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Chemical sciences

X-RAY AND ELECTROPHYSICAL PROPERTIES OF SOLID SOLUTIONS (YbGa₂S₄)_{1-x}(PbGa₂S₄)_x

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Abstract

The alloys of solid solutions (YbGa₂S₄)_{1-x}(PbGa₂S₄)_x were studied using the methods of physicochemical analysis: differential thermal analysis (DTA), X-ray phase analysis (XRD), microstructural analysis (MSA), as well as density and microhardness measurements. It was found that at room temperature, solid solutions based on the YbGa₂S₄ compound reach 25 mol. % PbGa₂S₄. The temperature dependence of electrical conductivity and thermoelectromotive force (thermo-EMF) of the alloys (YbGa₂S₄)_{1-x}(PbGa₂S₄)_x (0.01; 0.02; 0.03; 0.05) was studied depending on the composition. Solid solutions (YbGa₂S₄)_{1-x}(PbGa₂S₄)_x (0.02; 0.03; 0.05) were studied using X-ray phase analysis and lattice parameters were calculated.

Keywords: system, solid solution, eutectic, density, microhardness

Introduction

YbGa₂S₄ compounds have unique functional properties and are studied as luminescent and magnetic materials. By acting on the YbGa₂S₄ compound with ions of various rare earth elements, luminescent materials suitable for the manufacture of phosphors were obtained [1-4]. The authors of the work [4] studied the luminescent properties of the YbGa₂S₄:5 % Er³⁺ composition. Compounds containing YbGa₂S₄:5 % Er³⁺, activated by REE ions, are promising for optical excitation of activated centers through key absorption bands.

Lead thiogallate PbGa₂S₄ crystals belong to a wide class of ternary chalcogenide compounds. Various protein compositions based on the PbGa₂S₄ compound are semiconductor materials with photoelectric properties [5-8].

Therefore, during the chemical interaction of PbGa₂S₄ and YbGa₂S₄ compounds, the resulting solid solution alloys can also be materials with functional properties that retain the properties of the original materials.

The aim of this work is to study the X-ray and electrophysical properties of solid solution alloys (YbGa₂S₄)_{1-x}(PbGa₂S₄)_x (0.01; 0.02; 0.03; 0.05).

The YbGa₂S₄ compound melts with an open maximum at 1180°C and crystallizes in the orthorhombic syngony, the lattice parameters: $a = 20.14$; $b = 20.12$; $c = 12.15$ Å, sp. gr. D^{24}_{2h} -Fddd, density $\rho = 4.76$ g/cm³, microhardness $H\mu = 2250$ MPa [9].

The compound PbGa₂S₄ melts congruently at 890°C and crystallizes in the orthorhombic syngony with the lattice parameters: $a=20.44$, $b=20.64$, $c=12.09$ Å, $z=32$, sp. gr. Fddd, density $\rho=4.94$ g/cm³, microhardness $H\mu=2100$ MPa. [10, 11].

Experimental part

Prior to the synthesis of system PbGa₂S₄-YbGa₂S₄ alloys, PbS, Ga₂S₃ and YbS compounds were synthesized. Elements of the following purity were used for the synthesis: Pb-99.98%, Ga-000, Yb-99.997% and sulfur of the OSCh grade. Then, the initial components PbGa₂S₄ and YbGa₂S₄ were synthesized. The alloys of the PbGa₂S₄-YbGa₂S₄ system were synthesized from the PbGa₂S₄ and YbGa₂S₄ components at a temperature of 1100-1200°C in a quartz ampoule with air suction to a pressure of 0.133 Pa. After homogenization of the alloys at a temperature of 700°C for 240 hours, studies were carried out using the methods of physicochemical analysis (DTA, X-ray phase analysis, MSA, as well as density and microhardness measurements).

Differential-thermal analysis of the samples was carried out on a THERMOSCAN-2 pyrometer, Al_2O_3 served as a standard, the heating rate was 5 o/min. X-ray phase analysis was carried out on a D2 PHASER X-ray diffractometer. A CuK α cathode and a Ni filter were used as irradiators. Microhardness was determined on a PMT-3 metallographic microhardness tester. Microstructural analysis was carried out on an MIM-8 microscope. The density of the samples was determined by the pycnometric method using toluene as a filler. Electrical conductivity and thermo-EMF of solid solution alloys with $H < 10$ kGs in weak electric and magnetic fields ($E < 10$ V/cm) were measured by the traditional method. By the direct current method using an UA-1-51 electrometric amplifier [12, 13].

Results and discussion

After synthesis, the alloys $(\text{YbGa}_2\text{S}_4)_{1-x}(\text{PbGa}_2\text{S}_4)_x$ (0.01; 0.02; 0.03; 0.05) are in a compact form and are yellowish-brown substances. The solid solution alloys were studied by physicochemical methods of analysis after bringing them to equilibrium. During the thermal analysis of the solid solution alloys, it was found that two endothermic effects are observed on their thermograms.

Microstructural analysis of the solid solution alloys $(\text{YbGa}_2\text{S}_4)_{1-x}(\text{PbGa}_2\text{S}_4)_x$ shows that in the concentration range of 0-25 mol. % PbGa_2S_4 , there are single-phase alloys. Then, two-phase regions begin. To confirm the correctness of the results of differential thermal and microstructural analyses, an X-ray diffraction analysis was performed on the same alloys of the system containing 10, 15, 25 and 30 mol. % YbGa_2S_4 (Fig. 1). The diffraction lines on the X-ray diffraction pattern of the alloy with 10, 15 and 25 mol. % PbGa_2S_4 are identical to the diffraction lines of the YbGa_2S_4 compound, i.e. this alloy is a solid solution alloy based on the YbGa_2S_4 compound. On the diffraction pattern of the alloy with 30 mol. % PbGa_2S_4 , a mixture of diffraction lines of the initial components YbGa_2S_4 and PbGa_2S_4 is observed.

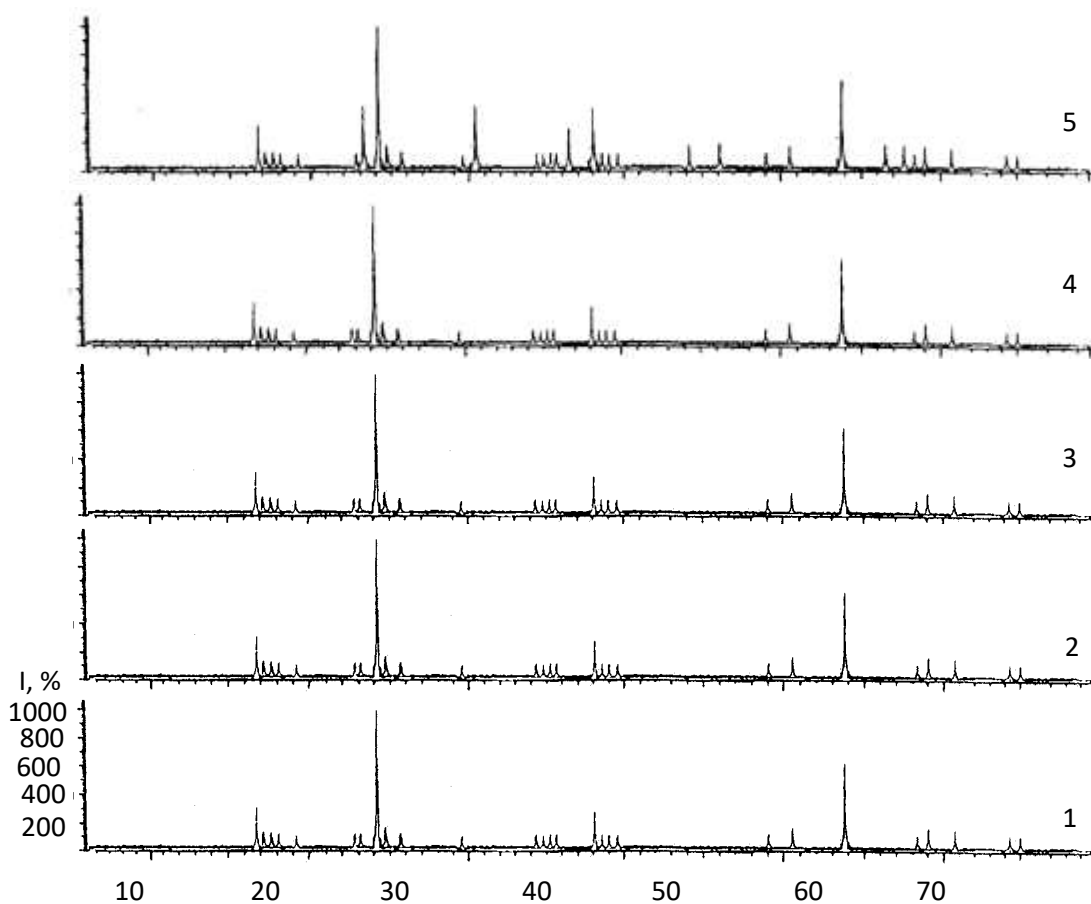


Fig. 1. X-ray diffraction patterns of solid solution alloys $(\text{YbGa}_2\text{S}_4)_{1-x}(\text{PbGa}_2\text{S}_4)_x$.
1- YbGa_2S_4 , 2-10, 3-15, 4-25, 5-30 mol. % PbGa_2S_4 .

When measuring the microhardness of the alloys of the system, two different values of microhardness were determined. Some physicochemical properties of the alloys of solid solutions $(\text{YbGa}_2\text{S}_4)_{1-x}(\text{PbGa}_2\text{S}_4)_x$ are presented in Table 1. As can be seen from Table 1. the microhardness of β -

solid solutions based on the compound YbGa_2S_4 increases from 2250 MPa to 2350 MPa. Depending on the composition of the density of the alloys of the system, it changes monotonically.

Table 1.

Composition of solid solution alloys $(\text{YbGa}_2\text{S}_4)_{1-x}(\text{PbGa}_2\text{S}_4)_x$, results of DTA analysis, density and microhardness measurements

Composition, mol. %		Thermal effects, °C	Density, g/ cm ³	Microhardness, MPa	
PbGa ₂ S ₄	YbGa ₂ S ₄			α	β
P=0,20 N					
0,0	100	1180	4.76	-	2250
5,0	95	1100,1175	4.77	-	2280
10	90	1000,1170	4,78	-	2310
15	85	850,1150	4,79	-	2330
20	80	830,940	4,80	-	2350
25	75	625,1120	4,82	-	2350
30	70	625.1100	4,84	-	2350

Alloys of solid solutions $(\text{YbGa}_2\text{S}_4)_{1-x}(\text{PbGa}_2\text{S}_4)_x$ ($x = 0.03; 0.05; 0.10$) also crystallize in a rhombic lattice, like the compound YbGa_2S_4 . The lattice parameters of the alloys of solid solutions depending on the composition are given in Table 2. As can be seen from Table 2, the lattice parameters of the alloys containing 3, 5 and 10 mol. % PbGa_2S_4 , respectively, increase.

Table 2.

Dependence of the lattice parameters, density and microhardness of the alloys of solid solutions YbGa_2S_4 and $(\text{YbGa}_2\text{S}_4)_{1-x}(\text{PbGa}_2\text{S}_4)_x$ ($x=0.03; 0.05; 0.10$) on the composition

Composition	Crystal parameters, Å			Density, g/cm ³	Microhardness, MPa
	a	b	c		
YbGa_2S_4	20,14	20,12	12,15	4,76	2250
97 % YbGa_2S_4 + 3 % PbGa_2S_4	20,21	20,19	12,20	4,77	2270
95 % YbGa_2S_4 + 5 % PbGa_2S_4	20,24	20,20	12,23	4,78	2280
90 % YbGa_2S_4 + 10 % PbGa_2S_4	20,28	20,25	12,30	4,79	2310

The dependence of electrical conductivity and thermo-EMF of solid solution alloys $(\text{YbGa}_2\text{S}_4)_{1-x}(\text{PbGa}_2\text{S}_4)_x$ ($x=0.01; 0.02; 0.03$) on composition and temperature was studied. To study the electrophysical properties, alloy samples measuring $1.5 \times 1.0 \times 0.5 \text{ cm}^3$ were prepared. The electrophysical properties were studied in the temperature range of 300-650 K. The temperature dependence of electrical conductivity of solid solution alloys $(\text{YbGa}_2\text{S}_4)_{1-x}(\text{PbGa}_2\text{S}_4)_x$ ($x=0.01; 0.02; 0.03$) is shown in Figure 2.

