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Economic Sciences

Georgian Treasury Bills Market – first steps and discovered problems (1997 – 1999)

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Georgian Treasury Bills Market – first steps and discovered problems
(1997 – 1999)
(abstract)

In this article is shown the historical trends of Georgian State Securities market and its tools - Georgian Treasury Bills and Georgian Treasury Bonds. We have described the starting point of Georgian state securities market, its volume, turnover, short and long-term securities and its peculiarities. The mission of this Article is to show the mistakes and obstacles of the market, its tendency and rates, state policy, rules, participants and market transparency. Here is shown the past conditions, obstacles and importance of State Securities for the country development and for the investment attractiveness.

Keywords: Treasury Bills, Deficit, Emission, Georgia, Financial Market, Investments.

In late 1997, new securities – the Treasury Bills established in Georgia's financial system. The regulations, terms and possible emission trenches thereof had been defined in line with the National Bank, Ministry of Finance and the IMF expert recommendations. An actual emission of the Treasury bills started in August 1997.

A total discharged amount in 1997 equaled 6416000 Lari, an emission of 32 mln Lari was planned in 1998, with a total emission amounting to 50 mln Lari. (Note: Exchange rate of 1 USD was equal to 1.3 Georgian Lari). (The source: Ministry of Finance, The National Bank, the 1997 and 1998 budgets)

The Objectives of an Emission of the Treasury Bills

Treasury Bills falls into an A – risk (zero risk) group of the securities, with an investment therein being a safe one.

The reasons behind an emission of the Treasury Bills in Georgia had been as follows:

1. a formation and a development of a security market and an attraction of both the local and foreign investors;

2. a new budget source;
3. a creation and development of a secondary Stock Exchange;
4. an attraction of foreign capital into the country;
5. maintenance of a stable National currency and a restriction of the hard currency interventions.

It's a common practice world-wide to use the resources obtained from the Treasury Bills (Long-term of course) and other State indemnities for financing and a development of strategically important branches of economy. To this end, however, an interest – rate ought to be an attractive and a long – term one. For instance, 5% - in the US, 6% - to 6,5% in the UK etc.

The interest – rates in Georgia, meanwhile, as well as the rest of the developing countries, do not provide an opportunity thereof and a construction of a state pyramid takes place. In some countries (Argentina, Brazil, Russia, for instance) it has turned into a huge problem. In others, however, well – calculated monetary and credit policies have led to an interest – rate "fall" and a limitation of an interest debt.

Risk

Treasury Bills is a state security and is, therefore, a zero – risk, the most liquid and acceptable asset among the securities in Georgia. The only possible risk in this connection is a currency related one resulting from an absence of a hedging mechanisms.

Problems

The following problems are related to the market of Treasury Bills in Georgia:

1. imperfect Stock and Financial Markets;
2. an absence of an emission schedule;
3. an actual exchange – rate risk and an absence of insurance.

Apart from these, an involvement of the non-commercial banks in Treasury Bills Auctions should be encouraged, too. Also:

1. a recognition of the investments as liquid assets;
2. a computerized trade.

A survey of Auctions

The first 28 - day Treasury Bills Auction was held in Georgia on 21 August, 1997. Interest rate at the 28-day auctions held in Georgia during 1997 ranged from 25% to 52% (in December). As to 91 – day auctions, it ranged from 37% to 60% (in December). An interest rate growth detected at the time should be related to the following factors:

1. an insufficient preparation and a general ambiguity existing in the banking sector;
2. a shortage of investment amounts;
3. scarcity of investors;
4. unshaped out regulations and mechanisms;
5. an absence of a secondary market;
6. the timing - autumn and a large demand on money.

The Auction Chart Indicators in 1997

1 Auction	2 Auction	3 Auction	4 Auction
Amount: 1000000 Demand: 1629000 Max: 30,00 Min: 30,00 Average: 30,00	Amount: 1250000 Demand: 4066500 Max: 24,99 Min: 19,95 Average: 23,82	Amount: 2500000 Demand: 2518000 Max: 48,00 Min: 20,98 Average: 30,19	Amount: 1000000 Demand: 1289000 Max: 48,00 Min: 26,35 Average %: 36,27
5 Auction	6 Auction	7 Auction	8 Auction
Amount: 2750000 Demand: 4192500 Max: 38,85 Min: 28,77 Average: 32,47	Amount: 1100000 Demand: 1574800 Max: 42,00 Min: 27,85 Average %: 37,10	Amount: 1000000 Demand: 1278000 Max: 59,97 Min: 25,97 Average %: 46,76	Amount: 2900000 Demand: 3693600 Max: 52,00 Min: 31,00 Average %: 44,51
9 Auction			
Amount: 800000 Demand: 416000 Max: 57,90 Min: 39,99 Average %: 44,03			

(Source: The National Bank of Georgia)

The results of the 1997 auctions made it evident that:

1. there is no upper discount level limit determined by the state and, therefore, a discount variation as to an international standard is striking enough (20 and more points from auction to auction);
2. none of the banks has sufficient resources for a market – maker position, therefore, two or three banks (their make – up changing), "form" a discount;
3. three categories of banks can be singled out, namely: "the expensive resources" ones, with a 50% and more discount;
4. the relatively expensive ones, with their discount of 35% and more;
5. the toughest possible competition among "the cheap" resource banks.

The Treasury Bills Market in 1998

1 Auction	2 Auction	3 Auction	4 Auction
Amount: 1800000 Demand: 4384600 Max: 36,90 Min: 31,00 Average: 35,41	Amount: 1200000 Demand: 2623200 Max: 44,00 Min: 25,00 Average: 40,47	Amount: 2000000 Demand: 2800500 Max: 48,00 Min: 19,50 Average: 35,81	Amount: 1350000 Demand: 1690900 Max: 49,00 Min: 35,00 Average: 43,42
5 Auction	6 Auction	7 Auction	8 Auction
Amount: 1350000 Demand: 2285000 Max: 43,91 Min: 36,00 Average %: 42,20	Amount: 2200000 Demand: 3897300 Max: 39,50 Min: 29,30 Average %: 34,59	Amount: 1300000 Demand: 1737800 Max: 43,50 Min: 33,84 Average %: 41,29	Amount: 1000000 Demand: 2136600 Max: 40,00 Min: 34,00 Average %: 39,13
9 Auction	10 Auction	11 Auction	12 Auction
Amount: 2300000 Demand: 4876000 Max: 26,84 Min: 29,90 Average %: 29,19	Amount: 1000000 Demand: 2784500 Max: 32,00 Min: 29,50 Average %: 31,84	Amount; 1300000 Demand: 3607000 Max %: 29,70 Min: 24,50 Average %: 29,19	Amount: 2700000 Demand: 7902000 Max: 22,49 Min %: 21,22 Average %: 21,88
13 Auction	14 Auction	15 Auction	16 Auction
Amount: 1200000 Demand: 2607000 Max: 22,00 Min %: 21,22 Average %: 21,48	Amount: 2200000 Demand: 4410500 Max %: 29,70 Min %: 20,00 Average %: 25,70	Amount: 3000000 Demand: 5442600 Max: 23,50 Min %: 22,00 Average %: 23,11	Amount: 2500000 Demand: 3742900 Max %: 25,00 Min %: 21,40 Average %: 24,80
17 Auction	18 Auction	19 Auction	20 Auction
Amount: 3000000 Demand: 3342200 Max %: 39,00 Min %: 23,00 Average %: 29,91	Amount: 1000000 Demand: 1924500 Max: 29,49 Min %: 17,99 Average %: 29,46	Amount: 2000000 Demand: 697000 Max: 48,00 Min %: 29,50 Average %: 44,64	Amount: 1250000 Demand: 2540300 Max %: 42,00 Min %: 27,00 Average %: 32,77
21 Auction	22 Auction	23 Auction	24 Auction
Amount: 5800000 Demand: 7504500 Max %: 30,00 Min %: 28,50 Average %: 29,59	Amount: 3000000 Demand: 1827700 Max %: 57,00 Min %: 29,50 Average %: 39,94	Amount: 1350000 Demand: 1365000 Max %: 60,00 Min %: 34,00 Average %: 46,76	Amount: 1000000 Demand: 1926000 Max %: 39,00 Min %: 32,00 Average %: 36,89
25 Auction	26 Auction	27 Auction	
Amount: 1200000 Demand: 2286400 Max %: 39,00 Min %: 35,00 Average %: 37,89	Amount: 1000000 Demand: 1150600 Max %: 41,00 Min %: 33,00 Average %: 38,17	Amount: 1000000 Demand: 913700 Max %: 43,00 Min %: 39,00 Average %: 39,13	

(Source: The National Bank of Georgia)

The situation changed radically in early 1998. The number of banks increased, with quite a few foreign ones and, also, financial institutions established in Georgia. An outcome thereof was

a radical interest – rate fall (particularly so in the 2nd quarter). A 28 – day auction percent went down from 37% to 29%, with that of the 91-day auctions diminishing from 40% to 20%.

The developments underway at the market of the time were as follows:

1. a tougher competition with new participants engaging therein;
2. a new banking "strategy" reflected in an inability of the "expensive resource banks" to get engaged in the auctions but working busily with the clients and putting up a tough competition against the "cheap" resource ones;
3. a discount rate fall and was "freezing" within 25 to 30% limits;

An analysis of the Auctions calls for their division into two groups:

1. from 11 to 19 Auctions;
2. from 19 up to 27.

The first group Auctions were held between 29 April and 30 June.
An emission and an internal debt of the period amounted to 18 000 000 Lari. A State forecast indicator was seemingly met (an average 25% per year).

The Auctions of the 2nd group were held between 30 June and 30 September 1998, when the percentage soared up to 60% as a result of a financial crisis and a cash diminution prompting the state to reduce an emission amount to 15 000 000 by late September.

A conclusion may be drawn that:

1. an absence of competition at the market and a drop – out of participants – a concentration;
2. bank – groupings no longer made sense;
3. a lot of banks left the market;
4. the state retains an interest – rate through an exertion of an administrative pressure the cases of incomplete emissions being frequent enough.

It was in such circumstances that a decision over a suspension of the Treasury Bills emission was made.

Thorough 1999, the National Bank and Ministry of Finance set quite a few legal norms that served as incentives to the Georgian banks' involvement in the Treasury Bills Auctions. In august 1999, commercial banks were allowed to replenish with the Treasury Bills 2% of the mandatory resources attracted to the National Bank. Those resources were charged an extra 10% annual rate. The amount in Georgia's entire banking area of the time (1999 – 2000) was over 4mln Lari, with an average 14,76% interest rate indicated at the 18 August resumed 28-day T-bills emission of 500000 Lari. At the next 11 auctions interest rate was on average 10 %. It's evident that a minor percentage of the interest rate had resulted from the meager emission and the foregoing norm changes in the Lari exchange rate cannot possibly make an impact upon the parameter. The undertakings, however, could not serve as an incentive to the market development and a replenishment of the country's budget or become a Stock Exchange stimulation instrument either.

History of Georgian Economy: from the recovery to the new crisis (1997-1999)

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History of Georgian Economy: from the recovery to the new crisis (1997-1999)
(abstract)

In this article we have shown the economic conditions of Georgia after the Civil war and dissolution of Soviet Union up to 1997 and the new crisis of 1998, its impact and reasons on Georgia, developments. Also, we have studied how arduous it was for unexperienced Government to handle situation under control, how the state bodies reacted and its steps to prevent the crisis
At the same time, the mission of this article is to be an example and lesson for Georgia how to avoid the sharp increase in State and Foreign debts in the future.

Keywords: economic crisis, debt, deficit, macroeconomy policy, models of economic development, Shock Therapy.

Significant changes have occurred in Georgia's foreign economic relationships since the starting point of economic reforms in 1995 and up to 1997. The number of the country's trade partners has enlarged. Customs reports say that between 1995 – 1997 an overall trade amount (export – import) has built – up by amount 43%. The one of 1998 was 11% larger than in the previous year and equaled 1164 mln. dollars. An import prevalence over export went down from 36% to 26%, that resulting in a radical increase of a trade balance deficit. In 1998, an adverse trade balance was estimated at 864 mln. dollars – 30% more than in 1997. The current accounts deficit, meanwhile, reached 547 mln. dollars – 11 % of the GDP. After a devaluation of the Russian ruble, Georgia's trade with the other CIS member countries diminished, as against its growth in early 1998.

Below figures has showed the significant progress of Georgia in 1997:

A comparison of some of the Economic Indicators.

Country	1997 GDP growth %	1997 inflation %	the 1997 interest rate gaps	The 1997 GDP income	The 1997 GDP spending %
Georgia	11.0	7.3	41	10.4	15.3
Hungary	4.0	18.3	N/A.	44.9	49.5
Poland	6.9	15.0	5	44.1	45.8
Armenia	3.3	13.9	29	17.4	24.1
Estonia	10.9	11.3	5	39.4	37.0

Sources: *World Economic Outlook*, IMF, May 1998; *International Financial Statistics,* IMF, September 1998, Georgia*; Recent Development and Selected Issues*, IMF, June, 1998

Chief import items were; fuel oil – products, tobacco, grain and corn. The significance of transit and an import of the investment commodities built up. Chief export items were: alcoholic beverages, metals and the metal produce, chemical products and fertilizers.

Direct foreign investments into Georgia went up from 189 mln. dollars in 1997 to 252 mln. dollars - in 1998. The increase had to do with an oil pipe – line construction completed in April, 1999.

Georgia's financial sector was at its initial stage, with most of the credits targeted at merely 6 banks. An annual interest rate on 3 moth credits in Lari amounted to 37% in April, 1999, while an interest rate on 3-month deposits in Lari reached 18%. Such a large gap between interest rates cannot have resulted from oligopoly, but has to do with the risk of money lending too. It is evident that a low interest rate on credits was going to bring about a supply of large investment designed credits.

Georgia's external debt had gradually built – up and amounted to 1,8 billion dollars in April, 1999. Along with a devaluation of Lari, the debt soared to 3,7 billion dollars, that making up 54% of Georgia's GDP in 1998.

In 1998, 80,3 mln. Lari went into the exterior debt service and payments, while the amount formed 183,8 mln. Lari in the country's 1999 approved budget.

(Source: Georgia's 1999 budget account)

The 1998 Financial Crisis and the Georgian Economy.

In Georgia's economic history, 1998 stands out for an evolutionary economic growth, for all the instability of circumstances and several radical factors. The situation, was understandingly, accompanied by alternative economic advance and slow – down phases. The developments were, on the one hand, favorable to business activities and a structural refinement of the country's economy but, on the other, the crisis setting in at the time, called for a rectification of the economic course.

Georgia's economic advance resulting from a positive trend detectable in strategically important structural branches became unmistakable in 1998. Among the favorable factors were: an upgrading of the country's geo – political status, namely, a fulfillment of its transit potential. Several significant projects had been successfully carried out. Among those was a construction of an oil pipe – line between the Azerbaijan capital Baku and a Georgian coastal site Supsa soon made operational, a construction of an oil – terminal also in Supsa, a commencement of a reconstruction of a sea – port in a Georgian town of Poti, radically increased transit shipments by the Silk Road, investments designed for safer and more regular rail shipments that went into an updating of the country's highways.

Transportation, communications and construction were among the frontrunners. An increase of capital investments equaling 275,2 mln. Lari or 1,8 times more than in 1997 was also among the accomplishments of the time.

The negative trends noticeable in 1998 were as follows:

- A slower GDP growth in both current and comparative prices, with GDP actual annual growth being but 4%, as against 1996 – 1997 when the GDP growth marks reached respectively 11,4% and 11,3%. A large – scale shadow economy – approximately 40% of the 1998 GDP, remained a negative factor, as well. A trade balance deficit in 1998 was 22% higher than a year before, that having resulted chiefly from a gap between a 12% import growth and an 18% export reduction.

The GDP reduction in 1998 had been largely brought about by an agricultural production cut. Some of the TACIS program credits provided at the time were targeted at a development of a small – scale farming in Georgia. But an improper spending of the partnership fund resources by some of the commercial banks made an implementation of the project somewhat questionable.

A critically low – level tax collection and a vulnerability of Georgia's economic borders made a strong impetus to the 1998 budget crisis. Regardless of the fact that an actual budget income in 1998 was 13% higher than that of 1997, actual income indicators related to individual taxes differed from the planned ones. Consequently, an overall income into the country's consolidated budget (with 80,5% thereof made up of tax incomes), was limited to 619 mln. Lari, while a 25% excess in spending made the budget deficit hit 154,7 mln. Lari.

The crisis of Russia's finance – credit market made a very negative impact upon Georgia's foreign trade balance, because of Russia's status of a chief sales market for Georgian export produce.

The large delayed payments within a short period of time caused big losses to the Georgian exporters and slowed an export growth.

The 1998 economic instability in Georgia had largely been caused by a budget crisis accompanied by a devaluation of the national currency Lari. An adverse balance of payments, an increasing budget deficit and a high – degree dollarization of the Georgian economy in 1998, created a grave threat to the country's monetary – credit system. In the run – up to a presumed inflation – rise, the commercial banks' demand on dollar increased significantly and was generally met owing to the National Bank's hard currency reserves.

By the end of the year, namely, in early December, after the peak sales, the Georgian National Bank decided to stop bolstering the National currency exchange – rate by its international currency reserves, and actually gave up the currency regulation leverages to the free market. By the end of 1998, Lari devaluation mark had reached 38% (the 1998 Georgian National Bank report).

Thus, it should be stated that the developments underway in the Georgian economy in 1998, testified to a viability of the country's macro – economic regulation leverages. A positive assessment of Georgia's economic management has been prompted by the developments and changes taking place in 1998.

The country's financial sector turned out immune to adverse trends, that laying grounds to a further refinement of Georgia's banking system.

The Role of Multinational Corporations in Shaping International Relations. Distinctive Paths of International Relations Studies in Asia

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Abstract

This article explores the evolution of International Relations studies (IRS) in China, Japan, and India. Since the early 1980s, IRS has seen rapid growth in China, establishing itself as an independent discipline. In contrast, despite earlier developments, IRS in Japan and India remains integrated within other academic departments, although there is a growing interest in these countries. As Asian powers continue to rise and take on greater roles in shaping regional and global orders, interest in IRS is likely to increase across Asia. The development of IRS in China, Japan, and India has followed unique paths, shaped by the dominant narratives and intellectual approaches that influence how IR is researched and taught in each country. These distinct trajectories are influenced by both national and international contexts and the extent of state control over public spheres in these nations. Changes in national goals and international standing have shaped the key narratives that guide IR research, while the degree of state involvement and government support has impacted the intellectual tendencies and institutional growth of IRS. In Asia, IRS has traditionally been practical, focusing on understanding the global environment to inform national strategies. This approach has led to an emphasis on normative-ethical issues, as well as research grounded in historical, regional, and policy studies. Due to various factors, including intellectual tendencies and limitations, positivist knowledge production has not been prioritized. However, there is growing interest among Asian IR scholars in broad IR theory. Initially, Asian scholars' interest in Western IR theory stemmed from their exposure to Western, particularly American, scholarship, which has led the way in developing IR concepts and theories. What began as imitation has evolved into application, with increasing interest in creating indigenous ideas based on national histories and traditions. Although positivism may gain traction, it is not deeply rooted in Asian intellectual traditions, and it has also faced significant criticism in the West, where alternative theories are emerging. Asian IR scholarship is expected to continue prioritizing normative-ethical issues, and historical, regional, and policy studies will remain central, not merely as a basis for generating universal laws. Additionally, there is a growing trend in Asian IR scholarship toward reviving and adapting indigenous ideas to contemporary contexts. These developments are likely to diversify and enrich existing IR concepts, theories, methods, and perspectives, potentially introducing new ones. The growth of IRS in Asia will contribute to making the IR discipline more truly international.

1. Introduction:

This article examines the distinct paths of International Relations studies (IRS) in China, India, and Japan, focusing particularly on the developments since the surge in interest during the 1980s and 1990s. The study puts forward four key propositions. Before detailing these, the article reviews

the evolution of IR as an academic field and the development of IR theory in the West, which is crucial for comparative analysis.

Distinctive Trajectories: The emergence of IRS in Asia differed fundamentally from its development in the West. In the aftermath of World War I, IR in the West grew out of a desire to prevent future international conflicts through international law, diplomacy, and organization. In contrast, IRS in Asia arose from the circumstances surrounding the emergence of Asian countries as sovereign states, focused on issues of national survival and their positioning within a polarized world dominated by Western powers. Each of the three countries studied—China, India, and Japan—has followed a unique trajectory shaped by specific national circumstances, concerns, and demands. These distinct paths are evident in the dominant research narratives, intellectual tendencies, and institutional opportunities that have collectively shaped IR as a discipline in these countries. Changes in national and international contexts, objectives, and priorities, along with the extent of state control over public spheres, have driven the unique trajectories of IRS in China, India, and Japan. While it might be tempting to attribute these trajectories solely to the changing international status of Asian countries, this explanation is overly simplistic. A comprehensive understanding requires an examination of the shifts in dominant research narratives, intellectual tendencies, and institutional growth opportunities. This article argues that changes in the international environment and positioning influence the content of master narratives, while variations in state control and financial support impact intellectual tendencies and the development of IR as a field of study.

2. IR becomes a discipline

The conventional view is that International Relations (IR) emerged as a distinct field of study after World War I. Before this, scholars from various disciplines such as philosophy, politics, political theory, history, ethics, economics, and law examined issues related to international relations. The primary focus of the field at its inception was on regulating interactions between states to prevent wars like the First World War (Olson, 1972). With a strong normative focus, early IR centered on the role of international organizations and non-coercive statecraft tools (such as law and diplomacy) in preventing conflict. There was little emphasis on understanding or explaining patterns in international politics. This practical and normative orientation was reflected in academic courses that covered topics like international organizations, public international law, statecraft techniques, country and regional studies, and the dynamics of international interactions, including idealism and realism. Knowledge production—such as creating, validating, and accumulating scholarly work—received limited attention. In the early stages, private think tanks, quasi-academic institutions in the U.S., England, and Europe, along with universities, played key roles in developing the field.

Over time, especially after World War II, the emphasis on theories and methods grew significantly. This shift is partly attributed to IR's integration into political science departments in American universities and the broader effort to establish politics as a social science in the United States. As theory and method became central to the discipline, its development was increasingly described in terms of major theoretical debates—such as realism versus idealism, behavioralism versus traditionalism, interdependence versus power politics, and reflectivism versus rationalism (Lapid, 1989; Waever, 1997). The discipline, particularly in the U.S., is now characterized by a hierarchy that prioritizes theory and method, while historical, regional, and empirical studies are mainly valued for their evidentiary contributions. In American universities, specialization,

theoretical contributions, and publications in select professional journals are the main criteria for recruiting, retaining, and promoting IR faculty. Strong gatekeeping practices maintain this established hierarchy.

3. Purpose: understanding, constituting, and transforming the world.

The earlier discussion on master narratives and intellectual tendencies highlights the strong contextual and practical focus of International Relations Studies (IRS) in China, India, and Japan. The main goal was to understand and interpret the international landscape to protect and advance national interests by reimagining and shaping the global system. This focus led to a strong emphasis on historical, regional, and policy studies, rather than prioritizing knowledge production through rationalist-positivist theorizing. The intellectual environment and institutional settings in these countries were not conducive to scientific methods of knowledge creation. In India, for instance, the aversion to formal theory is attributed to factors such as institutional priorities favoring policy work, an expectation that social sciences, including IR, should contribute to nation-building, unfamiliarity with formal theory, the absence of a professional IR scholar community, and the belief that theorizing is remote, irrelevant, and linked to imperialism (Mallavarapu, 2010).

However, a strong practical focus does not mean that theory has been absent in Asian IRS. This would only be true if theory is narrowly defined in positivist terms. If theory is broadly understood as the process of understanding, shaping, and transforming the world, then post-World War II IRS in Asia has certainly engaged with theoretical concepts. Examples include the "three worlds" theory, the "leaning to one side" strategy, and the united front strategy during Mao's era in China; the reinterpretation of global conditions as one of peace and development rather than revolution and war during Deng's era; India's practice of non-alignment during Nehru's time; and Japan's concepts like the Greater East Asia Co-Prosperity Sphere, interdependence, and comprehensive security in the 1970s, as well as the idea of global civilian power. These ideas reflect efforts to comprehend, reimagine, and transform the world according to desired goals. These orientations, with their strong normative, constitutive, and prescriptive elements, have influenced the ontology and methodology of IRS in Asia. Thus, it is inaccurate to question why there is no non-Western IR theory (Acharya and Buzan, 2007). Although Asian IR articulations might not use the same jargon, research frameworks, or methods as Western theories, it does not mean that theory has been absent in Asian IRS.

With the rise of Asian powers and their increasing influence in regional and global affairs, it seems likely that Asian scholars will develop ideas, concepts, and theories grounded in their national histories, traditions, experiences, and visions of the future to shape and manage global order. In China, for example, the effort to establish a Chinese School of IR is connected to the national goal of creating a world order based on Chinese perspectives. Scholars involved in this effort are exploring ideas such as a "harmonious world," "Tianxia" (all under heaven), integration, and peace to construct global order from a Chinese viewpoint (Callahan, 2001; Song, 2001; Wang, 2009). This approach, with its strong normative and ethical content, seems more focused on constituting and governing the world—similar to the normative variant in Western IR theory— rather than merely explaining an existing world. Normative and constitutive theoretical exploration, emphasizing historical, philosophical, empirical, and policy studies, is likely to continue in Asia.

4. Relationship to the west: growing convergence but still distinctive.

The origins of International Relations (IR) studies in the West and Asia were markedly different. In the United States and Europe, the impetus came from the desire of major powers to avoid large-scale wars through legal and institutional frameworks. Conversely, in China, Japan, and India, IR studies emerged from their unique historical contexts and foreign and security policy goals. These countries needed to navigate an international system still largely controlled by Western powers to safeguard their new sovereignty and strengthen their statehood. Consequently, IR studies in Asia evolved along paths that were only loosely related to Western developments in the field. For instance, debates in China and Japan were often disconnected or only marginally related to the

significant theoretical discussions occurring in the West. The post- 1979 debates in China about the international system, China's role within it, and the peaceful rise of China were driven by policy considerations rather than Western disciplinary debates.

Similarly, while Japan's early and later debates might seem to align with Western discussions, they were rooted in Japan's own context and concerns (Inoguchi and Bacon, 2001; Yamamoto, 2011). Criticism of idealism in interwar Japan, for example, was not a realist critique but rather a means to support Japan's imperial ambitions for a Greater East Asian Co-Prosperity Sphere. Additionally, Japan's discussions on securing its security and prosperity were deeply influenced by its national situation. The debates in Japan during the 1970s on international politics and the emphasis on transnational relations might have parallels with Western discussions on power politics versus interdependence. However, Japanese scholars did not engage with Western debates on traditionalism versus behavioralism or rationalism versus reflexivism (Inoguchi, 2009).

Aside from experts on specific countries, Western scholars largely overlooked IR debates in Asia. Generally, Western academic work neglected concepts and ideas from non-Western regions. For instance, India's notion of non-alignment, along with similar ideas from other developing countries, was often dismissed as neutralism, considered unethical and opportunistic, and thus not given proper consideration in Western scholarship (Behera, 2007). Mainstream IR research from Asia did not make its way into Western journals and publications, remaining confined to local discourse.

5. Conclusion.

Influenced by different domestic political environments, national goals, international roles, and global contexts, International Relations Studies (IRS) in China, India, and Japan have evolved in ways that are distinct not only from each other but also from Western trajectories. As state control over the public sphere has waned, these countries have gained prominence internationally, and shifting global conditions have led to some alignment in major narratives, epistemological approaches, and methodologies with Western IR. However, this alignment does not mean that Asian IRS is merely replicating Western models. While there will be efforts to adapt Western scholarly traditions and develop indigenous frameworks, such as national schools of IR, a direct replication of Western IRS in Asia is unlikely. Instead, key concepts like nation, state, sovereignty, power, and anarchy may be reinterpreted through the lens of Asian historical and contemporary experiences. This includes a concerted effort to rediscover pre-colonial intellectual traditions and relate them to current realities. In India, for instance, exploring the political philosophies of figures such as Kautilya, Ashoka, Akbar, and Kabir, as well as the ideas ofprominent anti-colonial leaders like Gandhi, Nehru, Tagore, Ambedkar, Aurobindo, and Radhakrishnan, could enrich and expand existing theories and introduce new ones (Bajpai, 2005). Such explorations might lead to innovative approaches to understanding and analyzing state interactions, and even if no entirely new ideas arise, integrating Asian traditions and experiences could enhance existing paradigms and offer fresh insights.

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METHODOLOGICAL ASPECTS OF THE ANALYSIS OF THE EFFECTIVENESS OF THE USE OF HUMAN RESOURCES

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Abstract. The article substantiates the need to analyze labor productivity in organizations. Its level is measured by the amount of products produced per unit of time by one employee. Labor productivity should be considered as a generalizing category that covers all aspects of the final activity of the enterprise. The article highlights the areas to which attention should be paid when analyzing the efficiency of labor resources utilization, presents factors and methods. The article pays special attention to generalizing, private and auxiliary indicators of labor productivity.

Keywords: labor resources, labor productivity, efficiency, indicators, factors, reserves, labor intensity

Human resources are the most important component of the entire resource potential of a company. At the same time, there is a tendency to increase the role of labor resources. This is due to many factors that take place in the modern market, including high knowledge-intensive production, increased competition, higher requirements for goods and many others.

With the help of the company's personnel, material elements of the production process are put in motion, the result of which is a finished product. Thus, it is from the efficiency of the use of labor resources often depends on the result of the functioning of a particular enterprise.

The indicator of labor productivity characterizes the efficiency of labor resources [1].

Labor productivity is understood as the efficiency of certain labor. Its level is measured by the amount of products produced per unit of time by one worker [2], who is employed in the production process, and is defined as the ratio of the volume of products produced to the average number of employees.

Labor productivity is a generalizing category that covers all aspects of the productive activity of an enterprise. At the same time, the organization, first of all, functions not for the sake of labor productivity growth, but for the purpose of profit multiplication. An enterprise that has achieved high financial results due to a successful market situation will have no prospects for development if it is unable to increase labor productivity, economically and efficiently use working time, to ensure compliance between labor productivity and its remuneration [3].

The main tasks of labor productivity analysis at the micro level include:

- Establishing the degree of labor productivity at the enterprise, by shops and individual workers;
- comparison of the obtained indicators with the data of previous years, with the plan and achieved in similar organizations or shops;
- assessment of changes in labor productivity;
- identification of key factors of labor productivity increase;
- study of the quality of used performance standards, their compliance and impact on the level of labor productivity;

- identification of reserves for labor productivity growth and determination of their impact on the volume of production.

In the process of analyzing the effectiveness of the use of labor resources, it is necessary to pay significant attention to:

- analysis of the use of calendar time fund,
- data on man-hours worked;
- identification of the causes of labor time losses, downtime,
- Establishing the reasons for hiring and attrition of labor force,
- analysis of data on the distribution of pieceworkers and time workers on the main and auxiliary.

Of particular importance in the analysis of the effectiveness of the use of labor resources have planned data on labor. These include:

- information on plans for labor productivity growth within the framework of technical and economic factors;
- information on planned labor intensity of products and prospects for its reduction;
- planned information on the number of employees of the organization by individual categories and professions of workers;
- balance of working time of the personnel;
- planned data on the labor remuneration fund for individual categories of personnel, shops, sections, management services and technical preparation of production.

