған қазақ арасына шығып, азғырып, артынан шұбыртып ертіп келіп 65000 мың қазақ-қырғыз атынан сөйлеймін деп отырғаны», - деп төмендегідей пікір айтып қортындылайды. «Хасекеңе мынадай заман, құлар заманы болып тұрғанда «большевиктердің» сөздері өтімді болу үшін алды артына абайлап қарап, аңғаймайтын алаңғасарлау ел керек болғанын қолдайтын алдағанға ергіш, арбағанға көнгіш, біздің қазақ екені тағы анық. Бұл мүмкіндіктен «құлар» пайдаланбай кім пайдалансын. Ардақты ақ жүрек, алаш балалары-ау, атыңыздан садағы кеткір, бір ноғай қуаныш шыныңызбен 65000 мың қазақ атын ойыншық қыласыз ба?» [9] – деп – өкініш білдіре отырып жазды.

Кеңес өкіметінің қол астындағы жергілікті халықтар өздерін қалай сезінде деген мәселеге келсек, шын мәнінде алғаш 1921 жылы 20 қаңтарында Әулиеата қаласында болып өткен Кеңестік Түркістан автономиялық Республикасына қараған өлкелік қазақ және қырғыздардың съезінде айтылған болатын. Осы съезге Сырдария және Жетісу облыстарының Ташкент, Шымкент, Пішпек, Верный, Қапал уездерінен және Нарыннан келген делегаттар өз баяндамаларын жасаған. Бұл жасалған баяндамаларды ықшамдап берсек мынандай мазмұнға саяды: 1) Кеңес өкіметінің барлық ұлттардың өзін-өзі басқаруының тең құқықын мойындағанына қарамастан, қазақтар нағыз Кеңес өкіметін көре алмай отыр. 2) Кеңес өкіметіне бірден әр түрлі қылмыскерлер отаршыл элементтер жұғыса кеткен. Мәселен, Қапал уезінде революциядан соң, осы күнге шейін бұрыңғы қазақтар арасында сауда жүргізген орыс және татар саудагерлері “Комиссар” болып алып, өздерін жоқтаушы тамыр-таныстарын қызметке алып, әлі де қазақтарды тонап отыр. 3) Қазақтарды переселен шаруалар және кулактар “большевик” болып алып, қанын судай ағызып отыр. 4)

Осы уақытқа шейін қазақ пен қырғыздарды құтқаруға ешкім қол ұшын бермей отыр делінген. [10]

1917 жылдан бастап Әулиеата уезінде түрлі қызметтер атқарған, ал, 1918 жылдың шілде айының екінші жартысынан бастап үш апта уездік атқару комитетінде қызмет атқарған Т. Рысқұлов “Түркістанда Кеңес үкіметінің билігі орнаған жерлерде жергілікті халық үстінен озбырлықтардың күшейе түсуіне Кеңес қызметкерлерінің өздері жағдай жасап беріп отырады” [11] деп жазған болатын.

Кеңес өкіметінің алғашқы жылдарында жергілікті жерлердегі билік-басқару мекемелерінің қызметі ілгеріде айтып өткеніміздей дерективалық әдіске негізделіп, жергілікті халықтардың мүдделерін жүрдім-бардым қарап, тіпті есептеспеді де. Ал, ылғи темір жол жұмыскерлерінен және Жетісу, Сібір казак әскерлерінен құрылған Ақмешіт (Перовск) Кеңесі жергілікті жерлерде Кеңес өкіметін орнатуда және оның дерективаларын орындауда орталықтан алда жүрді. Мәселен, революциялық Ташкентте Кеңес өкіметі жарияланбай жатып, Петроградтағы болған хабарды алысымен Ақмешіт Кеңестері уездегі билікті “бейбіт” жолмен өз қолдарына алып үлгеріп, тіпті Ташкентте әскери көмек те беріп үлгерді. [12] Кеңес өкіметінің қызметіндегі жұмыс әдістерінен хабар беретін фактілерді Ақмешіттік тілшінің берген мына бір хабарынан байқаймыз. Онда: “Ақмешіт Советінің” председателі бұ күнде құдайдан соң халықтың қожайыны. Халық оның құлы есебінде оған еш кім қарсы сөйлеуге болмайды. Қарсы сөйлеу түгілі жөн айтқан адамды жазықты деп, қахарына алады. Жалғыз соның – ақ дегені алғыс, қара дегені қарғыс. Оған жөн айтып, жұрт пайдасын айтамын деген адамдардың барлығы да сұраусыз, тергеусіз абақтыға жабылады. Осы күні Ақмешіт түрмесі сондайларға лық толы. Түрмеде бос орын қалмаған соң, енді жұрттың көбін үйге қамап “домашний арест” қылып жатыр.

Мінеки, елдің жайы осы. Ол елге хакім болып, бұқараның қамын жеген большевиктердің істерінде әлгідей” [13] – деп хабарлап жазды.

Ал, 1917 жылдың соңында Әулиеата уездік Кеңесі уездің халқы үшін Ақмола облысынан 100 мың пұт астық сатып алды, бірақ бұл астық уездегі аштық қатты етек алып жағдайлары аянышты күйде болған қазақ пен қырғыздарға таратылып берілмей, негізінен орыс жұртшылығы мен әскери бөлімдерге таратылып берілген. [14]

Бұл тек Ақмешіт уездік Кеңесіне ғана емес, Түркістанда Кеңестер билігі орнаған жергілікті жерлерде Кеңес өкіметінің билік – басқару мекемелерінің қызметіне тән жағдай болатын сол кездегі саяси-әлеуметтік жағдайына қарай келтірген тарихи фактілерді қорыта келе, сондай-ақ осы мәселеге байланысты жарық көрген еңбектерге сүйене отырып [15], мынадай ой-тұжырымдар жасауға болады:

1)Қазан революциясына біз қарастырып отырған облыстардағы жергілікті халықтардың басым бөлігі тарапынан қолдау болған жоқ. Өйткені, большевиктердің қоғамдық меншік, таптық жіктелу, пролетариат диктатурасы туралы айтқан әңгімелері саяси тұрғыдан панасыз, ешқандай құқығы жоқ жергілікті халық үшін, әрине, алыс ұғымдар еді.

2)Қазан революциясын осы облыстардағы переселен қоныстанушы шаруалар “өздерінше” ұғынып, бірден Кеңес өкіметі жағына шығып кетті. Сөйтіп, олар билікті өз жеке бастарының мүддесі үшін пайдаланды.

3)Сырдария және Жетісу облыстарындағы Кеңес өкіметінің билік-басқару орындағы жергілікті жерлерде орталыққа бейімделу саясатын ұстанып, дерективалық негізде құрылды. Осыған байланысты Кеңес өкіметіне жергілікті жерлерде қолдау көрсету және оның жағына шығу дерективалық негізде жаппай науқангершілік сипатта іске асты.

4) Біз сөз етіп отырған облыстардағы Кеңес өкіметінің жергілікті билік-басқару орындарының алғашқы кездегі қызметі жүйесіз болды. Осыған байланысты жергілікті

жерлерде билік өздігінше болып анархиялық сипат алды. Яғни патша өкіметі тұсындағыдай, қазақ пен қырғыздардың жерін тартып алу, оларға озбырлық көрсету т.б.с.с. ұлыдержавалық түсінік белгілі дәрежеде қайта жандана түсті.