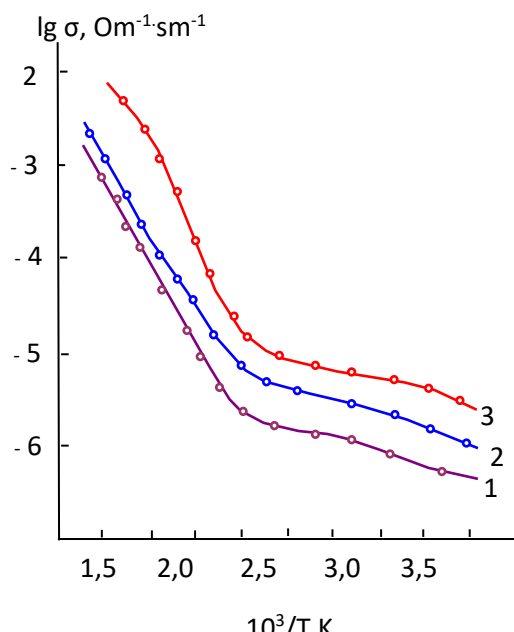


Fig. 2. Temperature dependence of the electrical conductivity of thermo-EMF of solid solution alloys $(YbGa_2S_4)_{1-x}(PbGa_2S_4)_x$ ($x=0.01; 0.02; 0.03$).

When adding low-resistance $PbGa_2S_4$ to high-resistance compound $YbGa_2S_4$, the electrical conductivity increases naturally depending on the composition. As can be seen from the graph of the temperature dependence of electrical conductivity at room temperature, the electrical conductivity for samples with a concentration of 1; 2; 3 mol % $PbGa_2S_4$, the logarithmic value is $lg\sigma = -7.75 \text{ Ohm}^{-1}\cdot\text{cm}^{-1}$, $lg\sigma = -6.05 \text{ Ohm}^{-1}\cdot\text{cm}^{-1}$ and $lg\sigma = -6.55 \text{ Ohm}^{-1}\cdot\text{cm}^{-1}$ respectively, and at 650 K the logarithmic value of electrical conductivity for samples with a concentration of 1; 2; 3 mol% $PbGa_2S_4$ is $lg\sigma = -4.90 \text{ Ohm}^{-1}\cdot\text{cm}^{-1}$, $lg\sigma = -3.55 \text{ Ohm}^{-1}\cdot\text{cm}^{-1}$ and $lg\sigma = -3.85 \text{ Ohm}^{-1}\cdot\text{cm}^{-1}$ respectively.

Conclusion

The methods of differential-thermal analysis (DTA), X-ray diffraction (XRD), microstructural analysis (MSA), as well as determination of microhardness and density were used for the alloys of solid solutions $(YbGa_2S_4)_{1-x}(PbGa_2S_4)_x$.

It was found that at room temperature the region of solid solution based on the compound $YbGa_2S_4$ is 25 mol. % $PbGa_2S_4$. The temperature dependence of electrical conductivity and thermo-EMF of alloys of solid solutions $(YbGa_2S_4)_{1-x}(PbGa_2S_4)_x$ (0.01; 0.02; 0.03; 0.05) were studied depending on the composition. Alloys of solid solutions $(YbGa_2S_4)_{1-x}(PbGa_2S_4)_x$ (0.02; 0.03; 0.05) were investigated by X-ray phase analysis and their lattice parameters were calculated. Solid solution alloys are also high-resistance semiconductors that crystallize in the orthorhombic syngony.

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ACYLIMINE SALTS AS REAGENTS IN REACTIONS C- AND N-ALKYLATION

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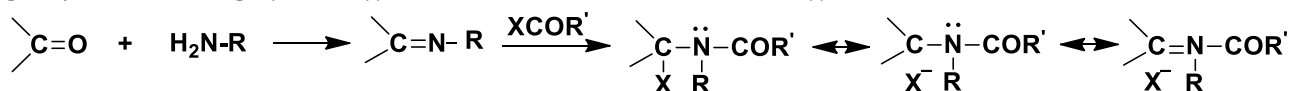
Abstract

Acyliminium salts are electrophilic reagents that potentially allow the introduction of various bulk nitrogen-containing groups in aromatic structures, to synthesize important, but inaccessible by other methods, heterocycles. However, the examples in the literature are limited to only a few cases of C-alkylation of aromatic substrates and the synthesis of 2-azetidinones. In the presented work the range of possible aromatic and heteroaromatic objects for alkylation with various acyliminium salts is expanded. Thus, 1-p-tolyl-N-p-methoxyphenyl-3-oxotetrahydroisoquinoline and 3,4- (2,3-thiopheno) -N-p-methoxyphenyl-5-p-tolyl-2-pyralidone were synthesized. With yields of 54 and 46%, respectively. The fundamental possibility of using acyliminium salts for N-alkylation of aliphatic amines and amino acid esters is shown. Synthesized N- [1-methyl-p-tolyl-1- (p-tolylamido-N'-p-methoxyphenyl)] isopropylamine, methyl esters of N- [1-methyl-p-tolyl-1- (p-tolylamido-N'-n-methoxyphenyl)] glycine, valine, dimethylglycine and adamantiglycine with yields of 53, 49, 47 and 36%, respectively. The structure of all synthesized compounds is proved by physicochemical methods.

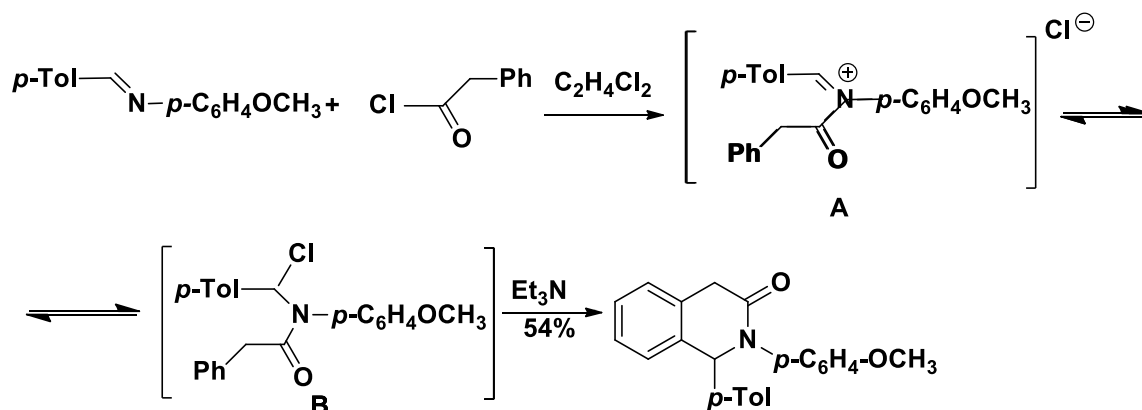
Keywords: aciiminium salt, C-alkylation, N-alkylation, triethylamine.

Amidoalkylating reagents, as can be seen from the literature [1,2], are of great importance for the synthesis of various derivatives of heterocycles by C- or N-alkylation. However, acyliminium salts, which belong to this class of reagents, have been used only for C-alkylation and only in a few cases [2], in particular, for the synthesis of important 2-azetidinones. The aim of the work was both to expand the range of objects for C-alkylation with acyliminium salts and to determine the possibilities of using the latter for N-alkylation.

When considering the reactivity of acyliminium salts, first of all, we must take into account their electrophilic nature. The unshared electron pair of the nitrogen atom, although conjugated to a carbonyl group, still has a significant effect on the C-X bond due to the α -effect.



$R, R' = \text{Alk}, \text{Ar}; X = \text{Hal}, \text{O}, \text{N}, \text{S} \text{ or } \text{P-containing groups}.$



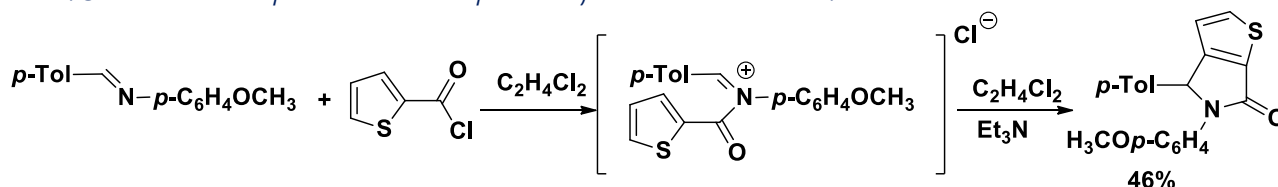
The contribution of ionic structures undoubtedly depends on the electronic nature of the substituent X, but even for N-1-haloalkylamides in the steady state it is not dominant, although it provides increased mobility of functional substituents X in reactions with nucleophiles. Interestingly, the electrophilicity of amidoalkylating agents can increase significantly in the presence of not only mineral acids or Lewis acids, but also bases. In the latter case, an important role is obviously played by intermediates with active electrophilic ability.

As a reagent in our studies was used acyliminium salt obtained from the corresponding Schiff base and phenylacetic acid chloride according to standard methods [2]. Such salts are not stable, they exist only in solutions for a limited time.

Advantageously, there is an equilibrium between the ionic structure (A) and the covalent structure (B).

Similar acyliminium salts have been used to alkylate the benzene nucleus [2]. The authors used AlCl_3 as a catalyst. However, when trying to reproduce this experiment, strong tarring was observed and the target product could not be isolated. When Lewis acid was replaced by Et_3N , a 4-hour boiling in dichloroethane gave an alkylation product in 54% yield. The following signals are observed in the PMR spectrum of the isolated compound: methyl group ($\delta = 2.36$ ppm), methoxyl group ($\delta = 3.74$ ppm), methylene group ($\delta = 4.24$, 1H, $j = 3$, 3 Hz, $\delta = 4.87$, 1H, $j = 3.3$ Hz), hydrogen atoms in aromatic cycles ($\delta = 6.79$ –7.33 ppm). The IR spectrum shows at 1760 cm^{-1} the valence vibrations of the amide carbonyl group.

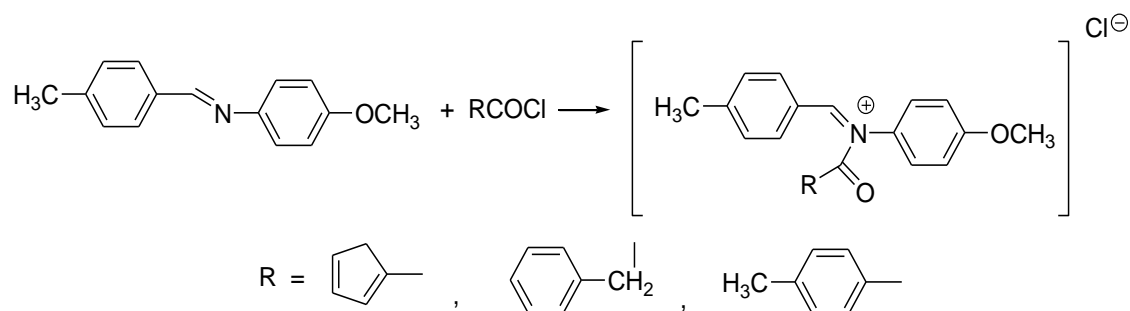
It would be interesting to use the acyliminium salt to alkylate another aromatic system also under the influence of Et_3N . For this purpose, a suitable salt based on 2-thiophenecarboxylic acid chloride was obtained. An experiment was performed where, by analogy with the above, intramolecular alkylation of the thiophene ring to position 3 was allowed. Alkylation to position 5, which could be an alternative as the most favorable, is impossible due to the formation of a double-bonded bridge structure at the bridge head. Substitution to position 4 is not possible for the same reason.



The experiment was performed under the same conditions. The alkylation product was isolated with a yield of 46%. In the PMR spectrum (δ , ppm) of the alkylation product there are signals: methyl group (2.31), methoxyl group (3.82), hydrogen in phenyl nuclei (6.81–7.21), hydrogen in the thiophene fragment (6.53, 1H, $j = 6.6$ Hz, 7.55, 1H, $j = 6.6$ Hz), tertiary hydrogen singlet (7.91). The IR spectrum shows at 1680 cm^{-1} the valence vibrations of the amide carbonyl group. These data prove the structure of the synthesized compound.