Factors of labor productivity growth can be divided into internal and external; such their analysis helps to identify the reserves of the enterprise, as well as to determine effective ways to increase labor productivity [4]. Internal factors affecting the growth of labor productivity of the enterprise:

- factors that create certain conditions for increasing labor productivity (scientific developments, organization of trade and technological process, improving the qualification level of personnel);
- factors that help to increase labor productivity (material and moral incentives for employees);
- factors demonstrating the level of labor productivity (use of modern methods of product creation, mechanization, automation and digitalization of production processes, reconstruction, improvement and modernization of production equipment).

To internal factors - with a certain degree of conventionality - can be attributed and reserves, which are understood as all available opportunities to improve the use of resources of the enterprise: material, financial, labor by introducing new technologies, improving the organization of production and other measures. Reserves of the enterprise are divided into two types, depending on the impact on the growth of labor productivity: on the objects of impact and on the nature and direction of impact. The typology is presented in Table 1.

Table 1

Typology of labor productivity growth reserves

Depending on the objects of influence	Extensive growth reserves	Reserves for intensive growth
Human resources	Improving the use of the working time fund	Reduction of labor costs per unit of production
Material resources	The involvement of unused materials and energy in the turnover	Reducing the cost of materials and energy per unit of production
Technical resources	Improving the use of equipment and other technical means over time	Improving the use of technology
Natural resources	Development of unused natural resources	Increase in output per unit of resources used
Financial resources	Raising funds	Economical spending and profitable investment of financial resources

At the enterprise, natural, conditionally natural and cost indicators of production are used as result indicators of production, which depend on certain conditions of the company's work, information support and goals. On this basis, a distinction is made between natural, labor and cost methods of measuring labor productivity.

Natural and conditionally-natural indicators contribute to determining the level and dynamics of labor productivity by certain types of products. To characterize labor productivity by main types of products natural and conditionally natural indicators have found their application. Simplicity of calculation, visual representation, objective measurement of labor productivity level are the advantages of this method. This method is used in organizations, sites, industries, which produce one kind of products or for each type of product there is a record of working time costs. The results are reflected in conditionally natural units.

Cost indicators of products are aimed at obtaining generalized characteristics of labor productivity by organizations and industries [5]. This method allows to determine labor productivity in the production of various products, as well as provides consolidated data on the industry and the economy as a whole. This method should take into account the data on the cost of manufactured products in comparable prices.

Labor productivity indicators are based on the measurement of the volume of products produced in standard hours of working time. They are calculated for one or more types of homogeneous products. Labor intensity serves as a measure of different products and services in this method.

Labor productivity is determined by the formula:

$$W=\sum qtn / \sum T \quad (1)$$

where q is the number of units of each type of product;

tn - norm of time per unit of production of each type;

ST - time worked for the given period.

The right part of this formula reflects the output in standard hours per unit of actual labor time. As mentioned above, depending on how labor inputs are measured, there are average hourly

output, average daily output, and average annual output. Let us consider each type of output in more detail.

Table 2

Indicators of the efficiency of the use of labor resources

The name of the indicator	Formula	Meaning	Description
Average hourly output	$W= Q / P_h$	Q is the volume of products produced; P_h is the number of person-hours actually worked during a given period.	This formula reflects the average output of one worker per hour of actual work (in-shift downtime and breaks are not taken into account, but overtime is taken into account).
Average daily output	$Wd= Q / M_d$	M_d – the number of man-days actually worked by all workers of the enterprise	The indicator reflects the average output of one worker per day of actual work (while not taking into account the whole day's loss of working time)
Average annual output per 1 employee	$Wr= N / E_{avr}$	N is the volume of output in value terms, units; E_{avr} is the average number of employees calculated in the second way, people.	The size and dynamics of this indicator depend on the output of one worker, the share of workers in the total number of staff, the number of days they worked and the length of the working day. In this case, the denominator of the formula reflects not costs, but labor reserves.
Staff profitability indicator	$R = P / E_{avr} *100$	P - profit from sales, units;	

Thus, the rapid increase in labor productivity is one of the key factors that improve the competitiveness and efficiency of the organization.

Consequently, the base of labor productivity, and we agree with this position, is its productive force, which shows how much living labor is effective. Productive force is not only a way to achieve the goals of the enterprise (in terms of how effectively employees work), but also an element of the labor potential of the enterprise. Efficiency in the use of living labor leads to an increase in the use of embodied labor, increases the use of means of production. In other words, the increase in labor productivity is reflected in the reduction of the mass of living labor in relation to the mass of operating means of production.

Labor productivity growth is an urgent necessity for economic growth in modern conditions. The level of public labor productivity acts as a synergetic effect of the levels of this indicator at enterprises. To increase labor productivity, enterprises should choose factors and methods that give the greatest return from the use of labor. Increasing labor productivity should be conducted systematically and take into account all the features of a particular enterprise and its external environment.

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Measuring the banking activity of Italian banks by functions of accounting utility

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ABSTRACT

The accounting utility function of Italian banks is a measure of their risk positions in an Edgeworth box, which acts as a laboratory for measuring the decision-making of the entities. Positions are accounting equations obtained from the dynamic activity of entities. The sum of net financial transactions and variations of economic assets equal to the sum of monetary savings and operating results is an annual equation. The asset and liability variables are respectively the y-axis and the x-axis of the Edgeworth box. The measure of dispersion the accounting positions transferred on Cartesian axes multiplied by the relationship between their efficiency and effectiveness is annual accounting utility. The dispersion of module and the Hessian normal length are contrasted to verify the measurement results of the accounting utility function. The conclusion justifies the application of the accounting methodology of the manuscript to evaluate European monetary policy in Italian banking activity.

Keywords: Experimental economics, Edgeworth box, Hessen normal. Accounting symmetries.

TEXT

INTRODUCTION

The function utility is the last effect of an action referred to a material or unmaterial result associated to satisfaction of actors. (Edgeworth, F. Y., 1967. Kapteyn, A, 1985, Tarascio, V.J. 1993. Wynn, G. 2024). The actors are part and counterpart of the accounting transactions recorded in their respective accounting information systems using the double-entry principle. So, the utilities can be real, symmetrical, and shared. The measure of utility for each actor depends on the conditions established in the research to be carried out (ISO/IEC 17025:2017. Dianat, A. and Freer, M. 2024. Bruhin, A. et al 2024).

The manuscript analysis the behavior Italian banks respect to monetary policy of Central Banks include them in an Edgeworth box. The axes are percentages of the accounting variables in annual dynamic equilibrium. So, the x-axes are passive, and the y-axes are active. The measurement of these annual accounting identities using two indicators can be transferred to Cartesian axes, to compare them with variables external to the accounting information explaining their decision-making. These strategies for obtaining a measure of utilities are objective and independent of research activities avoiding empathy on behalf of researchers. (Fernández-Pinto, I., 2008. Cuff, B.M.P., 2016).

The manuscript measures banking positions in the analytical space where human actions have limits, the Edgeworth box. These measures are combinations of four variables to obtain a singular criterion in decision-making regarding the dynamic activity of the entities. These measures are accounting utility functions. The continued action of the activity is based on the possible position that an entity can adopt in the Edgeworth box laboratory because the expected risk or benefit is determined by the ability of the company to assume an accounting equilibrium equation determined by that estimate. The Edgeworth box laboratory is an analytical space for decision-making, an intermediate stage in decision-making where anyone interested in participating in a common project can visually perceive the risk assumed in a certain action.

The manuscript has this introductory section and the following ones dedicated to explaining how the positions in Edgeworth's Box were obtained, how the accounting benefits were obtained, analyzing their relationships with the environmental variables to contrast the results obtained and the conclusions.

ACCOUNTING LABORATORY.

The accounting method followed to analyze Spanish banks requires obtaining consolidated variables by aggregations of accounts applying economic, financial, and monetary criteria (see ANEX). Considering annual financial statements are synthesis of decisions making, the following expression is the accounting balance of dynamic banking activity:

RO – VAE = NFP – MS (1 Expression)

VEA + NFP = MS + RO (2 Expression)

Where:

RO = Result of Financial and Economic Operations, obtained from compensation by differences the consumes and sales of banking services, excluding accounting politics transactions as depreciations and amortizations.

VAE = Variations in Economic Assets, which are economic consumption not transformed into sales of banking services and are stored as inventories.

MS = Monetary Savings, banking deposits generated in a period, and that are not transformed into financial transactions.

NFP = Net Financial Positions, compensation financial transactions.

The commercial subject of banking activity is lending and borrowing of credits. Thus, the main variables are RO and NFP, and both VEA and MS are variables that slow down the dynamism of banking activity. The positions of figure 1 are expressions 2 of annual accounting equilibrium, before several transformations. The first transformation is to add the economic, financial, and monetary accounting values of the Balance Sheet accounts and the annual Profit and Loss account. The second step is the generation of expression 2, which will possibly have negative values. The third step is to transform all the values of the variables in expression 2 into positive values, to subsequently obtain their relative values as accounting assets and liabilities in expression 2. These percentages are the Edgeworth axes in Figure 1. Finaly the expression for obtain positions on Edgeworth is as fallow:

Xei = (Xci + Xo)/S

Where:

Xo = Higher minus value of assets and liabilities in third steps of transformations, multiplied by minus 2 (-2).

Xci = Values of expression 2.

S = Sum assets or liabilities to obtain their t% on axes of Edgeworth box.

Xei = Values of axes Edgeworth as t% of assets (VAE, NFT) and liabilities (OR, MS).

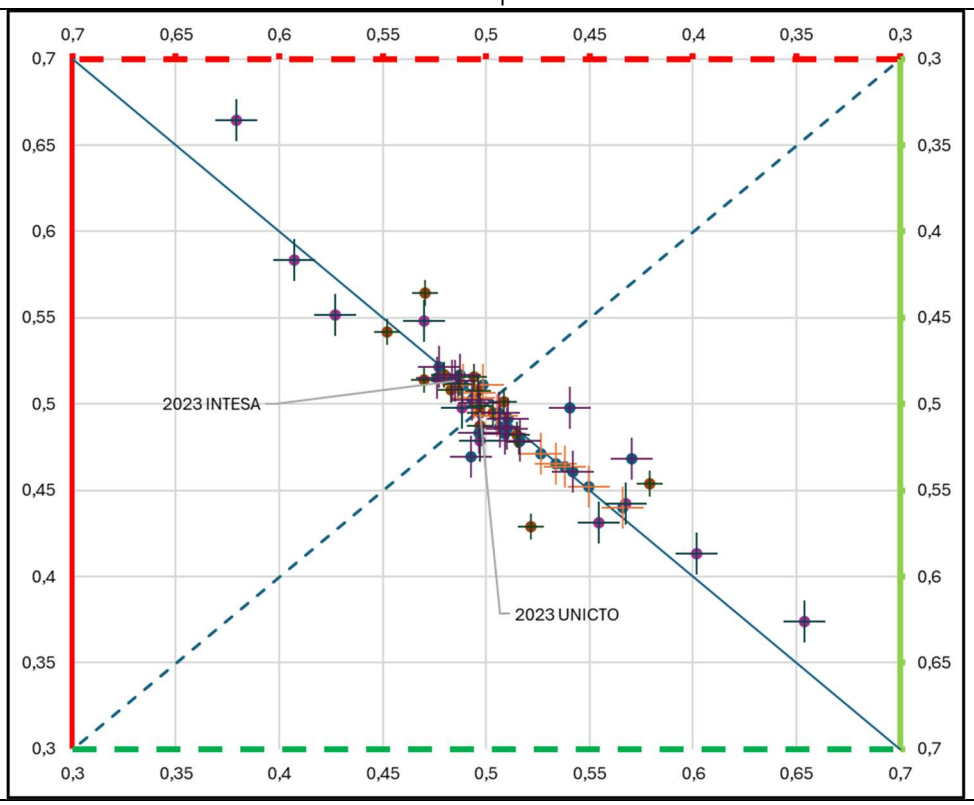


Figure 1. Edgeworth's box, Accounting Laboratory

The representation of Edgeworth positions on Cartesian axes is done using two indicators, represented on figure 2 where L(λ) and G(γ) are abscises and ordinates axes, respectively.

$$L(\lambda) = NFT / RO - VEA / MS \text{ (3 Expression)}$$

$$G(\gamma) = VE / RO - NFT / MS \text{ (4 Expression)}$$

The discontinued lines on the Edgeworth box are intermediate risk zones, the triangle with the NFP base is a risk-free zone, and the triangle with the VEA base there is an area with a high level of risk. The first quadrant of Figure 2 represents a low-risk area because both L and G are positive. Additionally, when L is greater than G there is an optimal application of monetary resources, banks develop their business matter and economic assets do not mainly serve as monetary warranty for bank deposit. So, L is a measure of efficiency and G measures the effectiveness of decision making. An extension explanation can be done.

Indicator L measures how many times Results of Operations turn respect to Net Financial Transactions. There is dynamic activity when they are positive and comparatively higher over time. These rotations (NFT/RO) are corrected by the level of coverage of Economic Assets over Monetary Savings (EM), Economic Assets not transferred to the economic markets.

Indicator G measure how many times Economic Assets (VEA) do not transfer to markets contains Result of Operations (RO). When it is higher over time, there is low dynamic activity. This rotation is correct by financial criteria, how many times the Monetary Savings (MS) is transformed into Financial Transactions (FT).

There is dynamic activity when L and G are positive (L>0, G>0) and L is higher than G (L>G), the market trusts the entity because it does not use Assets as a hedge or guarantee.

The positions on figure 2 are rotations positions of Edgeworth box and French banks positions are represented with symbol (●) for Central Bank, symbol (●) for Banke of France, symbol (+) for UNICREDIT SPA and symbol (X) for INTESA SANPAOLO S.P.A.

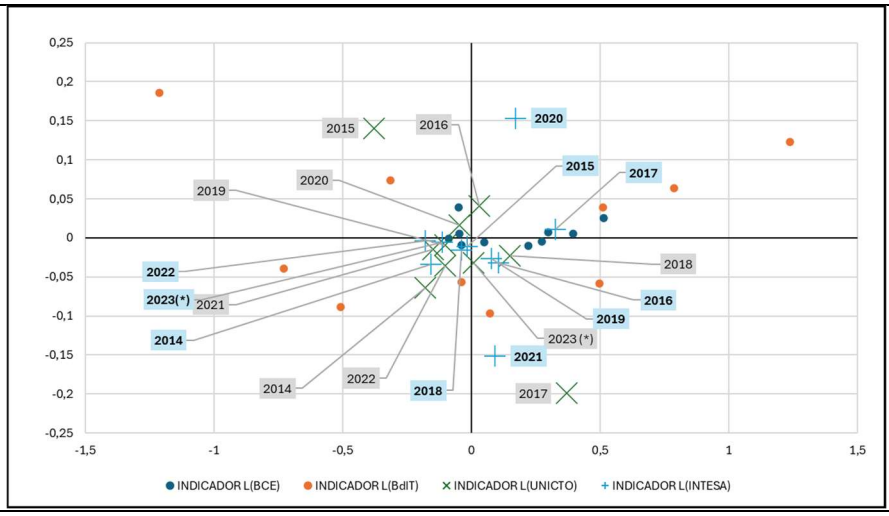


Figure 2. L and G indicators

The values of L(x) and G(y) of positions Italian banks are on figure 2, and they are a translation of their positions on Edgeworth box. The period 2023 has an asterisk (*) for fallowing the effects of transpositions positions from Edgeworth box to Cartesian axes. The Anex 1 have their values as well as they have assigned positions of quadrants of figure 2. The positions with low level of risk are on first quadrant (Q1) when G and L are positive (+|+), positions located on third quadrant (Q3) when G and L are negative (-|-) there is high level of risk, according to explanation above. The positions on second quadrant (Q2, +|-) and fourth quadrant (Q4, -|+) have assigned an intermediate risk.

Monetary policy instruments come into play when disturbances occur in any of the institutional sectors of a country's economy. To overcome limitations on dynamic activity the Central Banks do not adopt risk positions in the Edgeworth box, and it is on Q1. On the contrary, Central Banks adopt risk positions, outside the first quadrant (Q1), when there is dynamic activity without disturbances.

The European Central Banks (ECB) and Banca d'Italia (BdIT) have good positions in 2016 (+|+), 2017 (+|+) and 2020 (+|+), announcing the financial crisis 2018 (-|+) and chine pandemic, respectively. The economic growth has effect in 2014 and 2022, when central banks take risks to improve the Italian economy. They have an intermediate risk in 2023 (+|-) and, according to counterpart effects of their positions, the Italian economy is growing, and Commercial banks lend money with negative effects on their economic structure.

THE ACCOUNTING UTIILY FUNCTION

The accounting utility function measures the risk/reward of a position taken by an entity in the Edgeworth box. The position is an accounting equation of four variables measured on respective axes. These positions are transferred to the Cartesian axes by means of indicators G and L, which are, respectively, the y axis and the x axis. The L and G respectively measure efficiency and effectiveness of making decisions, and utility measure the first respect to second quality because it indicates that financial resources are applied to the economic growth of entities to continue their activity.

The manuscript considers that there is a conduct and tension in the activities of the entities. The first are radians of the tangent of the cartesian position and the tension is its module, and product

of both radian and module is cartesian component of accounting utility. This indicator is adjusted by the relationship between the efficiency and effectiveness of a position in the Edgeworth box using Cartesian criteria. The accounting utility is combined effect of both indicators.
The expression of accounting utility is:

U(Bank) = θH*θE (5 Expression)

θH = [Sine (Radian (90 – αc)) / Cosine (Radian (90+αc))] * Module = Normal (α) * Module
θE = Extension (L) / Extension (G); Conditions.

1. If position is on first quadrant (Q1) and fourth quadrant (Q4):
   1.1. Extension (L) = Extension (E) + L and Extension (G) = Extension (E) - G
2. If position is on second quadrant (Q2) and third quadrant (Q4)
   2.1. Extension (L) = Extension (E) - L and Extension (G) = Extension (E) + G

The obtaining of accounting utilities on Banca d'Italia develop on next tables fallowing a sequential obtentions of parameters.

Table 1. Module and Arccosine of cartesian observation (L,G)

Time	L(BdIT)	G(BdIT)	G/L	M(L)	Acos (G/L)	SenR(1) / CosR(2)	Normal(G/L)
2014	-0,5092	-0,0884	0,17365	-0,5168	0,1719	-5,7586	-5,7586
…/…	…/…	…/…	…/…	…/…	…/…	…/…	…/…
2019	-0,3146	0,0738	-0,2345	-0,3231	0,2303	-4,2647	4,2647
2020	1,2369	0,1225	0,0991	1,2430	0,0987	-10,0944	-10,0944
2021	0,4983	-0,0585	-0,1174	0,5018	0,1169	-8,5145	8,5145
2022	-0,7292	-0,0390	0,0535	-0,7302	0,0535	-18,6822	-18,6822
2023	-1,2114	0,1860	-0,1535	-1,2256	0,1524	-6,5127	6,5127

Explaining variables table 1:

- L(BdIT & G(BdIT): Efficiency and effectiveness indicators from Cartesian positions
- M(L) = L(bdIT) / Cosine (radian (G/L)). This is dispersion of behavior.
- Acos (G/L): Arccosine are radians of cosine function [Cosine (radians (G/L))]..
- SenR(1) / CosR(2): Normal of G/L considering radian of cosine function.
  Sen(R1) = sine (Radian 90 – Acos (G/L))
  Sen(R2) = sine (Radian 90 + Acos (G/L))

Table 2. Economic application of Hesse normal form

Time	X*COS(a)	Y*SENO(a)	P	AcAcosH	θH	Area	EX(L)	EX(G)	θE
2014	-0,5016	-0,0151	-0,5168	1,3989	-0,7229	-|-	5,8425	5,2449	1,1139
…/…	…/…	…/…	…/…	…/…	…/…	…/…	…/…	…/…	…/…
2019	-0,3062	-0,0168	-0,3231	1,3405	-0,4331	+|-	5,6479	5,4071	1,0445
2020	1,2309	0,0121	1,2430	1,4721	1,8297	+|+	6,5703	5,2108	1,2609
2021	0,4949	0,0068	0,5018	1,4539	0,7295	-|+	5,8317	5,3919	1,0816
2022	-0,7282	-0,0021	-0,7302	1,5173	-1,1080	-|-	6,0625	5,2943	1,1451
2023	-1,1973	-0,0282	-1,2256	1,4184	-1,7384	+|-	6,5447	5,5193	1,1858

Explaining variables: table 2

- X*COS(a), is L multiply function cosine radians tangent (L, G) and its degree (a)
- Y*COS(a), is G multiply function cosine radians tangent (L, G) and its degree (a)
- P = distance cartesian center to point (L, G) and is equal to Module [M(L)]
- AcAcosH, is Arccosine of tangent function (SenR(1) / CosR(2)). This is the angular amplitude of the behavioral entities, measured in always positive radians.

- AcAcosH is equal to the arccosine of the Normal of the observation (L, G), and this is a control contrast respect to collum, SenR(1) / CosR(2) and Normal(G/L.)

— θH, is product between AcAcosH and P or module M(L)

— Ex(L) is extension of L from Edgeworth box position on Cartesian space.

- Ex(L) = [2*(3-1/3) +/- L(cartesian)], been 2*(3-1/3) half the distance of L in the Edgeworth box. The Cartesian value of L is added (+) when the positions are in quadrants Q1 and Q4, otherwise it is subtracted.

— Ex(G) is extension of G from Edgeworth box position on Cartesian space.

- Ex(G) = [2*(3-1/3) +/- G(cartesian)], been 2*(3-1/3) half the distance of G in the Edgeworth box. The Cartesian value of G is subtracted (-) when the positions are in quadrants Q1 and Q4, otherwise it is added.

— θE is equal relation (Ex(L) / Ex(G))

—

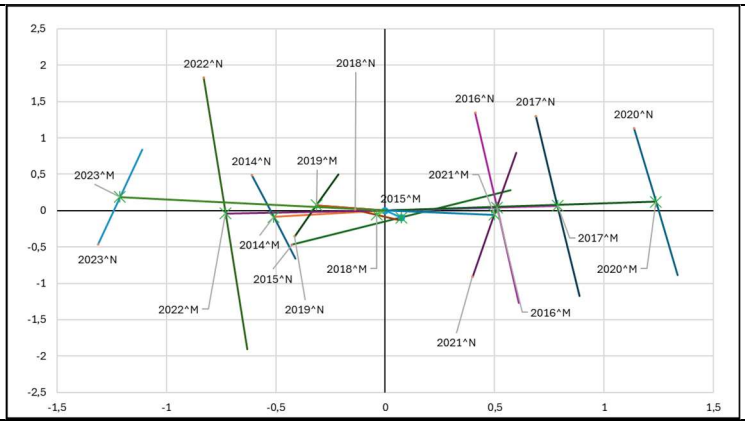


Figure 3. Normal positions entities and Normal Hessen of Banca d'Italia

Table 3. Degree control of results and annual accounting utilities

Time	Normal Degree	AgTan(G/L)	AgTan(HNormal)	Sum Degree	U(BdIT)	G|L Area
2014	90	-53,1761	36,8239	180	-0,8053	-|- Q3
…/…	…/…	…/…	…/…	…/…	…/…	…/…
2019	90	-13,1965	76,8035	180	-0,45238	+|- Q2
2020	90	5,6575	-84,3425	180	2,3071	+|+ Q1
2021	90	-6,6985	83,3015	180	0,7889	-|+ Q4
2022	90	3,0639	-86,9361	180	-1,2688	-|- Q3
2023	90	-8,7294	81,2706	180	-2,0613	+|- Q2

The accounting utilities of Banca d' Italia is la column of Table 3 (U(BdIT)) and next is Cartesian area where annual positions are located from 2014 to 2023, disponible years in data base. The measures of table 3 have been represented on figure 3 and represented in figure 3. The positions of Central Bank (Banca d' Italia) are counterpart of Italian economics, because BdIT assumes risk of dynamic activity the economics. So, negative value of U(BdIT) are growths for economic activity. Years 2019, 2022 and 2023 are risk positions and their normal have different tendencies. Nevertheless, 2022 is the best year for economic growth when Normal is negative ang Tangent positive. This analysis supposes a new form to analyses the economies countries, and so the normal form Hesse has a economic application. The manuscript focuses on the accounting profit function, so the analysis of the distance effects in the Hessian normal form is an alternative.

The functions of utilities of commercial banks are in figures 4 and 5, and their positions fallows significantly criterion of above sections. The utilities adopt negative values on quadrants second

(Q2) and third (Q3), represented on the bottom of continued line cero. The positive utilities are represented up to continue line cero on quadrants first (Q1) and fourth (Q4). Accounting utilities are labeled according to their location in Cartesian space by criteria G|L (Y|X), so 2020 utility is located on Q2 adding level (+|-), saying G>0 and L<0. This position means banks low lending activity and assets have a hedging function as above sections has been explained.

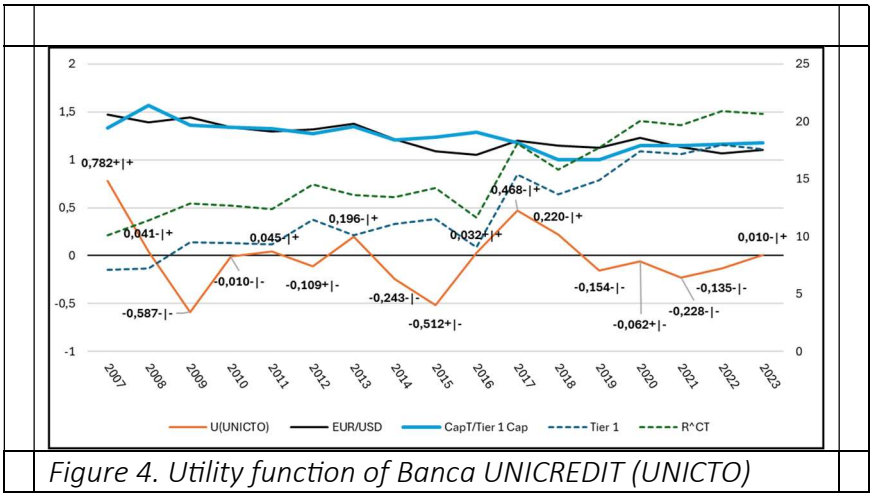


Figure 4. Utility function of Banca UNICREDIT (UNICTO)

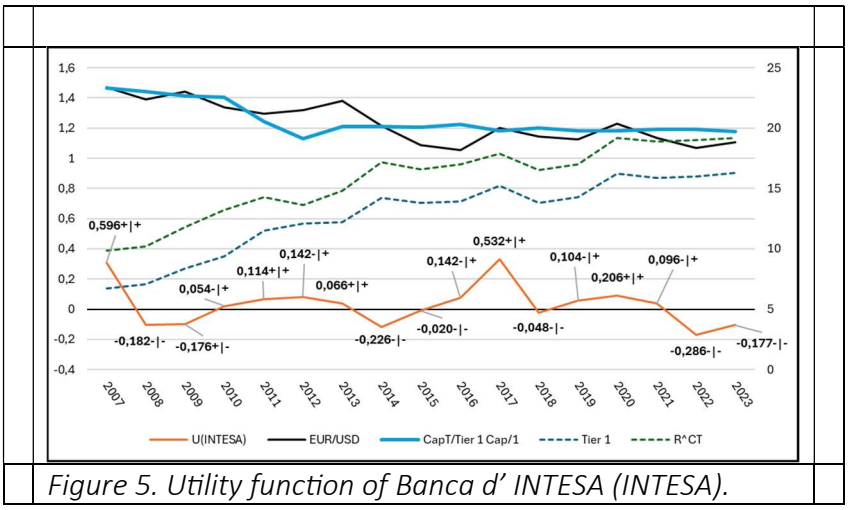


Figure 5. Utility function of Banca d' INTESA (INTESA).

The commercial banks must comply with the Basel regulations fallowing the criteria liquidity of financial instruments. So, ratio capital structures (continued blue line) is adjusted to change currency (EUR/USD) (blank line). Compliance with solvency ratios indicates that utilities maintain the same variation, more pronounced since 2016 when the IFRS 17 standard was issued as well as respect to currency change (EUR/USD).

The financial crisis before the 2013 financial sector reform (DOUE, 27.5.2013) has effects on a new regulation (Basel III, 2019). However, the failed banks occurs and institutions for supervision maintain their activity. The entities directly supervisions were 113 (ECB, 2024) and Federal Deposit Insurance Corporation (FDIC, 2024) as an independent agency created by Congress to maintain stability and public confidence in the nation's financial system; record five failed banks in 2023. Additionally, Basel Committee on Banking Supervision explains criteria for maintain supervision which will be review in 2027 according to the negative externalities associated with institutions that are perceived as not being allowed to fail due to their size, interconnectedness, complexity, lack of substitutability or global scope. (BSI, 2024).

The valuation of the markets is shown in Figure 6, which shows the evolution of the banks' utilities and market prices. The accounting utilities graphics are continued lines and discontinued lines are

measured on y-secondary axes, been evolutions currency changes (EUR/USD), and market prices banks (MP^name).

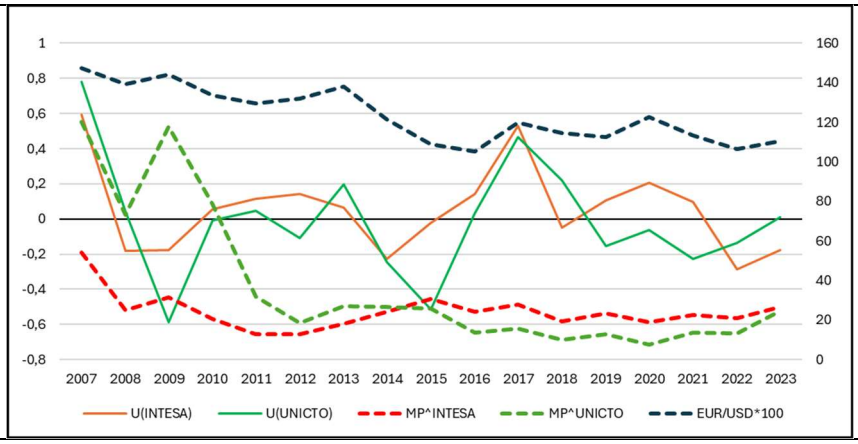


Figure 6. Utilities function on Market prices

The transversal variable associated to monetary policy is currency changes (EUR/USD) because transformation of financial products into monetary value depends on variation currency changes, according to Basil regulatory strategies. The regulations in 2013 and 2016 have effects on utilities and respective market prices of capital shares. The high level EUR/USD has effect on high utilities from 2013, and Intesa market price is higher than UniCredit due to the smaller changes in capital structures relative to the exchange rate observed in the previous figures.

The market price of banks differs according to their respective matter trade. Considering the regulation in 2016 the price of Intesa banking entity is higher than UniCredit as well as their utilities, the measure obtained explain successfully adjustment to monetary politic conditions and variation of market prices. Furthermore, accounting utilities are also measures of dispersion, so the correlation of the variables related to banking activity improves when they are divided by annual utilities in each of the periods analyzed. (Annex II). The market variables are Market price (€), Price/earnings ratio, Earnings yield (%) and Price/book value ratio, the graphics of market price (MP) are in figures related. The correlations are higher in the Basel variables than in the stock market variables, which justifies the preference for converting capital structures into liquidity products.

THE ACCOUNTING SYMETRIES.

The change in the accounting structures of an entity is not independent of the decision making made by other entities included in the Edgeworth box laboratory. The hypothesis of the behavior of the entities in the experiment is based on considering the existence of shared information, in such a way that the asymmetry of information is conditioned by the different subject matter of the activity that they develop and on considering that an entity acts when it make the decision not to act or intervene in the financial market.

The accounting symmetries are relations on four entities: Central Banca d' Italia, CTO, TSA and sum of them. The incorporation of combined effect of all of them require new measures of L and G indicators. The accounting symmetries are on figures 7NNN, and their centers are mean of L and G of the agents whose symmetries are obtained. So, symmetries of CTO are figures 7CTO, symmetries of SG are figures 7TSA and symmetries of group are figures 7BGRs.