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КАВКАЗ ХАЛЫҚТАРЫНЫҢ ҚАЗАҚСТАНҒА ДЕПОРТАЦИЯЛАНУЫ ТАРИХЫНАН

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Summary: The deportation of the peoples of the North Caucasus to Kazakhstan in the 1940s is one of the tragic pages in the history of the Soviet Union. As a result of Joseph Stalin's repressive policy, many peoples, including Chechens, Ingush, Balkars, and Karachays, were forcibly relocated from their homeland in the Caucasus to remote areas of Kazakhstan and Central Asia. Officially, this deportation was explained by accusations of collaboration with Nazi Germany, but most researchers believe that it was part of a broader policy of ethnic cleansing and repression in the USSR.

Keywords: Soviet government, socio-demographic situation, repression, deportation, Stalinist policy, forced resettlement.

Резюме: Депортация народов Северного Кавказа в Казахстан в 1940-е годы является одной из трагических страниц в истории Советского Союза. В результате репрессивной политики Иосифа Сталина многие народы, включая чеченцев, ингушей, балкарцев, карачаевцев, были насильственно переселены из своей Родины на Кавказе в отдаленные районы Казахстана и Средней Азии. Официально эта депортация была объяснена обвинением в сотрудничестве с нацистской Германией, но большинство исследователей считают, что это было частью более широкой политики этнических чисток и репрессий в СССР.

Ключевые слова: Советская власть, социально-демографическая ситуация, репрессии, депортация, сталинская политика, насильственные переселения.

Kіріспе: Қазақстанға және Орталық Азияның басқа аймақтарына жер аударылған Солтүстік Кавказ халықтарының жалпы саны шамамен 600-650 мың адамды құрайды.

Солтүстік Кавказ халықтарының туған жерге оралуы 1953 жылы Сталин қайтыс болғаннан кейін ғана мүмкін болды. Алайда жер аударылған халықтарды қалпына келтіру процесі ұзақ және қиын болды. Жер аударылғандардың бір бөлігі Кавказға орала алды, бірақ олардың барлығына бұрынғы аумақтарында өмірлерін қалпына келтіруге мүмкіндік берілмеді.

Бұл салдар әртүрлі этникалық топтар арасындағы қарым-қатынастарға әсер етіп, посткеңестік кеңістіктегі саяси және әлеуметтік процестерді қалыптастырады.

Солтүстік Кавказ халықтарын Қазақстанға депортациялау тарих тағылымы деп санауға болатын бірқатар тұжырымдарға әкелді:

1. Кеңес Одағы жүргізген жаппай жер аудару және қуғын-сүргін саясаты ұзақ мерзімді перспективада өзінің тиімсіздігін көрсетті. Ол проблемаларды шешудің орнына жаңа міндеттер туғызды – бұл аймақтардың әлеуметтік-экономикалық тұрақтылығына әсер етті, ұлтаралық қақтығыстар ушығып, мемлекеттік институттарға сенімсіздікті күшейтті.

2. Жер аударылған халықтарды оңалту мәселелері ондаған жылдар өтсе де өзекті болып қала береді. Ел бірлігін нығайтуда, тарихи әділетсіздікті жеңуде есте сақтау, өткен

қателіктерді мойындау және заңсыз алынған құқықтар мен аумақтарды қайтару саясаты басты рөл атқарады.

3. Депортацияның әлеуметтік, экономикалық және психологиялық зардаптары бірнеше ұрпаққа әсер етеді. Жер аударылған халықтар өздерінің мәдени ерекшеліктері мен әлеуметтік құрылымын қалпына келтіруде қиындықтарға тап болды. Бұл оқиғалардың психологиялық жарақаты сақталады және ұрпақтан-ұрпаққа беріліп, халықтардың ұжымдық жадына әсер етеді.

4. Солтүстік Кавказдың жер аударылған халықтары қиыншылықтарға қарамастан бейімделіп, Қазақстанның экономикасының, мәдениетінің және әлеуметтік өмірінің дамуына үлкен үлес қосты. Олардың интеграциялық тарихы үлкен қиындықтарға қарсы шыдамдылық пен аман қалудың дәлелі.

5. Халықтардың депортациялануы болашақта осындай қайғылы оқиғалардың қайталанбауы үшін тарихи жадыны сақтаудың және өткеннің тағылымын танудың маңыздылығын еске салады.

Депортация этникалық топтарға ауыр соққы беріп қана қоймай, тұтас аймақтардың әлеуметтік жағдайын өзгертті. Жер аударылған халықтарды оңалту және олардың қасіретін мойындау – ұлтаралық келісімді нығайту және әділетті қоғам құру жолындағы маңызды қадамдар.

Бұл оқиғаларды зерделеу болашақта осындай қайғылы оқиғалардың қайталанбауы үшін қажет. Өткеннің қателіктерін мойындай отырып, халықтар арасындағы мәдени-тарихи диалогты дамыту қазіргі Қазақстандағы және посткеңестік кеңістіктегі бейбітшілік пен келісімді нығайтуға ықпал ететін негізгі элементтер болып табылады.

Халықтарды депортациялау КСРО-дағы сталиндік құғын-сүргіннің бір түрі болып табылады. Депортацияның негізгі белгілері олардың соттан тыс, мәжбүрлі және әлеуметтік қауіпті сипатта - халықтың үлкен бөлігін географиялық тұрғыдан шалғай, бейтаныс мекендеу орындарына көшуі болды[1, 5-б.].

Павел Полянный пікірінше, КСРО-да он бір халық толық депортацияға ұшыраған: корейлер, немістер, финдер, қарашайлар, қалмақтар, шешендер, осетиндер, ингуштар, балқарлар, қырым татарлары және месхет түріктері. Оның ішінде жеті халық - немістер, қарашайлар, қалмақтар, ингуштар, шешендер, балқарлар және қырым татарлары ұлттық автономияларынан айырылды[2, 46-б.].

Қиыр Шығыстан көшіру сияқты соғысқа дейінгі жер аударуды Кеңес өкіметі «өз еркімен қоныс аудару» деп сипаттаса, кейіннен депортациялар теріс бағаға ие болды, ал 2004 жылы ақпанда Еуропарламент оларды геноцид және адамзатқа қарсы қылмыс ретінде баға берді[3].

2010 жылдары бірқатар тарихшылар КСРО тұрғындарын Кеңес Одағы шекарасына мәжбүрлеп көшіруге қатысты «депортация» ұғымының қолданылуын сынға алды. «Депортация» ұғымының орнына Николай Бугай және басқалар «күштеп көшіру» терминін қолдануды ұсынды[4, 118-б.].

2017 жылы Владивостокта өткен «1937 жыл: орыстілді корейлер – өткені, бүгіні және болашағы» атты халықаралық симпозиумына қатысушылар арнайы резолюция қабылдады, онда «депортация» термині КСРО халқын күштеп қоныс аударуға қатысты қолданылмайтынын атап өтті[5].