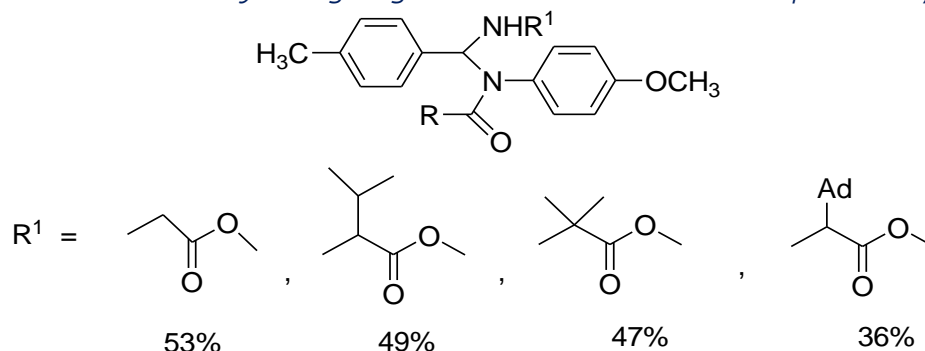
Reaction of acyliminium salts with amino acid esters.

For the first time, the possibility of N-alkylation of amino acids of acyliminium salts with the formation of appropriate N-alkylamides is shown. Yield acyliminium salts were obtained according to the scheme according to the standard method [1,2].



Development of the method of synthesis of potentially biologically active compounds based on acyliminium salts and natural amino acids.

Synthesis was carried out by boiling reagents in dichloromethane in the presence of triethylamine.



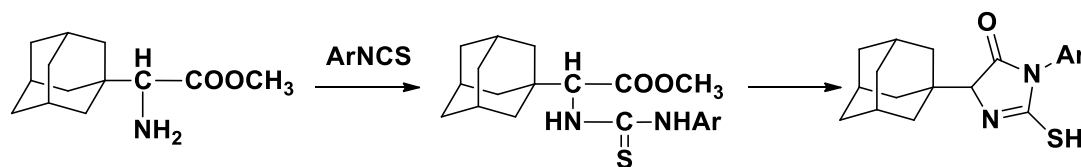
Yield for the corresponding esters are indicated in the scheme. A wide range of diverse radicals. As in the amino acid, and in acylating components leads to a large number of compounds with possible physiological activity. All synthesized substances were identified by spectroscopic methods.

A convenient method of synthesis of potentially physiologically active compounds based on natural amino acids has been developed.

Adamantylcontaining derivatives of natural α -amino acids.

*Adamantylglycine was synthesized by method [3]. As arylisothiocyanates, the following reagents of the company Lancaster were used: phenylisothiocyanate, *p*-chlorophenylisothiocyanate, 2-naphthylisothiocyanate. Studies of NMR ^1H spectra were performed on the JEOL spectrometer (90 MHz) in CDCl_3 , chemical shifts were measured in δ -shift. Chromatomass spectra are measured on the Hewlett-Packard 5890-II device with a detector MSD 59771A (capillary 30 m, HP-1, 100-250 $^\circ\text{C}$, 10 $^\circ$ / min).*

Thiohydantoines are formed by cyclization of α -amino acids phenylthiocarbonyl derivatives by acidic agents action. This reaction is used for the determination amino acids followance of peptides for Edman's. We have found that thioures forming under heating methyl-1-adamantyl glycine ester with various isothiocyanates in benzene give thiohydantoines spontaneously with quantitative yield. The PMR spectrums analysis has shown produced thiohydantoines to exist in solution as thioenol form exclusively. For example, Ar = Ph: 7.8 ppm, SH; 3.57 ppm, singlet CH. The obtained substances could be interesting as matters for biological study.



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POLYMERS - THE PAST AND FUTURE OF SCIENCE

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Mankind has known about polymers for a long time, since they form the basis of both the plant and animal worlds. The technology for producing artificial polymers was known in ancient China. The secretory secretions of silkworm glands were squeezed out of caterpillars. This concentrated polymer liquid was poured into a vessel, then a stream was pulled out with a stick. The stream solidified in the air, and a fiber was obtained that was indistinguishable from that obtained by unwinding silkworm cocoons.

A huge number of polymers are currently known. We are literally surrounded by them, our homes, furniture, clothes, food (biopolymers such as proteins and carbohydrates) are largely made of them. And we ourselves are made of polymers, or more precisely biopolymers. Polymers first developed as structural materials: fibers, plastics, rubbers, then came the era of functional polymers, when they were valued for their function, not their structural features: superabsorbents, conductive polymers, etc [1]. Then, scientists began to synthesize "smart" polymers - those whose function depends on external conditions. Smart polymers can deliver medicine to a specific point in the body, be used as sorbents to purify water from specific pollutants, create implants that are indistinguishable in properties from the original, etc. For example, an entire area is currently actively developing related to microrobots based on soft media. Soft media is another name for these smart materials. By applying a certain amount of radiation, it is possible to cause mechanical movements of these microobjects, forcing them to move in space in a given direction [2].

Smart polymers can also play a significant role in military technology. For example, army researchers are placing piezoelectric crystals in helicopter rotor blades; the crystals produce feedback designed to reduce vibration and noise inside the cabin.

There are very small wireless sensors that can transmit information (when implanted in the patient's muscle) about local nerve activity via radio to an external computer, as well as receive energy through magnetic induction and send light shocks that stimulate muscles to act. The widely known "lotus effect", developed at the University of Bonn in Germany, the essence of which is to keep surfaces spotlessly clean after rain, caused by the movement of liquid along microscopic paths.

An interesting prospect is also the use of smart polymers in the invention of an "invisibility cloak" or, as they are also called, an "invisibility carpet". A breakthrough in the field of smart polymers could be understanding, down to the atomic detail, how a biopolymer functions in a living cell. In the next few years, due to the development of computer methods, it will become entirely possible to conduct molecular modeling of those systems, biopolymers, that are present in a living cell [3].

Due to the wide range of applications of smart polymers, the relevance of these materials is undeniable in modern science and research in this area of chemistry deserves special attention. In addition, for such research, scientists are increasingly attracting another highly promising area of chemistry - molecular modeling, which is becoming a doubly relevant and promising task for modern science.

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Economic sciences

WAYS TO DEVELOP A HUMAN-ORIENTED ECONOMY IN AZERBAIJAN IN THE CONTEXT OF THE FOURTH INDUSTRIAL REVOLUTION

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Abstract

The present article investigates the ways in which a human-centered economy can be developed in Azerbaijan in the context of the Fourth Industrial Revolution. The article first provides a detailed description of the processes that led to the previous industrial revolutions. It then goes on to explain the main features and essence of the Fourth Industrial Revolution, it offers materials related to the organization, efficiency, and advantage of the processes taking place in the conditions of the Fourth Industrial Revolution. It was posited that the advent of novel professions would render many traditional occupations obsolete. The investigation delved into the repercussions of the integration of advanced technologies, the proliferation of digital mechanisms, and the automation of manual labor within the context of the human factor. In the contemporary epoch of accelerated technological advancement, the imperative of attaining proficiency in the innovations pertinent to each discipline has been accentuated. The chronology and initial results of the organizational, legal, and other measures taken in Azerbaijan related to the Fourth Industrial Revolution have been announced, emphasizing the need to accelerate the transition to technological change in the country. The strategic importance of effective use of artificial intelligence capabilities has been highlighted, and the priority of completing the creation of the national innovation system has been noted. Generalizations and suggestions have been made on the formation and development of a human-centered economy under the conditions of the Fourth Industrial Revolution.

Keywords: Azerbaijan, Fourth Industrial Revolution, high technologies, artificial intelligence, "smart" technologies, innovations, development and application of innovations, high technology centers, advantages of artificial intelligence.

It is imperative to acknowledge the profound impact of the Fourth Industrial Revolution on the contemporary global economy. In essence, if we generalize from the initial industrial revolution, it becomes evident that the contemporary industrial revolution encompasses a plethora of intricate technologies. Indeed, we have entered an era of profound augmentation of the outcomes attained by the preceding three industrial revolutions. The Fourth Industrial Revolution is characterized by two key aspects: the emergence of highly productive domains that extend beyond the realm of material production, and the boundless possibilities afforded by artificial intelligence. Furthermore, the capabilities and capacity of microelectronics have increased exponentially, and robotics has witnessed the integration of nanomotors, which are rotors measuring at the molecular level. This phenomenon is intricately intertwined with the revolutionary advancements in innovation and nanotechnology [1]. In nations with advanced technological capabilities, the role of robots in various economic sectors is projected to rise, facilitating the formation of a more affordable labor force. A significant objective in the United States is the reduction in demand for conventional energy resources, which is expected to be achieved through the implementation of advanced technologies. In this regard, the development of energy supply from renewable sources has been identified as a top priority. In addition to maintaining its global economic leadership, the United States is also at the forefront of artificial intelligence development. To provide a point of reference, the number of experts in artificial intelligence in the USA and Canada totals 10,000, whereas China and India, despite their status as developing countries, have only 1,000 experts in this field. Addressing this disparity will necessitate significant investment of time and resources. During this period, it is inevitable that technological complexity and functional capabilities will continue to advance. In the context of robot production and export to global markets, China is poised to expand its share, with up to 40% of the robots placed on the market being of Chinese origin. It is noteworthy that Japan and South Korea have particularly noteworthy activities in this domain. Japan

has firmly established itself as the global leader in the production of industrial robots, with the most sophisticated robots performing complex production and technological operations. This development has significant implications for employment dynamics, as it often leads to the displacement and exclusion of individuals engaged in production and service processes. Consequently, economically developed countries are driven to attract talented and skilled specialists from various regions worldwide through immigration policies.

The contemporary global technological revolution is driving rapid advancements in production and technology across economically and technologically developed countries, with these changes eventually extending to the entire global population. Innovation plays a pivotal role in modernization and the transition to a novel technological system, and the proliferation of automation processes has the potential to profoundly impact both individuals and their environment. To this end, a comprehensive and systematic consideration, assessment, and implementation of technological, economic, scientific, innovative, social, psychological, and other factors is imperative in the processes of formulating and developing a human-centered economy. The present study observes the considerable resistance and competition exhibited by South Korean companies, as well as the recent competition between Chinese companies and technologically advanced countries, including the United States, Japan, Germany, and France. It is noteworthy that economically developing countries have achieved notable technological innovations by modifying and replicating the results of technologically advanced countries. However, recent observations indicate substantial progress in terms of technological development and adoption of new technologies in a number of similar countries.

The fourth industrial revolution is distinguished by its comprehensive automation, the advent of industrial Internet resources, and the enhancement of intellectual resources in terms of quality and multifunctionality. Additionally, it is characterized by the profound technological development of cyber-physical systems. This evolution is exemplified by the pervasive presence of mobile devices, internet activity platforms, "smart" technologies, and multifunctional computer programs in both society and the economy. The implementation of analogous mechanisms and technological tools has been shown to enhance economic efficiency, thereby creating additional opportunities to predict and organize technical support and development under more optimal conditions. Concurrently, the knowledge economy is undergoing a pronounced transition, becoming a pivotal domain of economic activity, thereby accelerating technical progress and development to a considerable extent. In essence, the foundation of the economy is not in physical resources, but rather in human intelligence and its potential.

According to forecasts derived from multiple sources, it is projected that by the end of 2025, operations conducted over the Internet within the global economy will generate a sum exceeding 10 trillion dollars. The primary factors contributing to this projected growth include the widespread adoption of information technologies in various industries and the increasing automation of business processes at an unprecedented level. Additionally, the rapid advancements in artificial intelligence, as previously discussed, are expected to play a significant role in shaping the future of the global economy.

Given that the forecasting of most segments of the fourth industrial revolution is, in some sense, for a long period, the focus will be on a group of features. A primary direction of this revolution entails a substantial augmentation in labor and production productivity. The pervasive implementation of automation and robots in these processes gives rise to the displacement of individuals from their respective workplaces [2]. However, in the course of international discourse, particularly within the framework of the World Economic Forum in Davos, Switzerland, numerous transcontinental companies have underscored the significance of prioritizing the development of human capital in alignment with global trends and transformations. Among the key factors contributing to this paradigm shift are the need to retrain employees, fostering their creativity, and ensuring their active and effective engagement in adopting and implementing novel innovations. These measures, in turn, can serve as substantial justifications for prioritizing the development of a human-centered economy during the periods of intensified development associated with the Fourth Industrial Revolution.