The symmetries of UniCredit (CTO) respectively to TSA, Banca d' Italia and Banking Group, are represented by bread reed (●), triangle (Δ) and white fish or diamond (◊), respectively, in figures 7CTO. The symmetries of TSA with CTO and other agents are in figure 7TSA and adopt color green

(●) the bread symbol and maintain the triangle and fish for Banca d' Italia and Banking Group respectively.

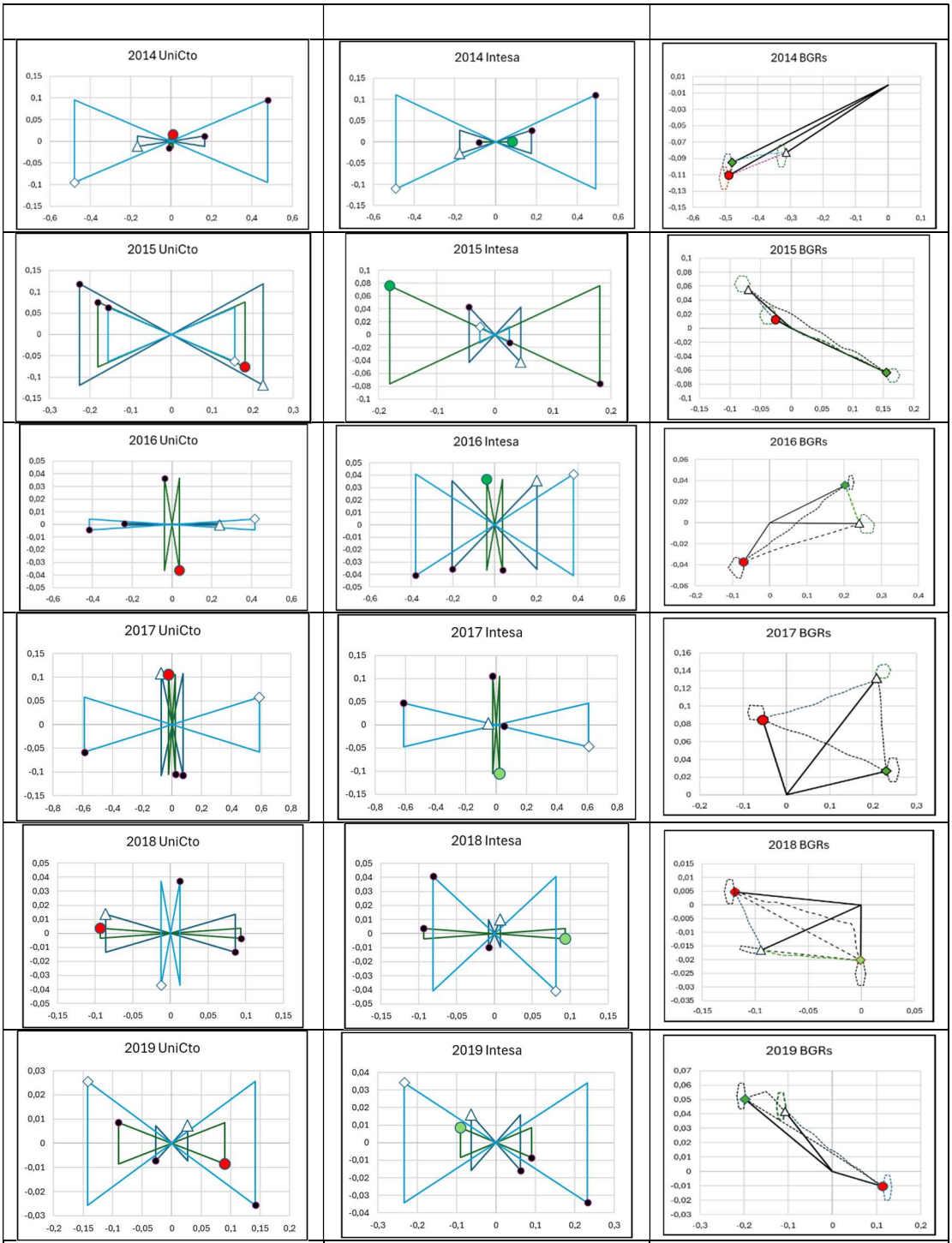
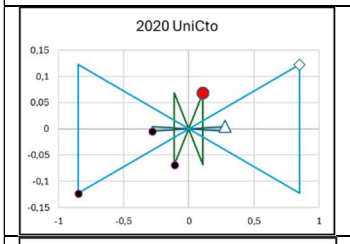
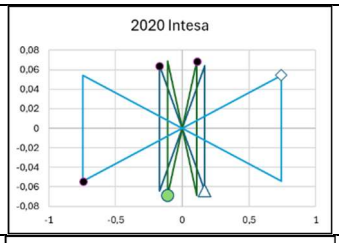
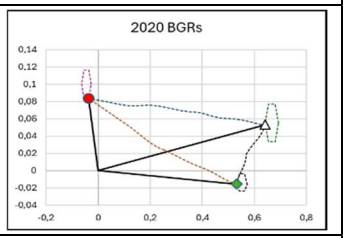
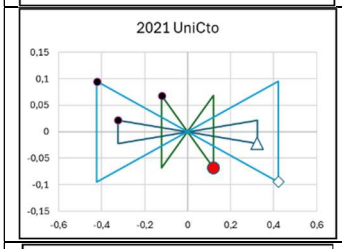


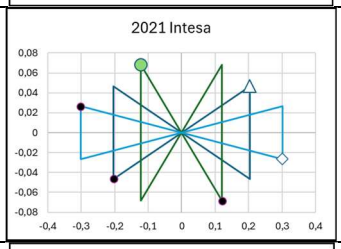
Figure 7UniCto(CTO) | Figure 7Intesa(TSA) | Figure BGRs

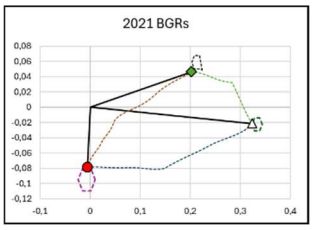


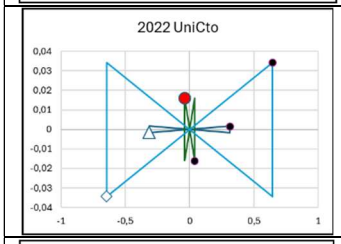


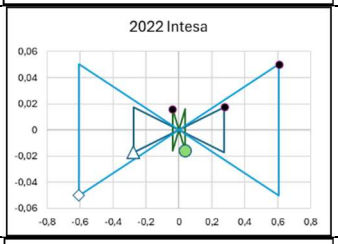


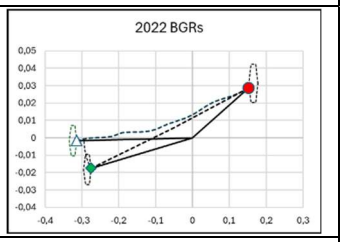


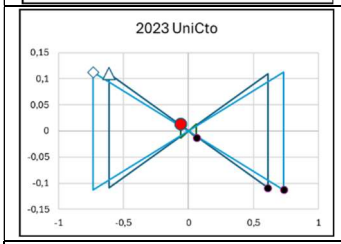


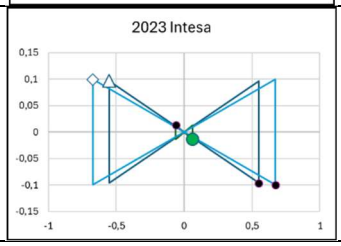












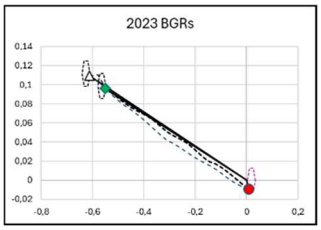


Figure 7 UniCto (CTO) | Figure 7 Intesa (TSA) | Figure BGRs

The symmetries measure dependency or independency of agents represented on these graphics. The general criterion is that the greater the extension of the X axes is greater financial independence between the agents. At the same time, the smaller the Y axis extension indicates a more dynamic economic activity. According to these criteria in Figure 7CTO and 7TSA, the center of symmetry are CTO and TSA, respectively, and explain their relationship to themselves, the Central Bank (BdE, Δ) and the group of agents in the experiment (BGRs, ◊)

According to above paragraph years 2016 and 2017 banking activity is concentrated and announces financial difficulties in 2018. The TSA has difficult in 2020 because has not financial independence on CTO (●) and Banca d' Italia (Δ). The commercial banks overcome financial restrictions and have same behavior in 2023. Considering the central positions of banks respect to other entities, the commercial banks have independency on monetary politic (Δ) and relation of group banks (◊), improving the Italian banking activity as annual report of The Governor's report on 2024 (BdIT, 2024). Nevertheless, the research continues because accounting symmetries are relations on singular activity of banks and annual accounts could be include them. The following section differentiates them.

THE ACCOUNTING UTILITIES AND DETERMINATS

The experiment could not be concluded without an explanation of the relationships between entities in the same laboratory. The neuronal accounting networks in the BGRs figures explains symmetries from an accounting perspective, obtaining different utilities. Considering the counterpart of Banca d' Italia (Δ) respect Group Banking (◊), Central Bank have good positions in 2017 and 2020 do not assume risks of economics, and Intesa (●) adopt risk positions on both year

but UniCredit (●) only adopt risk positions in 2020. Respect to other years Banca d' Italia (Δ) adopts risk positions. Compared to other years, the Bank of Italy (Δ) is adopting high-risk positions in 2014, 2018, and 2022, mainly to correct disturbances from previous years.

The symmetries are reflexive, reciprocal and transitive. The reflexive symmetries are real accounting utilities (RU), without relation on other agents in the experiment, the reciprocal symmetries are symmetric utilities (SU) and transitive symmetries are group utilities (GU). The accounting utilities obtained from annual accounts are nominal (NU) and discount other utilities allows obtaining the RU, it is the entity's activity. (Anex III)

$$NU = RU + \sum US + GU;\ RU = NU - \sum US - \sum(GUs - \sum USc)$$

USc = measure of Symmetric Utilities counterpart of US

The symmetries of figures BGRs have centers respect to L and G indicators BGRs, and considering counterpart positions of banks, their good/bad positions suppose risk/goodness to BGRs. The chronology of BF evolution is as follows:

Table 4. Banking evolutions.

Banks	2014	2015	2016	2017	2018
BdIT (Δ)	Q3(-|-)	Q2(+|-)|	Q1(+|+)	Q1(+|+)	Q3(-|-)
UniCredit (●)	Q3(-|-)	Q4(-|+)	Q1(+|+)	Q1(+|+)	Q4(-|+)
Intesa (●)	Q3(-|-)	Q2(+|-)	Q3(-|-)	Q2(+|-)	Q2(+|-)
Banks	2019	2020	2021	2022	2023
BdIT (Δ)	Q2(+|-)	Q1(+|+)	Q4(-|+)	Q3(-|-)	Q2(+|-)
UniCredit (●)	Q2(+|-)	Q4(-|+)	Q1(+|+)	Q3(-|-)	Q2(+|-)
Intesa (●)	Q4(-|+)	Q2(+|-)	Q3(-|-)	Q1(+|+)	Q4(-|+)

The Italian banking has difficult in 2016, 2017 and 2020, according to counterpart of Banca d' Italia positions. On the contrary, the improving was in 2014, 2018 and 2022 because central banks assume risk of Italian economics, as above paragraph explain.

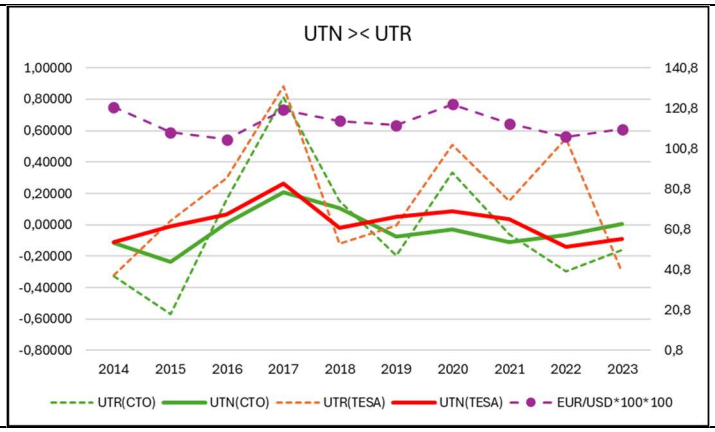


Figure 8. Real symmetries vs Nominal symmetries

The Banca d' Italia adopts same position in 2015 and 2023 but different effects on commercial banks. The contrast of UR and UN in figure 8 presents hard answers of both UniCredit and Intesa to financial crisis in 2017 and 2020 because UR is higher than UN, according to regulation in annual symmetry graphics of figures 7NNN on above section.

The accounting utilities allow us to obtain annual determinants. Their significance measures the level regulation of banking activity as well as level of their independence, Like the null hypothesis criteria for the chi-square test in economics, there are economic difficulties. The cero value of

determinants means that there is lineal dependency of variables, so there a same behavior of entities. The differ values to cero there is independence of variables and there is less banking regulation.

The analysis of results on Annex IV indicates that UniCredit loses independence on banking activities in 2018 (0,00034) and Intesa loses them in 2015(-0,00001), 2018 (0,00004), and 2019 (-0,00003), according to result of figure 7NNN. The parenthesis are determinants and increasing their individual independence in 2017 and 2020, fallowing criteria of symmetries 7NNN. The accounting utility determinants for UniCredit are respectively 0,28456 and 0,10414, and the determinants of Intesa are 0,33825 and -0,26365 in same respective years. (Annex IV).

The evolution of determinants is in figure 9 and labels of graphics have their value. The discontinued line are currency changes (EUR/USD) and are referenced to Y-secondary axis.

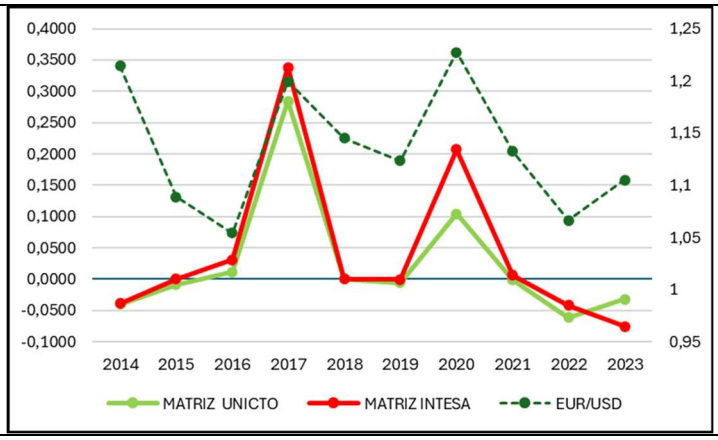


Figure 9. Evolution determinants BNP and SG

The European financial reform started in 2013, and central banks have been issuing their accounts separately (EP&C, 2013) until 2023, the period covered by the analysis of Italian banking activity. Visually the determinants of commercial banking utilities have same behavior of currency changes (EUR/USD) from 2016, year in which the onerousness criterion of contracts was introduced in the accounting standards to maintain the continuity of financial entities (insurance) (EP, 2018). Fallowing criteria accounting utilities, the evolution of Intesa is better suited than UniCredit and has a higher market price in this period (see figure 6). Nevertheless, lineal correlation coefficients between UR and UN of UniCredit are higher than the Intesa (Anex IV). Additionally, the effects of regulations after crisis - 2015, 2019, 2021 and 2023 - are positive tangent normal Hesse in figure 3, so economic function of Hesse announce before regulations banking sector.

CONCLUSIONS.

The utility function measure making decisions from annual accounts and adjusts to market prices. From the positions adopted by the entities in an Edgeworth box, a synthesis measure of four dynamic variables is obtained and contrasted with the external variables, establishing a relationship with the entity of the environment. Considering the Edgeworth box as a laboratory for economic experiments, anyone (persons) can understand the risk/goodness perception of the activities of entities located in the areas of the box. The applied methodology avoids having empathy for the actors in the experiment and there is a direct relationship with the variables of interest that researchers can considered. The constructed hypotheses are closer to the reality analyzed and less refutable. Considering result obtained, Accounting is an economic science close to the paradigm of natural and formal sciences.

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ANEX 1

Annual accounting equilibria

Entities	BCE	BdIT	UNICTO	INTESA	BGRs
PERIOD	2023	2023	2023	2023	2023
VEA	8547995,106	36759079,54	2295507,155	7052231,189	54654813
NFT	-14114418,76	-232634548,8	13007898,7	-19943735,25	-253684804
SUM ASSETS	-5566423,655	-195875469,3	15303405,86	-12891504,06	-199029991
MS	-4167493,028	-196776093,3	4768331,13	-21457467,91	-217632723
RO	-1398930,628	900624,0242	10535074,73	8565963,844	18602732
SUM LIABILITIES	-5566423,655	-195875469,3	15303405,86	-12891504,06	-199029991

Xo = 507369608,2

First transformation: Add Xo to all values

	BCE	BdIT	UNICTO	INTESA	BGRs
PERIOD	2023	2023	2023	2023	2023
VAE	515917603,3	544128687,8	509665115,4	514421839,4	562024421
NFT	493255189,5	274735059,4	520377506,9	487425873	253684804
SUM ASSETS	1009172793	818863747,2	1030042622	1001847712	815709225
MS	503202115,2	310593514,9	512137939,4	485912140,3	289736885
RO	505970677,6	508270232,2	517904683	515935572,1	525972340
SUM LIABILITIES	1009172793	818863747,2	1030042622	1001847712	815709225

Second transformation:

Dividing respective sum on all values, obtaining t% of accounting variable or value of Edgeworth axes.

Axes: X-Primary VAM; X-Secondary RO; Y-Primary VEA; Y-Secondary NFT

	BCE	BdIT	UNICTO	INTESA	BGRs
PERIOD	2023	2023	2023	2023	2023
VAE	0,51123	0,66449	0,49480	0,51347	0,68900
NFT	0,48877	0,33551	0,50520	0,48653	0,31100
SUM ASSETS	1	1	1	1	1
MS	0,498628	0,379298	0,497201	0,485016	0,355196
RO	0,501372	0,620702	0,502799	0,514984	0,644804
SUM LIABILITIES	1	1	1	1	1

Years	L(BCE)	G(BCE)	Y|X	Years	(BdIT)	L(BdIT)	Y|X
2014	-0,038	-0,009	-|-	2014	-0,509	-0,088	-|-
2015	0,222	-0,011	-|+	2015	0,073	-0,097	-|+
2016	0,298	0,007	+|+	2016	0,511	0,039	+|+
2017	0,394	0,005	+|+	2017	0,787	0,064	+|+
2018	0,049	-0,006	-|+	2018	-0,039	-0,056	-|-
2019	-0,047	0,005	+|-	2019	-0,315	0,074	+|-
2020	0,513	0,025	+|+	2020	1,237	0,123	+|+
2021	0,274	-0,005	-|+	2021	0,498	-0,059	-|+
2022	-0,088	-0,001	-|-	2022	-0,729	-0,039	-|-
2023	-0,050	0,039	+|-	2023	-1,211	0,186	+|-

Note: symbol +|+ is position on 1 Quadrant; +|- is position on 2 Quadrant; -|- is position on 3 Quadrant; -|+ is position on 4 Quadrant.

Years	L(CTO)	G(CTO)	Y|X	Years	L(TSA)	G(TSA)	Y|X	Years	L(BGRs)	G(BGRs)	Y|X
2014	-0,1784	-0,0643	-|-	2014	-0,1569	-0,0335	-|-	2014	-1,1352	-0,2544	-|-
2015	-0,3788	0,1405	+|-	2015	-0,0169	-0,0112	-|-	2015	-0,0677	0,0134	+|-
2016	0,0296	0,0407	+|+	2016	0,1054	-0,0321	-|+	2016	0,8634	0,0494	+|+
2017	0,3707	-0,1991	-|+	2017	0,3253	0,0108	+|+	2017	1,5469	-0,0835	-|+
2018	0,1500	-0,0232	-|+	2018	-0,0373	-0,0159	-|-	2018	0,1249	-0,0975	-|+
2019	-0,1017	-0,0092	-|-	2019	0,0784	-0,0263	-|+	2019	-0,3861	0,0419	+|-
2020	-0,0470	0,0162	+|-	2020	0,1716	0,1533	+|+	2020	1,6544	0,2619	+|+
2021	-0,1497	-0,0148	-|-	2021	0,0921	-0,1514	-|+	2021	0,6943	-0,2045	-|+
2022	-0,1011	-0,0358	-|-	2022	-0,1787	-0,0040	-|-	2022	-1,3918	-0,1044	-|-
2023	0,0096	-0,0320	-|+	2023	-0,1139	-0,0060	-|-	2023	-1,4575	0,1930	+|-

Note: symbol +|+ is position on 1 Quadrant; +|- is position on 2 Quadrant; -|- is position on 3 Quadrant; -|+ is position on 4 Quadrant.

Year	L(CTO)	G(CTO)	U(CTO)	Yeas	L(TSA)	G(TSA)	U (TSA)	Year	U(BdIT)
2007	0,5124	0,1353	0,782+|+	2007	0,4155	0,1591	0,223-|+	2007	ND
2008	0,0393	-0,0618	0,041-|+	2008	-0,1205	-0,0123	0,596+|+	2008	ND
2009	-0,3633	-0,0254	-0,587-|-	2009	-0,1200	0,0172	-0,182-|-	2009	ND
2010	-0,0092	-0,0164	-0,010-|-	2010	0,0512	-0,0803	-0,176+|-	2010	ND
2011	0,0320	-0,0070	0,045-|+	2011	0,0755	0,0072	0,054-|+	2011	ND
2012	-0,0862	0,0402	-0,109+|-	2012	0,0987	-0,0172	0,114+|+	2012	ND
2013	0,1289	-0,0118	0,196-|+	2013	0,0446	0,0047	0,142-|+	2013	ND
2014	-0,1784	-0,0643	-0,243-|-	2014	-0,1569	-0,0335	0,066+|+	2014	-0,8053
2015	-0,3788	0,1405	-0,512+|-	2015	-0,0169	-0,0112	-0,226-|-	2015	0,0774
2016	0,0296	0,0407	0,032+|+	2016	0,1054	-0,0321	-0,020-|-	2016	0,8460
2017	0,3707	-0,1991	0,468-|+	2017	0,3253	0,0108	0,142-|+	2017	1,3669
2018	0,1500	-0,0232	0,220-|+	2018	-0,0373	-0,0159	0,532+|+	2018	-0,0417
2019	-0,1017	-0,0092	-0,154-|-	2019	0,0784	-0,0263	-0,048-|-	2019	-0,4524
2020	-0,0470	0,0162	-0,062+|-	2020	0,1716	0,1533	0,104-|+	2020	2,3071
2021	-0,1497	-0,0148	-0,228-|-	2021	0,0921	-0,1514	0,206+|+	2021	0,7890
2022	-0,1011	-0,0358	-0,135-|-	2022	-0,1787	-0,0040	0,096-|+	2022	-1,2688
2023	0,0096	-0,0320	0,010-|+	2023	-0,1139	-0,0060	-0,286-|-	2023	-2,0613

ANEX II

Coefficient correlations UNICTO (CTO) respect to Basel criteria

	U(CTO)	U(TSA)	EUR/USD	R^CT	Tier 1	CapT	Tier 1 Cap
U(CTO)	1|\\	0,69|\\	0,27|**	-0,17|**	-0,37|**	-0,54|**	-0,54|**
U(TSA)	NP	1,00|\\	0,24|**	-0,16|**	-0,32|**	-0,44|**	-0,40|**
EUR/USD	NP	*-0,30\0,41*	1,00|\\	-0,62|**	-0,70|**	0,01|**	-0,24|**
R^CT	NP	*-0,54\0,35*	*0,95\0,35*	1,00|\\	0,94|*	0,28|*	0,55|*
Tier 1	NP	*-0,58\0,35*	*0,93\0,34*	*1,00\0,39*	1,00|\\	0,50|*	0,74|*
CapT	NP	*-0,32\0,47*	*1,00\0,47*	*0,95\0,47*	*0,93\0,47*	1,00|\\	0,93|*
Tier 1 Cap	NP	*-0,36\0,46*	*1,00\0,46*	*0,97\0,46*	*0,95\0,46*	*1,00\0,50*	1,00|\\

Coefficient correlations UNICTO (CTO) respect to Market indicators

Coef_corr /T_ St	U(CTO)	U(INTESA)	EUR/USD	MP	PER	EY%	P/B
U(CTO)	1|\\	0,69|\\	0,27|**	0,39|**	0,22|**	-0,18|**	0,19|\\
θH*θE	NP	1,00|\\	0,24|**	0,35|**	0,22|**	0,30|**	0,60|\\
EUR/USD	NP	*-0,30\0,41*	1,00|\\	0,72|**	0,84|**	-0,33|**	0,31|\\
MP	NP	*-0,05\0,37*	*0,92\0,36*	1,00|\\	0,61|*	-0,33|*	0,14|\\
PER	NP	*0,23\0,30*	*0,80\0,27*	*0,95\0,39*	1,00|\\	-0,30|\\	0,41|\\
EY%	NP	*0,36\0,41*	*0,67\0,38*	*0,66\0,37*	*0,73\0,28*	1,00|\\	0,51|\\
P/B	NP	*0,30\0,42*	*0,79\0,41*	*0,86\0,37*	*0,94\0,29*	*0,87\0,41*	1,00|\\

Variables: Market price (€) (MP) Price/earnings ratio (PER) .Earnings yield (%) (EY) Price/book value ratio (P/B)

Coefficient correlations INTESA (TSA) respect to Basel criteria

Coef_corr /T_ St	U(TSA)	U(CTO)	EUR/USD	R^CT	Tier 1	CapT	Tier 1 Cap
U(TESA)	1|\\	0,68|\\	0,22|**	-0,36|**	-0,29|**	-0,41|**	-0,32|**
U(CTO)	NP	1,00|\\	0,28|**	-0,49|**	-0,42|**	-0,60|**	-0,53|**
EUR/USD	NP	*-0,70\0,45*	1,00|\\	-0,79|**	-0,81|**	-0,39|**	-0,50|**
R^CT	NP	*-0,76\0,42*	*0,99\0,41*	1,00|\\	0,99|*	0,84|*	0,90|*
Tier 1	NP	*-0,76\0,41*	*0,98\0,40*	*1,00\0,47*	1,00|\\	0,79|*	0,88|*
CapT	NP	*-0,72\0,50*	*1,00\0,50*	*0,99\0,50*	*0,99\0,50*	1,00|\\	0,97|*
Tier 1 Cap	NP	*-0,73\0,50*	*0,99\0,50*	*1,00\0,50*	*0,99\0,50*	*1,00\0,46*	1,00|\\

Coefficient correlations INTESA (TSA) respect to Market indicators

Coef_corr /T_ St	U(TESA)	U(CTO)	EUR/USD	MP	PER	EY%	P/Book
U(TESA)	1|\\	0,69|\\	0,24|**	0,39|**	-0,33|**	0,34|**	0,29|**
U(CTO)	NP	1,00|\\	0,27|**	0,35|**	-0,38|**	0,52|**	0,23|**
EUR/USD	NP	*-0,68\0,38*	1,00|\\	0,28|**	0,08|**	-0,14|**	-0,07|**
MP	NP	*-0,83\0,29*	*0,97\0,22*	1,00|\\	-0,09|**	0,14|**	0,88|**
PER	NP	*-0,82\0,36*	*0,95\0,35*	*0,98\0,37*	1,00|\\	-0,86|\\	0,16|**
EY%	NP	*-0,49\0,49*	*0,95\0,48*	*0,88\0,39*	*0,82\0,29*	1,00|\\	-0,02|**
P/Book	NP	*-0,84\0,24*	*0,95\0,15*	*1,00\0,32*	*0,98\0,37*	*0,85\0,46*	1,00|\\

Variables: Market price (€) (MP) Price/earnings ratio (PER). Earnings yield (%) (EY) Price/book value ratio (P/B)

ANEX III

U(Bank) = θH*θE

Θ1 = Acos {Sine [(Radian 90 – Acos (G/L)]/Cosine [Radian 90 + Acos (G/L)]} * Modulo (G/L)

Θ1 = ΘH = Acos {Cosine (Atan (G/L)) * P (distancie Hesse normal form)

ΘE = Extension (L)/Extension (G)

- Extension (L) = (3-1/3)*2 + L and Extension (G) = (3-1/3)*2 - G, for Q1 and Q4
- Extension (L) = (3-1/3)*2 - L and Extension (G) = (3-1/3)*2 + G, for Q1 and Q4
-

YEAR (BANK)	INDICADOR L	INDICAOR G	θH	θE	θH*θE
2021BdIT	0,49832991	-0,05852695	0,35680178	1,08156794	0,385905364
2021ICTO)	-0,14969596	-0,01480014	-0,10871918	1,03092885	-0,112081741
2021TESA)	0,09209309	-0,15138561	0,036780458	0,989189506	0,036382843
2021GrIT	2021GrIT	0,69428075	0,929577586	1,088443564	1,011792741

SYMMETRIES FOR COMMERCIAL BANKING

Symmetries Banque de France and UNICREDIT SPA

Indicadores L&G	L^Italia	G^Italia	Sing L	Sing G	Sing(U)	Utsg
2021BdIT	0,49832991	-0,05852695	**+**	**-**	+|-	0,3859+|-2021
2021I (CTO)	-0,14969596	-0,01480014	**-**	**-**	-|-	-0,1121-|-2021
2021BdIT^(CTO)	0,17431698	-0,03666355	**+**	**-**	+|-	0,1195+|-2021

Symmetries Banque de Italia and INTESA SANPAOLO S.P.A.

Indicadores L&G	L^France	G^France	Sing L	Sing G	Sing(U)	Utsg
2021BdIT	0,49832991	-0,05852695	+	-	+|-	0,7890+|-2021
2021(TSA)	0,09209309	-0,15138561	+	-	+|-	0,0364+|-2021
2021BdIT^(TSA)	0,2952115	-0,10495628	+	-	+|-	0,1852+|-2021

Symmetries of the Italia Banking Group and UNICREDIT SPA

Indicadores L&G	L^France	G^France	Sing L	Sing G	Sing(U)	Utsg
2021GrIT	0,69428075	-0,20449543	+	-	+|-	0,4766+|-2021
2021I(CTO)	-0,14969596	-0,01480014	-	-	-|-	-0,1121-|-2021
2021GrIT^(CTO)	0,27229239	-0,10964778	+	-	+|-	0,1652+|-2021

Symmetries of the Italia Banking Group and INTESA SANPAOLO S.P.A

Indicadores L&G	L^France	G^France	Singno L	Signo G	Sig(U)	Utsg
2021GrIT	0,69428075	-0,20449543	+	-	+|-	1,0118+|-2021
2021TESA)	0,09209309	-0,15138561	+	-	+|-	0,0364+|-2021
2021GrIT^(TSA)	0,39318692	-0,17794052	+	-	+|-	0,2337+|-2021

Symmetries of the Commerce Banks INTESA SANPAOLO S.P.A. and UNICREDIT SPA

Indicadores L&G	L^France	G^France	Singno L	Signo G	Sig(U)	Utsg
2021(TSA)	0,09209309	-0,15138561	+	-	+|-	0,0364+|-2021
2021ICTO)	-0,14969596	-0,01480014	-	-	-|-	-0,1121-|-2021
2021(TSA)^(CTO)	-0,02880144	-0,08309287	-	-	-|-	-0,0106-|-2021

REAL UTILITIES

SYMMETRIES	STR CTO	CONDITION1	CONDITION2	UT & CNDTN	UT REAL
2021BdIT^(CTO)	0,1195171	IF (+) EQUAL	-0,1195171	2021ICTO)	-0,1120817
2021GrIT^(CTO)	0,1651673	Gr	0,0562732	Sum CNDTN	-0,0526200
2021(TSA)^(CTO)	-0,0106231	IF (-) SUM	0,0106229	2021UR^CTO	-0,0594607

SYMMETRIES	STR TSA	CONDITION1	CONDITION2	UT & CNDTN	UT REAL
2021BdIT^(TSA)	0,1852479	IF (+) EQUAL	-0,1852479	2021(TSA)	0,0363828
2021GrIT^(TSA)	0,2337109	Gr	0,0590858	Sum CNDC	-0,1155392
2021(TSA)^(CTO)	-0,0106229	IF (-) SUM	0,0106228	2021UR^TSA	0,1519220

Explanation:

1 Symmetries: references from respective tables above section.

2 Condition: counterpart effects to obtain value of Sum CNDC (Sum Conditions)

3 Condition Gr (Group):

3.1. Gr = 2021GrIT^(NNN) + 2021^(NNN) if STR NNN<0

3.2. Gr = 2021GrIT^(NNN) - 2021^(NNN) if STR NNN>0

4 Sum CNDC (Sum Conditions) = Sum Condition2 column.

5 UT REAL = Nominal Utility 2021 (NNN) – Sum CNDC

MATRIX SIMETRIES

Real Utility (RU) is Reflexive Symmetry, Symmetry Utility (SU) is Reciprocal Symmetry, Group Utility (GU) is Transitive Symmetry.