Халықтарды депортациялау КСРО ұлттық саясатының мынадай стратегиялық мақсаттарын көздеді:

- 1) елді билеу үшін үрей тудыру;
- 2) халықтардың ішкі бірлігін ыдыратуға ұмтылу және этникалық ассимиляцияны қалыптастыру;

3) билеуші режимнің әскери-саяси және экономикалық қателіктері үшін жауапкершілікті қуғын-сүргінге ұшыраған халықтардың мойнына артуға ұмтылу;

4) Сібірдің, Қазақстанның және Орталық Азияның шөлейт аймақтарындағы халық санын арттыру;

5) Кеңес одағының бұрынғы артта қалған аудандарын өндіргіш күштермен қамтамасыз ету[6].

Материалдар мен әдістер: Зерттеулік материалдарды, оқулықтар мен ғылыми еңбектерді, архивтік деректерді жинау және талдау бойынша негізгі әдістер мақаланы даярлау кезінде жүйелі түрде жүргізіліп отырды. Тұтастай алғанда зерттеу тақырыбы төл тарихтың ақтаңдақ беттерін ашуды, халқымыздың басынан өткен күрделі кезеңнің тұстарын нақты дерек көздеріне сүйене отырып айқындауды қамтыды. Жұмыс жүргізу барысында нақты тарихи, салыстырмалы тарихи, талдау, жинақтау және қорыту әдістері қолданылды.

Нәтижелерді талқылау: Көптеген басқа елдердегі сияқты Қазақстандағы саяси қуғын-сүргіннің қоғам мен жекелеген азаматтар үшін ауыр зардаптары болды. Кеңес өкіметі тұсында (әсіресе 1930-1950 жылдары) Қазақстанда жаппай саяси қуғын-сүргіндер халықтың әртүрлі топтарына, соның ішінде зиялы қауымға, шаруаларға, аз ұлттар мен діни топтарға әсер етті.

Қазақстандағы саяси қуғын-сүргіннің ерекшеліктеріне мыналар жатады:

- Көптеген халықтар тарихи отандарын тастап, Кеңес Одағының басқа аймақтарына қоныс аударуға мәжбүр болды. Мысалы, неміс халқын, кәрістерді, шешендерді және басқа ұлттарды жер аудару.

- Көптеген зиялылар, ғалымдар, жазушылар, тарихшылар және басқа да қоғам қайраткерлері өздерінің сенімдері немесе кеңестік билік саясатын сынағаны үшін саяси қуғын-сүргіннің құрбаны болды.

- Шіркеулер мен діни бірлестіктер де қудаланды. Діни жетекшілер тұтқындалды, шіркеулер жабылды, сенушілер кемсітілді.

- Ауыл шаруашылығын күштеп ұжымдастыру 1930 жылдары миллиондаған қазақтардың өмірін қиған ашаршылыққа әкелді.

Түркістан облысы көптеген басқа аймақтар сияқты халықтар мен мәдениеттердің бай және күрделі тарихына ие. Көптеген ғасырлар бойы бұл аймақ әртүрлі этностардың көші-қонының, жаулап алуының объектісі болды.

1943-1944 ж.ж. Солтүстік Кавказдың халықтары қалмақтар, ингуштар, шешендер, қарашайлар, балқарлар, қырым татарлары, ноғайлар, месхет түріктері, гректер, болгарлар, қырым сығандары, күрдтерді - негізінен жаулармен ынтымақтастық орнатты, бандитизм және кеңес үкіметіне қарсы қарулы күрес ұйымдастырды деген айыптармен күштеп көшіру жүзеге асырылды. Іс жүзінде соғыс жылдарындағы антисоветтік іс-әрекеттерді, сатқындық жасады деп айыптауды дәлелдеп көрсететін бірде-бір құжатты табу мүмкін болмады.

Ұлы Отан соғысы жылдары Түркістан облысына 16 944 отбасы, 59 398 адам қоныстанды.

Соның ішінде - Қарашайлар - 4705 отбасы, 17649 адам; Шешен-ингуштер - 4270 отбасы, 14730 адам; Кабардин-Балқарлар - 610 отбасы, 1964 адам; Грузиндер - 2385 отбасы, 9558 адам; Қырымдықтар - 63 отбасы, 163 адам; Немістер - 4904 отбасы, 15317 адам; Қалмақтар - 7 отбасы, 17 адам.

Еңбекке жарамды арнайы қоныс аударушылардың басым көпшілігі колхоздарға бірігіп, совхоздарда колхозшылар мен жұмысшылар сияқты еңбек етіп, балалары бастауыш және орта мектептерге оқуға қабылданды.

Мәселен, Шымкенттресінің кеңшарларында 556 қоныс аударушылар отбасы тұрады, оның ішінде шешендер - 345, қарашайлар - 100 және күрдтер - 12, жалпы саны 1711 адам.

Өндірісте 747 адам жұмыс істеді, олардың көпшілігі өз мамандығы бойынша жұмысқа орналасып, 1 адам агроном, 6 адам мал дәрігері, 10 адам есепші-бухгалтер, 8 адам егіс және мал шаруашылығы бригадирі, 69 адам тракторшы, комбайншы болып жұмыс істеді. Арнайы курстарда 75 тракторшы, 14 комбайншы, 13 кіші ветеринарлық фельдшер, мал бригадирлері мен ветеринарлық медбикелер дайындалды.

Алғашқы жылдары колхоздық және совхоздық өндіріске еңбекке жарамды арнайы қоныстанушылардың 60%-ы ғана қатысып, жұмыста адалдық танытпау, жұмысқа келмеу және жұмыстан бас тарту, ұрлық және т.б. орын алған болса, уақыт өте еңбекке жарамды адамдардың басым бөлігі өндірісте жұмыс істеді және олардың арасында еңбек тәртібін бұзу және теріс қылық жағдайлары сирек кездесіп, олардың көпшілігі жұмыста белсенділік танытып, жақсы көрсеткіштерді көрсетеді.

Қоныс аударғандар мал және тұрғын үйлермен қамтамасыз етілді. Жеке пайдалануға арналған ірі қара мал - 4966 отбасыға; ұсақ мал - 5562 отбасыға беріліп, 8602 отбасы жеке үймен қамтылып, колхоздардың, совхоздардың және басқа да кәсіпорындардың үйлерінде - 12261 отбасы; жеке тұлғалардың отбасында - 1948 отбасы тұрды.

1948 жылы одақтық үкіметтің бекітілген жоспарына сәйкес колхозшылар үшін 2846 тұрғын үй салынып, оның да басым бөлігі арнайы қоныстанушылардың пайдалануына берілді. Осы кезеңде арнайы қоныстанушылар 21001,2 центнер мал, 281,6 центнер азық-түлік, 320,5 мың сом ақшалай жәрдемақы, 274 центнер жүн, 610 дана тері, 6925 центнер түк, 6925 мың бас қой алды[7].

1944 жылы мамырда қабылданған КСРО Халық Комиссарлар Кеңесінің қаулысында арнайы қоныстанғандардың әрбір отбасына бір бас ірі қара, орта есеппен 200 кг тірілей салмақ, ал ірі қара мал болмаған жағдайда қой, ұсақ мал беру қарастырылған. Ал ұсақ мал бір бас ірі қараға 200 кг тірілей салмақ есебінде беру керек. Алайда, арнайы қоныстанушыға сиыр немесе қой сыйға тартып, оған бірден заттай және ақшалай салық салынды. Көбінесе адамдар салық төлеу үшін сол сиырды сататын. 1945 жылы арнайы қоныстанушылар салықтан босатылды.