Digitalization processes in technologically advanced countries have yielded numerous advantages in terms of quality. These advancements have been observed to enhance the customer experience, ensuring satisfaction, promptness, and availability of services. Tesla, a prominent example of this trend, has a track record of regularly updating its software services, even for pre-sold vehicles, ensuring that customers receive the latest features and enhancements. Another notable example is the transformative impact of the Internet service of the Amazon company, which has facilitated access to literature and reading material to individuals across the globe. The rapid growth of many start-ups, enabled by digital platforms such as WhatsApp and Instagram, has become a pervasive global phenomenon. In the realm of

digital innovation, companies that are not widely recognized, such as Alibaba, Uber, and Airbnb, have rapidly evolved into some of the largest corporations in the world over a brief period [3]. It is noteworthy that a significant trend within the human-centered economy, precipitated by mass digitalization, is the heightened demand for highly qualified personnel and professionals. The rapid development of digital technologies is characterized by higher revenues. Consequently, each economic entity is subject to a process of constant transformation, irrespective of its position or function. The integration of technological innovations has emerged as a pivotal prerequisite for survival and growth in this dynamic landscape.

In order to ascertain the fundamental principles of the human-centered economy, it is imperative to acknowledge the contemporary evolution of the role of the individual within the economic system. This contemporary evolution underscores the significance of this role, a fact that demands careful consideration. The formulation and evolution of a human-centered economy must be anchored in explicit objectives, thereby ensuring the effective management of this economic model. A survey of the extant literature reveals an absence of a unifying approach to the essence of the human-centered economy phenomenon. Nevertheless, numerous researchers have endeavored to concentrate on specific aspects of this concept. For instance, G.S. Alonzo and S. Hickerson adopt a multi-level approach to delineate the objectives of a human-centered economy, encompassing macroeconomic goals such as full employment within a fair and sustainable society, and microeconomic goals including ensuring opportunities for decent work, creative endeavors, economic benefits, and security [4].

A variety of economic frameworks have been established within the domain of modern economic studies, each focusing on distinct aspects of human activity, the acceleration of specific developmental trajectories, and the advancement of society as a whole. Examples include the socially oriented economy, the intellectual economy, the knowledge economy, the innovative economy, the informational economy, the digital economy, the cognitive economy, neuroeconomics, behavioral economy, ethnoeconomics, and the virtual economy. However, it is important to note that these economic systems do not possess a uniform character. This is due to the fact that the comprehensive development and full activity of a person must be ensured by taking into account all aspects of an individual's life. The human-centered economy can be conceptualized as a unifying synthesis, encompassing diverse facets of contemporary economic systems.

The term "people-centered" signifies that the focal point of the work process or the company as a whole is the individual with their unique values, priorities, and motivations. Contemporary realities shape an individual's lifestyle, priorities, behavioral norms, and acceptance of these norms as values, compelling individuals to modify their individual behaviors. However, this behavioral paradigm does not align with human nature. Individuals ought to base their behavior on their own interests, needs, and ability to satisfy them. In contrast to the modern economic system, which prioritizes a production model aimed at maximizing consumption, the human-centered economy functions as an actual consumption model, with the objective of enhancing human well-being. Despite the inclusion of the concept of a "human-centered economy" in scientific discourse, it remains deficient in its theoretical and methodological foundations. The full scope of this category's essence remains obscured without a methodological apparatus. Consequently, there is an urgent need to define and formulate a productive methodology for economic research that will help build a full-fledged theory of human-centered economics, which is quite difficult within the social sciences.

Presently, scholars in the field are engaged in formulating a range of strategies aimed at promoting the sustainable growth of the economy while ensuring its resilience. The prevailing approaches encompass the domains of information, knowledge, innovation, the digital sphere, and ecology, among others. In essence, the fundamental objective of the economic system should be to prioritize the needs and requirements of individuals and to optimize their satisfaction. The fundamental rationale for the evolution and perpetual existence of the economic system must be sought in the inherent nature of humankind. In this context, the notion of embracing a human-centered economy as a subject of inquiry assumes significance [5].

To synthesize a concise definition of human-centered economics, the following formulation is proposed. The human-centered economy can be defined as a system of interaction between economic subjects formed on the basis of resources such as human, material, and information, formed on the basis of aspects of human nature (social, biological, mental), goods (goods, services, ideas), and aimed at satisfying human needs. This comprehensive definition enables a nuanced understanding of the human-centered economy. This definition unveils the triple component of human-centered economics, namely human nature, resources, and benefits.

In order to establish and cultivate a human-centered economy, it is imperative to prioritize the needs of individuals at the core of the economic system. This necessitates the resolution of challenges that demand a comprehensive theoretical framework and the formulation of unified postulates grounded in scientifically substantiated conceptual foundations. Contrary to the prevailing technological emphasis in contemporary economic discourse, numerous experts contend that the core of the modern economy is not technology per se, but rather, human needs and aspirations. A human-centered economy is a strategy to increase investment in people's employment opportunities, disposable income, purchasing power, economic, environmental, and social security. A people-centered economy fosters the potential to respond more effectively to concerns regarding inclusion, sustainability, and resilience, as well as to the challenges people encounter on a daily basis [6]. Assessing the state and development of the human-centered economy and human potential is facilitated by a range of indicators, which in turn inform decisions aimed at enhancing these vital areas. These indicators are widely regarded as the primary benchmarks for assessing the socio-economic development of individual nations, businesses, and the general population.

The exacerbation of globalization processes engenders an imperative for the formulation of a novel enterprise model. In this context, a growing number of businesses are opting for a human-centered model as the foundation for their operations. This shift is driven by the need to maintain a balance between the interests of the enterprise, its customers and users, and society at large. It is imperative to delineate the fundamental purpose of a human-centered enterprise, which is to comprehensively address the needs of customers, employees, and society at large through its operations. A human-centered enterprise is defined as an organization that prioritizes the needs of customers and society through the provision of products and services, while also ensuring the well-being of employees by enhancing the efficiency of work processes and organizational structures.

The fundamental impetus for advancement within a human-centered economy is the diverse and evolving needs that characterize this paradigm [7]. The concept of need is intricately linked to the process of identifying the subject of action, which can encompass not only individuals but also groups, classes, or even societies. Contemporary scientists posit that needs are not exclusively the purview of human individuals or communities; they can also be expressed by biological organisms. However, it should be noted that not all biological organisms are subject to action. Human behavior is not merely a product of autonomous decision-making; rather, it is influenced by a myriad of factors, including social relations, which serve as a foundation for human activity. The actions of individuals are governed by objective laws, with human needs playing a pivotal role in their underlying mechanisms. A human-centered enterprise prioritizes employee empowerment, leveraging the principle of constructing an optimal organization. Employee empowerment and responsibility represent critical tenets of human-centered enterprises.

A human-centered business model is a business model that prioritizes enhancing the experience of users, customers, and society at large. A human-centered enterprise regards all business processes as the needs of its current and potential customers. In the context of human-centered enterprises, internal projects are developed with a consideration for the evolving nature of customer needs, thereby facilitating active customer participation in the continuous enhancement of products or services. Performance indicators in the human-centered enterprise model are designed to reflect customer and societal satisfaction with the enterprise's activities. It is evident that this approach necessitates a comprehensive consideration of all business indicators within the enterprise.

It is important to acknowledge that in Azerbaijan, there are ongoing efforts to recalibrate the nation's economic structure in response to global challenges, with a focus on human capital development and the diversification of its economic portfolio [8]. Azerbaijan has demonstrated a resolute commitment to effectively address global challenges and trends, positioning itself at the vanguard of adopting new development trends in the post-pandemic era. In this regard, Azerbaijan is undertaking proactive measures to establish a conducive environment for the development of the digital economy and related technologies, aligning with the standards of the Fourth Industrial Revolution. In this regard, the "Analysis and Coordination Center of the Fourth Industrial Revolution" was established as a public legal entity under the Ministry of Economy of the Republic of Azerbaijan on January 6, 2021, as per the decree of the President [9]. Consequently, a series of measures and initiatives are being executed, encompassing economic, organizational, and legal dimensions. Notably, the Azerbaijan Center of the Fourth Industrial Revolution Network of the World Economic Forum was inaugurated in Baku, and a conference was held on the subject of "Trends in the Fourth Industrial Revolution". During the event, the role of digitization and modern technologies in ensuring sustainable development was highlighted, and the importance of increased private sector involvement in this field was underscored. This underscores the substantial

potential for the evolution of the digital economy ecosystem in Azerbaijan. In the near future, Azerbaijan's primary objectives will be to enhance its global standing and to achieve recognition as a leading technologically advanced nation. In this regard, collaboration with the World Economic Forum and its Fourth Industrial Revolution Network, as well as the establishment of one of the few Fourth Industrial Revolution centers globally in Azerbaijan, will facilitate the expeditious implementation of advanced technologies, the provision of services to citizens and the public interest, and the advancement of the digital economy. The advent of the Fourth Industrial Revolution and the evolution of a production ecosystem reliant on advanced technologies have engendered an environment conducive to the cultivation of competitive human capital that aligns with the demands of the Fourth Industrial Revolution. Consequently, educational institutions are compelled to adopt a more proactive stance in this regard. Concurrent with these developments, memorandums of understanding on cooperation were signed between the Center for Analysis and Coordination of the Fourth Industrial Revolution and the State Agency for Compulsory Medical Insurance, as well as "Microsoft Azerbaijan" LLC [10].

In addition to these events, at the World Economic Forum held in Davos, Switzerland, on January 21, 2020, the President of the Republic of Azerbaijan, Ilham Aliyev, and the President of the World Economic Forum, Borge Brende, signed a protocol of intent regarding the establishment of the Affiliated Azerbaijan Center of the Fourth Industrial Revolution Centers Network of the World Economic Forum. At present, cooperation with the World Economic Forum is underway on three platforms. Within the framework of these platforms, projects on "Artificial intelligence and machine learning," "Internet of things and urban transformation," and "Digital trade" are implemented in Azerbaijan. In the context of the Fourth Industrial Revolution, a series of measures are being implemented to ensure rapid development in the areas of electronicization, digitalization, scientific and technical progress, the achievement of significant milestones, and the enhancement of our country's standing in these domains. The "Azerbaijan Socio-economic Development Strategy of the Republic in 2022-2026" is a pivotal document in this regard, as it outlines a comprehensive set of measures aimed at propelling the nation's future progress in this domain. Of the measures outlined in this plan, a group of measures, of which the Ministry of Economy is the primary executive, merits particular attention: 1. The development and implementation of a strategy for the advancement of the digital economy; the creation of a regulatory mechanism for the development of the digital economy; the exploration of the possibilities of applying the technologies of the fourth industrial revolution in the national economy; the creation of mechanisms (simplified visa regime, etc.) for attracting foreign talents to the country; and the formation of a "Science-industry cluster 4.0." Concurrently, the "Working Group for the Development of the Digital Economy Strategy" was established to formulate and operationalize the strategy for the development of the digital economy. The processes of developing this strategy are ongoing. In the course of formulating the strategy, the group convened regularly with representatives from the state and private sectors. A comprehensive analysis of the prevailing circumstances in this domain within the nation was conducted, and global best practices were examined. Collaborations have been initiated with 4SIM and the Fourth Industrial Revolution Center Networks of the World Economic Forum, focusing on the establishment of a regulatory framework for the digital economy's advancement. Furthermore, the establishment of the "LegalTech" initiative group has been undertaken with the objective of contributing to the development of the start-up ecosystem in the field of law in Azerbaijan. The initiative group is composed of representatives from relevant state institutions, non-governmental organizations, the private sector, and educational institutions. The primary goals of the initiative group are to support young people in implementing business ideas and to contribute to the processes of expanding the promotion of innovations and technologies at the country level. The initiative group's activities encompass the promotion of innovation in the domain of law and the implementation of 4SI technologies, in addition to the establishment of a large-scale cooperative platform among relevant stakeholders.

Furthermore, 4SIM implements measures and initiatives to achieve automation, improvement, and optimization of production processes by applying new business models and innovative solutions. Furthermore, 4SIM places significant emphasis on the education of young individuals, with the objective of cultivating a workforce that is well-versed in the competencies required for digital transformation and other pertinent domains within the future labor market. To this end, 4SIM is implementing several projects.