Simtr. Reflex.	S. Reflex. (RU)	**Simtr. Rcipro**	S.Rcipro (SU)	**Simtr Transti**	S.Transti (GU)
		2021BdIT^ICTO)	0,1195171		
				2021GrIT^ICTO)	0,1651675
2021UR^BNP	-0,0594607	2021(TSA)^ICTO)	-0,0106229		

MATRIZ UniCredit Simtr. Reflex.	DTR (2021) = Simtr. Rcipro	1. -0,001173776 Simtr Transti
0	0,11951712	0
0	0	0,16516749
-0,05946075	-0,01062288	0

Simtr. Reflex.	S. Reflex. (RU)	Simtr. Rcipro	S.Rcipro (SU)	Simtr Transti	S.Transti (GU)
		2021BdIT^TSA)	0,185247927		
				2021GrIT^TSA)	0,233710911
2021UR^BNP	0,151922024	2021(TSA)^TSA)	-0,010622881		

Matrix Intesa

MATRIZ Intesa SA Simtr. Reflex.	DTR (2021) = Simtr. Rcipro	1. 0,006577382 Simtr Transti
0	0,18524793	0
0	0	0,23371091
0,15192202	-0,01062288	0

ANEX IV

Values of Determinat and Utilities Real and Nominal

YR	Dtr CTO	UR(CTO)	UN(CTO)	Dtr TSA	UR(TSA)	UN(TSA)	EUR/USD
2014	-0,04020	-0,32874	-0,11279	-0,03855	-0,32022	-0,10845	121,41
2015	-0,00877	-0,56825	-0,23736	-0,00001	0,02792	-0,00873	108,87
2016	0,01145	0,16153	0,01250	0,03113	0,29911	0,06694	105,41
2017	0,28456	0,81252	0,20886	0,33825	0,88264	0,26450	119,93
2018	0,00034	0,15184	0,10686	0,00004	-0,11968	-0,02189	114,5
2019	-0,00553	-0,19532	-0,07587	-0,00003	-0,00351	0,04858	112,34
2020	0,10414	0,33264	-0,02885	-0,26365	-0,64901	0,08580	122,71
2021	-0,00117	-0,05946	-0,11208	0,00658	0,15192	0,03638	113,26
2022	-0,06126	-0,29577	-0,06292	-0,04134	0,55262	-0,14254	106,66
2023	-0,03171	-0,15959	0,00339	-0,07520	-0,30252	-0,08769	110,5

Correlations Coefficients Values of Determinat and Utilities Real and Nominal

	Dtr CTO	UR(CTO)	UN(CTO)	Dtr TSA	UR(TSA)	UN(TSA)	*EUR/USD*
Dtr CTO	1						
UTR(CTO)	0,873501	1					
UTN(CTO)	0,664421	0,874288	1				
Dtr TSA	0,574336	0,437509	0,508922	1			
UTR(TSA)	0,398074	0,317713	0,373380	0,837470	1		
UTN(TSA)	0,909902	0,810175	0,537451	0,557540	0,383235	1	
EUR/USD	0,527607	0,458128	0,271008	-0,037396	-0,344258	0,353594	1

Agricultural Sciences

ОБЩА ХАРАКТЕРИСТИКА НА СМОЛНИЦИ (VERTISOLS) В РАЙОНА НА СОФИЯ, БЪЛГАРИЯ

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GENERAL CHARACTERISTICS OF VERTISOLS IN THE SOFIA REGION, BULGARIA

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Abstract. The soils of type Vertisols have a particularly great importance, especially in relation to the agriculture of Bulgaria. This is due to their distribution in the low-lying parts of the country and their high fertility. The paper presents a general description of Vertisols in the Sofia region, Bulgaria. They are well stocked with nutritional elements, which determines their importance for the agriculture of the country. At the same time, their water regime and soil texture are unfavorable for the development of forest vegetation.
Key words: soil, properties, Vertisols.

Въведение

Почвата е сред най-значимите природни ресурси и основен компонент на околната среда. Значението ѝ се обуславя от изключително важните функции, които изпълнява. Тя осигурява среда за развитието на много растителни и животински видове, регулира и разпределя водния отток, съхранява водата и чрез своята поглъщателна способност служи като буфер на околната среда. Характеристиките и състоянието на почвата определят, до голяма степен, и качеството на храните, което има пряко отношение за икономиката на страната и здравния статус на населението (Богданов, 2024).

Ефективното използване на природните ресурси, без това да предизвиква необратимата им деградация, или да наруши тяхната функционалност е задължително условие за позитивното развитие на съвременното общество. Икономическата ефективност при използването на природните ресурси, тяхното опазване и възстановяване изисква задълбочен анализ на почвените условия, като основен фактор на околната среда.

Почвата се разглежда като основно средство за производство в горското и селското стопанство, което обуславя нейното значение, като един от най-важните природни ресурси. Тя осигурява подходяща растежна среда за развитието на много растителни и животински видове, регулира и разпределя водния отток, съхранява водата и чрез своята поглъщателна способност служи като буфер на околната среда (Богданов, 2022).

Смолниците (Vertisols) притежават особено голямо значение, особено по отношение на селското стопанство на България. Това се обуславя от разпространението им в ниските части на страната и високото им плодородие. Тези почви се срещат в низините и

котловинните полета на Средна и Южна България, в Горнотракийската низина, в ниските части на Тунджанската хълмиста област, в Бургаската низина и в някои котловинни полета на Югозападна България - Софийско, Пернишко, Брезнишко, Радомирско и Кюстендилско. В Северозападна България се срещат във Видинско и Монтанско.

Според Актуализираната класификация на почвите в България (Пенков и др., 1992), смолниците се разделят се на три вида:

- *обикновени (Haplic)* – имат окраска по-тъмна от 2 в повърхностните 50 cm или непосредствено под орницата;

- *канеленоцветни (Chromic)* – характеризират се с окраска 2 или по-червено в повърхностните 50 cm или непосредствено под орницата;

- *глеевидни (Gleyc)* – имат една от следните характеристики: глеевидни петна или общ сивкав оттенък на дълбочина от 50 до 100 cm; хидроморфна акумулация на карбонати на дълбочина до 125 cm (Богданов, 2024; Донов, 1993).

Целта на настоящата работа е да представи обща характеристика на смолници (Vertisols) в района на София, България.

Обект и метод на работа

Обект на изследване са почви от тип Смолници (Vertisols) в района на София. Съгласно Горскорастителното райониране на страната (Захариев, 1979), територията на изследвания обект попада в Долния горскорастителен пояс на Мизийската горскорастителна област (Захариев, 1979).

За нуждите на изследването са анализирани резултати дългогодишни проучвания на почвени профили в района на град Костинброд и литературни данни от други автори (Донов, 1979; 1993; Пенков и др., 1992).

Резултатите и обсъждане

Смолниците се определят като минерални, дълбоки, тъмно оцветени, тежко глинести почви, които притежават добре изразен вертичен хоризонт с мощност над 50 cm. Към този клас е включен само един почвен тип със същото наименование.

Главните особености на смолниците са следните:

- голямо съдържание на ил (повече от 30%) във всички хоризонти на дълбочина до 50 cm;

- голямо количество набъбващи глини – над 40% от ситнозема;

- възможна вълнообразна граница между почвата и почвообразуващите материали;

- силно свиване в сухо състояние и образуване на пукнатини;

- матови или лъскави цепителности по естествените структурни агрегати;

- формиране на микрорелеф;

- голяма плътност на агрегатите в средните и дълбоките хоризонти;

- голяма компактност на буците с малка или без всакаква порьозност;

- преобръщане и разместване на почвените хоризонти;

- сив до черен цвят;

- изключително тежък механичен състав и голям сорбционен капацитет;

- освен нормалните генетични хоризонти може да се отделят троховиден горен и уплътнен долен хоризонт, като уплътняването обхваща част от хумусно-акумулативния хоризонт и целия преходен хоризонт;

- мощен хумусно-акумулативен хоризонт;

- наличие на карбонати по почвения профил, които се срещат и във вид на карбонатни конкреции (Богданов, 2024; Донов, 1979; 1993; Пенков и др., 1992).

Характеристиките на смолниците са сходни с тези на почвената група Vertisols в световната референтна база за почвените ресурси (WRB 2022).

Развитието на смолниците се свързва със съчетанието на два фактора:

1. Особеният характер на почвообразуващата скала, обуславяща натрупването и здравото задържане на устойчиви форми на органичното вещество.

2. Релефът и други условия за преовлажняване, спомагащи за развитие на ливадна и ливадно-блатна растителност, което води до натрупване на много хумусни вещества и формиране на мощен хумусно-акумулативен хоризонт.

Сходството в характеристиките на смолниците в райони с различни климатични условия показва, че климатът не е водещ фактор при тяхното образуване. Количеството на валежите в зоната на разпространение на тези почви варира от 550 до 680 mm. Счита се, че основна роля в почвообразувателния процес са изиграли релефът, почвообразуващите материали и растителността (Донов, 1993).

Характеристиките на Смолниците се обуславят от особеностите на почвообразувателния процес, който най-вероятно има хидроморфен характер. Това се потвърждава от наличието на редица реликтови белези – мощен хумусен хоризонт, богата на карбонати подпочва, специфичен характер на органичното вещество и връзката му с минералната част на почвата. Част от хумусните вещества са свързани с монтморилонитовата глина в много устойчиви глинесто-хумусни съединения, които придават на почвата характерния смолисто-черен цвят.

Съществува и мнението, че смолниците имат автоморфен произход, като са образувани върху специфични, богати на монтморилонитова глина почвообразуващи материали, а мощният хумусно-акумулативен хоризонт е резултат от непрекъснатото разместване на почвата от повърхностния хоризонт с тази от преходния и от скалния рохляк (Донов, 1993; Пенков и др., 1992).

Изследваните почви притежават пълен почвен профил от типа ABC. Хумусно-акумулативният А хоризонт, който се диагностицира като Mollic, е с мощност 60 - 70 cm, има смолисто-черен цвят и по своя строеж се разделя на две части. Горната, която достига дълбочина до около 25 cm се характеризира с троховидно-зърнеста структура. Долната част на хумусния хоризонт е много по-плътна и има буцесто-призматична структура, с типичните за този почвен тип наклонени цепително полирани повърхнини.

Преходният В хоризонт е тъмнокафяв или ръждивокафяв. Дълбочината му надхвърля 120 cm. Агрегатите в него са с ясно изразени наклонени и полирани повърхности. След 30 cm дълбочина на почвения профил следват карбонатни отложения във вид на белоочки.

Характерно за смолниците е непрекъснатото размесване на почвата, което е резултат от образуването на дълбоки пукнатини през сухия период на годината (Донов, 1993). От повърхността в тях попадат дребни почвени агрегати и постепенно ги запълват. След навлажняване материалът в пукнатините набъбва, увеличава обема си и се издига нагоре. По този начин А хоризонт се вклинява в С хоризонт под формата на езици, а последният се покачва към повърхността образувайки т. нар. „джобове". Когато тези процеси протичат интензивно на повърхността, там се образуват малки издатини, приличащи на къртичини и се формира микрорелеф, наречен „гилгай" (Богданов, 2024; Донов, 1993).

Смолниците са тежки по механичен състав почви. Най-често са леко до средно глинести, като обикновено не се наблюдава текстурна диференциация. Относителната и обемнат плътност достигат високи стойности – съответно до 2,6 за относителната и до 2,1 g/cm^3 за обемната. В съответствие с това е малката обща порьозност, която е 30 - 40 %.

Минералният състав също е еднообразен по дълбочина на почвения профил и се характеризира с наличие на кварц, фелдшпати и други устойчиви първични минерали, и вторични минерали, представени изцяло от глинести. От тях преобладава монтморилонитът следван от хидрослюдите и каолинитът. Образуваните върху варовикови и андезитови скали почви съдържат по-голямо количество монтморилонит, а върху гранит – хидрослюдени минерали (Богданов, 2024; Донов, 1993).

Съдържанието на хумус е 5,2 – 6,4 % в повърхностния А хоризонт, като плавно намалява по дълбочина на почвения профил до 1,7 – 2,0 % в В хоризонт. Той е от хуматен тип и съдържа смоли и восъци, поради което е силно консервативен (Малинова, 2010).

Смолниците са слабо до средно запасени с усвоим азот, поради не особено добрите условия за минерализация на органичното вещество. Бедни са на фосфор, но са добре запасени с усвоим калий (Богданов, 2024; Донов, 1979; 1993).

Реакцията на изследваните почви е от неутрална до алкална, като стойностите на pH са между 6,9 и 7,5.

Поради тежкия си механичен състав и относително високото съдържание на хумус, смолниците имат висок сорбционен капацитет, който достига 45 - 50 mequ/100g. Наситеността с бази е над 85 %.

Заключение

Смолниците имат неблагоприятни физико-механични свойства, което се обуславя от значителното съдържание на монтморилонит. Те са с голяма пластичност, лепливост и свързаност, поради което трудно се обработват. Независимо от това, те са добре запасени с хранителни елементи, което определя значението им за селското стопанство на страната.

В същото време, водният режим на смолниците е неблагоприятен за горската растителност. Поради лошата водопроницаемост и тежкия механичен състав през влажните периоди настъпва преовлажняване, което през сухите периоди се сменя със силно изсушаване на почвите. Това, както и тежкия механичен състав, представлява лимитиращ фактор за развитието на повечето дървесни видове. На много места в страната върху смолниците задоволително се развиват дъбови насаждения.

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Philological Sciences

Müəllim peşəsi və müəllim şəxsiyyəti

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Təhsil sistemində haqqında ən çox danışılan, barəsində müzakirələr aparılan, peşəkarlıq səviyyəsi daim diqqət mərkəzində olan, eyni zamanda, şəxsiyyəti gözəl və təsirli ifadələrlə qiymətləndirilən, təbii ki, müəllimdir. Müəllimlik bütün zamanlarda şərəfli peşə hesab olunub, müəllim isə ən hörmətli şəxs kimi qəbul edilib. Dövrünə görə, təhsilin prioritet sayılan hansı istiqamətindən danışırıqsa-danışaq, fikir və mülahizələrimizin son dayanacağında yenə də Əlahəzrət Müəllim amili dayanır. Müəllimlik peşəsini, rəmzi mənada olsa da, incəsənət adlandıranlar, fikrimcə, tam haqlıdırlar. Bununla belə, daha ciddi yanaşsaq, "mövcudatın ən şərəflisi olan insanı kamillik səviyyəsinə çatdırmaq məqsədi güdən" (Nəsrəddin Tusi), "insanda insan oyadan" (Rəsul Rza), insana ədəb, mərifət, savad öyrətməklə onu formalaşdırıb cəmiyyətdə müstəqil həyata hazırlamaq, inkişaf yoluna yönəltmək, dəyərli və məhsuldar vətəndaşa çevirmək peşəsi, yəni müəllimlik, əslində, incəsənətdən daha çox, mübaliğəsiz desək, canlı möcüzə yaratmaq sənətidir. Bu fikri qəbul ediriksə, demək, cəmiyyətin, millətin tərəqqisi müəllimdən daha çox asılıdır.

Mahiyyət etibarı ilə "müəllim", "müəllimlik" anlayışları daha geniş məna tutumuna, əhatə dairəsinə malikdir. Hər hansı bir peşə üzrə sənətkar öz sənətini fərdi və ya qrup halında digərlərinə öyrədirsə, təbii ki, onu müəllim adlandırmaq mümkündür. Bəzən ibrət, təcrübə, nəticə çıxartmaq anlamında deyirlər ki, həyat böyük məktəb, böyük müəllimdir. Məşhur yazıçı M.Qorki həyatı "mənim universitetlərim" adlandırmışdı. Birmənalı qəbul olunmalıdır ki, həyatını öz millətinin müstəqilliyi, istiqlalı, azadlığı, işıqlı gələcəyi yolunda şam kimi əridən, xalqının rəmzi və fədakarlıq simvolu səviyyəsinə yüksələn dahi şəxsiyyətlər "Millətin Müəllimi" adını daşımaqla müəllim adını daha yüksək dərəcədə şərəfləndirmişlər

Açar sözlər: müəllim, təhsil, peşə, təhsil sistemi, bilik, bacarıq, müəllimlik, vərdişlər, səriştəlik

Dar mənada "Müəllim" ərəbcədən tərcümədə "dərs keçən, tədris edən", geniş mənada Azərbaycan dilinin izahlı lüğətində məktəbdə hər hansı bir fəndən dərs deyən adam, nəsihət verən, öyüd verən, öyrədən, ağıl verən deməkdir. Müəllim – ilk növbədə insandır, bilikli, savadlı, tərbiyəli, uşaqları və peşəsini sevəndir, uşaqları, gəncləri xalqın, vətənin gələcəyi üçün hazırlayan vətənpərvərdir, vətəndaşdır, ictimai xadimdir.

"Yaxşı müəllim nə deməkdir" sualına V.A.Suxomlinski belə cavab verirdi: "O, ilk növbədə, uşaqları sevən insandır, onlarla ünsiyyətdən sevinc tapır, inanır ki, hər bir uşaq yaxşı insan ola bilər, uşaqlarla dostluq etməyi bacarır, uşaqların sevincini və kədərini ürəyinə sala bilir, uşağın qəlbini oxuyur və heç vaxt unutmur ki, özü də vaxtilə uşaq olub.

İkincisi, yaxşı müəllim tədris etdiyi fənnin elmini yaxşı bilir, ona vurğunluqla onun inkişaf üfüqlərini – yeni kəşfləri, tədqiqatları, nailiyyətləri izləyir, o elmin problemlərindən də xəbərdardır. Yaxşı müəllim orta məktəbin tədris proqramında nəzərdə tutulanlardan daha çox bilir. Dərin bilik, geniş dünyagörüş şagirdlər qarşısında elmin, biliyin, fənnin, tədris prosesinin cəzbedici qüvvəsini açа bilmək üçün vacibdir. Şagirdlər müəllimin simasında ağıllı, bilikli, düşüncəli, sənətinə vurğun bir insan görməlidirlər…

Üçüncüsü, yaxşı müəllim psixologiya və pedaqogika elmlərini bilən, tərbiyə haqqında elmləri bilmədən uşaqlarla işləməyin mümkünsüzlüyünü hiss və dərk edən insan olmalıdır.

Dördüncüsü, yaxşı müəllim öz peşəsinin ustası olmalıdır".
Müəllim gənc nəslin mənəvi aləminin memarı, cəmiyyətin etibar etdiyi şəxsdir. Cəmiyyət ən əziz, ən qiymətli sərvətini – uşaqları, öz ümidini, öz gələcəyini müəllimə etibar edir. Bununla sanki məktəbin, müəllimin məqsədi, vəzifəsi müəyyənləşdirilir – xalqın, dövlətin gələcəyini formalaşdırmaq, "Təhsil Haqqında" qanunda təsbit olunduğu kimi, "Azərbaycan dövləti qarşısında öz məsuliyyətini dərk edən, xalqın milli ənənələrinə və demokratiya prinsiplərinə, insan hüquqları və azadlıqlarına hörmət edən, vətənpərvərlik və azərbaycançılıq ideyalarına sadiq olan, müstəqil və yaradıcı düşünən vətəndaş və şəxsiyyət yetişdirməkdir".
Pedaqoji fəaliyyətin əsas simalarından biri olan müəllimlər gənc nəsillərin tərbiyə olunması kimi məsul işi yerinə yetirirlər. Pedaqoji fəaliyyət tələbatdan yaranır və tələbatların ödənilməsi ilə təşəkkül tapır. Pedaqoji fəaliyyət prosesində müəllim şəxsiyyəti formalaşır, zənginləşir və inkişaf edir. Pedaqoji fəaliyyət dedikdə gənc nəslin tərbiyə olunmasına yönələn fəaliyyət başa düşülür. Başqa sözlə desək, təlim, tərbiyə, inkişaf prosesinin həyata keçirilməsinə, o cümlədən şagird şəxsiyyətinin formataşmasına yönəldilən peşə fəallığı başa düşülür. Pedaqoji fəaliyyətin strukturunu aşağıdakı cəhətlər təşkil edir.
1. Pedaqoji fəaliyyətin məqsədi bu cəmiyyət üçün yararlı, hərtərəfli, ahəngdar inkişaf etmiş vətəndaşlar tərbiyə etməkdən ibarətdir.
2. Pedaqoji fəaliyyətin subyekti bilik verən, tərbiyə edən, istiqamət verən hesab olunur.
3. Pedaqoji fəaliyyətin obyekti və subyekti isə bilik, bacarıqlara yiyələnən, araşdıran, tədqiqiat aparan, tərbiyə olunan hesab edilir.
4. Pedaqoji fəaliyyətin vasitələri dedikdə, təlim-tərbiyənin formaları, istifadə olunan metodları, qaydaları və s. nəzərdə tutulur.
5. Pedaqoji fəaliyyətin şərtləri sırasına böyüyən nəslin tərbiyəsinə cəmiyyətin qayğısı, təlim-tərbiyənin səmərəliliyini şərtləndirən amillərin olması (məktəblərin vaxtlı-vaxtında təmir olunması, avadanlıqların səliqəliliyi), kollektivin həmrəyliyi, məktəb müəllimlərinin bilik və bacarıqlarının yüksək olması və s. daxildir.
6. Pedaqoji fəaliyyətin nəticələri nisbətən gec görünən prosesdir. Tədris ilinin sonunda müxtəlif yoxlamalar, müqayisələr aparmaqla bunu ayırd etmək olur. Şagirdlərdə yüksək keyfiyyətlərin formalaşdırılması buna aiddir. Pedaqoji fəaliyyət mürəkkəb və çoxsahəlidir. Qarşıda duran vəzifələrdən asılı olaraq pedaqoji fəaliyyətin öyrətmə, tərbiyə etmə, təşkilatçılıq, təşviqatçılıq, özünütəhsil və s. növləri mövcuddur. Bunların hər biri müəyyən quruluşa malikdir. Qeyd etdiyimiz kimi, pedaqoji fəaliyyətin subyekti müəllimdir, yəni öyrədən, bilik verən, istqamət verən, məsləhət verən, yol göstərən, tərbiyə edəndir.

Müəllim – tərbiyəçi vəzifəsinə seçilənlər dövlətin taleyinin onlara tapşırılması üçün fəxr edirdilər ki, dövlətin taleyi gənc nəslin siyasi, əxlaqi, fiziki hazırlığı onlardan asılıdır. Böyük yunan filosofu Platondan soruşurlar: «Sən atanı, yoxsa müəllimini çox istəyirsən?» O, «Müəllimimi», – deyə cavab verir. «Çünki atam məni göydən yerə endirdi, müəllimim isə yerdən göylərə qaldırdı». Roma pedaqoqları arasında çox istedadlı, savadlı qədim fəlsəfəni bilən adamlar var idi. Məşhur Roma alimi M.F.Kvintilian öz pedaqoji təcrübəsini və müəllimin tərbiyə işində yerini nəzəri cəhətdən ümumiləşdirməyə çalışmışdır. O «natiqin tərbiyəsi haqqında» əsərində yazmışdır ki, müəllim yalnız yüksək təhsilli, bilikli olmaqla bərabər, uşaqları sevən və onları başa düşən bir adam olmalıdır. M.F.Kvintilanın pedaqoji mülahizələri müəllim və tərbiyəçinin mənəvi aləmini əks etdirən ilk əsərlərdən biridir. Bu onu göstərir ki, ilk təlim-tərbiyə müəsisələrində belə gənc nəslin yetişməsində müəllim peşəsinə və müəllim-şagird münasibətlərinə verilən tələblər diqqət mərkəzində durmuşdur. Qədim Yunanıstanda və Romada fəlsəfi məktəblərdə əxlaq ayrıca bir fənn kimi keçilmiş və digər fənlərin də əsasını əxlaq təşkil etmişdir. Quldarlıq dövründə pedaqoji peşə fəaliyyətini təşkil edən tərbiyəçi şəxsiyyətinə verilən tələblər araşdırılmağa başlanmışdır. Orta əsrlərdə, yetkin feodalizm və kapitalizmə keçid dövründə iqtisadi inkişafın yeni yüksəlişi ilə əlaqədar təlim-tərbiyə həyatın tələblərinə cavab vermirdi. Bu zaman xüsusi təlim müəssisələri

yaradılırdı ki, burada müəllim kadrları hazırlamağa başlamışlar. Gələcəkdə müəllimlərə burada daha çox təlqin edilirdi ki, məktəbdə təlim-tərbiyənin uğuru ciddiyyətdir və tənbəl, sözə baxmayan uşaqları cəzalandırmaqla tərbiyələndirmək lazımdır. Universiteti bitirən gənc müəllimlərə "Palm" adlanan, ucunda kiçik disk olan çubuq verilirdi ki, onun vasitəsilə uşaqların əllərinə vuraraq intizamı möhkəmləndirirdilər. Buraxılış imtahan komissiyasına müəllim bu tərbiyə vasitəsindən necə istifadə edəcəyini nümayiş etdirməli idi. Şərq ölkələrində mollaxana və mədrəsələrdə cəza üsulu kimi falaqqadan istifadə edilirdi. Yəni uşaqların ayaqları yuxarı qaldırılaraq xüsusi falaqqa deyilən alətə salınaraq ayaqların altına müəyyən sayda cəza məqsədilə çubuq vurulurdu. Fiziki cəzalar bu tədris müəssisələrində təlim-tərbiyəni möhkəmləndirmək üçün çubuq tərbiyə üsulu sayılmışdır. Təbii ki, intibah dövrünün ictimai xadimləri – humanistlər şəxsiyyətin azadlığı uğrunda mübarizə edərək bu təlim-tərbiyə üsullarına qarşı çıxdılar. Bir çox yerlərdə xalq kütlələri feodalizm quruluşuna qarşı çıxaraq yeni – mütərəqqi quruluş, yeni təhsil arzulayırdılar. Yeni quruluşun yaranmasında yeni insanların olması tələbatını yaradırdı. Bu isə yeni məktəblərin, yeni təlim-tərbiyə üsulunun, yeni müəllimlərin olması zərurətini meydana gətirirdi. Görkəmli çex pedaqoqu Y.A.Komenski göstərirdi ki, uşaqların mənəvi tərbiyəsi müəllimin müsbət nümunəsindən başlayır. Böyük pedaqoq özünəməxsus tərzdə məktəbin nizamnaməsini və müəllimin pedaqoji kodeksini işləyib hazırlamışdı. O göstərirdi ki, uşaqları tərbiyə edən müəllim özü düz, doğru olmalı, qarşısına qoyduğu məqsədə çatmaqda səbatlı olmalı, sinifdə intizam yaratmalı, ciddi və inamlı olmalı, özünə hörmət qazanmalıdır. J.J. Russo, İ.H.Pestalotsi, A.Disterveq və başqaları yeni nəslin formalaşmasında müəllimin mənəvi aləminə böyük qiymət vermişlər. Müəllimin əməyi öz hörmət və peşəsinə görə, məsuliyyət və mürəkkəbliyinə görə bütün peşələrdən fərqlənir. Müəllimin əməyi çoxcəhətlidir. Müəllim, şagirdlə işləyərkən, həm təbiət hadisələrindən, həm texnikadan, həm də bədii obraz, işarə sistemlərindən istifadə edir. Deməli, müəllim sənəti insanın fiziki, intellektualemosional inkişafına, mənəvi keyfiyyətlərinə, ümumiyyətlə şəxsiyyətinin bütün sahələrinə müəyyən tələblərlə yanaşır. Hər şeydən əvvəl yüksək iş qabiliyyəti, gərgin əmək tələb edən bu sənət müəllimin tam sağlamlığını əsəb sisteminin sakitliyini tələb edir. Müəllim əməyinin başlıca xüsusiyyətlərindən biri onun obyektidir. Müəllimin obyekti uşaqdır. Müəllim əməyinin məhsulu isə başqa adamın davranışında, biliyində, əxlaqında, bacarıq və vərdişində maddiləşir. Müəllimin obyekti olan uşaq eyni zamanda subyektdir. Çünki uşaqlar da müəllimə təsir edirlər, onun işini təhlil edir və qiymətləndirirlər. Müəllim əməyinin xüsusiyyəti eyni zamanda vaxt və məkanla bağlıdır: Saatla tənzim olunan vaxt və tənzim olunmayan vaxt. Müəllimin sinifdəki fəaliyyəti saatla tənzim olunur, sinifdənkənar işləri, dərsdənkənar fəaliyyəti isə vaxtla tənzim olunmur. Müəllimin səmərəli fəaliyyəti üçün başlıca amillərdən biri onun ixtisasa uyğun və ümumi biliklər sisteminə yiyələnməsidir. Bura ixtisas biliyi ilə bərabər pedaqoji, psixoloji, fəlsəfi, metodiki biliklər daxildir. Fəaliyyət prosesində həmin biliklər vəhdətdə bir-birilə əlaqəli şəkildə istifadə olunur. Bununla bərabər müəllimin sənəti yüksək şüurluluq, əxlaqi saflıq, ümumi mədəniyyət, intellektual səviyyə tələb edir. Müəllim əsasən məktəbdə və evdə işləyir. Müəllim əməyinin məzmunu tədris planı, proqramlar, kitab və dərsliklərdir. Əmək fəaliyyətində iş forma və metodlarını müəllim özü seçir. Müəllim obrazlı desək, dərsin həm ssenaristi, həm rejissoru, həm aktyoru, həm təşkilatçısı, həm də baş qəhrəmanıdır. Aktyor tamaşaçılara təsir göstərdiyi kimi, müəllim də şagirdlərə elə təsir göstərir, onlarda müəyyən hiss və emosiyalar yaradır, onları maraqlandırır, heyrətləndirir, öyrədir və tərbiyə edir. Müəllim hər yerdə, hər zaman əxlaqilik nümunəsi göstərməlidir. Müəllim daim vətəninə, xalqına xidmət etməli, ölkəyə layiqli vətəndaşlar tərbiyə edib yetişdirməlidir. Ulu öndərimiz Heydər Əliyev 1998-ci ildə Azərbaycan Müəllimlərinin Qurultayında müraciətində demişdir: "Azərbaycan müəlliminin bir amalı olmalıdır. Azərbaycanımızı çiçəklənən, inkişaf edən, firavan, qüdrətli bir ölkəyə çevirməyə qadir, müstəqillik ideyalarına sadiq, özünü vətənin azadlığı naminə fəda etməyə hər an hazır olan, yeni təfəkkür tərzini qavrayaraq müasir tələblərə cavab verən sağlam əqidəli, milli ruhlu nəsil yetişdirmək". Müəllimlik peşəsinin səciyyəvi xüsusiyyətlərini aşağıdakı kimi şərh edə bilirik: Müəllimlik peşəsi

deyə bilərik ki, cəmiyyətimizdə kütləvi peşədir. Çünki nəsilləri öyrətmək, tərbiyə etmək çox gərəkdir. Buna görə də müəllimlik peşəsinə həmişə ehtiyac duyulmaqdadır. Müəllimlik peşəsi kütləvi peşə olduğuna görə də bəlkə də bəzən bu peşə gənclərin diqqətindən kənarda qalır, başqa peşələrə daha çox üz tuturlar. Müəllimlik peşəsi nadir peşədir. Bu peşə kütləvi olmaqla bərabər, həm də nadir peşədir. Çünki müəllim çox olsa da, yadda qalan bir-iki nəfər olur. Onlar da həyatımızda böyük rol oynayırlar. Məhz müəllimin sayəsində insanlar əsaslı elm və biliklər qazanır, həyatda özünə doğru yol seçə bilirlər. Müəllim elə bir elm, bilik daşıyıcısıdır ki, onsuz heç bir tərəqqi, inkişaf da ola bilməz. Müəllimlik məsyliyyətli peşədir. Çünki müəllim insan üzərində işləyir və burada səhvə yol vermək olmaz. Bu işdə buraxılmış səhv, nöqsan öz nəticəsini dərhal olmasa da, bir müddətdən sonra hökmən göstərəcəkdir. Müəllimlik mürəkkəb bir peşədir.