Қоныстанушылардың жұмыспен қамтылуы туралы мәлімет

№	Аудан	Отбасы саны	Колхоз. отбасы	Совхоз. отбасы	Өндіріс орындары. отбасы	Мекемелер мен ұйымдар. отбасы
1	Арыс	1021	648	300	10	63
2	Бостандық	538	44	-	414	80
3	Жуалы	724	477	53	26	168
4	Ильич	1470	467	770	102	129
5	Киров	385	126	259	-	-
6	Қаратас	470	320	150	-	-
7	Қызылқұм	464	66	345	-	53
8	Келес	523	437	-	20	16
9	Георгиев	1403	930	-	464	9
10	Пахта-Арал	952	739	110	73	25
11	Сайрам	1196	1140	46	10	-
12	Сары-Ағаш	1022	464	427	47	84
13	Түлкібас	1046	431	65	393	157
14	Түркістан	843	310	90	440	3
15	Шаян	535	514	-	6	15
16	Шәуілдір	87	61	21	5	-
	Барлығы	12899	7251	2810	2036	802

Көмір өнеркәсібінде қоныс аударушы Шешен-ингуш ұлтының 1351 өкілі, түсті металлургияда 898 адам жұмыспен қамтылды.

Қоныс аударылған арнайы қоныстанушылар ішінде еңбекке жарамды 17512 адам болса, оның 18072 адам жұмыс істейді, бұл көрсеткіш жасөспірімдердің де қоғамдық пайдалы еңбекке араласатынын көрсетеді.

Барлық арнайы қоныстанушылар 7252 шаруа қожалығының ұжымшарларына орналастырылды, барлығы ауылшаруашылық артелінің жарғысына сәйкес колхоз мүшелігіне қабылданып, барлық колхозшылармен тең дәрежеде жеке учаскелер алды, сонымен қатар, өндіріс орындарында қоныстанғандар 4016 шаруа қожалығынан бақша егу үшін жеке жер телімдерін алды, осылайша 1946 жылы арнайы қоныстанушылар отбасылары бау-бақшаларды қосымша азық-түлік көзі ретінде екті.

Түркістан облысында арнайы қоныстанушылар 1946 жылғы 1 шілдедегі жағдай бойынша мынадай тәртіппен орналастырылды:

1. Жаңадан салынған үйлерде - 782 отбасы
2. Сатып алынған үйлерде - 1075 отбасы
3. Шаруашылық мекемелері үйлерінде - 6538 отбасы
4. Тұрақты пайдалануға берілген үйлерде - 6538 отбасы
5. Жергілікті тұрғындармен бірге - 732 отбасы

Барлығы: 12899 отбасы.

Тұрғын үй құрылысы бойынша іс-шаралар жоспарының орындалуы облысқа құрылыс материалдарының, әсіресе 359 текше метр ағаш материалдарының және 2450 дана терезе әйнегі – осыншама құрылыс материалдарының көлемі 100 ғана үйдің құрылысын қамтамасыз етті, бірақ бар болғаны 782 үй салынды, бұл жергілікті құрылыс материалдары есебінен, бірақ облысымыз жалпы ағашсыз болғандықтан, дайын материалдарды сатып алу ұйымдастырылды. 1944 жылы 1075 үй салынды ал 1945 жылы 843 үй сатып алынды, 396 жаңа үй салынды, 2589 үй жөнделді [8, Қ.40, Т 9, Іс 67, П 11].

Арнайы қоныс аударушылардың 1946 жылдан бастап жұмысқа деген көзқарасы туралы деректер келтіретін болсақ, онда арнайы қоныстанушылар Кавказға қайтып оралмайтынын түсініп жұмыстарын адал атқара бастады.

Мысалға: Сарыағаш ауданында, «Союзформит» карьеріндегі Дарбаза станциясында бригадир Каимов Д., жұмысшылар Докаев Т., Лақаев, Каимов Закеря - өндіріс нормаларын 150-250 пайызға дейін асыра орындады.

«Қапланбек» кеңшарында канал қатты бітеліп қалып аудан басшылары Жексенбілікті ұйымдастырды. Каналды тазалауға 23 адамнан тұратын арнайы қоныстанушылар бригадасы қатысып, өнімділік көрсеткішін 300%-ға жеткізді, бұл үшін арнайы қоныстанушылар: Елімбаев, Латспанов, Адзазов, Дагалаев және т.б. марапатталды.

Жуалы ауданында Бурно-Октябрь МТС-тен Мамадов басқаратын трактор бригадасы көктемгі егіс кезінде жоспарды асыра орындағаны үшін бригаданың әрбір мүшесіне бір қойдан сыйлық алды.

Ильич ауданындағы «Пахтаарал» кеңшарының Сталин бөлімшесіндегі арнайы қоныстанушы Қарашайлар бригадасы өнім көрсеткішін 170 пайызға жеткізіп, үстемақы алып, екінші жыл қатарынан совхоздың ауыспалы Қызыл Туын жеңіп отырды.

«Келтемашатуголь» кенішінде арнайы қоныстанушы шахтер Шахтиевтер көмір өндіру нормасын айдан-айға асыра орындап, орта есеппен 4000-4500 сом табыс алды. [9, Қ.40, Т 9, Іс 67, П 12].

Депортацияға дайындық барысында қоныстанған отбасыларды шаруашылық жағынан реттеуге бағытталған шаралардың тұтас кешені қарастырылды. Алайда бұл шараларды жергілікті жерлерде жүзеге асыру объективті және субъективті себептерге байланысты қиынға соқты. Күрделі жағдай материалдық-экономикалық ресурстардың

жоқтығынан, қатал климаттық жағдайдан, кей жағдайда жергілікті биліктің немқұрайлы қарауынан туындады.

Соның салдарынан арнайы қоныстанушылар арасында аурушандық пен өлім-жітім адам шығынына әкелді. Мәселен, «Қазақстанда 1944 жылы 32 502 адам, ал 1945 жылы 32 111 адам қайтыс болды. Ең жоғары өлім көрсеткіші 1944 жылдың екінші жартысы мен 1945 жылдың бірінші жартысына жатады, яғни климаттандырудың бірінші жылының күзгі, қысқы және көктемгі мезгілі, бұл да азық-түлік қиындықтарымен және сәйкес киім мен аяқ киімнің болмауымен сәйкес келді» [10].

Түркістан облысының Түлкібас ауданында осы аралықта 857 адам немесе аудан бойынша көшіп келгендердің 23 пайызы қайтыс болды.

Түркістан ауданында – 1944 жылы шілдеде 35 адам әлсіздіктен қайтыс болды.

Күйік кеңшарында 1944 жылдың наурызынан 1 қыркүйегіне дейін 376 адам түрлі аурудан қайтыс болды, оның 150-і бала.

«Келтемашатуголь» кенішінде 1944 жылдың наурыз айынан қыркүйек айына дейін 340 адам қайтыс болды.

Бостандық ауданында – 1944 жылы мамырда сүзектен 13 адам, ұрлық жасады деген күдікпен ұрып-соғудан 4 адам қайтыс болды.

Жуалы ауданында 1944 жылдың наурызынан 1945 жылдың маусымына дейін 1321 адам қайтыс болды, бұл ауданға қоныс аударушылардың жалпы санының 32 пайызын құрады.