A notable initiative is the "IT Hubs: Attracting foreign direct investments to the information and communication sector of Azerbaijan" has been initiated. The project is financed under the EBRD-Azerbaijan Cooperation Account, established through a partnership between the Government of the Republic of Azerbaijan and the European Bank for Reconstruction and Development. Concurrently, 4SIM

is implementing the "4SIM Academy" project in collaboration with the Ministry of Science and Education and the US-based company "Coursera." The project is currently in the registration phase, and upon completion, it will offer thousands of Azerbaijani youth access to the digitization and digital transformation resources of Coursera, thereby expanding their development and application areas. Notably, the program will provide complimentary training courses to participants [11].

A study by Oxford researchers Carl Benedikt Frey and Michael A. Osborne analyzed 702 occupations to study the impact of automation on the labor market in the United States. The researchers reported that 47% of these jobs will be at risk of automation in the next 10-20 years. A report by the McKinsey Global Institute on 46 countries, representing 80% of the global workforce, indicates that at the current technological level, only less than 5% of jobs can be fully automated. However, there is a divergence of opinion among experts regarding the impact of the technologies of the Fourth Industrial Revolution on employment. These experts posit that while the Fourth Industrial Revolution may result in short-term job losses, it will also generate a multitude of new employment opportunities that are yet to be conceptualized. However, these emerging roles will necessitate advanced skills, as the rapid advancements in technology diminish the "usefulness period" of existing knowledge and skills. Estimates indicate that approximately 50% of the knowledge acquired during the first year of a four-year university education in technology becomes obsolete by the time students graduate. According to a report by the World Economic Forum, 65% of children currently enrolled in primary school may eventually be employed in occupations that have yet to be created. In developed countries, deliberations are already underway concerning the implementation of preventive measures in the domains of labor market and social security policy. This phenomenon is not merely coincidental. The automation of workplaces through the integration of artificial intelligence and the pervasive utilization of robots in production will profoundly impact the allocation of tax, social insurance, and pension funds. The taxation of robots is a subject that has already sparked significant discourse, with the prevailing viewpoint being that robots and humans have equal status in the creation of value, despite the fact that robots are more competitive in many areas.

It is evident that the inquiries concerning the Fourth Industrial Revolution are novel and necessitate novel methodologies. These inquiries encompass a wide range of disciplines, including technology, education, taxation, labor, and social sciences. In light of these challenges, there is an imperative for collective action among all stakeholders in the global political landscape, encompassing the public and private sectors, academic institutions, and civil society. Our nation has already initiated measures in this regard. In the "Azerbaijan 2030: National Priorities for Socio-Economic Development" program, endorsed by the Decree of the President of the Republic of Azerbaijan dated February 2, 2021, there is a clear emphasis on augmenting the technological capacity of the economy, cultivating the youth demographic for the imminent digital era, and equipping them with the requisite skills, qualifications, and vocational training. The "Smart City" and "Smart Village" initiatives, which are predicated on the extensive implementation of artificial intelligence, Big Data, the Internet of Things, and assorted digital technologies, are currently being executed. Personnel training in subjects related to the technologies of the Fourth Industrial Revolution, including "Artificial intelligence," "Robots and robotic systems," "Mechatronics and robotics engineering," and "Data analysis," is being carried out in higher educational institutions.

The Employment Strategy for 2019-2030 was formally endorsed by the Decree of the President of the Republic of Azerbaijan dated October 30, 2018. A central tenet of this strategy is the implementation of a labor force certification program, a move that is driven by the confluence of globalization, innovative production methods, and evolving labor conditions. This initiative is underpinned by the necessity to cultivate highly skilled professionals, thereby catalyzing the evolution of competency-based educational curricula. These educational programs are to be grounded in professional standards and align with market demands, ensuring the development of competitive labor forces. To this end, a comprehensive strategy is envisioned, encompassing measures aimed at enhancing the existing system of vocational, secondary, and higher education. The advent of Industry 4.0 will precipitate the creation of new professions and employment opportunities for the workforce, but it will also engender an increase in the competencies expected of people in the labor market. In general, each of the first three revolutions led to changes in employment opportunities, and the Fourth Industrial Revolution is affecting the whole world with its rapid pace. To this end, it is imperative for the state to implement pragmatic measures to ensure that Azerbaijan does not become a bystander in this transformative process. Specifically, there is a need to expand the scope of activities undertaken by state institutions involved in the development of

this field, to enhance the scale of international cooperation, to ensure the development of ICT-related fields, and to augment the potential of qualified personnel [12].

Consequently, in the imminent future, a series of intricate and methodical measures must be implemented to establish a human-centered economy that aligns with the demands of the Fourth Industrial Revolution in Azerbaijan.

- First, it is imperative to undertake a thorough examination of advanced practices observed in technologically advanced countries, followed by the formulation of mechanisms for their implementation.

- Second, to bolster the nation's innovative capacity, the establishment of a National Innovation System must be finalized.

- Third, the establishment of a network of technology and innovation centers in major cities and regional centers of Azerbaijan is crucial.

- In the context of the Fourth Industrial Revolution in Azerbaijan, it is imperative to prioritize the human factor in the formation of a human-centered economy. This necessitates the implementation of measures to ensure that individuals who may experience job loss due to automation and artificial intelligence are able to acquire new skills and knowledge, thereby enhancing their employable skills and marketability.

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NEW TRENDS AND CHALLENGES TO THE GLOBAL ECONOMY

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<https://orcid.org/0009-0007-1222-4238>**Abstract**

The article deals with the problem of today's economy de-globalization in conditions of post-crisis restoration of world economy from 2009 to the present day. The author shows that de-globalization is characterized by aggravation of protectionist policy of states (especially in conditions of combating against COVID-19 pandemic) and extension of sanction regimes. It caused the relative drop in intensity of global trade and global capital flows and at the same time led to the crisis in regional integration in different parts of the world. The article systematized the most widely spread approaches of today's researchers to the issue of de-globalization. It was found out that expectations of fast return of global economy to the former trajectory of globalization were groundless. The author shows that COVID-19 pandemic fostered disintegration processes in global economy. It was caused not only by objective need to combat against the virus but also by goals of stimulating policy of states essential for overcoming lock-down after-effects. A conclusion was drawn that, on the one hand, de-globalization conditions give states the tools for supporting national manufacturers and development of priority industries but, on the other hand, overall radicalization of political discourse could raise risks of social tension and military confrontation.

Keywords: globalization, protectionism, sanctions, global trade, regional integration, direct investment.

Introduction

In the context of the accelerated globalization of the 1980s–2000s, which took place against the backdrop of the collapse of the socialist camp, the thesis theoretically derived and formalized in the famous article by F. Fukuyama "The End of History?" became the mainstream of Western ideology. In it, the author comes to the conclusion that the disappearance of the world socialist system is evidence of the triumph of the principles of Western-style liberal democracy, which have no alternatives. This means that society has reached the end point of socio-cultural evolution, where there is no place for wars and revolutions that were carried out in the name of ideologies that asserted their superiority over liberalism [12]. The economic side of the ideology of market globalism went back to the idea of four freedoms (for the movement of goods, services, capital and labor), as well as the principles of free access to raw materials, global patent law, the use of the dollar and the euro as global money, the intervention of international organizations in the domestic policies of states, etc. The question of whether the period of openness in politics and foreign trade could hypothetically be replaced by protectionism and trade wars contradicted the dominant narratives and was practically not discussed even in the scientific sphere.

At the same time, the period of global good neighborliness ended with the development of the financial crisis of 2007-2009. The history of the world economy entered a stage of deglobalization. High rates of economic growth, which once seemed to have come forever, gave way to a less favorable situation, forcing states to concentrate their efforts and resources on restoring national economies and supporting local businesses. Various methods of protectionist policy were used: from the introduction of individual increased customs duties to the implementation of entire state programs. They were aimed both at weakening foreign competitors (introduction of sanctions regimes) and at creating hothouse

conditions for domestic producers (for example, import substitution programs in Azerbaijan and "Buy American" in the USA).

Discussion

Deglobalization: Theoretical Aspect

The first mention of the term "deglobalization" dates back to 1989 (according to Google Scholar). However, the fundamental study of this issue was first conducted by W. Bellow, who in his book "Deglobalization: Ideas for a New World Economy" reveals the internal contradictions of the latest stage of capitalist globalization, accuses developed countries of strictly subordinating developing economies to the interests of transnational corporations and banks, and also conducts a critical analysis of supranational institutions (IMF, WTO, World Bank, etc.). The author calls on the world community to fundamentally shift towards a decentralized economic model that allows all countries to focus on their own interests and values. Bellow argues that the WTO regulatory institutions are in crisis, and its member states have largely lost their economic sovereignty [9].

The spread of the WTO's influence and the favorable conditions it creates for global corporations undermine the prospects for sustainable development, social justice, equality, and improved environmental conditions [9].

The frequency of references to the concept of deglobalization increased against the backdrop of the global crisis of 2007-2009. A real surge of interest in this topic occurred in 2017 after D. Trump came to power in the United States, and the crisis of European integration led to the victory of supporters of the UK's exit from the EU in the referendum. Then, in 2019-2020, due to the intensification of trends in political and economic confrontation between states, as well as the spread of the coronavirus pandemic, which paralyzed tourism and labor migration, the popularity of the deglobalization topic reached its peak (Fig. 1).

At first glance, the studies were divided into two main directions: some interpreted what was happening as a systemic crisis of market globalism, others - as a temporary decline in trade activity, characteristic of the phases of recession and stagnation of the traditional economic cycle.

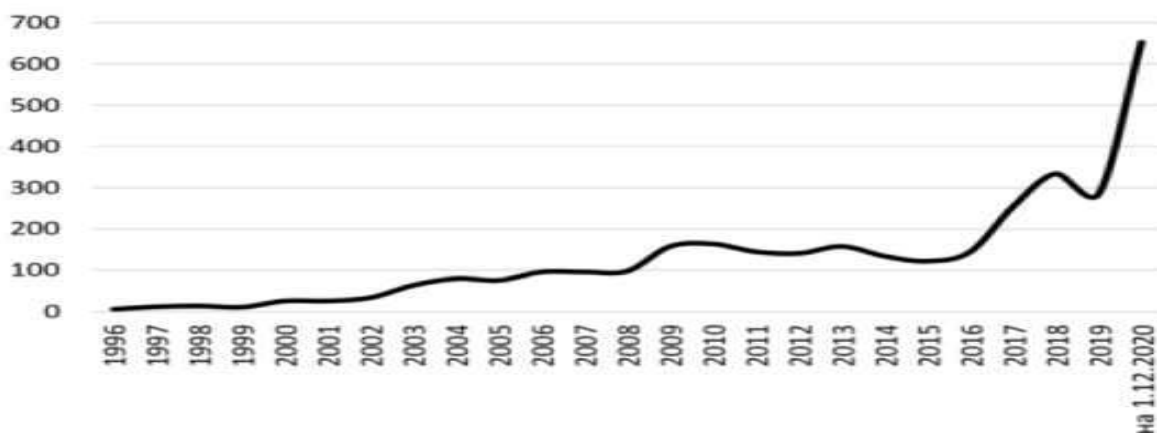


Fig. 1. Frequency of use of the term "deglobalization" in scientific papers (in titles and keywords of articles and monographs) included in the Google Scholar database (for the period from 1996 to 1.12.2020 inclusive)

The views of researchers are also divided regarding the consequences of what is happening in the global economy. Some consider this turn of events to be an attempt by society to overcome the shortcomings of globalization, while others predict social catastrophes due to the disintegration of the world capitalist system.

Thus, V. S. Pankov in his work "2020 – Globalization or Deglobalization?", published in 2010, suggests that the pre-crisis model of globalization has reached a dead end and has exhausted itself. The overwhelming influence of national interests makes the mechanisms of supranational regulation and coordination inoperative: the G8 is a discussion club that serves the interests of its members rather than the world community. At the same time, the organization "does not have even a minimal infrastructure (a permanent secretariat, etc.) at least for monitoring (let alone control) the implementation of what is recorded in the final documents of the summits. There are no international legal instruments for their implementation at all" [4]. The documents adopted at the summits are only declarations of intent. The

deadlock of the Doha stage of the WTO negotiations, according to the author's forecasts, led to the leading economies pursuing a policy of mutual preferences with their neighbors within regional integration groups without the organization's knowledge, to the detriment of openness to the rest of the world. Further developments, as history has shown, took place according to an even more gloomy scenario. A number of other authors adhere to a similar position [15–17].