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Chemical Sciences

Жаңа гликольурил-меламин-формальдегид полимерін синтездеу және зерттеу

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Аннотация: Бұл зерттеу "жасыл" пластификатор ретінде оксиэтилидендифосфон қышқылының (ОЭДФ) әсерінде гликолурил мен меламин (ГУ-МЕ) кешенінен ГУМЕФА полимерін алу әдісін және оның түзілу химиясын ұсынады. Алынған полимердің молекулалық массасы зерттеліп, сипатталды және бос формальдегид пен метилол топтарының мөлшері анықталды. Алынған мәліметтер әртүрлі құрамдағы және мақсаттағы шайырларды алуға көмектеседі, бұл өз кезегінде берілген қасиеттері бар композициялық материалдарды алу перспективаларын ашады.
Кілтті сөздер: гликолурил, гликолурил-меламин-формальдегидті шайырлар, ОЭДФ, полимерлердегі бос формальдегид;

Адамның практикалық өміріндегі полимерлі заттардың алуан түрлілігінің ішінде фенол-формальдегид, мочевина-формальдегид және меламин-формальдегид шайырлары (МФШ) сияқты шайырлар маңызды рөл атқарады. МФШ целлюлозақұрамды композиттердің құрамында жеке де, мочевина-формальдегид шайырымен бірге де, соңғысының беріктігі мен отқа төзімділігін арттыру үшін қолданылады.

МФ шайырлары мен олардың негізіндегі материалдардың елеулі кемшілігі ылғалға өте төмен төзімділік болып табылады және гидролитикалық әсер нәтижесінде полимер тізбектерінің бұзылуы және оларда метиленэфирлік байланыстардың болуына байланысты, формальдегид пен басқа да улы қосылыстардың қоршаған ортаға шығарылуы орын алады [1]. Тағы бір кемшілігі - сынғыштыққа байланысты таза МФШ-ті қолдану мүмкін еместігі. Шайырды орта мерзімді сақтауға байланысты мәселелер бар. Жоғарыда аталған кемшіліктердің жиынтығы МФШ қолданудың әлеуетті салаларын айтарлықтай шектейді. Алайда, шөгу процестерінен туындаған шайырдағы ішкі кернеулерден арылу, сонымен бірге беріктік қасиеттерін жақсарту бүгінгі күнге дейін мүмкін болмады. Сондықтан гликолурилмен модификацияланған шайырлар және олардың зерттеулері зерттеушілердің үлкен қызығушылығын арттыруда.

Жұмыстың бірінші кезеңінде гликолурил мен меламин (ГУ-МЕ) кешені алынды. Алынған кешеннің құрамы мен құрылымы ИҚ- және ЯМР- спектроскопиясының көмегімен зерттелді.

Бұл кешендердің балқу температурасы ыдыраумен 325°С және 321° құрады. Гликольурилдің (ыдыраумен >300°С) және меламиннің (ыдыраумен 345°С) балқу температурасымен салыстырғанда температураның алынғаннан өзгеше екендігі байқалады, бұл да өз кезегінде кешеннің түзілуін көрсетеді.

Жұмыстың келесі кезеңінде пластификатордың таңдалған концентрациясына байланысты, сондай-ақ пластификаторсыз алынған ГУ-МЕ кешенінен полимер (ГУМЕФА)

синтезі жүргізілді. Қышқыл концентрациясы полимерді пластификациялау уақытындае шешуші рөл атқаратыны анықталды. Осылай, ОЭДФ және концентрацияланған HCl қолданған кезде пластификация уақыты шамамен 5 минут жүрді, ал сұйылтылған ерітінділерді қолданған кезде ол уақыт бір тәулікке дейін өсті. Пластификаторсыз тәжірибеде полимердің толық пластификациясы үш тәулік ішінде жүрді. Алынған полимер үлгілері шамамен 150-200 мкм бөлшектердің орташа өлшемді зертханалық диірменінде ұсақталды және полимердің орташа молекулалық салмағын анықтау үшін алынған ГУМЕФА-ға ГПХ талдауы жүргізілді. Ол үшін бөлме температурасында ГУМЕФА полимерінің хлороформды сығындысы жүргізілді. Полимер орташа молекулалық салмағы $3,3*10^4$-тен $4,4*10^4$ г\мольге дейінгі жоғары молекулалық фракциядан тұратыны анықталды.

ГУМЕФА-ның ИҚ-спектрінде гликолурил бөліктері де, меламинге қатысты фрагменттер көрінеді.

ОЭДФ әсерінде гликольурил формальдегидпен әрекеттескенде, бұл жұмыста көрсетілгендей [2] Манних реакциясы бойынша метилолды топтар түзіледі. Келесі кезеңде меламинмен метилол тобының арасында метилен көпірлерін түзе отыра, реакция жүреді меламинмен метилен көпірлерін қалыптастыру кезінде. Сонымен қатар, егер гликольурил мен меламин арасында реакция болмаса, онда гликольурилде де, меламинде де бос метилол топтары пайда болады, олар кейіннен сыртқы ортаның әсерінен формальдегидті элиминерлей алады [3].

Сонымен қатар, меламинді ұқсас сызба бойынша өзара байланыстыруға болады, оның барысында меламин-меламиннің тармақталған құрылымы пайда болады. Жоғарыда айтылғандардың бәріне сүйене отырып, полимердің құрылымы ұсынылды. Ұсынылған реакция химиясына сүйене отырып, уақыт өте келе формальдегидті баяу шығара алатын гликольурилде метилол топтарының түзілуі байқалады [4].

Гликольурил тетраметилолгликольурилді [5] оңай түзетіні белгілі, сонымен қатар меламин триметилолмеламин [2] түзеді, Бұл меламин мен формальдегид реакция қоспасында бәсекелес өзара әрекеттесуді тудырады. Бұл реакциялар бір мезгілде және параллель жүреді, нәтижесінде ГУМЕФА-ның торлы құрылымы пайда болады.

Әрі қарай ГУМЕФА-дағы бос формальдегидтің мөлшері спектрофотометриялық және флуориметриялық әдістермен зерттелді. ОЭДФ-пен алынған ГУМЕФА-да HCl-мен пластификацияланған шайырмен салыстырғанда бос формальдегидтің (1,15-1,34 масс.%) және метилолды топтардың (1,56-0,54 масс.%) мөлшері аз екені анықталды. Нәтижелер ОЭДФ-ті пластификатор ретінде пайдалану бос формальдегидтің мөлшерін азайтатынын және алынған ГУМЕФА-ның қолдану аясын арттыратынын көрсетті. Зерттеу деректері гликольурил-меламин шайырларын пластификациялау процесін түсінуге және бос формальдегид мөлшерін азайту үшін өндіру процесін оңтайландыруға көмектеседі, бұл өз кезегінде әлеуетті қолдану салаларының санын арттырады. Сонымен қатар, алынған мәліметтер әртүрлі құрамдағы және мақсаттағы шайырларды алуға көмектеседі, бұл өз кезегінде берілген қасиеттері бар композициялық материалдарды алу перспективаларын ашады.

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АНАЛИЗ ПРОБЛЕМЫ ДЕТСКИХ И ПОДРОСТКОВЫХ СУИЦИДОВ В КАЗХАСТАНЕ И ПОДХОДОВ К ЕЕ РЕШЕНИЮ

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Аннотация

Целью данного исследования является разработка рекомендаций по решению проблемы с детским и подростковым суицидом в Казахстане. Представлены результаты обзора научно-теоретических и научно-практических статей с целью выявления основных причин для совершения суицида среди подростков. Был проведен экспертно-аналитический сбор информации по существующим подходам решения детского и подросткового суицида в мире и в

Казахстане. Данная проблема является актуальной и требует внедрения немедленных действий, потому что с Сентября 2020 года по Июль 2024 года мальчиками и девочками от 11 до 18 лет было совершено 4 299 зарегистрированных суицидов. За аналогичный период было совершено 8 966 попыток суицида среди детей и подростков. Проведенное исследование показало, что психологические консультации определенно несут в себе положительный эффект на снижение подросткового суицида в Казахстане, но для достижение масштабных изменений необходимо принять более системный подход. Иными словами, нужно работать не с последствиями, а с причинами, толкающих детей на совершение непоправимых действий.

***Ключевые слова**: детские и подростковые суициды, психологическая помощь, причины суицида, профилактика суицида, способы снижения суицида, статистика суицида в Казахстане.*

При опросе детей (1 862 респондентов), обратившихся за психологической поддержкой в JANYM были выявлены следующие причины, вызывающей суицидальные мысли:

1. Серьезные психические расстройства – редко, но тем не менее, психологи сталкивались с клиническими случаями шизофрении или другими психологическими заболеваниями. В данных случаях психологи выходили на связь с родителями и рекомендовали обратиться к психиатрам за получением дальнейшего лечения. Для сравнения в США [1] 31.4% детей, совершивших суицид, страдали от психических расстройств;

2. Прошлые попытки суицида – неудачные попытки суицида чаще всего вызывают у людей желание еще раз попробовать его совершить. В случае с детьми также сказывается

фактор, что они не всегда серьёзно воспринимают последствия суицида. У них может возникнуть ощущение «игры» и не отдавая себе отчет подростки могут совершить непоправимые действия. Для сравнения в США 24,3% детей, совершивших суицид, пытались сделать это в прошлом;

3. Тревожное расстройство – в 21 веке все люди подвержены более высокому риску развития панических атак и повышенной тревожности из-за перенасыщения пространства вокруг нас информацией. В США более 70% людей, страдающих от суицидальных мыслей, имеют диагноз тревожного расстройства [2]. Ситуация в Казахстане, как и во всем мире, была усугублена пандемией, военными действиями в соседствующих странах и другими геополитическими, культурными, экономическими факторами, которые оказывают сильное эмоциональное давление на детей и подростков;

4. Семья – чаще всего дети эмоционально страдают из-за проблем в семье. Развод, финансовые трудности, ссоры родителей, игнорирование ребенка – все это наиболее часто встречающиеся причины, из-за которых дети обращались за помощью в JANYM. Та же самая ситуация наблюдается в США [3];

5. Влияние со стороны – бывают ситуации, когда дети попадают под негативное влияние со стороны. Самым ярким примером был «синий кит», но на самом деле на просторах интернета очень много деструктивных страниц, призывающих к совершению суицида. Любое деструктивное течение, привлекающие внимание детей, оказывает на них прямое влияние [4];

По данным Комитета по правовой статистике и специальным учётам Генеральной Прокуратуры Республики Казахстан с Сентября 2020 года по Июль 2024 года мальчиками и девочками от 11 до 18 лет было совершено 4 299 суицида. Из них 63% мальчики и 37% девочки [5]. За аналогичный период было совершено 8 966 попыток суицида среди детей и подростков. Из них 24% мальчики и 76% девочки [5].

Графики совершенных детских и подростковых суицидов, а также попыток в Казахстане с 2016 по 2024 год (Рисунок 1 и Рисунок 2) включительно наглядно показывает, что мальчики и девочки синхронны в действиях.

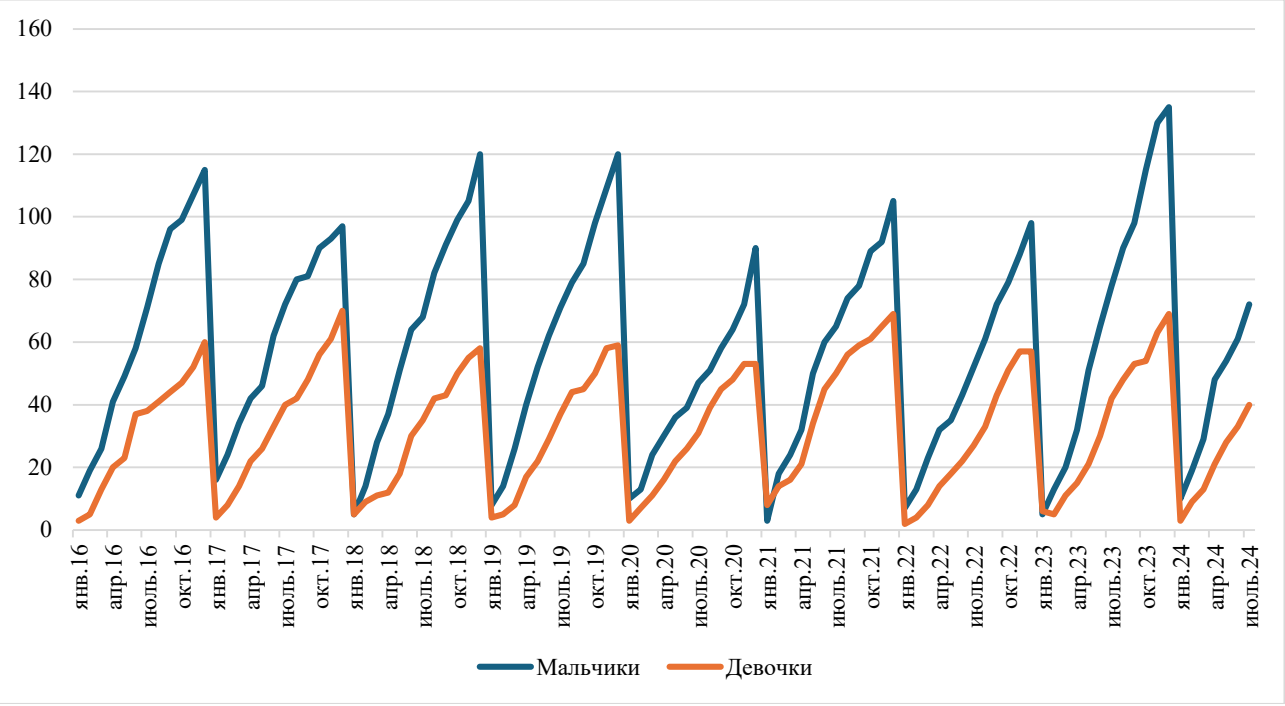

Рисунок 1. Детские и подростковые суициды в Казахстане 2016-2024

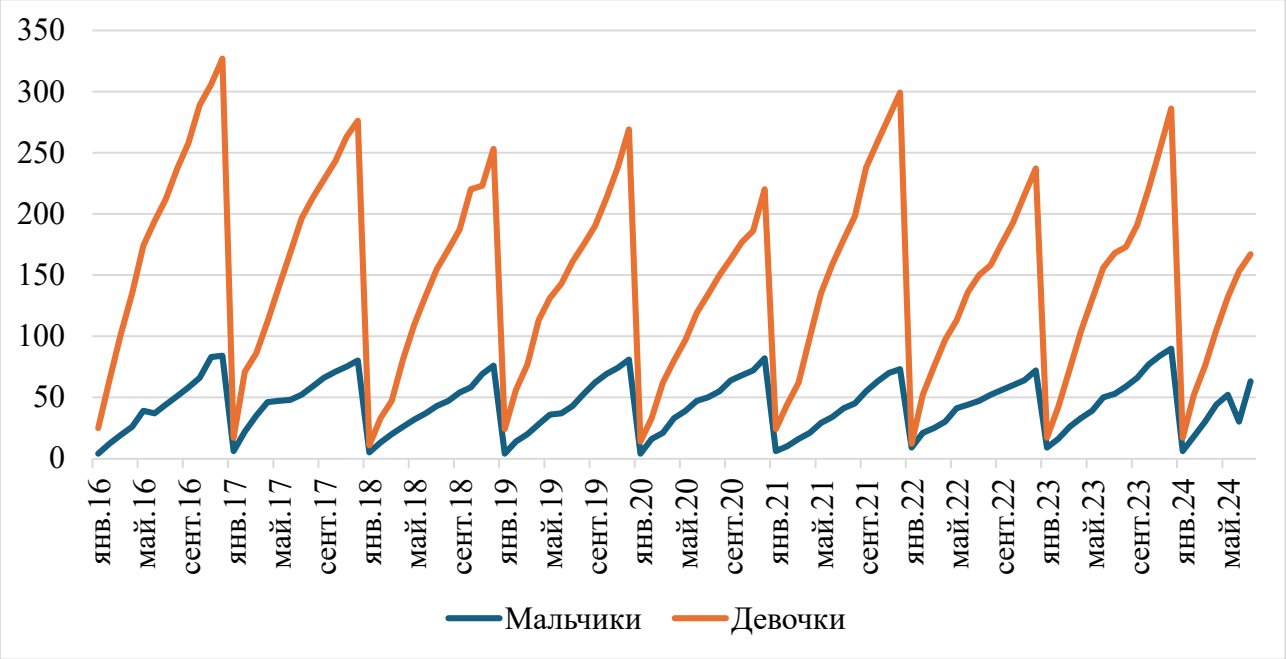

Рисунок 2. Детские и подростковые попытки суицида в Казахстане 2016-2024

Пик совершения суицидов из года в год приходится на Ноябрь. По мере приближения Нового Года и Января количество суицидов резко падает, но потом снова набирает обороты. Ученые из Греции [6] объясняют это нехваткой солнечного света. Более того, увеличение количества суицидов осенью можно объяснить Сезонным аффективным расстройством (далее – САР). Было предложено, что САР вызывается изменениями в выработке мелатонина, повышением кортизола и пролактина и недостатком серотонина. В совокупности данные факторы могут вызвать депрессивное состояние, которые может повлечь к совершению суицида [7].

Проводилось много исследований для выявления причин различий в количестве суицидов по половому признаку. По данным наиболее свежего исследования в Индии [8], есть несколько причин, почему мальчики совершают суицид чаще, чем девочки. Первая – особенности воспитания. Мальчиков чаще всего не в зависимости от культуры, религии и других факторов воспитывают быть «сильными». Вследствие этого они склонны держать эмоции в себе и не часто делятся с окружающими своими переживаниями. Вторая – нежелание обращаться к врачам. Исследование в Великобритании [9] показало, что только треть мужчин с психологическими проблемами обращаются за помощью к специалистам. Третья – мужчины более бесстрашны, когда речь заходит о нанесении себе физического вреда, чем женщины. Это же и касается эмоциональной составляющей суицида – мужчины более хладнокровны к чувствам близких им людей, чем женщины, которые чаще оберегают своих близких от чувства потери.

31 августа 2023 года Правительством РК был принят Комплексный план по защите детей от насилия, превенции суицида и обеспечению их прав и благополучия на 2023-2025 годы. Суть программы заключается в:

- проведении анализа программ и проектов по профилактике суицидов среди несовершеннолетних в Республике Казахстан и выработке рекомендаций;
- разработке и утверждении единого алгоритма выявления несовершеннолетних с признаками суицидального поведения и дальнейшей работы с ними;
- разработке и утверждении алгоритма действий государственных органов по оказанию помощи ребенку, совершившему попытку суицида;

• разработке и утверждении методических рекомендаций по оказанию психолого-педагогической помощи родителям обучающихся, совершивших попытку суицида;

• проведении информационно-разъяснительной работы по ограничению доступа к средствам совершения самоубийств (контроль за доступом на крыши, блокирование нежелательного контента, ответственное применение лекарственных препаратов);

• модернизации онлайн-кабинета психолога в части введения инструментариев для работы с детьми аутодеструктивного поведения;

• пересмотре программы содержания подготовки педагогов-психологов, психологов, социальных педагогов в организациях высшего и послевузовского образования;

• принятии модели по развитию психолого-педагогической службы в системе образования Республики Казахстан;

• адаптации для Республики Казахстан международного комплекта материалов программы "Содействие процветанию подростков и обучение педагогов-психологов образовательных учреждений";

• внесении изменений в типовые программы образования в части введения часов работы педагога-психолога с классом в рамках 40-часовой недельной нагрузки;

• создании областных и (или) районных центров психологической службы;

• создании объединений (лабораторий) практической психологии при организациях высшего и послевузовского образования;

• организации и проведении супервизии для педагогов-психологов, психологов, социальных педагогов организаций образования

• создании региональных межведомственных групп по изучению и квалификации фактов суицида среди несовершеннолетних

Помимо государственной инициативы по внедрению превентивных мер, с подростковым суицидом работают другие организации.

1. JANYM - анонимное оказание бесплатной онлайн психологической помощи молодежи от 11 до 18 лет на двух языках. Провели 74 279 консультаций. 5 психологов в штате.
2. Bilim Foundation - анонимное оказание бесплатной онлайн психологической помощи молодежи от 14 до 35 лет на двух языках. Провели 1 998 консультаций. 4 психолога в штате.
3. Sezim - проводят анонимные платные консультации для всех на двух языках. Провели 13 383 консультаций. 54 психолога в базе
4. Единый государственный контакт-центр «111 Аманат» по вопросам семьи, женщин и защиты прав детей – горячая линия. Работает круглосуточно и анонимно на двух языках для всех
5. Национальная телефонная линия доверия для детей и молодежи по номеру 150. Работает круглосуточно и анонимно на двух языках для всех
6. Телефон доверия 1303 Центра Психического здоровья. Работает круглосуточно и анонимно на двух языках для всех

В Казахстане пока еще нет единого установленного алгоритма профилактики детского суицида. Предпринимаются различные действия, направленные на идентификацию детей с суицидальными мыслями, но подобные тестирования детей могут вызвать негативные отклики от родителей. Во-первых, сами вопросы о суициде могут натолкнуть подростков на мысли о суициде. Во-вторых, так как тестирование не является абсолютно анонимным и результаты выдаются не только директору и родителям, но и психологам, классному руководителю, участковым и врачам, высок риск распространения информации. В-третьих, не учитывается эмоциональный фон опрашиваемых детей. В силу высокой эмоциональности

из-за гормонального фона подростки в зависимости от предшествующих тестированию событий могут отвечать предвзято.

В странах ближнего зарубежья также нет общеустановленного алгоритма профилактики детских и подростковых суицидов. Тем не менее, существует ряд рекомендаций по выявлению суицидально настроенных детей.

- уделять особое внимание изменениям в поведении несовершеннолетних;
- следить за участием детей в онлайн группах, посвященных суициду;
- тестирование детей на уровень стресса и напряженности;
- следить за публикуемым контентом детей в социальных сетях;
- вовлечь детей в групповые формы досуга;
- проведение профилактической работы с родителями;
- просветительская работа со стороны школьных учителей и психологов о важности ментального здоровья;

Также существуют различные тестирования, которые должны выявить предрасположенность детей к суицидальному поведению. Нижеприведенные методики позволяют оценить различные факторы психологического состояния подростков.

- Цветовой тест Люшера - дает оценку эмоционального состояния, уровня психической стабильности, выраженности переживаний и поведенческих особенностей в стрессовых ситуациях, а также склонности к депрессии и другим эмоциональным реакциям;
- Методика "Незаконченные предложения" - по ответам на незаконченные предложения можно сделать выводы о внутренних убеждениях, чувствах и мыслях человека;
- Опросник Г. Айзенка «Самооценка психических состояний личности» - помогает понять индивидуальные черты личности, уровень тревожности, агрессии, стрессоустойчивость и другие аспекты психического благополучия.
- Методика «Сигнал» - помогает выявить факторы, способствующие суицидальным мыслям, а также мотивацию для продолжения жизни
- Методика «Карта риска суицида» - помогает оценить степень выраженности факторов риска и может использоваться для раннего выявления и предотвращения потенциальных случаев суицида.

Обязательно стоит отметить, что результаты тестирования на склонность к суициду должны быть максимально конфиденциальными. Также они должны быть составлены таким образом, что не провоцируют мысли о суициде.

Ситуация в США:

Самоубийство является второй по частоте причиной смерти среди молодежи в возрасте от 10 до 24 лет в Соединенных Штатах, и его уровень растет на протяжении десятилетий. Уровень самоубийств среди детей и подростковой вырос на 62% с 2007 по 2021 год согласно отчету Центров по контролю и профилактике заболеваний (CDC) [10]. Данные из опроса 2019 года и Девиантном Поведении Среди Молодежи показали, что 8% старшеклассников серьезно думают о суициде, 9% старшеклассников пытались совершить суицид.

Американская Академия Педиатрии совместно с другими заинтересованными в решении проблемы организациями выявила, что необходимо разграничивать поддержку молодежи в зависимости от этнической принадлежности. По статистике, молодежи, относящаяся к меньшинствам, таким как черные, коренной народ США, латиноамериканцы, азиаты и представители LGBTQ2S+. Также было выявлено, что присутствует большая разница в доступе к услугам и удобствам между жителями сельской местности и городов. В связи с

этим необходимы различные подходы в проведении превентивных мероприятия по суицидам среди молодежи в зависимости от их места проживания.

Аналитики из США также выявили очень интересную закономерность: 80% подростков посещали врача в течение года до самоубийства. Она обращались из-за соматических жалоб – головные боли или боль в брюшной полости. Следовательно, изучение детей на этом этапе и проверка их на склонность к суициду может предотвратить их от совершения неотвратимых действий.

Учитывая все вышеперечисленные факторы, Американская Академия Педиатрии предлагает разделить мероприятия по противодействию детского и подросткового суицида на три категории:

1. первичная профилактика- направлена на всю целевую аудиторию. Профилактика будет проводиться путем распространения информации о важности психического здоровья, укрепление безопасности распространения сообщений в средствах массовой информации, сокращение доступа к смертоносным лекарственным средствам, расширение доступа к психологической помощи, проверка риска самоубийства при обращении в медицинские учреждения и проведение обязательного тренинга по диагностированию деструктивного поведения у детей и предотвращению самоубийств для всех работающих с молодежью взрослых.
2. профилактика группы повышенного риска – обучение и повышение квалификации специалистов, работающих с детьми из групп повышенного риска (исправительные учреждения, больницы, школы, детские дома)
3. профилактика детей с высоким риском самоубийства (выявленные через тестирования, либо попытавшиеся покончить с жизнью) – назначение специалиста для работы с семьей и ребенком

Американская Академия Педиатрии выявила несколько способов для уменьшения количества суицидов среди детей и подростков:

- обучение молодежи навыкая решения проблем и борьбы со стрессом;
- построение доверительных отношений внутри семьи, с друзьями и обществом;
- доступ к медицинской помощи;
- ограничение доступа к инструментам, которые могут быть использованы во время суицида

Рекомендации по изменениям в работе для достижения большего положительного эффекта

Проведение консультаций определенно несет в себе положительный эффект на снижение подросткового суицида в Казахстане, но для достижение масштабных изменений необходимо принять более системный подход. Иными словами, нужно работать не с последствиями, а с причинами, толкающих детей на совершение непоправимых действий.

Мероприятия, направленные на детей:

Во-первых, в школах необходимо ввести обязательный предмет или семинар, объясняющий детям, что происходит во время переходного периода не только с физиологической стороны, но и с психологической. Многие подростки не подготовлены к изменениям в своем организме, не знают, как относиться к ним и вынуждены испытывать психологическое напряжение от неожиданных перемен.

Во-вторых, также в школах рекомендуется ввести серию занятий по техникам преодоления стресса. Различные дыхательные практики, физическая активность, музыкальная терапия могут помочь подросткам органично пережить эмоциональные потрясения. В дополнение, необходимо добавить сценарные разборы различных ситуаций и рассказать детям, как поступать, когда возникают проблемы в семье, происходит буллинг, когда ссоришься с друзьями и т.д.

В-третьих, чувство одиночества негативно влияет на эмоциональное состояние детей. Для того, чтобы окружить ребенка знакомыми или друзьями, необходимо участие в групповых активностях – спорт, творчество, образовательные курсы. Не все родители могут позволить себе платные кружки. Более того, не во всех регионах есть доступ к подобному досугу. Следовательно, нужно продумать решение по созданию доступных групп занятий в регионах и городах.

В-четвертых, JANYM запускает серию бесплатных youtube видео-роликов для личностного роста детей и подростков. Основная цель – чтобы дети осознали свою ценность в этом мире и нашли ключ к развитию необходимых навыков.

Далее, JANYM планирует создать платформу для детей и подростков, где каждый мог бы поделиться своими мыслями, переживаниями, идеями. Зачастую детей не слышат, и им

Мероприятия, направленные на учителей:

Во-первых, необходимо обучить классных руководителей и остальных учителей как выявлять предсуицидальное настроение у детей.

Во-вторых, преподаватели и руководство школы должны научиться вести диалог с детьми касательно их проблем.

Мероприятия, направленные на родителей:

Нужно разработать методику мастер-класса для родителей, чтобы родители понимали, что эмоциональное состояние дома крайне важно для детей. Подросткам требуется не сколько механическая забота (приготовили обед, погладили одежду, оплатили школу), но и внимание родителей, проявление любви, разговоры без страха признаться в своих переживаниях.

Как и случае с учителями, нужно чтобы между родителями и детьми также мог состояться диалог касательно существующих проблем. Ни в коим случае нельзя обесценивать чувства детей и их эмоции. Самое главное – показать, что родитель любит своего ребенка несмотря ни на что.

Не менее важно, обеспечить самих родителей качественными психологическими консультациями. Чаще всего, на практике специалисты JANYM замечают, что родители не видят проблему в себе. Им кажется, что раз они сумели пережить более нестабильные экономически и политически времена, то детям и жаловаться нечего.