Ленгер ауданында осы кезеңде 1263 адам немесе аудан бойынша қоныс аударғандардың жалпы санының 22,5% қайтыс болды.

Түркістан облысы бойынша қаза болғандар арнайы қоныстанушылардың жалпы санының 25,6%-ын құрады [11].

1956 жылы 17 қаңтарда 1936 жылы қуылған поляктарға шектеуді алып тастау туралы Жоғарғы Кеңес Президиумының Жарлығы шықты; 1956 жылы 17 наурыз - қалмақтардан, 27 наурыз - гректер, болгарлар, армяндардан; 1956 жылы 18 сәуір - Қырым татарларынан, балқарлардан, месхетиялық түріктерден, күрдтерден және хемшилдерден; 1956 жылы 16 шілдеде шешендер, ингуштар және қарашайлықтардан өз отанына қайту құқығы жоқ заңды шектеулер алынып тасталды.

1957-1958 жылдары қалмақ, шешен, ингуш, қарашай және балқар ұлттық автономиялары қалпына келтірілді, бұл халықтардың тарихи аумақтарына оралуына рұқсат етілді. Қуғын-сүргінге ұшыраған халықтарды қайтару қиындықтарсыз жүзеге асырылған жоқ, ол сол кезде де, кейін де ұлттық қақтығыстарға әкелді.

Алайда, қуғын-сүргінге ұшыраған халықтардың едәуір бөлігі Еділ немістері, Қырым татарлары, месхет түріктері, гректер, корейлерге тарихи отанына оралу құқығы қайтарылмады.

1964 жылы 29 тамызда КСРО Жоғарғы Кеңесінің Президиумы 1964 жылғы 29 тамыздағы № 2820-VI Жарлығымен неміс халқына жаппай айыптауды жойды. 1960 жылдардың ортасынан бастап «жазаланған халықтарды» оңалту процесі аяқталды [12].

Қуғын-сүргінге ұшыраған халықтарға қатысты тарихи әділеттілікті қалпына келтіру жолындағы алғашқы қадамдардың бірі 1989 жылғы 14 қарашадағы КСРО Жоғарғы Кеңесінің «Күштеп қоныс аударуға ұшыраған халықтарға қарсы заңсыз және қылмыстық қуғын-сүргін әрекеттерін тану және олардың құқықтарын қамтамасыз ету туралы» Декларациясының қабылдануы болды. Оған сәйкес барлық қуғын-сүргінге ұшыраған халықтар, оларға қарсы жала, геноцид, күштеп көшіру, ұлттық-мемлекеттік құрылымдарды жою, арнайы орындарда террор мен зорлық-зомбылық режимін орнату саясаты, мемлекеттік деңгейде репрессиялық әрекеттер заңсыз және қылмыстық деп танылды.

1991 жылы 26 сәуірде «Репрессияға ұшыраған халықтарды ақтау туралы» РСФСР-дің № 1107-І Заңы қабылданды, онда халықтарды депортациялау «жала жабу және геноцид саясаты» деп танылды. Сонымен қатар, заң қуғын-сүргінге ұшыраған халықтардың шекараларды күштеп өзгертудің конституциялық емес саясатына дейін болған аумақтық тұтастықты қалпына келтіруге, олар жойылғанға дейін болған ұлттық-мемлекеттік құрылымдарды қалпына келтіруге, сондай-ақ айыпты мемлекет заң бұзушылықтар салдарынан келтірілген зиянды өтеуге құқылығын мойындап, үлкен жауапкершілік алды [13].

Қуғын-сүргін құрбандарын толық құқықтық және саяси оңалтудың ғылыми-әдістемелік мәселелеріне келетін болсақ, олар біздің ойымызша мыналарды қамтиды:

қуғын-сүргін туралы көптеген мұрағаттық материалдар әлі күнге дейін жабық күйде немесе зерттеушілер мен құрбандардың ұрпақтары үшін қолжетімсіз күйінде қалып отыр.

- саяси жағдай мен әртүрлі мүдделердің ықпалына байланысты репрессияның ауқымы мен салдарын объективті бағалауда мәселелер туындайды.

- өткенді есте сақтау, құрбан болғандардың және олардың отбасыларының ар-намысы мен қадір-қасиетін қалпына келтіру үшін репрессия құрбандары туралы зерттеулер жүргізу, мемориалдық кітаптар құрастыру маңызды.

- саяси қуғын-сүргін құрбандары мен олардың отбасы мүшелерін толық құқықтық оңалтуға, оның ішінде өтемақы төлеуге және бұзылған құқықтарын қалпына келтіруге бағытталған тиісті заңдар мен шараларды әзірлеу және қабылдау қажет.

Осы мәселелердің барлығы Қазақстанда әділеттілік пен саяси қуғын-сүргін құрбандарын еске алуды қамтамасыз ету үшін мемлекеттен, қоғамдық ұйымдардан және ғылыми қоғамдастықтан үлкен назар аударуды талап етеді.

Халықтардың Қазақстанға жер аударылуы ел тарихында ауыр әлеуметтік, экономикалық және мәдени зардаптарға әкелді. Міне, осы депортацияға байланысты кейбір мәселелер:

- депортациялар, әсіресе Кеңес өкіметі кезінде, көбінесе гуманитарлық трагедиялармен қатар жүрді. Көптеген адамдар қажетті ресурстар мен көмектің жоқтығынан қайтыс болды немесе қиын өмір сүру жағдайларына тап болды.

- депортацияның нәтижесінде туыстық байланыстар үзілді, отбасы мүшелері депортацияға байланысты әртүрлі аймақтарда қалуға мәжбүр болды.

- Қазақстанға жер аударылған көптеген этностардың өз тілдері, дәстүрлері мен мәдениеттері болды. Депортациялар осы мәдени мұраның жоғалуына немесе елеулі бұрмалануына әкелді.

- жер аударылған халықтар жаңа жағдайда өзін және отбасын қамтамасыз етуде жиі қиындықтарға тап болды. Ресурстар мен инфрақұрылымның жетіспеушілігінен экономикалық интеграция қиындықтарға тап болды.

- күштеп қоныс аударылған адамдар мен олардың ұрпақтары арасында терең психологиялық жаралар қалдырды. Туған жерінен айырылу, отбасының ыдырауы, тұрмыс жағдайының өзгеруі ұрпақтан-ұрпаққа берілуі мүмкін.

- көптеген депортацияланған халықтар мен олардың ұрпақтары ресми оңалту және келтірілген зиян мен азаптың орнын толтыру қажеттілігін сезінеді.

Бұл мәселелер Қазақстандағы депортацияның тарихи мұрасын байыпты зерделеу және хабардар ету, сондай-ақ зардап шеккендерге көмек көрсету және олардың мәдени мұрасын сақтау шараларын қабылдау қажеттігін көрсетеді.

Қорытынды: Депортация тарихы Қазақстанның көпұлтты мәдениеті мен қоғамының қалыптасуына әсер еткен маңызды кезең болып табылады. Бұл өткен шақтан алынған сабақтар қазіргі және болашақ ұрпақтар үшін бейбітшілік пен келісімді сақтаудың маңыздылығын көрсетеді.

Жер аударылған халықтар ауыр жағдайлар мен кемсітушіліктерге қарамастан елдің мәдениетіне, экономикасына және әлеуметтік өміріне айтарлықтай әсер етті. Бүгінде Қазақстан өзінің этникалық әртүрлілігі мен толеранттылығын мақтан тұтады.