Representative of the new institutional school A. A. Auzan [8] argues that globalization is not a linear process, but a wave-like one. At the moment, we are not witnessing the decline of the phenomenon of globalization, but only a temporary "low tide" that began after the crisis of 2008–2009 and led to a reduction in trade, trade wars, sanctions, etc. At the moment, world trade is at a local minimum, and soon the world will enter the stage of resumption and strengthening of globalization.

B. A. Kheifets [6], speaking about the modern transformation of global integration processes, points to two modern trends: economic nationalism and transregionalization. The first concerns the expansion of protectionism in world trade and capital flows: the number of measures adopted that are protectionist in nature is traditionally higher than those aimed at trade liberalization, and non-tariff measures (various technical regulations, conformity assessment criteria, etc.) are often unfeasible and ruinous for small and medium-sized organizations and developing countries. At the same time, at the time of writing the study, the author predicted the restoration of globalization according to the specified indicators after 2017. The trend towards transregionalization that he notes allows for the creation of large trade unions (for example, the Trans-Pacific Partnership or the Comprehensive Economic and Trade Agreement), within which freedom of trade is truly great. However, countries that are not part of these associations are unable to enter into trade relations with the participants, which hinders their development. Kheifets nevertheless writes about his confidence that transregionalism in the future will not only not hinder globalization, but will also strengthen it. There is another point of view on the state of integration processes after the global financial crisis.

According to M.M. Orudzhev [19], there is no trade and financial disunity in the world. This is argued by the fact that, firstly, it is incorrect to compare the indicators of post-crisis times with the peak values of the economy in a state of overheating. Secondly, the economy, including world trade, demonstrated recovery growth after 2010. Thirdly, after the global financial crisis, at the initiative of the G20 countries, measures were taken to reform supranational institutions of the global financial system, such as the Basel Committee on Banking Supervision (for example, the adoption of the Basel III document), which should have led to an increase in the stability of this institution and the restoration and strengthening of international cooperation. However, the post-crisis stagnation of the world economy, called the Great Stagnation, has been going on long enough to be considered only as a phase of the medium-term cycle. And the intensification of the economic confrontation between the US and China is not only not getting closer to its resolution, but is also expressed in an increasing number of unfriendly steps by each of the parties. The same applies to Russia, Iran, Turkey and their relations with the US and the EU. Contrary to many expectations, sanctions on these countries have not been lifted, and Western countries are constantly using new pretexts to increase economic and political pressure on them.

Empirical aspects of deglobalization. World trade and global capital flows.

To assess the scale of economic deglobalization, let us look at the dynamics of the share of exports of goods and services, as well as direct investment in global GDP. This indicator has a negative trend in the post-crisis period.

In 2007, it was 35.5% of GDP. After a sharp drop in 2009 to 28.8% and recovery growth in 2010–2011, the intensity of international economic ties continued to decline, reaching 32.4% in 2019 (Fig. 2).

The decline in the intensity of global trade and investment also affected the dynamics of the development of global value chains, whose role in the global economy has also declined in recent years. Thus, the share of net national production in global GDP fell from 84.9 to 79% between 1995 and 2007. However, after the onset of the global financial crisis, it increased by 2 percentage points by 2017. At the same time, the share of simple value chains (with a single crossing of the customs border by intermediate consumption goods) fell by 1 percentage point, and complex ones by 2 percentage points [13].

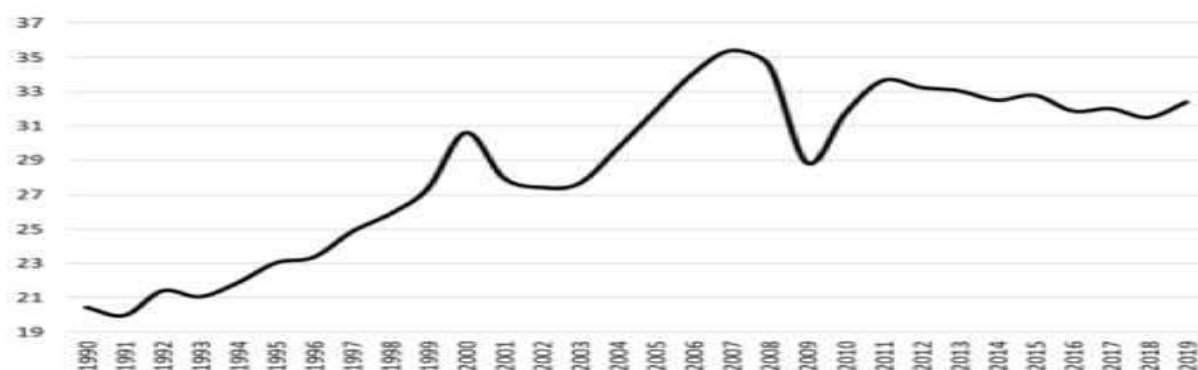


Fig. 2. Ratio of the sum of world exports of goods and services, as well as net FDI as a percentage of world nominal GDP at current prices (1990–2023) Compiled from: URL: <https://data.worldbank.org/indicator/BX.KLT.DINV.WD.GD.ZS>; URL: https://www.wto.org/english/ress/statistics/statistics_e.htm

The decline of international trade and investment relations has affected the dynamics of the development of the entire global financial market. One can note the process of financial divergence, which is expressed in a decrease in cross-border capital mobility, a slowdown in the dynamics of global securities markets, derivative financial instruments and loans. After the onset of the global financial crisis, the reduction in the volume of transferred flows of financial capital is estimated at 10-20% [20]. If we talk about financial transnational corporations, then in the post-crisis period their international activities have declined, many banks (however, like many non-financial organizations) preferred to concentrate their activities within national economies. Thus, in 2014, one of the largest financial conglomerates in the world, HSBC Holdings plc, refused to serve clients in more than 20 countries, and Citigroup (an American transnational investment bank and financial services corporation) reduced its presence in the retail banking services sector almost in half - to 24 countries [7]. The period of rapid growth in the volume of international credit in the interval between the crises of 2000 and 2008 was replaced by its long-term stagnation (Fig. 3)

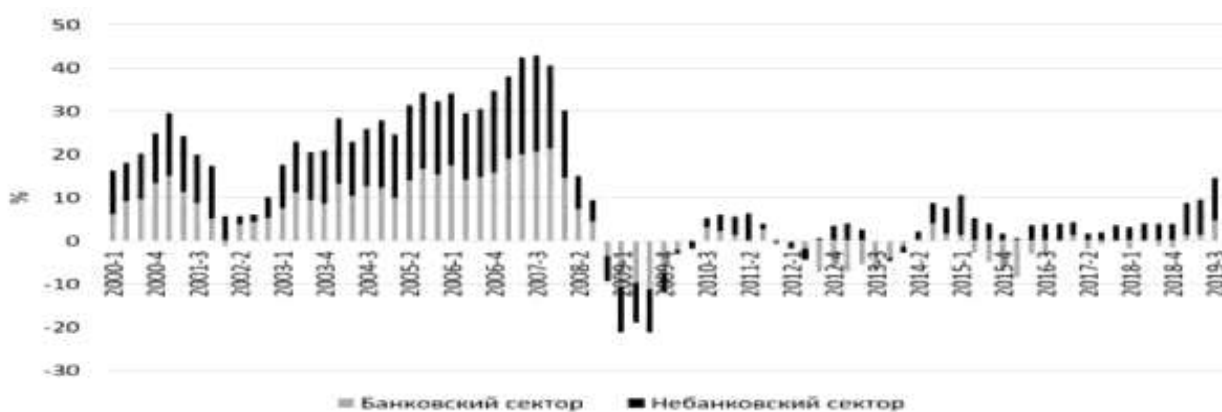


Fig. 3. Dynamics of the global credit market (annual growth rates for US dollar instruments as a percentage of the previous year) Составлено по: URL: <https://www.bis.org/statistics/gli.htm?m=6%7C333%7C690>

The growth of non-banking sector loans decreased by 2-4 times from 2009 to 2019, and for the banking sector it was in the negative zone. In 2019, a trend towards a weak market recovery emerged. At the time of publication of the study, data for 2024 are not yet available, but it can be assumed that the lockdown announced in most countries of the world against the backdrop of the coronavirus pandemic will again collapse the indicators of the international credit market. Rising protectionism The

deglobalization of the world economy also manifests itself in the strengthening of protectionist policies. According to Global Trade Alert, between 2009 and 2023, states adopted more than 11.5 thousand measures aimed at regulating foreign trade, cross-border capital flows and migration. 3/4 of them were protectionist in nature (Fig. 4).

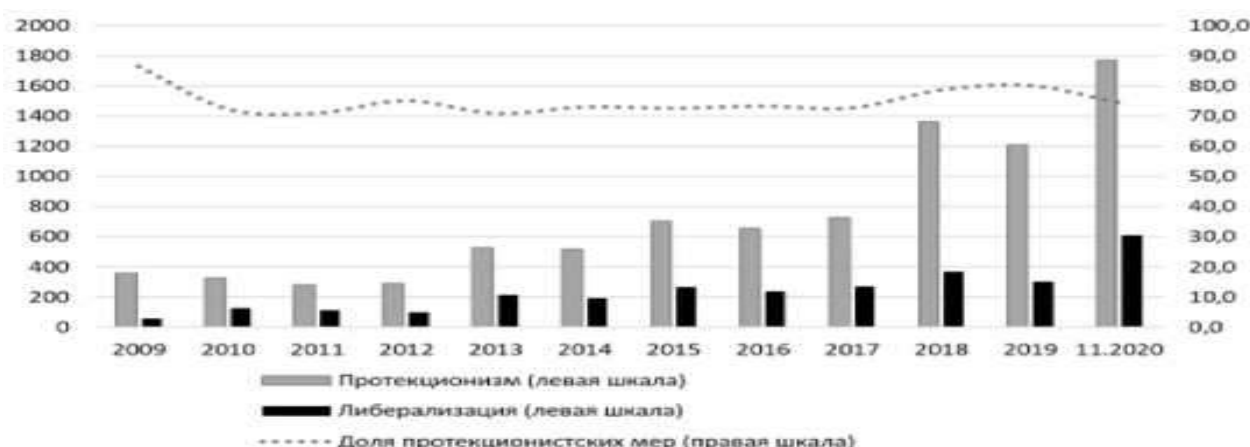


Fig. 4. Total number of measures adopted by states regulating foreign trade, foreign investment and migration (2009–2020). Compiled from: URL: https://www.globaltradealert.org/global_dynamics (accessed: 12.12.2020).

The most popular measures to protect the national market are subsidies for local producers, quotas and tariff restrictions (Table 1).

Table 1
Measures adopted by states to regulate foreign trade, foreign investment and migration (2009–2023)*

Protectionist measures	Number of measures
Subsidies (except export)	2 956
Trade quotas	1 541
Export support (including export subsidies)	1 443
Tariff regulation	1 080
Regulation of trade-related investments	450
Tightening regulation of public procurement	318
Targeted licensing	306
Regulation of FDI	193
Regulation of migration	162
Other measures	269

Compiled from: URL: https://www.globaltradealert.org/global_dynamics (accessed: 12.12.2023).

The main conductor of protectionist policy is the United States. However, this circumstance is not only the result of the presidency of D. Trump, known for his isolationist rhetoric. During the second term of B. Obama's presidency, the number of restrictive measures in trade and financial relations against the G20 countries increased from 50 to 150 from 2013 to 2016. At the same time, other G20 countries also pursued policies that were contrary to the interests of American companies and also directed against each other. The number of such practices increased over the same period from 509 to 8771. To the greatest extent, they consisted of the establishment of artificial barriers in foreign trade: technical regulations, voluntary standards, conformity assessment criteria (Table 2).

Table 2

10 countries that adopted the largest number of protectionist measures in the period 2009–2023.

Country Share, %	Number of measures	Share, %
USA	984	6,6
India	723	4,9
Russia	559	3,8
Germany	523	3,5
United Kingdom	515	3,5
Canada	470	3,2
Brazil	442	3
Argentina	419	2,8
Italy	403	2,7
France	360	2,4

Compiled from: URL: https://www.globaltradealert.org/global_dynamics (accessed: 12.12.2023).

The main target of restrictions is China. With the help of economic barriers, Western countries are trying to prevent its expansion into national markets (Table 3).

Table 3

10 countries against which the largest number of protectionist measures were adopted in the period 2009–2023.