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Psychological characteristics of the personality development

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Abstract: There are various classifications of age development, and the corresponding ideas about youth are different. In classical psychology, youth is defined by age boundaries from 21 to 33 years. This period involves the individual solving several developmental problems at once, which leads to the emergence of a new formation of youth - the achievement of social maturity. Maturity is determined based on the content of the tasks of each specific age stage. The period of youth is characterized by the first collision of the individual with reality, requires the manifestation of qualities conditioned by biological, social factors of development, as well as the development of the internal position of the individual, influencing not only the individual in a specific age period, but also the entire previous stage of its development and formation.
Mental development of the personality, its specific features is discussed in this study.
Keywords: mental development, youth population, specific age period, social maturity

According to literature the contact of the individual with the demands of the surrounding world can be painful if the individual's ideas do not correspond to reality. L. I. Bozhovich reveals the problem of "the formation of a need at an earlier age stage, including the formation of the personal-meaningful sphere". It is the need for self-determination that underlies the search for meaning not only during youth, but also at subsequent age stages. The crisis that ends the period of youth offers the individual in youth an opportunity for further development. The individual experiencing a crisis studies his inner world, acquires a new attitude toward loneliness, communication, and begins to perceive the present, past, and future differently.
V.S. Mukhina describes the “structure of self-awareness of the individual”. Thanks to outstanding domestic and foreign scientists of the last century, modern science has good prerequisites for further scientific research on the development of young people in new socio-economic conditions, taking into account not only Russian and world standards, but also at the regional level, which is very relevant. Conducting this kind of long-term research for this work has created a favorable basis for obtaining a holistic idea of the personal properties of the average young person living in special cultural, social and natural conditions. The systemic approach of V.S. Mukhina, as well as the complex structural-systemic approach of B.G. Ananyev, L.S. Vygotsky, the theoretical and empirical material of which is far from exhausted, gives confidence that the specificity of the personal properties of young people is formed in the format of a research triad, including biogenesis, sociogenesis and systemogenesis. Researchers disagree on the definition of the boundaries of youth. Thus, according to D. Birren, youth lasts from 17 to 25 years, according to D. Bromel, youth lasts from 21 to 25 years, according to V.V. Bunak, the period of youth is from 25 to 35 years, according to D. Veksler, this period begins at 20 and lasts until 35 years.
These authors call the period of time lived as "youth", "late adolescence", "early adulthood". However, there is a single point of view, according to which the period from 18 to 25 years is the time of the beginning of the mature period of a person's life, during which the individual character of the passage of life is emphasized.
There are various points of view on the definition of the concept of "youth" or "youth":
- biogenetic theory, according to which youth is a stage of development of the organism, which is characterized by a strong growth of various functions and abilities, as well as achievements;

- psychoanalytic, according to which youth is a certain stage of psychosexual development, a time when the influx of intense libido energy is compensated by defense mechanisms;
- psychosocial theory of E. Erikson, according to which during the period of youth the central task of achieving identity is solved, and consistent images of oneself are created in a condition of multiple choice;
- sociological, according to which youth is a certain stage of socialization, as well as the transition from childhood to responsible activity and independence of an adult;
- psychological, according to which during the period of youth, the features of the inner world are formed, as well as the self-awareness of the maturing individual.

To sum up the problem, consideration of the concept of the specificity of the personal characteristics of young people allowed us to outline a range of issues that are directly related to it. Moreover it lets the study to understand its specificity, to see the stable and historically variable in the psychology of a young person, to distinguish between phenomena, their interpretation from the point of view of different scientific concepts, to better understand the approach to the problem of the psychology of youth.

Particular attention was paid to the cognitive development of the individual, which contributes to the formation of a meaningful image of the world, which is a key issue from the point of view of the philosophy of education, which it is planned to cover in the future researches.

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Architecture

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HISTORY OF THE INTERPRETATION OF ART AND ARCHITECTURE

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Annotation. *This article examines the interpretation of art and architecture, focusing on the subjective nature of interpretation and how it depends on the viewer`s understanding and cultural context. The history of art interpretation should be understood as the study of the meaning of a work of art, which may include its historical, cultural, social as well as political context. Similarly, the interpretation of architecture involves analysing components such as the meaning of a building`s design, style and construction. Architecture has evolved to reflect changing ideals and attitudes in the modern period. The Industrial Revolution led to the development of new materials and building processes, giving rise to new architectural styles such as Art Nouveau and Art Deco.*

Keywords: *art; architecture; famous architects; artworks.*

Throughout the history of humankind as a whole, there has been a close relationship between art and architecture, which has been strengthening year be year. Both art and architecture involve the creation of tangible forms that are appreciated by other people. Although the primary purpose of art is to evoke an emotional response or to present a certain concept to the public, in architecture a building also serves a utilitarian purpose, providing shelter, security and space. Despite all their differences, art and architecture share many common characteristics, including form, space, colour and structure.

Both art and architecture can be interpreted, and their meaning and relevance often depend on the cultural, social and historical context of the viewer. Moreover, both art and architecture can represent the values and ideas of a society or culture. Art and architecture have in certain situations been created as part of the same project, with artists and architects as an artist emerged throughout the Italian Renaissance, with luminaries such as Leonardo da Vinci and Michelangelo acted as both artists and architects.

In some situations, artists incorporated architectural elements into their work, including arches and columns in Baroque and Neoclassical paintings. Overall, art and architecture have a complex and interdisciplinary relationship, with both disciplines influencing and inspiring each other throughout history. Artistic interpretation is a subjective process that involves the investigation of the meaning and importance of a work of art. This method may include an examination of the historical, cultural, social and political context of the work of art, as well as the artist`s own views and goals [1].

Understanding the visual language of a work of art is an important component of comprehending it. This involves considering the artist`s use of hue, form, formulation and composition, and in addition, the materials and techniques that he or she uses. Moreover, the observer needs to assess how the artwork interacts with its surroundings, particularly the physical context in which it is placed.

Another essential part of artistic analysis considers the artist`s purpose, and the circumstances under which the artwork was created. This may require exploring the artist`s biography, perceptions and experiences, furthermore the social and political context in which the artwork was created. By understanding these characteristics, one can gain a deeper comprehension of the artwork`s meaning and its significance, as well as its relationship to the broader cultural, historical and social context in which it was produced [2]. It is also important to recognize that perception is subjective and can very depending on the cultural, social and historical background of the audience. Two viewers can have very different perspectives on the same work of art, but both can be valid.

For example, Pablo Picasso`s famous work “Les Demoiselles d`Avignon” is considered a turning point in the evolution of modern art. The painting depicts five nude female figures, each in a highly stylized and abstract style. The work`s angular forms, vibrant hues and distorted perspectives challenge traditional notions of beauty and reality. “Les Demoiselles d`Avignon” serves as an example of how oral translation is key to the innovative experience. The artwork has been subject to numerous interpretations over the years, with critics and scholars offering various explanations for its meaning. Some have interpreted the work as a critique of female objectification, while others have viewed it as a celebration of female femininity.

However, one of the most prevalent views of “Les Demoiselles d`Avignon” is that it symbolizes a sharp departure from traditional forms of art and a rejection of the premise that art must depict the visible world. Picasso`s use of abstraction and distortion challenged the conventional view of art as a reflection of reality, paving the way for the rise of modernism. Picasso`s painting allows viewers to engage with the work on a deeper level, exploring the numerous meanings and interpretations it can yield, questioning standard concept of beauty and representation. The work further highlights the interconnectedness of multiple forms of artistic expression and how art and architecture can influence and inspire each other [3].

Picture 1 – Pablo Picasso`s painting “Les Demoiselles d`Avignon”

Exegesis architecture is deciphering the meaning of a building`s design, style and construction. Architecture, much like art, is open to analysis by different observers or critics, who may see different meanings or messages in the same structure [3]. Understanding architecture requires considering various factors, including its historical, cultural, social and political context, as well as the architect`s own perspectives and intentions.

Delving the historical context of a structure is a crucial part of its analysis. This may involve considering the era in which the structure was built, as well as the cultural and social influences

that shaped its design. Another factor to take into account when understanding architects have developed a distinctive style that reflects their viewpoints, values and cultural heritage.

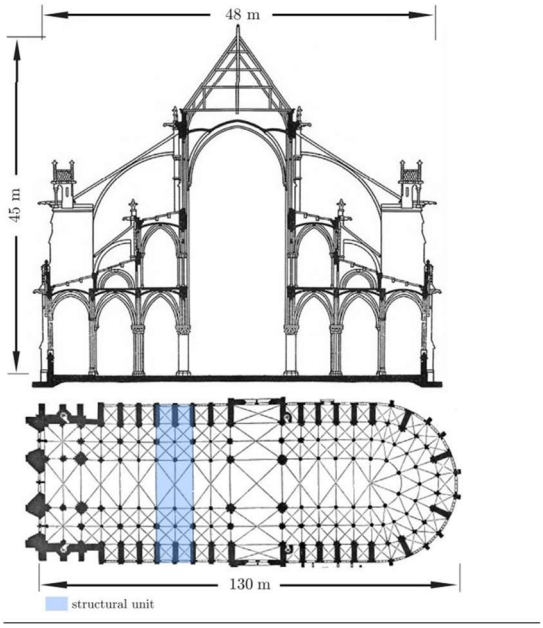
The cultural and social background of a structure can also influence its interpretation. For instance, the architecture of a government building may reflect the ideals and interests of the ruling party, as well as the current political atmosphere. Similarly, the design of a religious structure may reflect the beliefs and practices of a particular culture. Finally, architectural perception is subjective and depends on the viewer`s understanding and cultural context. Depending on their subjective experiences and beliefs, the same architecture may generate different meanings or perceptions in different viewers. Nevertheless, it is possible to gain a deeper knowledge of the meaning and value of a building by exploring the historical, cultural and personal circumstances that influenced its design and construction. The Gothic cathedrals of Europe, such as Notre Dame de Paris, are considered some of the most iconic and significant architectural masterpieces in history.

The Medieval period was a time steeped in spiritual ideas and ideals. As a result, they are often rich with symbolic and metaphorical meanings that can be explained in various ways. Notre-Dame de Paris is a prime example of an architectural interpretation. Constructed between 1163 and 1345, the cathedral has been repeatedly repaired and extended over the centuries. Its design was influenced by the Gothic style, characterized by pointed arches, ribbed vaults, and flying buttresses. However, Notre-Dame de Paris also features several statues, stained-glass windows, and other decorative elements designed to express the cathedral`s symbolic and mystical value [4].

Examining the symbolic meaning of Notre-Dame de Paris is one way to elucidate it. For instance, the cathedral`s three doorways depict the three tiers of Christian society: the peasants, the clergy and the nobility. The sculptures on the entrances represent biblical events and allegorical figures conveying moral and spiritual values. The rose window positioned above the central doorway depicts the Eye of God and serves as a symbol of divine vigilance.

Another approach to understanding Notre-Dame de Paris is to consider its historical and cultural context. The cathedral was built during a period of immense upheaval in Europe, when wars, epidemics and social instability contributed to the shaping of beliefs and ideals. Consequently, the cathedral`s architecture reflects not only its spiritual significance but also the social and cultural ideals of Medieval Europe [4].

Appreciating Notre-Dame de Paris as an example of Gothic architecture necessitates examining of the cathedral`s meaning and importance can be achieved by exploring its historical, cultural and spiritual relevance. A deeper comprehension of the cathedral`s definition and conspicuousness can be better understood by also examining its architecture, symbolism and historical context.



Picture 2 – Notre-Dame Cathedral, cross-section (top) and plan view (bottom), after the reconstruction initiated in 1225 and the restoration by Viollet-le-Duc in the 19th century [4]

Frank Lloyd Wright`s “Fallingwater” is a great example of how various aspects, such as an architect`s personal view, historical context, and the surrounding environment, can influence the understanding of a building. Fallingwater, also known as the Kaufman Residence, was built in 1935 in southwestern Pennsylvania and is considered one of Frank Lloyd Wright`s finest works [5].

How Wright utilized the surrounding environmental to shape his design is a key component in the interpretation of Fallingwater. The house was built directly over a waterfall, and its architecture blends harmoniously with the local landscape, blurring the line between interior and exterior space. Fallingwater exemplifies Wright`s belief in the need to build in harmony with nature. Another important aspect of the interpretation of Fallingwater is how it represents the historical background of the 1930s [5]. The Great Depression was a period of economic hardship and uncertainty, and many people questioned societal norms and foundations. Wright`s organic design, emphasizing the value of nature and the unity of all living things, presented a new vision that many people found appealing at the time. Wright`s own ideas and goals can also influence the reading of Fallingwater. Wright was known for his idiosyncratic approach to architecture and his desire to create unique, personalized environments for his clientele. Fallingwater was created specifically for the Kaufmann family, wealthy department store owners in Pittsburgh. Wright incorporated his own interests and way of life into the design, resulting in a house specifically tailored to their needs and desires.

Picture 3 – Frank Lloyd Wright`s “Fallingwater” [5]

The Guangzhou Opera House, designed by Zaha Hadid, exemplifies the varied ways in which architecture can be understood and appreciated. The building in Guangzhou, China, was completed in 2010 and is known for its distinctive futuristic architecture. One interpretation suggests that the Guangzhou Opera House demonstrates China`s desire to be perceived as a modern and progressive nation [6]. The structure`s futuristic style, with its smooth curves and metallic façade, can be interpreted as a representation of China`s technological advancements and future aspirations. Another viewpoint is that the Guangzhou Opera House reflects and cultural and historical context of its surroundings. Guangzhou is known for its rich cultural past, and the Opera House`s design incorporates elements of traditional Chinese architecture, such as smooth roof lines and undulating walls. The Guangzhou Opera House reflects the cultural and historical character of Guangzhou while simultaneously showcasing its modernity by blending traditional and contemporary aspects. The Guangzhou Opera House is also a manifestation of Zaha Hadid`s own views and design philosophy. This building is no exception to Hadid`s innovative and forward-thinking concepts. Its organic shape, characterized by flowing curves and undulating patterns, embodies her conviction about the significance of movement and fluidity in architecture.

Picture 4 – Zaha Hadid`s Guangzhou Opera House [6]

The transition from the old to the modern period in art and architecture can be illustrated through the evolution of iconic works such as “Les Demoiselles d`Avignon”, the Gothic Notre-Dame Cathedral, Frank Lloyd Wright`s “Fallingwater”, and Zaha Hadid`s Guangzhou Opera House.

“Les Demoiselles d`Avignon”, painted by Pablo Picasso in 1907, represents a shift towards modernism in art. The painting is highly abstract and non-representation, depicting five nude women in a fragmented and disjointed style. Its use of colour and form challenges traditional

conventions of composition and narrative, reflecting the growing emphasis on expressionism and abstraction in modern art.

Similarly, the shift from pre-modernist architecture to modern architecture can be observed in the evolution of iconic structures such as Notre-Dame Cathedral and Fallingwater. Notre-Dame Cathedral, built in the Gothic style during the Medieval period, is a monumental example of pre-modern architecture. The Cathedral is characterized by pointed arches, ribbed vaults, and flying buttresses, creating a sense of verticality and grandeur. Its design pre-modern emphasis on symmetry, proportion and classical forms.

In contrast, Fallingwater designed by Frank Lloyd Wright in 1935, signifies a transition towards modernism in architecture. Situated on a hillside, the house features natural materials like stone and wood. The incorporation of cantilevered balconies and open floor plans highlights an increasing focus on functionality and simplicity within modern architectural design.

Zaha Hadid`s Guangzhou Opera House, completed in 2010, exemplifies the transition from pre-modernist to modern architectural styles. The building is distinguished by its fluid forms, challenging traditional notions of symmetry and proportion. Its incorporation of innovative material, such as glass and steel, reflects the increasing emphasis on modern technology and materials in contemporary architecture.

The shift from traditional to modern periods in art and architecture reflects broader cultural and societal changes as well as the evolving beliefs and values of artists and architects. Examining the evolution of such iconic work as “Les Demoiselles d`Avignon”, Notre-Dame Cathedral, Fallingwater, A=and the Guangzhou Opera House, we gain deeper understanding of how art and architecture have developed over time and the influence they have exerted on society and culture. Several key factors contribute to the interpretation or understanding of art and architecture:

1. Personal Experience and Background. Each individual brings unique experiences, beliefs, and values to the process of interpretation. These personal factors shape how people perceive and understand art and architecture. Different cultural, educational and social backgrounds can lead to contrasting perspectives.

2. Historical and Cultural Context. The historical and cultural context in which an artwork or architectural structure is created plays a crucial role in its interpretation. Historical events, social norms, artistic movements and cultural traditions influence the meaning and significance attributed to these forms of expression. Understanding art and architecture often relies on knowledge of the historical and cultural context from which they emerged.

3. Subject Matter and Symbolism. The choice of subject matter and the use of symbolism in art and architecture are integral to their understanding. Symbolic elements, metaphors, allegories, and visual representation convey meaning and evoke emotions. Different viewers may interpret these symbols and their meanings in distinct ways, leading to diverse explanations.

4. Artist`s Intent. The intent and motivations of the artist or architect behind a particular work influence its reading. Artists may have specific messages, ideas, or emotions they wish to convey through their creations. However, it`s important to note that the artist`s intent may not always align with the viewer`s interpretation, as the latter is subjective and can be influenced by other factors.

5. Sociopolitical Influences. The sociopolitical climate and ideologies prevalent during the creation and reception of art and architecture can shape views. Artists and architects often respond to social issues, political movements, or cultural debates through their works, which can be interpreted and analyzed within the context of these influences.

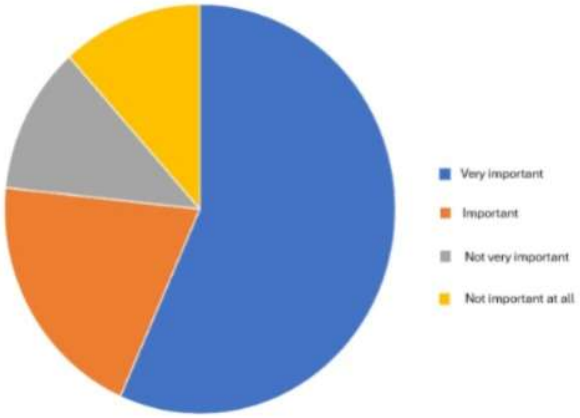
6. Visual Elements and Design Principles. In that case of architecture, the design elements, principles, and aesthetic choices employed by architects impact the perception of the structure.

Factors such as form, materials, scale, symmetry, and spatial organization contribute to the overall perception and meaning attributed to architectural projects.

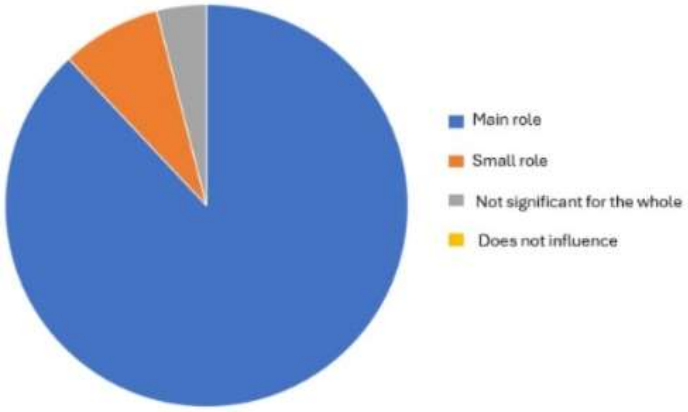
7. Contemporary Discourse and Critical Theory. Interpretations of art and architecture are influenced by current discourses and critical theories within the field. Academic scholarship, art history, architectural theory and cultural analysis contribute to shaping understanding, providing frameworks, methodologies, and analytical tools for understanding and contextualizing these forms of expression. [7]

This research employed a survey methodology designed to capture a representative sample and ensure that the analysis accounts for diverse perspectives. The survey aimed to unveil a range of viewpoint within the social context by addressing the following questions:

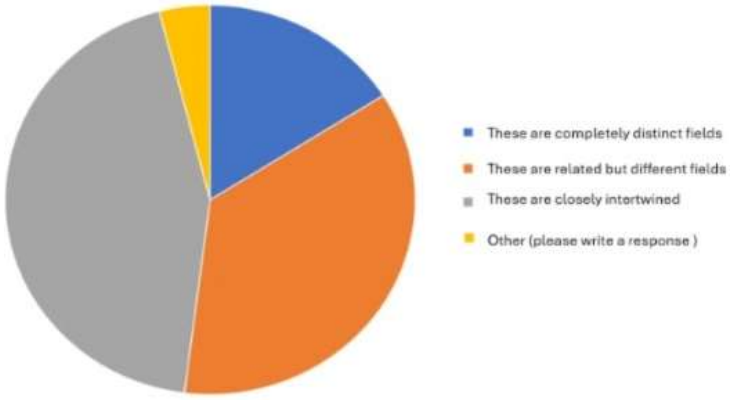
1) To what extent to you believe that art and architecture are essential to our society?



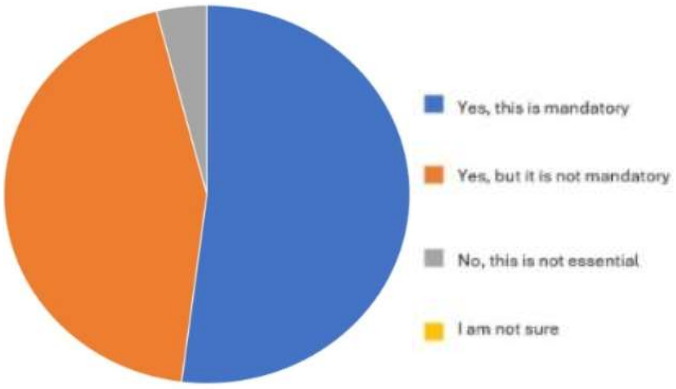
2) What role do you believe art and architecture play in shaping and reflecting cultural values?



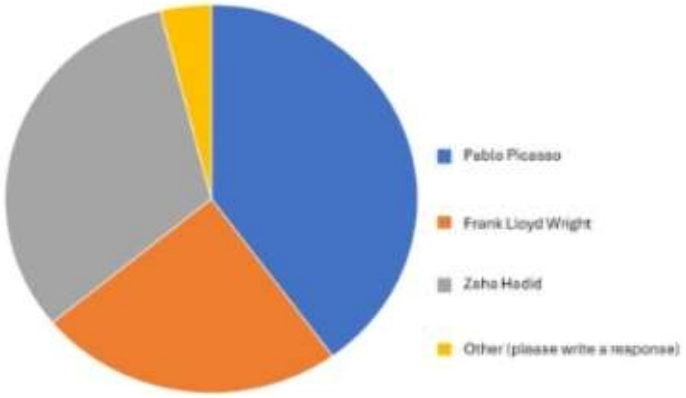
3) How do you define the relationship between art and architecture?



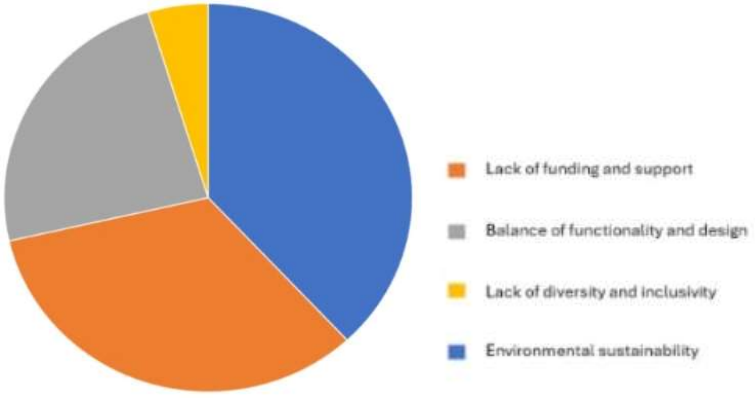
4) Do you believe that an understanding of art and architecture should be a component of education?



5) Which artist or architect do you admire most?

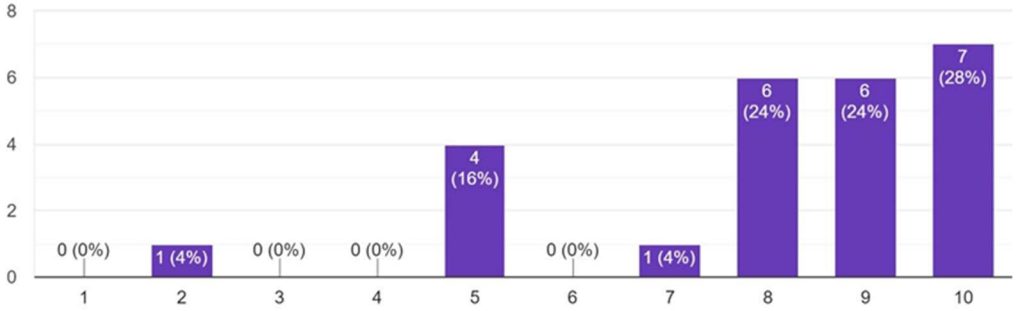


6) What do you perceive as the most significant challenge facing the fields of art and architecture today?

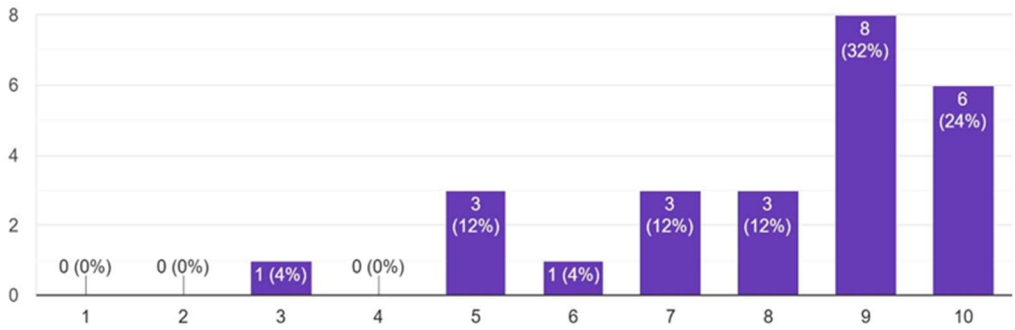


7) On a scale of 1 to 10, how crucial do you consider interpretation to be in evaluating and understanding a work of art or architecture?

8)



9) On a scale of 1 to 10, how strongly do you agree with the statement: “The interpretation of a work of art or architecture is subjective and can vary significantly depending on the viewer`s perspective and cultural background?”



Interpretation of art and architecture constitutes a multifaceted and complex field of inquiry, encompassing a myriad of approaches and perspectives. Throughout history, humans have sought to express themselves through creative endeavors, with art and architecture serving as profound vehicles of communication and self-expression.

Examining examples such as “Les Demoiselles d`Avignon”, Notre-Dame Cathedral, Fallingwater and Guangzhou Opera House reveals the evolution of art and architecture across time, highlighting shifts in cultural, social and technological contexts. From the realistic depictions of the Renaissance to the abstract forms of Cubism, from the intricate embellishments of Gothic architecture to the fluid lines of parametric design, art and architecture have consistently pushed the boundaries of creativity and innovation.

Furthermore, analyzing these examples underscores the importance of considering numerous parameters, such as colour, design, theory and purpose, when interpreting art and architecture. These parameters offer insights into the cultural and historical underpinnings that have shaped artistic and architectural movements, as well as the intentions and motivations behind the work.

Ultimately, appreciation of art and architecture presents a rich and multifaceted lens through which to view the world, emphasizing the boundless creativity and ingenuity of art and architecture. It provides an opportunity to appreciate the beauty and complexity of our built environment, as well as the historical and cultural contexts that have shaped it.

Comparing the history of art and architectural interpretation reveals several significant insights:

1. Interpretation as a Dynamic Process:

Interpretation is not static or unchanging. It evolves under the influence of new knowledge, ideas and contexts. Comparing views across different eras can provide a deeper understanding of how perspectives on art and architecture have shifted over time.

2. Common Trends in Interpretation:

Comparing interpretations across different periods can uncover common methodologies, such as analysis of form, content, iconography and context. These shared trends might be linked to overarching factors influencing interpretation, such as cultural, social, political and religious transformations.

3. Distinctive Features of Art and Architecture5al Interpretation:

Comparison can illuminate how art and architecture are interpreted using methods owing to their unique characteristics. These features might be tied to various factors, such as materials, technologies and functions.

4. The Multifaceted Nature of Interpretation:

Comparing interpretations of the same work of art or architecture reveals their potential diversity. This multifaceted nature might stem from factors such as contexts, social functions and individual perception.

5. Comparison as a Valuable Tool:

Comparison can contribute to the attribution of art and architectural works. It can assist in the restoration of these works. Additionally, comparison can serve educational purposes, helping students comprehend art and architecture more effectively.

6. Comparison as a Source of Inspiration:

Comparison can offer fresh, unexpected perspectives on art and architecture. It can stimulate critical thinking and encourage deeper analysis of artistic and architectural works.

It`s crucial to acknowledge that comparing the history of art and architectural action is not an exact science. No single correct method of interpretation exists. While comparison can expose diverse viewpoints, it cannot provide definitive answers.

Nonetheless, comparing the history of art and architectural interpretation remains a valuable tool for gaining a more profound understanding of art, architecture and their place within history and culture.

Comparing the history of art and architecture interpretation serves several valuable purposes:

1. Unveiling Shared Trends:

Common Interpretative Methods: Comparing how art and architecture were interpreted across different eras can reveal shared methodologies, such as analysis of form, content, iconography and context.

Overarching Factors Influencing Interpretation: Comparison can identify overarching factors that influence view, such as cultural, social, political and religious shifts.

Evolution of Interpretation: By comparing interpretations across different periods, we can trace the evolution of perspectives on art and architecture.

2. Demonstrating Divergences:

Specific Interpretative Methods: Comparison can showcase how art and architecture are interpreted using distinct methods due to their unique characteristics.

Impact of Diverse Factors: Comparison can demonstrate how different factors (such as materials, technologies and functions) influence the understanding of art and architecture differently.

Variety of Interpretation: Comparing interpretations of the same work of art or architecture highlights the potential for diverse perspectives, underscoring the need for comparative analysis.

3. Understanding Interconnections:

Mutual Influence: Comparison can help understand how art and architecture mutually influence each other`s interpretation.

Cultural Context: Comparison can reveal how art and architecture reflect and shape the cultural context in which they are created and interpreted.

Social Functions: Comparison can demonstrate how art and architecture fulfill various social functions and how interpretation is linked to these functions.

4. Broadening Perspectives:

Novel Perspectives: Comparison can offer fresh, unexpected viewpoints on art and architecture.

Crucial Thinking: Comparison can stimulate critical thinking and encourage deeper analysis of artistic and architectural works.

Interdisciplinary Approach: Comparison can foster an interdisciplinary approach to the study of art and architecture, integrating, methodologies from art history, architecture, philosophy, history and other disciplines.

Comparison of the history of art and architectural interpretation proves a fruitful method of inquiry, leading to new discoveries and a deeper understanding of both the works themselves and their place within history and culture.

Examples of Comparative Analysis:

Comparing the interpretation of ancient sculpture during the 19th Renaissance and the 20th century.

Comparing the interpretation of Gothic architecture in the 19th century and the 21th century.

Comparing the interpretation of Abstract Expressionism in the United Stated and Europe.

It is important to stress that the study of art and architectural history is not a static process. Our understanding of these fields is fluid, constantly evolving with new knowledge, ideas and contexts. As a result, examining perspectives from different eras allows us not only to comprehend the past, but also to gain insights into the present and reimagine the future of art and architecture.

The dynamic quality highlights that our understanding of art and architecture is continuously progressing. As we encounter new information, develop new theories and experience shifts in our cultural landscape, our perception of these creative endeavors changes with it. By comparing interpretations across different periods, we gain a deeper appreciation for the richness and complexity of these fields, acknowledging that they are not fixed or immutable bur rather fluid and perpetually in motion.

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Pedagogical Sciences

Формирование навыков кибербезопасности у школьников

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Аннотация:
Формирование навыков кибербезопасности у школьников является актуальной задачей современной образовательной системы. В статье рассматриваются основные аспекты обучения школьников основам кибербезопасности, а также требования к учебным программам, направленным на развитие данных навыков. В статье предложены подходы к интеграции основ кибербезопасности в образовательные программы, а также методики, способствующие эффективному усвоению школьниками правил безопасного поведения в цифровой среде.

Ключевые слова: кибербезопасность, школьники, цифровая грамотность, обучение, защита данных.