Жер аударылғандар туралы естелік елдің қоғамдық санасы мен тарихында сақталады және бұл кезең тарихи қателіктерді де, көпұлтты мемлекетте ұлтаралық келісімнің мүмкіндігін де түсіну үшін маңызды болып қала береді.

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FROM THE HISTORY OF THE MERITS OF GEORGIAN JEWS WHO SIGNED THE ACT OF INDEPENDENCE OF THE DEMOCRATIC REPUBLIC OF GEORGIA

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Key Words: Georgia, Jews, Politics, History

Abstract *In the history of the Democratic Republic of Georgia, alongside prominent Georgian public and political figures, significant contributions have been made by representatives of ethnically non-Georgian groups, including Georgian Jews. On May 26, 1918, the National Council of Georgia unanimously adopted the Act of Independence, which was signed by 88 members of the Council. Subsequently, on March 12, 1919, the newly elected Constituent Assembly re-approved the document with a minor amendment, which was endorsed by 13 additional signatories. Among these signatories were two Georgian Jews, Joseph Eligulashvili and Mose Davarashvili. Although only a few episodes of their social and political activities are discussed in this work, they serve to illustrate the significant role played by Georgian Jews in the state-building process of Georgia during this period.*

In the history of the Democratic Republic of Georgia, significant contributions were made not only by Georgian public and political figures but also by representatives of ethnically non-Georgian groups, including the Jewish community residing in the country.

As is well known, on May 26, 1918, the National Council of Georgia unanimously adopted the Act of Independence, which was signed by 88 members of the Council. Article VI of the declaration affirmed that "the Democratic Republic of Georgia would provide a free environment for the development of all nations living within its territory." This principle, which went beyond a mere rhetorical declaration, was repeatedly reaffirmed throughout the existence of the Democratic Republic of Georgia.

For instance, on March 12, 1919, the newly elected Constituent Assembly re-approved the Act of Independence with a minor amendment. Thirteen additional signatories, including two Georgian Jews - Ioseb Eligulashvili and Moses Davarashvili - were added to the list. To illustrate their contributions in this regard, I will present excerpts from the public activities of these individuals.

Ioseb Eligulashvili was born in Kutaisi on November 12, 1890. His father, Aron Eligulashvili (1856–1938), was elected as a member of the City Council of Voters at different times, and in the 1917 elections, which were held after the overthrow of the king's government, he was elected as a member of the City Voters Council from the list of the National Democratic Party of Georgia (Sharadze, 1993: 112).

Ioseb Eligulashvili himself was in Moscow during the Bolshevik coup of October 1917, where he and his family had a lot of property confiscated. Having fallen into a difficult situation, Iosebi decided to return to Georgia and started active social activities. In 1919, he was nominated by the Social-Democratic Party as a candidate for the deputy of the constituent assembly of Georgia with the number 93 of its list, together with another Jew from Kutaisi, Moshe (Moshe) Davarashvili. As

is known, the Social-Democratic Party won the elections, as a result of which two Georgian Jews were included in the constituent assembly, both from Kutaisi (Newspaper "Ertoba", Feb. 7, 1919, # 30, p. 1).

Starting from that time, Ioseb Eligulashvili took an active part in the life of the Democratic Republic of Georgia. In 1921, he played an important role in the recovery of the national treasure from Georgia. To illustrate what I have said, I will quote a fragment from the memoirs of Ekvtime Takaishvili, which he wrote to the social democrat Valiko Chubinidze (1891-1988), a political émigré living in Paris, one of the participants of the August 1924 uprising:

"The Red Army is approaching Tbilisi. My friend famous Ivane (Javakhishvili) calls me and says, you see, Ekvtime, the Russian army is coming, baptized with hostility and hatred of independent Georgia and the clergy. They will raid and loot our churches, museums, and all public institutions. Therefore, you should see the chairman of the government (Noah Jhordania) and inform him about the danger of looting and destruction of our national property. It should be collected now and temporarily taken out of Georgia for saving. I immediately agreed to Ivan and hurriedly went to the palace. At that time it was not so easy to see Mr. Noah, but he immediately received me, listened to me, and immediately called my good acquaintance and friend Ioseb Eligulashvili—the assistant minister of finance—an educated, energetic, and businessman. Mr. Noah said to him: Joseph, you cooperate with the Six; you are given full right to act according to your views to collect the inheritance. I give you the right to requisition all kinds of transport and the necessary funds... and there he dictated to the secretary the decree for my appointment and the appointment of Ioseb (Eligulashvili) as my assistant. He signed it, gave a copy to the secretary, wished us success, and said, I am always at your disposal; don't hesitate! He shook our hands and said goodbye...

We started working immediately. Everyone stood by us with great zeal. Of course, with the help of Ivan the Great and Ioseb Eligulashvili's talent as an exceptional organizer, we performed our task brilliantly" (Sharadze, 1993: 114-115).

In addition to the exemplary attention shown to the national treasure, I. Eligulashvili's work in emigration is also very interesting in other respects. In particular, according to Nino Salia, I. Eligulashvili played an important role in the fact that in 1922, the exiled government of Georgia was able to purchase a manor and a two-story house ("chateau") in the village of Leville, near Paris. According to him, I. Eligulashvili "did not neglect any Georgian cultural affairs either. He acquired and collected interesting books and prepared a gift for Tbilisi University. He bought church items and wanted to give them to the Zion Temple with a thank-you note to mark the attention that Georgians showed to Georgian Jews in Paris during World War II, as was our old, paternal tradition. He did not have time to hand over these precious gifts in his retired life." In Paris, he was elected a member of the Georgian National Council, as well as the chairman of the Association of Georgian Jews living abroad.

The outstanding episode of Ioseb Eligulashvili's life in France was the period of World War II. It should be noted that despite his arrest by the Nazis, he not only managed to save himself but also participated in saving the lives of many Jews together with Mikheil Kedia. In proof of all the above, I will check the relevant quote:

"Ioseb Eligulashvili was one of the first to be arrested by the Germans. Fortunately, thanks to his contacts in Germany, Mikheil Kedia, the son of the former Minister of Security of the Democratic Republic of Georgia, was able to rescue him.

Eligulashvili and Kedia managed to evacuate thousands of people from the fascist camps with their joint efforts. This was greatly facilitated by the organization they created and the supposedly "scientifically substantiated" memorandum of the Georgian Jews, which was sent to the representatives of the Nazis in Paris.

According to the memorandum, Georgian Jews were Chaldeans, not Semites, who believed in Judaism and settled in the Caucasus (they were called "Georgians of the Law of Moses"). The

document asserted that Georgian Jews were no different from ethnic Georgians and linked them with a "common physical constitution, one language, and appearance." It was also emphasized that "they did not have any communist or Zionist aspirations".

This argumentation was considered sufficient justification by Nazi high officials, who canceled the decree of deportation of Georgian Jews.

Thanks to the memorandum, there was a short-term opportunity to save all "Georgian" Jews. False documents were issued. For non-Georgian Jews living in Europe, the word "son" or "son" was added to their real surname in their passports, which for a certain period was considered sufficient to prove their Georgian origin.