Country Share, %	Number of measures	Share, %
China	3 466	3,22
Germany	2 532	2,35
USA	2 377	2,21
Italy	2 294	2,13
France	2 259	2,1
Great Britain	2 103	1,95
Republic of Korea	2 095	1,95
Japan	2 012	1,87
Spain	1 976	1,83
Netherlands	1 972	1,83

Compiled from: URL: https://www.globaltradealert.org/global_dynamics (accessed: 12.12.2023).

The most intense struggle unfolded in the field of ferrous metallurgy (Table 4). China achieved great success in winning dominance in this market, becoming the largest producer of this product in the world, displacing producers in Central and Eastern Europe, as well as Asia. Naturally, the PRC became the main object of protectionist policy on the part of the USA, Germany, India, and Japan.

Table 4

10 industries most affected by protectionist measures in the period 2009–2023 worldwide

Industry	Number of measures
Products of iron or steel	706
Other fabricated metal products	451
Motor vehicles, trailers and semi-trailers; parts and accessories	459
Other general-purpose machinery and parts	249
Basic organic chemicals	365
Pharmaceutical products	295
Iron and steel (rolled)	256
Products of flour milling	247
Mining, quarrying and construction machinery and parts	246
Electric motors, generators and transformers and parts	243

Compiled from: URL: https://www.globaltradealert.org/global_dynamics (accessed: 12.12.2023)

The crisis of regional integration

Another sign of deglobalization in the world economy has become the crisis of regional integration, which has manifested itself to varying degrees on all continents. The idea of openness and economic freedoms is becoming an object of criticism within the European Union. Eurosceptics (both left and right) are gaining increasing popularity in France, Germany, Hungary, Poland, and Italy. The apogee of the crisis of European integration was the referendum on the UK's exit from the EU. Such trends are a consequence

of accumulated economic problems in Europe. One of them is the constant slowdown in economic growth over several decades and, as a result, the reduction of the EU's role in the global economy.

The task of ensuring the growth of competitiveness of the European Union economy has been set repeatedly, including within the framework of the Lisbon Strategy of 2000 and the Europe 2020 strategy. However, they have not brought significant success. The latest EU-24 development strategy, designed for the period from 2019 to 2024, sets the task of combating illegal migration and terrorism, creating a strong and dynamic economic base, admitting new members to the EU, and controlling climate change¹. The migration problem has remained acute for almost 10 years: the existing social policy forces the EU to spend more and more money on migrants. However, in conditions where migration is non-labor in nature, the contribution of migrants to GDP decreases so much that it does not cover the costs incurred (for example, the contribution of German migrants to GDP is 0.2% [7] per year). This entails an increase in xenophobic sentiments, pushing European authorities to take measures to limit migration.

The concept of a monetary union is also experiencing a crisis. The original idea of introducing a single European currency was to simplify trade and accelerate economic growth. However, in some cases, the loss of economic sovereignty prevents EU member states from taking sufficient measures to support their national economies with monetary policy instruments. This is causing anti-integration sentiments to grow in European countries, including in the form of mass protests such as the Yellow Vests. According to European Commission surveys, trust in EU institutions has fallen sharply since the peak of 2007. In 2016, Greece, France, Spain and the UK had the most unfavorable attitudes towards the EU [11]. For the latter, this resulted in a referendum on leaving the EU. According to a 2019 survey, 68% of citizens support the European Union, but the number of Europeans who do not approve of the direction of economic policy in the EU in general and in their countries in particular has also grown to 50% [10].

The integration project in the post-Soviet space is also going through hard times. Despite periodic media reports about the desire of one or another country to join the EAEU, the union continues to consist of the same five countries that created the Customs Union in 2010. Despite a slight increase in the share of mutual trade between the members of the union relative to trade relations with the outside world, it did not rise above 14% [1].

The EAEU members themselves are not ready to give up part of their economic sovereignty. Thus, the idea of creating a currency union on the basis of the EAEU did not find support. Kazakhstan strongly opposed the formation of supranational monetary regulation bodies [3]. This position seems justified, given the fact that the impact on the exchange rate of the national currency is an important instrument for regulating the economy in general and foreign trade in particular, and the importance of this instrument has greatly increased during the period of increasing protectionist tendencies in the world.

Within the EAEU, disagreements constantly arise on foreign economic issues. For example, after Russia imposed sanctions against Ukraine, other countries of the union continued to do business with Ukrainian companies. The attitude towards the management policy within the union also differs: the Belarusian authorities express a desire to form strong institutional structures that would strictly regulate the actions of countries; Kazakhstan is set on the opposite - to liberalize relations, freedom of action of the participating countries [3]. Despite the fact that by 2025 the formation of a single market for gas, oil and oil products is expected, consensus on this issue between the countries has not yet been reached.

Probably, the most problematic at the moment in terms of the number of existing contradictions is the free trade area UMSCA (UMSCA, former NAFTA). Before the reboot of NAFTA, there were suggestions that the union could fall apart due to the insoluble conflict of US protectionism (D. Trump at that time threatened to introduce protective tariffs on imports from Mexico) and the openness policy of other members of the association.

After the reboot and renaming of the agreement, the appearance of entering a new stage of cooperation was created, despite the fact that D. Trump insisted on the following favorable conditions for the United States [20]:

1) Mexican and Canadian companies forced to reduce imports of cheaper Asian and European intermediate goods for automobiles;

2) Mexican authorities are obliged to raise wages for workers in the auto industry (which could lead to an increase in industry employment in the United States and its decline in Mexico);

3) Canada and Mexico should liberalize their national financial markets, which is important for the United States as the world's largest exporter of financial services, which seeks to increase its trade surplus in this indicator;

4) Canada should reduce barriers to access by US companies to its agricultural market.

Despite the fact that the participating countries seemed to have come to an agreement after lengthy negotiations on the creation of USMCA, the contradictions not only did not disappear, but also worsened. According to a survey by Nanos Research, 81% of Canadians believe that the borders between the United States and Canada should not be open¹. Representatives of the Canadian and Mexican authorities are calling for people not to rejoice at the agreement that was adopted, but to prepare for a confrontation with the United States, which is clearly determined to lobby harshly for national interests [4].

Globalization and the COVID-19 pandemic

The coronavirus pandemic that broke out in 2020 has intensified the disintegration of the global economy. The lockdown declared in most major countries of the world, together with a sharp reduction in transport communications between countries, significantly limited the international circulation of goods, services, capital and labor. Against the backdrop of the epidemic, states continued to follow the policy of isolationism, primarily by closing borders to the entry of foreign citizens: in the spring of 2020, 175 new restrictive measures were introduced, 117 of which were still in effect as of September 2020, and 111 measures were still in effect as of January 2021.

The crisis of globalization is also forced to be acknowledged by the Economist magazine, the May 2020 issue of which was published under the headline "Goodbye, globalization! The dangerous temptation of self-sufficiency." The main article of the issue, however, avoids the word "deglobalization", following the tradition of the magazine, coining its own neologism "slowbalisation". It means a slowdown in globalization, the beginning of which the authors date back to 2008, when, after the fall of Lehman Brothers, world trade and investment fell relative to GDP. The coronavirus pandemic has not brought anything new to this process, because "when the virus had just begun to spread in Wuhan province, American tariffs were at a record high since 1993, and the United States and China began to divide up high-tech production between themselves" [14]. The Economist notes the growth of isolationist sentiments against the backdrop of the global pandemic. Thus, the Prime Minister of India announced the beginning of an era of economic independence for the nation. In Japan, only those companies that repatriate production can receive state subsidies; EU officials are talking about strategic autonomy and creating a fund to buy stakes in firms; the US authorities are calling on Intel to build factories in the country. The paper concludes with a note of pessimism: "Don't be fooled into thinking that a trading system with an unstable structure of state control will be more humane or safer. Poorer countries will have a harder time catching up, and rich countries will be more expensive to live in, with freebies likely to disappear entirely" [14].

According to our research, COVID-19 has reduced foreign direct investment flows by 30–40%.

As of late 2024, the economic situation remained fragile. This turn of events, according to our forecasts, has weakened the recovery, made the economy vulnerable and spread geopolitical instability [20]. Since the beginning of 2024, factories, stores, and companies have closed everywhere, suppliers have reduced their communication channels with customers, and demand has fallen sharply. Some industries are not only staying afloat, but are also experiencing increased demand (such as food products, household appliances, and computer equipment), but the overall observed and expected future impact of the pandemic on global trade is assessed as sharply negative. International travel is limited, with passenger traffic down by an average of 60% [14]. Labor mobility has fallen to a record low.

At the same time, the US government has announced new measures to regulate the labor market, making proposals to reduce immigration in order to reduce unemployment. Since 2019, the US government has been trying to change the rules for purchasing medical supplies, redirecting demand to the domestic market, and has also been convincing large companies to build factories in the US. A survey of Global Business Alliance members published in the spring of 2024 showed the following: 78% of respondents expect the country to become more protectionist in terms of cross-border mergers and acquisitions, government procurement, and trade due to the pandemic. Based on the 2023 MNC survey, approximately 30% of international companies expect to diversify their global supply chains, and 15% expect to become less dependent on Chinese suppliers as a result of the pandemic.

The pandemic has also affected international capital flows. Chinese venture capital in the United States fell to \$400 million in the first quarter of 2020 (60% below the level two years ago) [14]. The largest US pension fund (California Public Employees' Retirement System - Calpers) was ordered to stop buying Chinese shares. According to World Bank forecasts, MNCs may reduce their cross-border investments by a third in 2024-2025.

In 2024, countries representing 59% of global GDP tightened rules on foreign investment transactions (a situation that could be further exacerbated by the need to pay off new debts by restricting cross-border capital flows). In particular, the governments of Germany, Italy, Australia, Spain and India are imposing additional requirements when screening foreign investments.

Conclusion

The global economy has entered a new stage of deglobalization. It is due to the low growth rates of the global economy in the post-crisis period, which force states to resort to measures of active protection of national producers from external competition. The logic of the development of the capitalist economy gives reason to believe that globalization processes are also subject to cyclicity, and the stages of disintegration replace the periods of strengthening international economic ties. This context must be taken into account when implementing state economic policy. The global trend today is the protection of the national market by protectionist measures, which are more or less strict in certain countries. The effectiveness of such measures is becoming one of the determining factors in the development of national production. The global "fashion" for protectionism provides governments with effective tools for the redistribution of resources in favor of individual sectors of the economy, which allows them to increase their competitiveness and increase their share of the world market. For Azerbaijan, this means further movement in the paradigm of the import substitution program with a greater emphasis on supporting non-oil sectors of the economy, such as enterprises in the light industry, food industry and agriculture. At the same time, against the backdrop of the escalating confrontation between the largest entities of the global economy, politicians who take nationalist positions and profess an aggressive isolationist ideology are gaining increasing popularity. Many of them are achieving political success. At the same time, the widespread radicalization of political discourse creates threats of escalation of social conflicts, as well as armed confrontation for the redistribution of markets.

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CURRENT STATUS OF INVESTMENT ENVIRONMENT AND STATE REGULATION IN AZERBAIJAN**Rovshan Xalilov***Doctoral student of Odlaq Yurdu University, Baku, Azerbaijan***Abstract**

The main objective of the study is to assess the current investment climate in Azerbaijan. Over the past few years, the Azerbaijani government has been working to further integrate the country into the world economy, attract foreign investment, diversify the economy, and ensure positive growth. Attracting foreign investment to support economic diversification is one of the goals set by President Ilham Aliyev. The expected low oil prices on the world market over the past few years and their impact on budget revenues have led the Azerbaijani government to undertake broader and more comprehensive reforms. President Ilham Aliyev has identified the following areas as key targets to attract investment to help diversify the economy away from oil and gas production to agriculture, transport, tourism, and information and communication technologies.

Keywords: *global economic market, foreign investments, positive growth, oil production, communication technologies.*

1. Introduction

The solution to the problem of attracting and effectively using investments is impossible without a conceptual, systematic methodological approach, without considering the characteristics of investment processes in Azerbaijan in the conditions of the establishment of a market economy. The development of perspective theoretical provisions and scientifically substantiated methodologies for the state's investment policy and investment strategy, the formation of a favorable investment environment are considered a necessary condition for creating initial conditions for strengthening the economic foundations of the country's development.

Management of investment processes in the country's economy as a whole and in its individual sectors requires a comprehensive study of the factors affecting the change and dynamics of their development structure. It is necessary to study the macroeconomic conditions affecting the formation of management decisions on investment.