Введение

С каждым годом интернет и цифровые технологии становятся неотъемлемой частью жизни современных школьников. Мобильные устройства, компьютеры и различные онлайн-сервисы активно используются не только для развлечения, но и для обучения. Однако наряду с преимуществами, цифровая среда несёт в себе и множество угроз, таких как мошенничество, хищение персональных данных, кибербуллинг и вредоносные программы. Формирование навыков кибербезопасности у школьников становится одной из приоритетных задач современной школы.

Цель данной статьи – рассмотреть требования к формированию навыков кибербезопасности у школьников, а также предложить практические рекомендации по организации учебного процесса с учётом современных цифровых вызовов.

1. Необходимость формирования навыков кибербезопасности

1.1 Угрозы цифрового мира для школьников

Школьники, как активные пользователи интернета, подвержены множеству угроз. Среди основных рисков можно выделить:

- **Фишинг** – мошеннические попытки получения личной информации.
- **Кибербуллинг** – травля в интернете, которая может привести к психологическим последствиям.
- **Злоумышленники** – распространение вредоносных программ и вирусов.
- **Неэтичное поведение в интернете** – создание негативного цифрового следа.

1.2 Исторический аспект развития киберугроз

С развитием технологий и массовым распространением интернета изменялись и эволюционировали виды киберугроз. Для более глубокого понимания этой эволюции важно

рассмотреть ключевые этапы и изменения в угрозах, а также их влияние на пользователей, особенно детей.

1.3 Кибербуллинг

- Определение кибербуллинга: Кибербуллинг — это форма агрессии, осуществляемая через цифровые каналы, такие как социальные сети, мессенджеры, форумы и игровые платформы. Это может проявляться в виде оскорблений, запугивания, распространения слухов, угроз или публикации уничижительных материалов.
- Типы кибербуллинга: Включает прямое агрессивное поведение (нападения, угрозы) и косвенное (изоляция, игнорирование, манипуляции). Под воздействием кибербуллинга может быть как индивидуум, так и группа.

Психологические последствия:

- Психологическое здоровье: Кибербуллинг может приводить к низкой самооценке, тревожности, депрессии, и даже суицидальным мыслям. Исследования показывают, что дети, подвергшиеся кибербуллингу, имеют повышенный риск развития психических расстройств.
- Психосоматические реакции: Дети, переживающие кибербуллинг, могут испытывать головные боли, проблемы с желудком и бессонницу. Эти симптомы могут проявляться в реакциях на стресс и тревогу.

Социальные последствия:

- Социальная изоляция: Пострадавшие от кибербуллинга часто начинают избегать социальных взаимодействий, что может привести к изоляции и трудностям в установлении и поддержании дружеских отношений.
- Снижение академической успеваемости: Стресс и тревожность, вызванные кибербуллингом, могут негативно сказаться на учебной мотивации и успеваемости. Исследования показывают, что пострадавшие от буллинга могут демонстрировать пониженные результаты в учебе.

2. Утечка данных

- Определение утечки данных: Утечка данных — это несанкционированный доступ к личной информации, который может быть использован для мошенничества или нанесения ущерба. В контексте школьников это может включать утечку данных из социальных сетей, школьных систем или образовательных приложений.
- Методы и последствия: Утечка данных может произойти через взлом аккаунтов, несанкционированный доступ к системам или недостаточную защиту личной информации. Последствия могут варьироваться от финансовых потерь до нарушения личной безопасности.

Психологические последствия:

- Тревожность и стресс: Узнав о нарушении безопасности своих данных, дети могут испытывать значительный стресс и тревогу. Это может проявляться в постоянных мыслях о возможном мошенничестве или угрозах.
- Нарушение чувства безопасности: Пострадавшие от утечки данных могут ощущать себя уязвимыми и небезопасными, что может привести к общему снижению чувства безопасности и доверия к окружающим.

Социальные последствия:

- **Стигматизация и унижение**: Дети могут подвергаться осуждению и насмешкам со стороны сверстников, что усугубляет социальную изоляцию и чувство стыда.
- **Финансовые трудности**: В случае утечки данных, связанной с финансовыми аспектами, дети и их семьи могут столкнуться с финансовыми трудностями, что может негативно сказаться на семейных отношениях и социальной адаптации.

1.4 Кибермошенничество

- **Определение кибермошенничества**: Кибермошенничество включает в себя действия мошенников, направленные на обман пользователей с целью получения финансовой выгоды или личной информации. В контексте школьников это может включать мошеннические схемы, обманные онлайн-игры, фальшивые покупки и т.д.
- **Методы мошенничества**: Мошенники могут использовать фальшивые веб-сайты, поддельные электронные письма или социальные сети для манипуляций и обмана.

Психологические последствия:

- **Чувство вины и стыда**: Если школьники становятся жертвами кибермошенничества, они могут испытывать чувство вины и стыда за свою наивность. Это может повлиять на их самооценку и психическое состояние.
- **Тревога и стресс**: Ощущение потери и финансового ущерба может вызывать высокий уровень стресса и беспокойства. Это может проявляться в эмоциональной нестабильности и проблемах со сном.

Социальные последствия:

- **Потеря доверия**: Дети могут потерять доверие к цифровым платформам и интернету, что затрудняет их участие в онлайн-активностях и социальном взаимодействии.
- **Финансовые трудности для семьи**: Если мошенничество затрагивает финансовые ресурсы, это может создать дополнительные нагрузки на семью и привести к конфликтам и напряжённости в семейных отношениях.

1.5 Значение кибербезопасности в образовательном процессе

Кибербезопасность – это совокупность правил и практик, направленных на обеспечение безопасного использования информационных технологий. Развитие цифровой грамотности среди школьников становится важным аспектом их общей безопасности. Помимо базовых знаний о защите информации, учащимся необходимо развивать навыки критического мышления и осознанного использования интернета.

2. Требования к формированию навыков кибербезопасности

2.1 Государственные образовательные стандарты

Существующие образовательные стандарты должны включать элементы кибербезопасности на всех уровнях школьного обучения. Важно, чтобы программы предусматривали:

- **Интеграцию основ кибербезопасности** в различные учебные предметы, такие как информатика, обществознание и даже литература.

- **Разработку интерактивных методик** обучения, направленных на активное вовлечение школьников в процесс изучения правил безопасности в интернете.

2.2 Роль учителей и родителей

Учителя и родители играют ключевую роль в процессе формирования навыков кибербезопасности у детей. Учителя должны не только обучать школьников правилам работы с информацией в интернете, но и развивать у них навыки самозащиты. Родители, в свою очередь, могут поддерживать этот процесс, контролируя использование детьми интернета и обучая их ответственному поведению в сети.

3. Подходы к обучению школьников кибербезопасности

3.1 Интерактивные методы

Один из эффективных методов обучения кибербезопасности – использование игровых технологий. Интерактивные задания, симуляции и кейсы позволяют школьникам на практике закрепить теоретические знания. Например, игра, имитирующая реальную угрозу фишинга, может помочь учащимся распознавать мошеннические сайты и электронные письма.

3.2 Внедрение проектной деятельности

Проектная деятельность, связанная с кибербезопасностью, способствует углублению знаний школьников и развитию у них практических навыков. В рамках таких проектов учащиеся могут разрабатывать свои собственные рекомендации по безопасному поведению в интернете, проводить исследования угроз цифровой среды или создавать обучающие материалы для сверстников.

3.3 Внеклассные мероприятия

Школы могут организовывать внеклассные мероприятия, направленные на повышение уровня осведомлённости школьников о киберугрозах. Проведение тематических конкурсов, выставок и тренингов по кибербезопасности станет не только полезным, но и интересным для учеников.

4. Примеры эффективных программ

Существуют различные программы, направленные на обучение школьников кибербезопасности. Одной из таких программ является проект "Цифровой гражданин", который успешно интегрируется в учебные программы многих школ. В рамках этого проекта школьникам предлагается изучать основы кибербезопасности через игровую форму, а также применять полученные знания на практике.

Другой успешный пример – "КиберУмник", программа, направленная на формирование у школьников навыков защиты своих данных и понимания угроз, с которыми они могут столкнуться в интернете. В рамках программы учащиеся участвуют в интерактивных квестах и тренингах, которые помогают им лучше усваивать правила цифровой безопасности.

Заключение

В современных условиях формирование навыков кибербезопасности у школьников является необходимым элементом образовательного процесса. Обучение основам безопасного использования интернета и цифровых технологий должно начинаться с младших классов и продолжаться на протяжении всего школьного обучения. Важно, чтобы в образовательные программы включались как теоретические, так и практические аспекты кибербезопасности, а учителя и родители играли активную роль в процессе обучения детей ответственному поведению в интернете.

Building Bridges: Connecting Research Findings to Classroom Realities in Kazakhstan

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Abstract

This study explores the persistent gap between educational research and classroom practices in Kazakhstan, particularly within the context of middle school mathematics. Despite the availability of cutting-edge research designed to enhance teaching methods and improve student outcomes, many teachers face significant challenges in integrating these findings into their daily instruction. Key barriers identified include limited access to research, time constraints, and difficulties in translating theoretical concepts into practical applications. The research highlights the importance of targeted professional development and improved dissemination of research findings to bridge this divide. Furthermore, the study emphasizes the need for collaborative efforts among educators, policymakers, and researchers to create more adaptable curricular frameworks and provide greater support for teachers in adopting research-based practices. By addressing these challenges, the potential for significant improvements in both teaching efficacy and student achievement can be realized.

Keywords

Educational research, middle school mathematics, research-practice gap, teacher development, Kazakhstan, professional development, curriculum flexibility.

Introduction

Bridging the gap between theory and practice in education remains a significant challenge, particularly when attempting to translate cutting-edge research into effective teaching methods. This issue is especially evident in middle school mathematics, where educators face difficulties in fostering deep comprehension and sustained engagement among students while simultaneously addressing their diverse needs. As noted by Šulcová, Muir, and Fraser (2024), middle school mathematics teachers frequently experience a disconnect between educational research and its application in the classroom, leaving them struggling to meet the varying needs of their students. Efforts to bridge this gap through professional development and training programs have shown promise (MathTrack Institute, 2024), yet the challenge of effectively translating theory into everyday teaching practice persists, particularly when it comes to complex concepts like mathematical modeling (Ramos & Siebert, 2024).

As the educational landscape evolves, so too does our understanding of how students learn and how best to support their mathematical development. Despite the wealth of research outlining effective instructional strategies, many educators struggle to translate these insights into classroom practice. Šulcová, Muir, and Fraser (2024) highlight the difficulties that teachers face in applying research-based strategies, particularly in adapting them to meet the diverse needs of students. Even with a growing body of data showcasing successful techniques, the challenge of bridging the gap between research and real-world application remains significant (MathTrack Institute, 2024; Ramos & Siebert, 2024).

This paper examines the relationship between recent research and the everyday challenges faced by middle school mathematics teachers. It highlights the critical role that scientific

approaches play in shaping effective teaching practices, emphasizing key discoveries with the potential to transform the educational experience for both students and teachers.

Numerous studies have highlighted a range of challenges that hinder the integration of research findings into everyday classroom practices. Heid, Middleton, Larson, Gutstein, Fey, King, Strutchens, and Tunis (2006) found that many mathematics teachers lack the time or experience to read and interpret research on teaching and learning. Moreover, even when they are aware of such research, teachers often struggle to apply these insights in their classrooms. The limited time for reviewing and interpreting research can be attributed to the fact that teachers' daily activities are largely dictated by external factors. Governing bodies outside the school typically control key decisions such as curriculum design, choice of reading materials, school hours, and the academic calendar. As a result, teachers have limited influence over these aspects, further complicating their ability to incorporate research into their teaching practices.

Research Questions:

1. To what degree are teachers informed of the research results related to teaching methods?
2 Do the results of the research possess utility and relevance to the expertise level of mathematics teachers?
3 What barriers hinder the approach of translating research findings into classroom practice?

Literature review

Middle school education lays the foundation for students' future academic success, particularly in mathematics. However, many students face significant difficulties in grasping fundamental mathematical concepts, and these challenges often intensify as they progress through school. Such struggles can hinder students from completing the general education curriculum and, in many cases, lead to the identification of mathematical learning disabilities (MLD). To address these issues, teachers must implement evidence-based interventions grounded in proven instructional strategies that support students' mathematical development. Research has shown that using structured, systematic teaching approaches can significantly improve outcomes for students facing difficulties in mathematics (Bryant et al., 2011; Fuchs et al., 2005).

Research indicates that some children face difficulties as early as preschool in acquiring foundational mathematical skills such as number recognition, counting, and identifying quantities. These early challenges often persist as mathematical concepts become more complex, leading to long-term negative effects on academic performance, including persistent low achievement in mathematics (Swanson, Hoskyn, & Lee, 1999; Bryant et al., 2008; Geary, 2011). To address these difficulties, both special education and general education teachers must have access to evidence-based interventions that support students' mathematical development. Effective interventions for students with mathematical learning disabilities (MLD) or those struggling with mathematics are grounded in scientifically validated instructional practices. Research has consistently shown that explicit, systematic instruction is one of the most effective approaches for teaching mathematical concepts and problem-solving (Bryant et al., 2011; Fuchs et al., 2005). Additionally, the use of empirically based instructional methods, such as multiple representations—number lines, manipulatives, and diagrams—has been shown to significantly enhance students' conceptual understanding (Clements & Sarama, 2009).

Despite the availability of these evidence-based practices, translating research findings into effective classroom teaching remains a challenge. Educators often face barriers such as time constraints, limited access to research literature, and the complexity of applying research to diverse classroom settings (Jansen & Brown, 2008; Smith & Sztajn, 2010). It is critical for researchers to not only develop and validate effective instructional strategies but also work towards making these practices more accessible and actionable for classroom implementation.

Methodology

The study focused on mathematics teachers in Almaty, selecting a purposive sample of 50 instructors from 10 schools throughout the city. To ensure the sample was both targeted and representative, only secondary school teachers were included, as they are more directly involved in the challenges of applying research-based teaching strategies in mathematics (Creswell & Creswell, 2017). This sampling approach ensured that the study captured relevant insights from educators dealing with more advanced mathematical content and student engagement issues.

The primary research instrument for data collection was a questionnaire specifically designed for this study. The questionnaire consisted of 30 items aimed at assessing teachers' awareness of research on effective teaching methods, their perceived usefulness and relevance of the research, and the challenges they encountered in implementing these findings in classroom settings. Other factors explored in the questionnaire included teachers' attitudes toward professional development and their access to research literature (Abiodun, A. P., Ajayi, P., & Ogundola, P. I., 2012; McMillan & Schumacher, 2014).

The questionnaire consisted of closed-ended questions to facilitate quantitative data collection. A Likert scale was employed to measure respondents' levels of agreement with statements regarding their awareness of, and engagement with, research on teaching methods. This structured approach ensured consistent responses across the sample, allowing for a clear analysis of trends related to teachers' perceptions of research applicability and the challenges they face in implementing research findings (Bryman, 2016).

The questionnaire was distributed to teachers across various schools in Kazakhstan, with the assistance of colleagues fluent in Kazakh, Russian, and English to ensure accurate communication and comprehension. Clear, detailed instructions were provided to all participants to ensure consistent and correct completion of the questionnaire. Teachers were given a two-week period to complete and return the questionnaire, either digitally or in person, depending on the school's available resources (Dillman, Smyth, & Christian, 2014). This approach maximized participation while minimizing logistical challenges.

Results

Question 1: Are teachers aware of the research results in teaching methods?

Teaching Methods		Awareness							
		Frequently		Often		Seldom		Never	
		F	%	F	%	F	%	F	%
1	Problem Solving	31	44	31	44	3	4	6	8
2	Conversation	12	17	33	46	10	14	16	23
3	Heuristic problem solving	8	11	12	17	19	27	32	45
4	Peer instructional method	12	17	22	31	14	20	23	32
5	Inquirymodel	9	13	10	14	19	27	28	40

6	Demonstration	23	32	28	40	3	4	17	24
7	Field trip	6	8	11	16	15	21	39	55
8	Branching programmed instruction	11	15	9	13	20	28	31	44
9	Individualistic	17	24	30	42	8	11	16	22
10	Cooperative	14	20	24	34	16	22	17	24
11	Independent with teacher direction	15	21	20	28	15	21	21	30
12	Systematic approach	16	23	24	34	12	17	19	27
13	Problem based learning	20	28	22	31	14	20	15	21
14	Discovery learning	15	21	7	10	17	24	32	45
15	Masterylearning	15	21	12	17	12	17	32	45
16	Class audience	17	24	19	27	11	15	24	34
17	Independent study	16	23	21	29	16	23	18	25
18	Questioning method	16	23	31	44	6	8	18	25
19	Participatory	15	21	21	29	7	10	28	39
20	Drill	13	18	24	34	8	11	26	36
	Overall		17.97		24.18		29.37		28.48

Table 1 highlights a significant discrepancy in teachers' awareness of various teaching methods. Notably, only three methods—Problem Solving, Demonstration, and Individualistic—are frequently recognized by more than 20% of respondents. In stark contrast, sixteen of the twenty teaching methods are seldom or never recognized by more than half of the respondents. This widespread lack of awareness suggests that the majority of teachers are unfamiliar with many research-backed teaching methods. Specifically, 35.55% of respondents report never being aware of these methods, and 20.20% seldom are. Only 17.65% of teachers frequently acknowledge awareness of these methods, with even fewer, 26.60%, often aware. This underscores a critical need for broader dissemination and enhanced professional development programs to familiarize educators with a wider range of innovative teaching methods.

Question 2: Are research results relevant to the level of the Mathematics teachers?
Table 2: Relevance of research results to the level of Mathematics teachers

Item	Agree		Disagree	
	F	%	F	%
Most research results develop students' skills and cognitive abilities	58	82	13	18
Most research results can be applied in the classroom	46	65	25	35
Recent researches enhanced the knowledge of both teachers and students	57	80	14	20
Teachers find research findings relevant to classroom practice	58	82	13	18
Teachers improve on mathematical ideas when exposed to research findings on method of teaching	64	90	7	10
Exposure to research results improves teachers' potentialities in classroom practice	65	92	6	8
Overall		81.69		18.31

The data reveals strong consensus among respondents about the relevance of research results to classroom practice, with 82% affirming their utility, while 18% expressed disagreement. In more specific terms, 65% of respondents agreed that research findings are applicable in the classroom setting, though 35% did not see them as directly applicable. Additionally, a significant majority, 80%, recognized that recent research has broadened the knowledge base for both educators and students, although 20% did not observe such benefits. This overall agreement underscores the perceived value of integrating research into educational practices, despite some dissent regarding its practical implementation.
Question 3. What are the challenges to the translation of research results into classroom practice?

Table 3: Challenges of translating research results into classroom practice

Challenges	Agree		Disagree	
	F	%	F	%
Funding	47	66	24	34
Knowledge	43	61	28	39
Lack of information	51	72	20	28
Exposure	41	58	30	42
Implementation	55	77	16	23
Resources	54	76	17	24
Curriculum	40	56	31	47
Overall		66.6		33.4

The data from Table 3 underscores a range of challenges that teachers face in translating research results into classroom practice, highlighting issues from funding to curriculum constraints. The highest agreement among respondents is for implementation challenges, with 77% acknowledging difficulties, suggesting that even when teachers are aware of research, applying it effectively remains a significant hurdle. Close behind are concerns regarding resources and lack of

information, where 76% and 72% of respondents respectively agree these are major barriers, indicating a need for better support systems and information dissemination. Additionally, over half of the teachers cite funding limitations and restrictive curricula as significant obstacles, which can stifle the adoption of innovative teaching methods. These findings collectively demonstrate a pressing need for targeted interventions that address both the infrastructural and informational gaps impeding the practical application of educational research.

Conclusion

This study underscores a significant disconnect between cutting-edge educational research and its practical application in Kazakhstan's middle school mathematics classrooms. Despite the availability of research that could substantially enhance educational outcomes, various barriers prevent its integration into daily teaching practices. The data reveals a notable deficiency in teachers' familiarity with current research methodologies; a considerable number of educators seldom engage with modern instructional strategies. This issue is exacerbated by limited access to research materials, time constraints, and the complexities involved in adapting theoretical frameworks for use in the classroom.

The analysis also shows that while teachers acknowledge the value of research in enhancing classroom practices and student understanding of mathematics, systemic obstacles such as insufficient funding, limited opportunities for professional development, and rigid curriculum guidelines frequently hinder effective implementation. There is a clear need for more extensive dissemination of research findings and targeted professional development that emphasizes the practical application of these insights.

To bridge the gap between research and practice, concerted collaboration among educational stakeholders—including policymakers, school administrators, and researchers—is essential. Efforts should be directed towards making research more accessible and applicable for teachers, increasing their participation in research initiatives, and aligning educational policies with both contemporary research findings and the practical demands of teaching.

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ZƏİF UŞAQLARLA İŞİN TƏŞKİLİ VƏ UĞURLU NƏTİCƏ

Nailə Qədir qızı Sadıqova
Eyvazov adına 275 nömrəli tam orta məktəb, Təlim-tərbiyə işləri üzrə direktor müavini

Xülasə. *Məqalədə zəif şagirdlərlə işin təşkili və onların tədris prosesində uğurlu nəticələr əldə etməsi üçün effektiv metodlar təhlil edilmişdir. Bu metodlar, şagirdlərin təhsil motivasiyasının artırılması və fərdi yanaşmaların tətbiqi ilə onların tədris prosesinə daha fəal şəkildə cəlb edilməsini təmin edir. Məqalədə, zəif oxuyan şagirdlərin psixoloji və idraki xüsusiyyətlərinin öyrənilməsi, eləcə də bu xüsusiyyətlərə uyğun təlim proqramlarının hazırlanması vurğulanır. Ailənin və məktəbin birgə səyi ilə şagirdlərdə əməksevərlik, məsuliyyət və təhsilə maraq oyatmaq mümkündür. Müəllimlərin şagirdlərə fərdi yanaşması və davamlı qiymətləndirmələr vasitəsilə təhsildə uğurlu nəticələr əldə edilməsi əsas məqsəd kimi göstərilmişdir.*

Açar sözlər: *Zəif şagirdlər, tədris prosesi, fərdi yanaşma, təhsil motivasiyası, psixoloji xüsusiyyətlər.*

ORGANIZATION AND SUCCESSFUL OUTCOME OF WORK WITH VULNERABLE CHILDREN

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Summary. *Effective methods for organizing work with weak students and achieving successful results in their educational process are analyzed in the article. These methods ensure more active involvement of students in the educational process by increasing educational motivation and applying individual approaches. The article emphasizes the study of the psychological and cognitive characteristics of students with poor reading ability, as well as the preparation of training programs corresponding to these characteristics. With the joint effort of the family and the school, it is possible to arouse in students diligence, responsibility and interest in education. Achieving successful results in education through teachers' individual approach to students and continuous evaluations has been shown as the main goal.*

Key words: *Weak students, teaching process, individual approach, educational motivation, psychological characteristics.*

ОРГАНИЗАЦИЯ И УСПЕШНЫЙ РЕЗУЛЬТАТ РАБОТЫ С УЯЗВИМЫМИ ДЕТЯМИ

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Краткое содержание. *В статье анализируются эффективные методы организации работы со слабыми учениками и достижения успешных результатов в их учебном процессе. Эти методы обеспечивают более активное вовлечение студентов в учебный процесс за счет повышения учебной мотивации и применения индивидуальных подходов. В статье делается акцент на изучении психологических и когнитивных особенностей студентов с плохой способностью к чтению, а также на составлении программ обучения, соответствующих этим характеристикам. Совместными усилиями семьи и школы можно вызвать у учащихся трудолюбие, ответственность и интерес к*

учебе. Главной целью было показано достижение успешных результатов в образовании посредством индивидуального подхода учителей к учащимся и постоянной оценки.

Ключевые слова: *Слабые ученики, учебный процесс, индивидуальный подход, учебная мотивация, психологические особенности.*

Giriş. Zəif uşaqlarla işin təşkili və uğurlu nəticələrin əldə edilməsi təhsildə mühüm yer tutur, çünki hər bir şagirdin potensialını tam açmaq və cəmiyyətə faydalı vətəndaş kimi yetişdirmək əsas məqsəddir. Bu mövzu aktualdır, çünki təhsil sistemində müxtəlif çətinliklər yaşayan şagirdlərin sayı az deyil və onların inkişafına fərdi yanaşma zəruridir. Məktəblərdə zəif nəticə göstərən şagirdlərin tədris prosesinə inteqrasiyası ümumi təhsil keyfiyyətini artırır. Hər şagirdin tədris ehtiyaclarına uyğun yanaşma tətbiq etmək onların özünəinamını və dərs motivasiyasını yüksəldir. Nəticədə, belə yanaşmalar cəmiyyətin intelektual və sosial inkişafına töhfə verir [1, s. 45-52].

Məktəbdə təlimin səmərəliliyi və keyfiyyəti hər bir müəllimin qarşısında duran əsas vəzifələrdən biridir. Müvəffəqiyyətli təhsil motivasiyadan xeyli asılıdır. Şagirddə motivasiya zəif inkişaf etdikdə, o, təlimdə geri qalır. Məktəblilərdə motivasiya müxtəlif şəkildə özünü göstərir. Bəzi şagirdlər təhsil sahəsində uğurlu nəticələr göstərsələr də, zəif nəticə göstərən şagirdlərin də sayı az deyil. Belə şagirdlərlə təhsili düzgün təşkil etmək lazımdır ki, uğurlu nəticələr əldə edilsin.

Zəif oxuyan şagirdlərin bir qismini səhv olaraq, əqli cəhətdən geri qalmış hesab edirlər. Belə şagirdlər təlim materialını anlamağa, onun haqqında müstəqil düşünməyə cəhd göstərmir, əksinə, mexaniki əzbərləməyə meyil edirlər. Şagirddə bu nöqsanı aradan qaldırmaq üçün müəllim sadə mətnlərlə işə başlayaraq, şagirdə suallar verir. Şagird öz düşüncəsinə əsaslanaraq oxumaq və dinləmə ilə bağlı sualları cavablandırır. Müəllim onun suallara verdiyi cavabları dəyərləndirərək, şagirdin zəif cəhətlərini müəyyən edir və həmin nöqsanları aradan qaldırmağa çalışır [2, s. 28-34].

Təlimdə zəif nəticə göstərən şagirdlərin müəyyən hissəsində düzgün vərdişlərin və adətlərin formalaşmadığı müşahidə edilir. Belə şagirdlər haqqında tez-tez deyirlər ki, onlar oxumağı bacarmır və tənbəllik edirlər. Buna görə də birinci növbədə həmin şagirdlərdə oxumağa və biliyə həvəs oyatmaq lazımdır. Zəif şagirdlər dərsi öyrənmək üsullarından düzgün istifadə etmirlər və ya istifadə etdikləri üsullar çoxlu zəhmət tələb edir, amma az səmərə verir. Bu qrupa aid olan şagirdlərin bəziləri mətn oxuyarkən əsas məqamları qeyd etmir, materialı məntiqi hissələrə bölmürlər. Onlar dərsi bir-iki dəfə oxuduqdan sonra təkrar etməyi, ya da oxuduqlarını xatırlamağı unudurlar və nəticədə dərsi tam mənimsəmirlər. Bəzən şagirdlər öyrəndiklərini yaxşı mənimsədiklərini düşünsələr də, ifadə etməkdə çətinlik çəkirlər [3, s. 12-20].

Tədris prosesində qarşıya çıxan nöqsanlardan biri də müxtəlif tapşırıqların düzgün icra edilməməsidir. Bəzən şagirdlər müəyyən effektiv üsulları öyrənmədən yazı yazır, məsələ həll edir və ya şəkil çəkirlər. Bu cür səhvlər şagirdlərin diqqətsizliyindən qaynaqlanır. Səmərəli üsullardan istifadə etməklə bu nöqsanları aradan qaldırmaq lazımdır.

Dərsdə zəif nəticə göstərən şagirdlərin əsas qüsurlarından biri fasiləsiz tapşırıqlar yerinə yetirməkdir. Bəzən öz yazdığını və ya oxuduğunu dərk etməyən şagird dayanmadan tapşırıqlarla məşğul olur, lakin heç bir nəticəyə varmır və uğur əldə edə bilmir.

Şagirdləri çətinliklərə qarşı mübarizə aparmağa, maneələri aradan qaldırmaq uğrunda mübariz ruhda tərbiyə etmək lazımdır. Əks halda, onlar çətinliklərdən qorxar və əməyə düzgün olmayan münasibət formalaşar. Belə şagirdlər əməyə qarşı laqeyd olar, dərslərə ciddi yanaşmaz, ev tapşırıqlarını yerinə yetirmədən məktəbə gələr və s. Bu kimi şagirdlərdə əməksevərlik tərbiyə etmək üçün onları məktəbin ictimai işlərinə cəlb etmək lazımdır [5, s. 22-30].

İdrak maraqları şagirdlərin müvəffəqiyyətlə təhsil alması üçün böyük əhəmiyyətə malikdir. Bu marağa sahib olan şagirdlər üçün təlim prosesi cəlbedici, asan və fərəhli olur. Lakin bu marağa malik olmayan şagirdlər dərsi oxusalar da, səthi mənimsəyirlər ki, bu da onların təhsildə geri qalmasına səbəb olur. Ümumiyyətlə, maraq insanı elmi daha dərindən dərk etməyə yönəldir. Buna görə də, şagirdlərdə maraq yaratmaq və inkişaf etdirmək vacibdir.

Şagirdlərdə davamiyyət daimi və məsuliyyətli olmalıdır. Dərsə gəlmədiyi günlərdə şagird keçilmiş dərsləri öyrənmir. Buraxılan dərsləri hazırlamamaq müəyyən fənləri müvəffəqiyyətlə mənimsəməyə mənfi təsir edir və şagirdin geri qalmasına, zəif oxumasına səbəb olur. Müəllim dərs buraxmalarının qarşısını vaxtında almalıdır, əks halda bu hal şagirddə adətə çevrilir və sonra onu tərgitmək çox çətin olur. Müəllim belə şagirdlərə fərdi yanaşmalı, dərs buraxmalarının səbəbini öyrənməli və lazımi tədbirlər görməlidir.

Təlimdə zəif nəticə göstərmənin səbəblərindən biri də ailədə şagirdin dərsə hazırlaşması üçün lazımi şəraitin yaradılmamasıdır. Bəzi ailələr uşaqları nəzarətsiz buraxır və ya ev işləri ilə həddən artıq yükləyirlər. Sinif rəhbəri və məktəb psixoloqu birlikdə valideynlərlə sıx əlaqə saxlayaraq bu məsələdə onlara düzgün istiqamət göstərməli və yardım etməlidirlər [6, s. 10-18].

Şagirdin qüvvə və qabiliyyətini düzgün qiymətləndirmədikdə də təlimdə geri qalma halları baş verir. Şagirdin uğurlarını düzgün və vaxtında qiymətləndirmək vacibdir, əks halda şagirdin təhsilə marağı itir. Tez-tez yarışlar və qiymətləndirmələr təşkil etmək lazımdır ki, şagirdlər həvəslənsinlər. Şagirdin təhsildən geri qalmaması və uğurlu nəticələr göstərməsi üçün bu əsasları vacib şəkildə yerinə yetirmək lazımdır. Şagirdlərin psixoloji xüsusiyyətlərini öyrənmək, təlim-tərbiyə işinin düzgün qurulmasına, elmin əsaslarının dərindən mənimsənilməsinə və bununla yanaşı, dərsdə geri qalan şagirdlərin müvəffəqiyyətlə oxumalarına nail olmaq üçün müəllimlərə və valideynlərə böyük kömək göstərir [7, s. 50-58].