In the end, due to the efforts of Eligulashvili and his comrades, more than 20 thousand Jews were freed, although only a small part of them had any connection with Georgia. The rest were from Iran, Turkey, and various European countries" (7).

In France, Ioseb Eligulashvili was engaged in the production and sale of cotton bed linen, as a result of which his family had quite a substantial income. As a result of a serious illness, Joseph died in 1952 in Paris (6). He was buried with great honor at Banio Cemetery. The funeral was attended not only by members of the government who emigrated from Georgia but also by foreign guests.

As already mentioned, the second Georgian Jew signed the act of independence of Georgia—Mose (Moshe Akatan) Davarashvili, son of Rahami. He was born in 1893 in the city of Tskhinvali. Mose Davarashvili began his education at the Talmud Torah school established in 1906 with Rabbi Abram Halevi Khvols (1857-1931) of Tskhinvali and then continued in the city of Radin (or Radun) in Belarus.

After returning to Georgia, Moshe Davarashvili married the daughter of Ruben Eluashvili, the rabbi of Kutaisi, after which, together with his father-in-law, he founded the representative office of the Jewish religious organization "Agudat Israel" in Georgia (Rabbis of Georgia, 2000: 42).

In 1917, he represented the Jewishness of Georgia in the National Council. On May 26, 1918, he signed the Act of Independence of Georgia, and from March 12, 1919, as a deputy elected as a member of the Founding Assembly of the Republic of Georgia and a member of the Public Education Commission, he actively participated in the work of the said assembly (8).

To clarify Mose Davarashvili's attitude towards our country, I would like to witness his address here, in which he congratulated the Georgian people on the de facto recognition of Georgia by the Entente. This congratulation clearly shows the great love he had for our country. Although he was not Georgian by nationality, he considered Georgia his homeland. To prove what I said, I will quote the relevant quote:

"Congratulations from the Georgian Israelis On behalf of the Georgian Israelis, I greet the founding assembly and fervently congratulate the entire Georgian nation on the historic act, which is expressed by Europe in declaring the freedom of our homeland. This embodiment of our independence makes us, Georgian Israelis, happy for the glorious and proud past, which is the life of Israelis in Georgia. The life of the Israelis is truly a "bright point" in the history of the Georgian nation. The Georgian nation can be proud of this unprecedented fact in front of all mankind! We Israelis, who have lived together with Georgians since the beginning of Georgia's history and today have become inseparable brothers, we Israelis equally celebrate the historical resurrection of our beloved homeland and the liberation of whole and indivisible Georgia... Glory to our future! Victory and longevity to the entire Georgian nation!" (Gogidze, 2021: 25).

After the annexation-occupation of the Democratic Republic of Georgia by Soviet Russia, Moses Davarashvili stayed in Georgia and was appointed as the head and rabbi of the Jewish community of Kutaisi. He was recognized by contemporaries as one of the greatest rabbis and spiritual leaders of our country.

It is also worth noting that both of his brothers were religious figures. In particular, Gabriel Davarashvili (1896–1985) was the rabbi of Surami. After the Soviet occupation, he was arrested for counter-revolutionary activities but was released due to lack of evidence. Nevertheless, Gabriel Davarashvili was under constant surveillance by the Soviet penal authorities. In 1973, he immigrated to Israel, where he continued to work in the traditional Jewish educational institution Yeshiva (10).

As for Moshe Davarashvili's second brother, Yakob Davarashvili (1902-1988), he returned to Georgia after receiving his education in Russia and first began working as the rabbi of Kutaisi, and in 1965 he was appointed the chief rabbi of Georgia. Jacob was considered an unparalleled scholar of Torah and Kabbalah. In 1971, he immigrated to Israel for permanent residence, where he headed the Georgian Jewish community (10).

As for Moshe Davarashvili, he emigrated to Israel, specifically to the city of Jerusalem, in 1970 and settled in the Givat Mordechai neighborhood. Here he was considered one of the spiritual leaders of Jews who emigrated from Georgia. Prayers "Tefilat Achim" (Prayer of Brothers) were printed by him in Georgian font.

Moses Davarashvili died on May 19, 1980, in Jerusalem. He is buried there, on the Mount of Olives, in the existing Jewish cemetery (9).

Despite the fact that only a few episodes are cited in the presented work to illustrate the contribution of Georgian Jews to the history of the Democratic Republic of Georgia, we think that the important role they played in the state reconstruction process of our country can be clearly seen through them.

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THE HUNS IN FOREIGN AND DOMESTIC RESEARCH: THE IMAGE AND CHARACTERISTICS OF HUN TRIBES

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Annotation. The period of the Huns (IV-V centuries BC)) is one of the most important periods in the history of Central and Eastern Europe. During this period, the nomadic Hunnic tribes played a crucial role in changing the political and cultural situation of the region. This article contains data on the manifestation and character of the Hunnic period in domestic and foreign studies. In foreign studies, there are data on the Hunnic ethnic group in ancient Europe and China, and in domestic studies there is information about the Hunnic tribes on the Kazakh land. The Hunnic period is an important epoch in Kazakh history. Foreign and domestic studies have deeply analyzed the cultural, social, and political aspects of this period. Researchers are particularly interested in the history of the Huns, their nomadic life, military strategies, as well as their relations with other peoples. Ethnic, archaeological and linguistic aspects of the history of the Huns are widely considered in Russian studies. Meanwhile, foreign researchers have deeply studied the role of the Huns in the history of European countries, especially their ties with the Roman Empire. The results of these works reveal the richness of the culture of the Huns, their role in the relations between the West and the East, and also determine their influence on subsequent peoples, including the Turkic ones.

Keywords: Huns, Turkic peoples, domestic and foreign studies, data, ethnonym.

Introduction

Relevance of the Topic. The era of the Huns is one of the most important milestones in the history of Kazakhstan. This time played a major role in the formation of nomadic culture, the development of nomadic culture, the formation of military strategies. The Huns covered vast territories of Eurasia, maintained relations with other peoples carried out cultural exchange.

In Chinese sources, this tribe of Huns was called "hi-un-nu". Joseph de Guignes (1721-1800) first drew attention to the similarity of this ethnonym with the name of the Huns. However, the true researcher of their history was Friedrich Geert (1756-1800), who wrote the book "histowar general des Huns, des Turks, des m et des autres tatares occidental". It follows from his work that the correct name of this people is "Huns". It was found that linguistically they are closely related to the Turks who appeared later. The level of knowledge. The level of study of the Hunnic period is quite developed thanks to the works of historians and archaeologists. The first written data about them have been found since the IV century BC, information about their history, culture and, social structure are found in the historical records of China, Rome and Western Europe, Central Asia, as well as studies of the Hunnic tribes by domestic scientists, complementing each other, are interpreted by the Huns from different points of view.

It is known that the Hunnic state was formed on the territory of modern Mongolia in 1200 BC, namely, on the model of the Atameken, it created the origins of a single state from disparate

hordes. Since the unification of the Huns, especially with the annexation of the Zhou Dynasty to China (1122 BC), at that time the threat of the beginning of feudal construction began to intensify. In 910, the Huns captured Northern Shanxi, and a few decades later, the Chinese army led by the emperor expelled them from there. The invasion of the Huns lasted until 220, until the emperor of the Qing state Shi-Huang di drove them out of the Ordos (now the autonomous region of Inner Mongolia). This period of Chinese history is very poorly reflected in the sources, since this emperor organized the "great book burning", as a result of which the oldest materials representing the history of the Huns were destroyed. The Huns and the III-V centuries AD, reflected in historical Chinese sources before the research of the German scientist Friedrich Geert. Communication between the Huns was very rare. Radically changed the history of Europe. Geert not only established it, but also connected them both with the name of the Huns. He also discovered that the Huns were linguistically close relatives of the Turks, who appeared later. (Daniyarov, 2002: 315).