Nəticə. Nəticə olaraq, zəif şagirdlərlə düzgün işin təşkili təhsil prosesində mühüm əhəmiyyət kəsb edir. Bu yanaşma sayəsində şagirdlər tədris materialını daha yaxşı mənimsəyir və dərsə olan maraqları artır. Şagirdlərdə formalaşdırılan müsbət vərdişlər onların dərsdə uğur qazanmasına və gələcəkdə daha müvəffəqiyyətli olmasına şərait yaradır. Fərdi yanaşma, təlimin effektivliyini artırmaqla yanaşı, şagirdlərin özünəinamını bərpa etməyə kömək edir. Ailə, müəllim və məktəb psixoloqunun birgə səyi ilə zəif şagirdlərdə təhsilə maraq oyadılması mümkündür. Müvəffəqiyyətli nəticələr əldə etmək üçün şagirdlərin psixoloji və idraki xüsusiyyətlərinə diqqət yetirilməlidir. Beləliklə, zəif şagirdlərin düzgün istiqamətləndirilməsi cəmiyyətin inkişafı üçün əhəmiyyətli bir addımdır.

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Geographic Sciences

Xəzərin bioloji resurs potensialından səmərəli istifadə yolları

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Açar sözlər: Xəzər dənizi, bioloji resurs, nərə balığı, potensial, Xəzəryanı ölkələr, çirklənmə problemi, qoruma tədbirləri.

Xəzər dənizi planetimizin ən böyük və unikal daxili su hövzəsidir. Bu, su bioloji resurslarının böyük bir anbarıdır. Xəzər dənizinin ixtiofaunasına balıq, dəniz heyvanları və xərçəngkimilərin 150-yə yaxın növü və yarımnövü daxildir. Xüsusi status, əlbəttə ki, burada yüz milyonlarla ildir mövcud olan nərə balıqlarına - relikt sakinlərə aiddir. Onların qlobal genofondu yalnız Xəzər dənizində qorunub saxlanılır. Hər il Xəzər dənizində 300 min ton balıq tutulur- bu, Rusiyanın daxili sularında tutulan ümumi balıqların təxminən 30%-ni təşkil edir. Balıq istehsalının strukturunda sprat üstünlük təşkil edir- onun ildə 200 min tona qədəri ovlanır, ovun bir hissəsi balıq ununda emal olunur. Xəzər dənizinin bioloji ehtiyatları illik "bazar" baxımından 6 milyard dollar həcmində qiymətləndirilir.

Lakin son onilliklər ərzində Xəzərin ekosistemində mənfi antropogen və təbii amillərin yaratdığı ciddi dəyişikliklər baş vermişdir. Onların birləşmiş təsiri qiymətli kommersiya növlərinin populyasiyasına əhəmiyyətli dərəcədə təsir göstərmişdir: sprat, siyənək, suitilər, xüsusilə də nərə balığı. Köhnəlmiş texnologiyalardan istifadə etməklə karbohidrogenlərin kəşfiyyatı və hasilatı, suyun çirklənməsi və yırtıcı balıq ovu geri dönməz proseslərə gətirib çıxara bilər və çıxarır. Planetin unikal ekosistemi- Xəzər dənizi Aral hövzəsi kimi məhv ola bilər.

Xəzər dənizi açıq dənizdən fərqli olaraq ayrılmaz, qapalı təbii sistemdir. Bir sahədə onun vəziyyətinin pozulması qaçılmaz olaraq bütün sistemin əhəmiyyətli hissəsinə mənfi təsir göstərəcəkdir. Kövrək tarazlığın pozulması bütün istiqamətlərə gedəcək. Bu prosesin qarşısını almaq bütün maraqlı tərəflərin vəzifəsidir. Ona görə də bu gün Xəzərdə iqtisadi və təbii fəaliyyətin bütün iştirakçılarının səylərini əlaqələndirmək və birləşdirmək lazımdır. Bu, ekosistemi indiki və gələcək nəsillər üçün qorumağın yeganə yoludur.

Xəzər dənizinin əsas ekoloji problemi, əhəmiyyətini qiymətləndirmək olmaz, təbii ki, dəniz səviyyəsinin qalxmasıdır, lakin bəşəriyyətin bu prosesə təsir imkanları kifayət qədər azdır. İlk növbədə insan fəaliyyətindən asılı olan problemlərdən bu gün (əvvəlki kimi) regionun ekosisteminin və biomüxtəlifliyinin qorunması baxımından ən əhəmiyyətlisi brakonyerlik problemi olaraq qalır. Hazırda potensial olan, lakin hazırkı tendensiyalar inkişaf etdikcə mütləq reallaşacaq təhlükə Xəzər sularında və onun hüdudlarında karbohidrogenlərin hasilatı və daşınmasına nəzarətin olmamasıdır.

Hidrokonstruksiya, pestisidlərlə çirklənmə və tullantı suları əvvəllər həyat qabiliyyəti olmayan kürü və nərə balığı qızartmasının meydana çıxmasına səbəb olmuşdur. Bununla belə, regionun sənaye inkişafının faktiki zərəri Xəzər şelfində karbohidrogenlərin işlənməsinin potensial təhlükələri ilə mütənasib deyil. Burada yalnız bir neft sızması nərə balıqlarının kürü tökmə yerlərinin daimi məhvinə və ekosistemin gözlənilməz şəkildə məhvinə səbəb ola bilər.

Xəzərin dibindən genişmiqyaslı kəşfiyyat və karbohidrogenlərin hasilatı, ekspertlərin fikrincə, istər-istəməz Xəzər dənizinin suyunun və dibinin neft, neft məhsulları və digər ekoloji zərərli maddələrlə çirklənməsinə gətirib çıxaracaq. Eyni zamanda, qazma yerindən 5-12 km məsafədə yatağın işlənməsi sahələrində fəsadlar izlənəcək. Mütəxəssislərin fikrincə, ən ağır nəticələrə qazma platformalarında baş verən qəzalar səbəb ola bilər.

Dünya təcrübəsi göstərir ki, dənizdə neftin işlənməsi dənizin balıq məhsuldarlığına çox mənfi təsir göstərir: yeniyetmə və yetkin balıqların məktəblərinin miqrasiya dövrləri pozulur, qidalanma və kürüləmə şəraiti pisləşir, su mühiti zəhərli maddələrlə çirklənir; hətta normallaşdırılmış neft hasilatı ilə də hər qazma qurğusu dənizə 30-120 ton neft, 150-400 ton qazma şlamı, 200-1000 ton qazma atır.

Xəzərin bioloji resurslarından söhbət gedəndə iki halı nəzərə almaq lazımdır. Birincisi, Xəzər dənizinin bioloji ehtiyatları minerallardan fərqli olaraq özünü yeniləyir. Başqa sözlə, ağlabatan istifadə ilə onlar tükənməzdir; Xəzər dənizi ildə 500-550 min ton yüksək keyfiyyətli balıq istehsal etmək gücündədir. İkincisi, əgər dənizin mineral ehtiyatlarını hansısa şəkildə sərhəd çəkməklə bölmək olarsa, o zaman bioloji ehtiyatlar mobildir, bölünməzdir - dənizin bir hissəsinin biologiyasından istifadə edin.

İranın paytaxtında beş Xəzəryanı dövlətin - Azərbaycan, İran, Qazaxıstan, Rusiya və Türkmənistanın səlahiyyətli nümayəndələri tərəfindən imzalanmış Xəzər dənizinin dəniz təbiətinin mühafizəsi haqqında Konvensiya (Tehran Konvensiyası) Sovet İttifaqının dağılmasından sonra imzalanmış Xəzər dənizi haqqında ilk hüquqi qüvvəyə malik sənəd oldu.

Konvensiyaya əsasən, bu dövlətlər Xəzər dənizinin ətraf mühitinin çirklənməsini azaltmaq və ona nəzarət etmək üçün həm fərdi, həm də kollektiv şəkildə bütün zəruri tədbirləri görməyi öhdələrinə götürürlər.

Konvensiyanın məqsədi həm də Xəzər dənizinin təbii sərvətlərinin qorunması, mühafizəsi və bərpası, onlardan davamlı istifadə, Xəzəryanı dövlətlərin həm öz aralarında, həm də müvafiq beynəlxalq təşkilatlarla əməkdaşlığı üçün tədbirlər görməkdən ibarətdir.

Xəzər dənizinin ən qiymətli bioloji sərvəti dünyada ümumi istehsal edilən nərə balıqlarının 90%-ə qədəri burada ovlanır. Lakin nərə balığının ovlanması kəskin şəkildə azalır (ildə 16 min tondan 4 min tona qədər). Bu, 7 Rusiya və 2 İran balıqçılıq zavodunda nərə balıqlarının süni yetişdirilməsi üzrə ciddi tədbirlərə baxmayaraq.

Nərə balıqlarının sayının azalmasının əsas səbəbləri aşağıdakılardır:

1) Xəzər dənizinə axan çaylarda, ilk növbədə Volqada ekoloji vəziyyətin kəskin pisləşməsi, bu gün haqlı olaraq Rusiyanın "əsas kanalizasiyası" adlandırıla bilər.

2) brakonyerlik, o cümlədən dəniz balıq ovu. Mütəxəssislərin fikrincə, hüquq-mühafizə orqanlarının gördüyü tədbirlərə baxmayaraq, brakonyerlər nərə balıqlarının kommersiya məqsədli ovunun ən azı 60 faizini müsadirə edirlər.

Xəzər dənizi- Volqa deltası və adına körfəzlər. Kirov, Krasnovodski, Severo-Çekmenski dünya əhəmiyyətli torpaqlar kimi tanınır. Avropa və Asiyanın bir çox ölkələrində quş populyasiyalarının rifahı onların vəziyyətindən asılıdır. Xəzər suitisinin ən qiymətli populyasiyasını və yalnız bu yerlərdə tapılan bir çox başqa nadir təbiət əsərlərini də sizə xatırlada bilərik.

Xəzəryanı dövlətlər seçim qarşısındadır: rasional olaraq, çoxalma şəraitini saxlamaqla, Xəzərin bioloji ehtiyatlarından istifadə etmək və ya karbohidrogen xammalının genişmiqyaslı işlənməsinə başlamaq, məsələn, qara kürü istehsalından daha az gəlirli olsa da. müqayisə olunmayacaq dərəcədə böyük ümumi gəlir təmin edir.

Xəzər dənizinin özəlliyi- qapalı su anbarı, xüsusilə onun dayaz, dərinliyi 1-3 metr, şimal hissəsi elədir ki, nərə balıqlarına və yuvalayan quşlara ölümcül, son zərbə vurmaq üçün neftin və ya zəhərli qazma məhsullarının bir dəfə ciddi dağılması kifayət edir. Kiçik müntəzəm tökülmələr tamamilə eyni təsirə malik olacaq.

Fikrimizcə, Xəzəryanı dövlətlər də uzunmüddətli “Nərə balıqlarının ehtiyatlarının bərpası və davamlı istifadəsi və bu balıqların genofondunun qorunub saxlanılması strategiyası”nı, habelə bu məsələ ilə bağlı nərə balığı növlərinin nəsli kəsilməsinin qarşısını almaq üçün konkret fəaliyyət proqramı qəbul etməlidirlər.

Çoxtərəfli danışıqlar zamanı maksimum səy nöqtələri müəyyən edilməli və mövcud ehtiyatlardan səriştəli istifadə əsasında beş dövlətin dənizinin unikal bio-zənginliyini xilas etmək prioritet olmalıdır.

CaspNIRKh alimlərinin fikrincə, təcili olaraq aşağıdakı vəzifələr tələb olunur: kompleks balıqçılıq fəaliyyəti (o cümlədən sahilboyu və dəniz balıqçılığının inkişafı) vasitəsilə resurs bazasının bərpası və dayanıqlı səviyyədə saxlanılması; su mühiti ehtiyatlarının vəziyyətinin monitorinqi tədqiqatları; bioresursların istifadəsinə və mühafizəsinə dövlət nəzarətinin səmərəliliyinin artırılması; bulaq sularının yaşıllaşdırılması; delta cəbhəsinin kürü tökmə yerlərinin, balıq keçidlərinin meliorasiyası, onların təmizlənməsi və dərinləşdirilməsi; sərbəst buraxılan yetkinlik yaşına çatmayanların çəkisinin artırılması və mütərəqqi dünya səviyyəli üsullara keçid yolu ilə bioloji resursların süni şəkildə çoxaldılması üçün biotexnologiyanın miqyasının artması və təkmilləşdirilməsi. Eyni zamanda, balıqçılıq sahəsində normativ-hüquqi bazanın daha da inkişaf etdirilməsi tələb olunur.

İnteqrativ yanaşma təkcə Volqa-Xəzər dənizində işləyən müxtəlif tipli strukturların qarşılıqlı fəaliyyətindən deyil, həm də Xəzərin bütün qonşu dövlətlər tərəfindən mühafizəsi baxımından ibarətdir. Bunun əsasını informasiya mübadiləsi sistemi təşkil etməlidir. İndi neqativ faktları bəyan etməkdən konkret aktiv hərəkətlərə keçməyin vaxtıdır. Həm də birtərəfli yox, hərtərəfli, Xəzər regionunun bütün ölkələri ilə birlikdə. Hər bir dövlət bu prosesə öz töhfəsini verməlidir.

Xəzəryanı dövlətlər arasında çoxtərəfli danışıqlarda bioloji resursların potensialından istifadə ilə bağlı aşağıdakı məsələlərin müzakirəsi məqsədəuyğundur:

- Xəzər dənizinin ekosisteminin və bioloji ehtiyatlarının mövcud vəziyyəti;
- Xəzər dənizində neft və qaz hasilatının inkişaf perspektivləri;
- karbohidrogen xammalının sənaye inkişafı şəraitində Xəzər dənizinin biomüxtəlifliyinin və qiymətli əmtəəlik balıqlarının sayının qorunmasına yönəlmiş ekoloji tədbirlər kompleksinin hazırlanması;
- neft və qaz yataqlarının geoloji tədqiqi və işlənməsinin normativ təminatının vəziyyəti və problemləri;
- neft və qaz yataqlarının kəşfiyyatı və işlənməsinin bioloji ehtiyatlara və onların yaşayış mühitinə mümkün təsiri üzrə monitorinqlərin aparılması;
- Xəzər ekosisteminin özünütəmizləmə qabiliyyəti;
- Xəzər dənizində karbohidrogenlərin sənaye işlənməsinin qısamüddətli və uzunmüddətli nəticələri, o cümlədən onun nəqli, o cümlədən. boru kəmərləri sistemləri;
- Xəzər dənizinin dibinin neft-qaz potensialının geoloji öyrənilməsi vəziyyəti;
- geodinamik zonalar və onların hidrobionlara mümkün təsiri;
- neft və qaz hasilatı zamanı Xəzər ekosisteminin qorunması məqsədilə beynəlxalq əməkdaşlıq.

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Legal Sciences

PECULIARITIES OF ADMINISTRATIVE PROCEEDINGS BY THE HIGH ANTI-CORRUPTION COURT IN CASES OF SANCTIONS

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The need to establish the High Anti-Corruption Court (hereinafter-HACC) was an important step towards combating corruption in Ukraine, as its general and primary task is to administer fair justice in criminal proceedings on corruption and related offences, to ensure everyone's right to a fair trial and respect for human rights and freedoms. It should be noted that since the adoption of the Law of Ukraine 'On the HACC of 7 June 2018 [1], it has been repeatedly amended and supplemented, in particular, to expand the powers of the HACC. For example, on 31 October 2019, the HACC's jurisdiction was extended to cases on the recognition of unjustified assets and their recovery to the state revenue, which are considered in civil proceedings [2], and on 12 May 2022- to cases on the application of sanctions provided for in paragraph 1-1 of part one of Article 4 of the Law of Ukraine 'On Sanctions', which are considered in administrative proceedings [3]. Given the scope of the study, we will focus on the issue of administrative proceedings by the HACC in cases of sanctions. Thus, on 12 May 2022, the Verkhovna Rada of Ukraine adopted the Law of Ukraine 'On Amendments to Certain Legislative Acts to Improve the Effectiveness of Sanctions Related to the Assets of Individuals' [3]. The Law amended the Laws of Ukraine 'On Sanctions', 'On the Legal Regime of Martial Law', 'On Prevention and Counteraction to Legalisation (Laundering) of the Proceeds of Crime, Terrorist Financing and Financing of the Proliferation of Weapons of Mass Destruction', as well as the Code of Administrative Procedure of Ukraine. Thus, Article 20 was supplemented by part 3, which states that the HACC is jurisdictional over cases of application of the sanction provided for in paragraph 1-1 of part one of Article 4 of the Law of Ukraine 'On Sanctions', and Article 22 was supplemented by part 5, which provides that the HACC decides administrative cases on the application of the sanction provided for in paragraph 1-1 of part one of Article 4 of the Law of Ukraine 'On Sanctions' as a court of first instance [4].

Paragraph 1-1 of Part 1 of Article 4 of the Law of Ukraine 'On Sanctions' provides for such a sanction as the recovery of assets belonging to an individual or legal entity, as well as assets in respect of which such a person may directly or indirectly (through other individuals or legal entities) perform actions identical in content to the exercise of the right to dispose of them.

This sanction is exceptional and may be applied only to individuals and legal entities that have created a significant threat to the national security, sovereignty or territorial integrity of Ukraine (including through armed aggression or terrorist activities) or have significantly contributed (including through financing) to the commission of such actions by other persons, including residents of the Russian Federation. This sanction can only be applied during the period

of martial law and provided that the relevant individual or legal entity has already been subject to an asset freeze [5]. The Law clearly defines the actions that will serve as grounds for imposing a sanction, such as participation in illegal elections or assistance in armed aggression against Ukraine, payment of taxes to the aggressor state, etc. If there are appropriate grounds and conditions, the central executive body that ensures the implementation of the state policy in the field of recovery of assets of persons subject to sanctions, namely the Ministry of Justice of Ukraine [6], shall apply to the HACC with a request to apply to the relevant individual or legal entity a sanction provided for in paragraph 1-1 of part one of Article 4 of the Law of Ukraine 'On Sanctions' in accordance with the procedure established by the Code of Administrative Procedure of Ukraine. In connection with the above, the Code of Administrative Procedure of Ukraine was supplemented with Article 283-1 'Peculiarities of Proceedings in Cases on Application of Sanctions' (hereinafter-sanction cases). The Article sets out the requirements for a statement of claim to be filed with the HACC and, in particular, must contain a justification for the existence of one or more grounds for imposing sanctions as defined by the Law of Ukraine 'On Sanctions' and the applicant's claims, as well as a list of property (assets) to be recovered as state revenue pursuant to paragraph 1-1 of part one of Article 4 of the Law of Ukraine 'On Sanctions'.

In general, the introduction of a mechanism to increase the effectiveness of sanctions related to the assets of individuals, which allows replenishing the state budget at the expense of persons who, by their actions, have created a significant threat to the national security, sovereignty or territorial integrity of Ukraine (including through armed aggression or terrorist activities) or have significantly contributed (including by financing) to the commission of such actions by other persons, should be positively assessed. At the same time, it is worth highlighting the controversial issues related to sanctions cases. If we look at the initial provisions of the Law of Ukraine 'On the HACC', the main task of the court was to consider criminal proceedings on offences containing a corruption component. The imposition of sanctions was not related to the commission of a corruption or related offence. However, in 2019, the HACC was empowered to administer justice as a court of first instance and appellate court in cases of declaring assets unjustified and recovering them for the state's revenue through civil proceedings (italics added). In our opinion, this approach of the legislator contradicts the purpose of creating the HACC, leads to excessive workload of the HACC judges, and as a result, inefficiency of judicial proceedings not only in civil but also in criminal proceedings. Even if this fact is not disputed, the legislator should have included sanctions cases in the jurisdiction of civil proceedings in order not to disperse the jurisdiction of the HACC.

In general, the introduction of a mechanism to increase the effectiveness of sanctions related to the assets of individuals, which allows replenishing the state budget at the expense of at the expense of persons who have created a significant threat to national security, sovereignty or territorial integrity of Ukraine (including through armed aggression or terrorist activity) or significantly contributed (including through financing) to the commission of such actions by other persons.

At the same time, it is worth highlighting the controversial issues related to sanctions cases. If we look at the initial provisions of the Law of Ukraine 'On the HACC', the main task of the court was to consider criminal proceedings on offences containing a corruption component. The imposition of sanctions is not related to the commission of a corruption-related offence. However, in 2019, the HACC was empowered to administer justice as a court of first instance and appellate court in cases of declaring assets unjustified and recovering them for the state's revenue through civil proceedings (italics added). In our opinion, this approach of the legislator contradicts the purpose of creating the HACC and leads to excessive workload of judges of the HACC, and as a result, ineffective judicial proceedings not only in civil but also in criminal proceedings. If this fact is not disputed, the legislator should have included sanctions cases in the jurisdiction of the HACC.

cases should also be referred to the jurisdiction of civil proceedings in order not to disperse jurisdiction of the HACC.

According to part 3 of Article 5-2 of the Law of Ukraine 'On Sanctions', the court decision on the application of a sanction is sent to the Cabinet of Ministers of Ukraine on the day it becomes effective to determine the subject, procedure and method of its implementation. The Cabinet of Ministers of Ukraine is authorised to entrust the implementation of measures related to the temporary management of assets subject to recovery to the state as a sanction under clauses 1-1 of part 1 of Article 4 of the Law to the central executive body responsible for implementing the state policy in the field of detection, tracing and management of assets derived from corruption and other crimes, the State Property Fund of Ukraine, military administrations and/or other public authorities, business entities of the public sector of the economy [5].

It seems that this legislative provision contradicts the provisions of Article 1 of the Law of Ukraine 'On Bodies and Persons Enforcing Court Decisions and Decisions of Other Bodies', since the subject of enforcement of court decisions and decisions of other bodies is the state executive service and, in cases specified by the Law of Ukraine 'On Enforcement Proceedings', private executors [6].

In general, the introduction of a mechanism to increase the effectiveness of sanctions related to the assets of individuals, related to the assets of individuals is an adequate response of public authorities to the crimes committed by the aggressor state and persons supporting these crimes. However, the legislative provisions need to be improved and finalised to ensure the fastest and most effective realisation of the right to a fair trial.

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Examination of mechanical features of welded connections for the production of automotive wheels

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Abstract
A rational method of microalloying low-pearlite 10HFTBch steel for automotive sheet rolling was selected. This method resulted in more uniform mechanical properties of welded joints in both the heat-affected zone and the weld, aligning them with the properties of the base metal.
Keywords: low-pearlite steel, weld, car wheel rims, electric resistance welding

Introduction

The modern development of road transport globally sets the direction for increasing the load capacity and speed of freight vehicles, as well as the creation of road trains. This necessitates improvements in vehicle suspension systems, particularly in wheel rims, which are key components. Currently, low-carbon steels, such as 15-type steel, are the primary materials used for manufacturing wheel rims for trucks, buses, and trolleybuses. A steady trend has emerged in the automotive wheel market: the production of wheels with increased energy loads, allowing for a significant increase in cargo mass under current operating conditions. This also reduces the number of trips, leading to substantial savings on fuel, lubricants, and depreciation costs. However, the critical weak point in truck wheels remains the welded joints.

Materials and methods

The aim of the research was to study the possibility of obtaining uniform indicators of the mechanical properties of welded joints such as heat-affected zone and weld, close to the properties of the base metal for the production of automobile wheels.

Comparative studies of structural and property of the basic metal, weld, and heat-affected zone after resistance welding changes were carried out on steels with an optimized composition such as 10HFTBch, 10HM, steel 15.

Results and Discussion

It is known that steels and alloys with the following properties have the highest weld property in resistance welding such as high electrical resistance, low thermal conductivity, the absence or low tendency to form hardening structures during heating and cooling in the welding zone and low chemical activity, when heated. Moreover, lower power machines are required for such material welding for this purpose.

Steels with low carbon content from 0.08 to 0.15 %, which are wellwelded by all resistance welding methods, both in hard and soft modes, without additional technological measures are closely met by these re- quirements. At the same time the introduction of components such as barium and rare-earth elements (REE) into the developed 10HFTBch steel, made it possible to obtain low-alloy steel with high impact strength, which ensures the formation of a rational weld structure.

The microstructure of welded joints of steels: 10 HFTBch steel, 10HM steel, 15 steel and the change in their micro Toughness are shown in Fig. 1. In the micrograph that in the welded joint the phase appearing light-grey fully or partially separates the grains of the phase appearing dark - grey. Such behaviour is intimately connected with the so-called complete and incomplete wetting of grain boundaries by the melt or the second solid phase. The morphology of integranular phase layers, in turn, strongly influences the properties of a polycrystalline composite, these issues are discussed in detail in the papers.

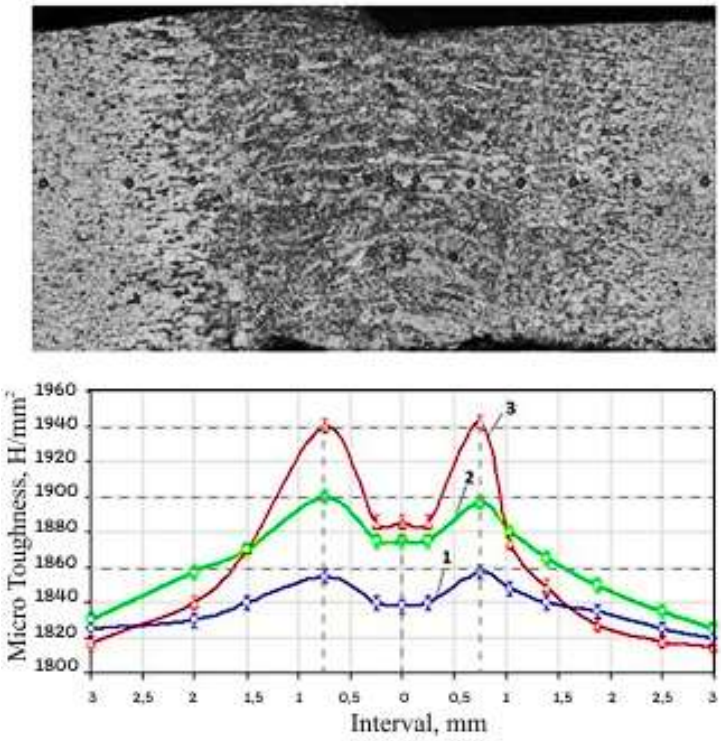

Fig. 1. Comparative change results in the micro toughness of a welded joint of 10 HFTBch steel with its analogues in cross section, ×100: 1 – 10 HFTBch steel; 2 – 10HM steel; 3 – steel 15.

In the center of the welds, a lesser unevenness of the microToughness values was observed in the developed steel 10HFTBch compared to its analogues. In this case, Toughness plays a decisive role, because. modification of REM and barium contributes to the inhibition of grain size growth in the heat-affected zone during welding. Refractory special carbides TiC, NbC, VC are formed in the weld, which are crystallization centers and prevent the migration of grain boundaries. The impact strength of the welded joint of 10 HFTBch steel also had a less noticeable difference in values compared to the base metal, in contrast to analogues (Fig. 2 and Table 1).

In the heat-affected zone, the impact strength indicators remained quite high, although the metal structure noticeably enlarged (Fig. 2, a, b, c). The developed steel, in comparison with the steels used, 15 steel and 10 HM steel namely, has from 1.25 to 1.30 times higher impact strength, respectively. In the heat affected zone it has from 0.80 to 0.85 MJ/m^2, and in the seam weld it has from 0.75 to 0.80 MJ/m^2.

Steels similar to those developed had significantly lower impact strength values: in the heat-affected zone $KCU_{h.a.z.}$ = 0.63…0.68 MJ/m^2, and in the area of the weld $KCU_{s.w.}$ = 0.55…0.60 MJ/m^2.

Thus, a rational method was chosen for micro alloying low-pearlite steels, which made it possible to obtain more uniform structure in the heat-affected zone and weld and more uniform indicators of the mechanical properties of welded joints. The developed steel has number of advantages in terms of strength and toughness of welded joints compared to its counterparts and can be successfully used as their full- fledged substitute.

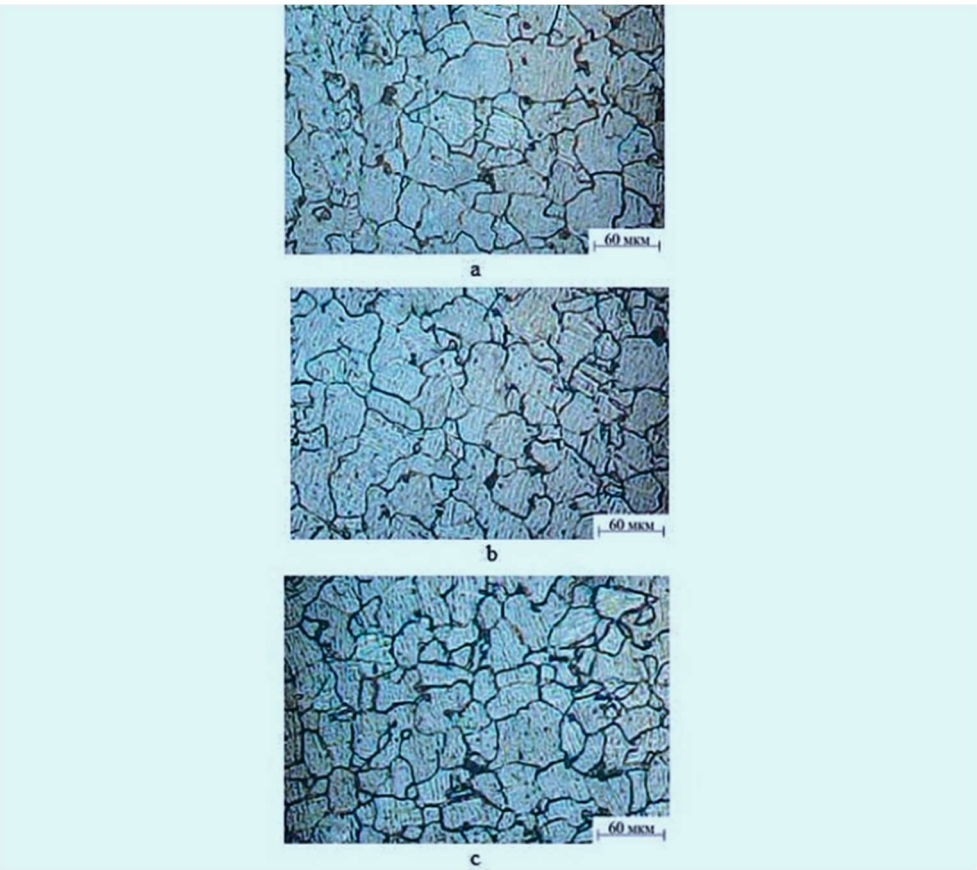

Fig. 2. Microstructure of experimental10 HFTBch steel with chemical composition at the lower, middle and upper values of the technical conditions after hot deformation and heat treatment at 900 °C, ×360: a – lower; b – average; c – top.

Table 1

Mechanical properties of 10HFTBch steel.

Characteristics of mechanical properties					
σ, MPa	σ_y, MPa	δ_5, %	KCb.m., MJ / m^2	KCUs.w., MJ / m^2	KCUh.a.z., MJ / m^2
490…502	320…345	27…29	0,90…0,95	0,75…0,80	0,80…0,85

* b.m. – base metal; s.w. – seam zone; h.a.z. – heat-affected zone.

Conclusions

The analysis of the structural state and mechanical properties of the weld, base metal, and heat-affected zone demonstrated that multi-component alloying of low-pearlite steel effectively minimized the negative thermal impact of resistance welding on the seam. A rational method of microalloying 10HFTBch steel was selected, leading to more consistent mechanical properties in welded joints (both in the heat-affected zone and the weld) and bringing them closer to those of the base metal. This approach successfully addressed the practical challenge of producing wheel disks and welded joints with enhanced strength.

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