A lot of folklore information has spread about the Huns, which is based on Ammianus Marcellinus. This author pointed to the Huns in Europe as a savage population that knows neither harvest nor plowing, does not know the place of their birth, where they are. "They did not know the power of the kings," A. Marcellin wrote, but they obeyed the leaders and destroyed everything that came in their way. But many scientists reject such concepts. Foreign studies show that the Huns in Mongolia were ruled by the Shanyu dynasty, and later they were ruled by the leaders of the same clan. It is known that one of these unusual families is the Dulo dynasty, from where the famous leader Attila comes from. This means that they not only remembered their native land, but also preserved the old traditions and customs. The fact that he does not know how to plow and sow is also unrealistic. However, by referring to the sources, one can trace the amazing history of one of the rare peoples through whom the world has left a deep mark in its development (Tagirov, 2000: 310).

Methodology. a) Analysis of historical records and reliance on archaeological studies; b) Inclusion of international and national literature; c) Comparison of data on the Hun era from foreign and domestic research.

Purpose and objectives. The primary objective of the article is to highlight the historical significance of Hun tribes in Asia and Europe and their ethnogenetic link to the Kazakh people based on foreign and domestic historical-ethnographic sources.

The main part

The Early History of the Huns. The prehistory of the Huns. The ancient Huns were first mentioned in the history of China in the XVIII century BC. The next reminder of them was the period between 882 and 304 BC. According to these sources, the history of the ancestors of the Huns for several thousand years looks like a foggy fog.

II millennium BC. archaeologists have established that in Southern Siberia the culture existed at the same time: one in the east - Glazkovskaya, and in the West - Andronovskaya. In the area of Lake Baikal, a group of related tribes was settled, which were to become the ancestors of modern Evanders and Evenks, Yukaghirs. This is a related tribe that had similar languages, culture and economy. According to a study by the famous historian L. N. Gumilev, later some ancestors of the Huns collided and mixed with the owners of the southern part of these tribes - the Glazkov Culture. From 1700 BC to 1200 BC, the lands of the western half of Southern Siberia and from Kazakhstan to the Urals were occupied by the Andronovo culture. Initially, the Huns lived on the lands of Eastern and Northwestern China and on the lands of Argun and Ili, Ishim in modern Kazakhstan. But there is little data about the Huns on the land of Kazakhstan, and data about the Huns near the Chinese border are found in the works of the famous historian of China Sima Qian (*History of the People of Hunnu*, 1998: 528).

L. N. Gumilev wrote his work on Huns based on the writings of Sima Qian. The creation of the first state of the Huns should be attributed to 1200 BC. This is because, after reaching Hebei and Barkol, he made hikes from the region to Chinese soil. The word "barkol" is found in almost all Turkic languages, and in Kazakh this ethnonym is widespread to the present day. There is a lake with that name in Kazakhstan. Subsequent studies will show other Turkic words borrowed from the Hunnic language. There is no doubt that they are pure Turkish (*Hundar, 1998: 418*).

The Hun State. In 209 BC, Mudde was the ruler of the Huns (shanyu) (mudde aspiration, goal, interest is a modern Kazakh word). At this time, the Huns lived next door to the Donghu tribe, which often demanded Huns. Mudde comprehensively calmed the Dunhuns and even gave them part of his land, which the Huns considered invalid and did not use. Meanwhile, Mudde was secretly preparing a war against the Dukhuns. Having weakened the vigilance of the spirits, Mudde unexpectedly attacked them. Not waiting for such a situation, the dukhuns suffered huge losses, fled and turned into an insignificant population. The entire flat part of Manchuria came under the rule of Mudde. Meanwhile, a civil war broke out in China, and Mudde took advantage of this to attack them. The Qin Dynasty in China collapsed, and a wide field for civil war appeared in China. At that time, an army of 300 thousand people was under the command of Mudde. Thus, Sima Qian reports on the creation of a strong Hunnic state (204-205 BC). From this message, it is clear that the Hunnic state was founded in the northeast of China and included the lowland part of Manchuria. Mudde had great political and military talent and was capable of commanding an army of 300,000.

The arrival of the Huns in Central Asia led to an increase in the influence of Turkic culture in the region. They were able to influence the ethnic culture of many people in Central Asia, including the Hungarians. Although the Hungarians did not actively participate in these events, they probably also came under the political influence of the Huns due to their dominance in Central Asia during certain periods (Turkish context in Magyar ethnocultural, 2002: 24).

In the II century BC, a mass exodus of the Huns began from Mongolia, Eastern Kazakhstan and Semirechye. In the Balkhash and Tarbagatai regions, they formed the Yueban state, which lasted until the 5th century. A second branch of the Huns, including the Ugrians from Western Siberia, migrated to the Ural region, displacing the Arals, Caspians and Asters. The Huns managed to unite the proto-Turkic tribes in the first half of the 4th century and reached the steppes of Eastern and Central Europe, leading to changes in Europe's ethnic and political map. Their migration also contributed to the spread of the Turkic language in the region. The main economic activity of the Huns was nomadic animal husbandry, but they also began to engage in sedentary farming.

The data clearly show that the Huns arrived in Europe from Central Asia. In the 4 century BC, the Chinese considered them to be their serious opponents. The military leaders of the Huns, Shanyu Ler, achieved significant success in the wars with the Han Empire. According to the research of K.T.Zhumagulov, Doctor of Historical Sciences, during the Hun-Chinese wars, the Hun tribal union returned territories with pastures previously occupied by the Qin emperors and achieved stable supplies of textiles and grain from China. Since the second century, the Huns have been winning with the help of other nomadic peoples, without being defeated on their own. In the first half of the 2 century, the migration of the Hunnic tribes to Eastern Kazakhstan and Zhetysay began, then together with the Ugric tribes in Western Siberia to the Urals, the Caspian and Volga steppes. In the middle of the 4 century, they captured the Volga and the Don (Huns in European history, 2001: 132)

Conclusion

The Hunnic period, spanning the 5th-6th centuries, is an important milestone in the history of Eurasia, especially in the context of the migration of nomadic peoples, the formation of new political structures and cultural changes. This chronological circle is the main stage in the ethnogenesis of the peoples of Central Asia and Eastern Europe. In foreign studies, this period is considered as the time of the influence of significant Huns on other peoples and the formation of new ethnic groups. In addition, the migration processes that continued at the same time had a significant impact on the demographic changes of the Huns as a nomadic population. Their migration facilitated the migration of other peoples, such as Germanic tribes, which led to the creation of new ethnic groups. As for cultural changes, under the influence of the Huns, there were simultaneous changes and adaptations of cultures, which can be seen in archaeological finds. As for the political structures, the Huns created a strong association of tribes. Slavs, Germans, etc. It influenced the formation of early feudal structures in neighboring countries, such as peoples.

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