Deep and effective changes in the economy are possible only with the formation and active use of new investment management mechanisms.

2. Discussion

It is necessary to develop scientifically substantiated principles for the formation of the state's investment policy. The principles of the formation of the investment policy of economic entities are one of the most important components of the methodology for managing investment processes. The creative use of these principles should contribute to the improvement of the mechanism for selecting investments for financing targeted development programs for the republic and its regions as a whole, the economy in general and its sectors.

The issues of the effectiveness of the use of various methods of stimulating investment activity in Azerbaijani economic science have not been studied in depth enough. Therefore, there is a need to develop a methodology for assessing investment potential in conditions of increasing competition in the sphere of technical development.

Goals and objectives of the study. The purpose of the study is to study the theoretical and methodological foundations of investment activity in Azerbaijan, to develop methodological approaches to assessing the investment attractiveness of the country's economy as a whole, as well as its regions and sectors, and to substantiate proposals and recommendations on the main directions of activating investment activity in the country. In accordance with the purpose of the study, the following specific tasks were set:

- to explain the concept of "investment" in the system of economic categories;*
- to examine the features of the formation of investment policy for the development of local production in the modern economy;*
- to determine the role of the state in the formation and efficient development of investment activity;*

- to analyze the current state of investment activity, to examine the impact of investment activity on the economic development of the country;
 - to analyze and identify opportunities for using international experience in improving the conceptual and legal foundations of investment policy;
 - to comprehensively analyze the problems of the development of joint ventures and attracting foreign capital to the country's economy;
 - to systematically study the formation of the investment climate in the country and the possibilities of attracting domestic and foreign investments to the real sector of the economy;
 - to study the interdependence of the development of investment and financial and credit policies in the republic;
 - to develop proposals and recommendations on improving the management system in the implementation of investment activity;
 1. Theoretical methodological foundations of investment activity and state investment policy. According to the Law of the Republic of Azerbaijan "On Investment Activity", investment means financial resources invested in objects of entrepreneurship and other types of activity in order to obtain income (profit) or social benefit, as well as material and intellectual assets. These funds and assets include the following:
 - cash, targeted bank deposits, loans, shares, stocks and other securities;
 - movable and immovable property (buildings, facilities, equipment, etc. material assets);
 - appropriately formalized scientific-experimental and other intellectual assets;
 - a set of technical, technological, commercial, etc. knowledge necessary for the organization of this or that type of production, compiled in the form of technical documentation, habits and production experience, but not patented;
 - rights to use land, water, etc. resources, buildings, facilities and equipment, as well as other property rights arising from copyright;
 - other assets.

As can be seen from the definition given in the legislation, the main source of capital growth and the driving motive for making investments is profit (income). Investment is carried out with the aim of generating income, and if it does not generate income, then it is considered useless. However, here a second, not entirely insignificant aspect of investment also appears: the investment of resources to obtain the required income.

Let's look at a few more definitions of the concept of "investment". "Investment is the investment of funds for the purpose of generating income or profit; property acquired for the purpose of generating income or profit".

In Mamilla's dictionary, investment is defined as "the flow of profits intended for production, not for direct consumption".

In the explanatory dictionary of I. Bernard and J. Kolmin, a similar definition of investment is given in a shorter form. Here, investment is understood as "the acquisition of means of production".

According to them:

"investment in a broader sense is the acquisition of capital for the purpose of obtaining income". In its general working form, it is an investment in securities:

The latter definition draws an important distinction between capital-generating (real) investments and financial investments. If real investments ultimately create new demand, If it leads to the commissioning of production facilities, financial investments lead to a change in the ownership rights to existing property.

In the Republic of Azerbaijan, which has adopted a market economy, large investments are required for the organization and conduct of production, the expansion of its sphere, the application of new equipment and technologies. Meeting this demand, attracting foreign investments to the sectors of the country's economy, especially the agrarian sector, directly depends on the investment policy

implemented by the state. In a market economy, investment policy should be implemented on the basis of the following principles:

- consistent centralization of the investment process, increasing the share of private funds of enterprises in the total volume of capital investments, increasing the role of depreciation allowances as one of the sources of financing investments;
- placing state investments on production goals on a competitive basis;
- return of centralized capital investments;
- joint expansion of projects;
- strengthening the practice of state commercial financing
- state control over the targeted spending of state budget funds directed to investments;
- expansion of the practice of insurance and guarantee of investment projects supported by the state;
- stimulation of foreign investments.

In order to implement the normal process of reproduction, it is necessary to restore the investment potential of enterprises. For this, it is necessary to increase the depreciation of their own resources and the role of profit.

To accelerate economic growth, it is necessary to increase total savings. However, increasing the savings fund beyond a certain level inevitably leads to freezing the solution of social problems, and ultimately to a slowdown in the development of production. Increasing savings to a certain level leads to an acceleration of economic development, after which its opposite effect on the development of production occurs. Efficiency decreases, which, in turn, acts as a natural consequence of a decrease in profitability.

All this proves that investment plays an important role in the economic development of the country and that it is important to maintain an optimal ratio between both external and internal sources of financing of the economy.

Investment, acting as one of the main means of stabilizing the economy and promising development, plays an important role in increasing real total capital, stimulating economic efficiency, in short, in forming a competitive national economy. Increasing its efficiency and accumulation level is the main basis for revitalizing real production and creating and developing new sectors of the economy, creating a basis for eliminating crisis events and increasing the national wealth of the country.

Currently, local enterprises are given the right to become equal participants and partners in foreign economic relations. It is by using this opportunity that beneficial economic relations are created with foreign partners in all sectors of the country's economy. At this time, each enterprise strives to take advantage of the advantages of the factor of foreign economic relations. Often this is explained by the processes taking place in the country's economy, in particular, the limitation of material and technical support, investment sources and financial resources for the restoration and expansion of production. Therefore, owners of the state and private sectors are trying to attract investment by creating foreign economic relations in order to return individual sectors, production and non-production enterprises to the path of development. The work carried out in this direction has already yielded results in the fuel and energy complex, as well as in the field of oil and gas production, which is the main sector of the country's economy. Currently, the flow of foreign investment to our republic continues and its scope of application is gradually expanding to include processing, construction and service sectors.

Studies and the experience of developed countries show that investment is the main factor determining the development of the economy. An increase in the real capital of society increases the production potential of the economy, investment in production and new technologies helps to operate in a fierce competitive struggle, and allows for more flexible regulation of prices for its products.

It should be borne in mind that the lack of necessary savings in non-oil sector enterprises and the presence of large-scale investment risks actually act as the main reasons for the production and financial crisis in the agrarian sphere.

Studies show that the main reasons for the deterioration of the investment climate in the non-oil sector of our country are the following:

- this includes financial resources a weakening of the economy;
- a decrease in the volume of income of local producers due to the high share of imported products in the market and the limited sales of local products;
- a radical restructuring of all spheres in the budget relations in a short period of time, the

abandonment of existing forms of state assistance to food producers without appropriate compensation for financial losses on the basis of a new mechanism of state regulation of the non-oil sector.

One of the most important directions of strengthening the market economy in our country is the development of entrepreneurship in the regions of our republic. For this purpose, the acceleration of regional development of entrepreneurship and directing investments to the development of the non-oil sector in the "State Program for the Development of Regions of the Republic of Azerbaijan" of February 11, 2004 of the President of the Republic of Azerbaijan is of particular importance. The main goal of the program is to attract investments to the regions, including rural settlements.

No one should doubt that Azerbaijan has extensive opportunities in the field of development of production and processing of non-oil sector products. Cotton, grapes, grain, tobacco, tea, fruits and vegetables, potatoes, citrus plants, etc. are grown on the fertile lands of the republic, and by attracting investments to this area, the productivity of the products produced can be significantly increased. Thus, it is possible to fully meet the country's domestic needs, as well as achieve export of these products. Also, the natural and climatic conditions of our country and the availability of recreation and treatment times allow foreign investments to be attracted to the development of these areas. Therefore, we believe that special attention should be paid to increasing the specific weight of investments directed to the development of the non-oil sector in the total investments directed to the country's economy as a whole, increasing the competitiveness of the country's economy by ensuring an increase in labor productivity, and preparing sectoral programs for the development of the mentioned areas.

2. Macroeconomic analysis of socio-economic development and assessment of the investment environment.

The socio-economic potential created in Azerbaijan has ensured sustainable economic development and macroeconomic stability. As a result of the implementation of this strategy, the diversification of the economy, the development of non-oil sectors and regions has accelerated, and the efficient use of strategic currency reserves has been ensured. The implementation of the policy determined by the head of state has allowed for the creation of a solid foundation for sustainable development for the coming years, the acceleration of the integration of the economy of the Republic of Azerbaijan into the world economic system, and the further improvement of the living standards of the population.

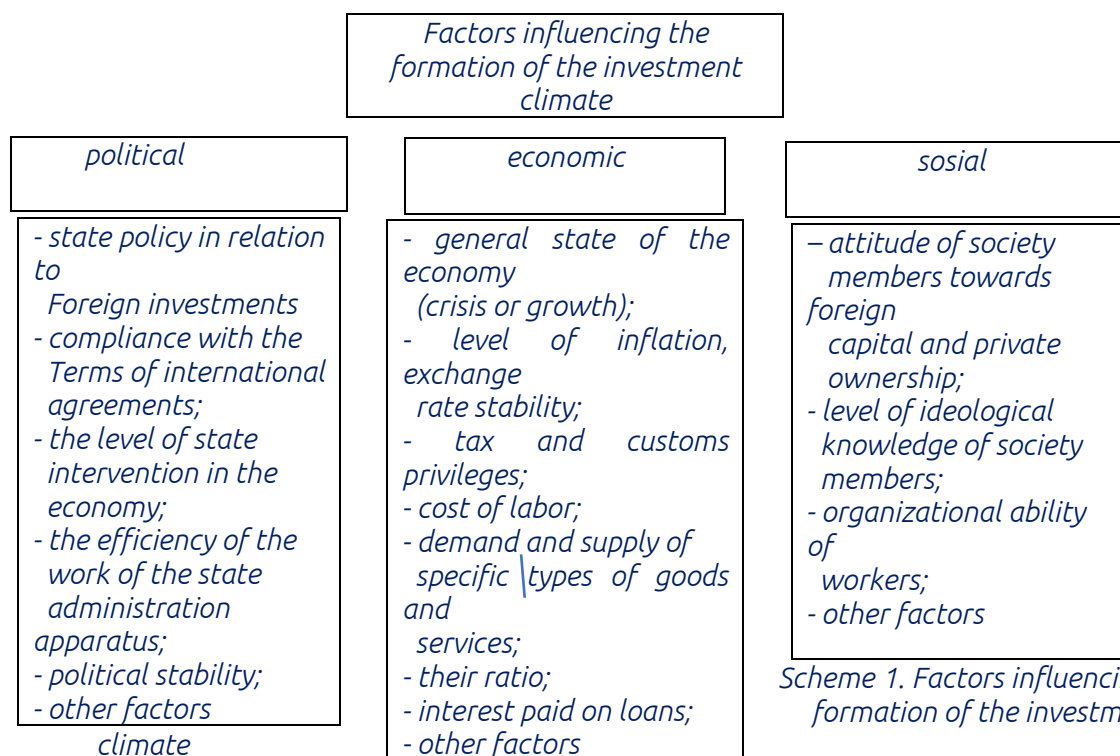
In order to accelerate the socio-economic development of the country, the main priority directions of the investment policy in the past year were the development of infrastructure sectors, stimulation of the direction of investment resources to the development of the non-oil sector and regions, optimization of the distribution of investments between regions, and strengthening the social direction of investment activities in the country.

The main goal of the state investment program is to ensure the systematic and efficient implementation of state-important investment projects aimed at the dynamic development of the country's economy, especially the non-oil sector, more complete satisfaction of the economic and social needs of the population, the development of regions, ensuring the economic security of the country, and environmental protection.

During 2023, 31,327.2 million manats of added value was created in the non-oil sector of the economy, and 56.5% of it fell to the share of social and other services, trade, vehicle repair, and construction. In 2023, the "Pirallahi" Solar Power Plant in Pirallahi district, Balakhani Industrial Park, Varvara fish breeding and fish farming plant in Yevlakh city, Rice factory in Lankaran city, "Khazar Palace" hotel complex, Balakan Hydroelectric Power Plant in Balakan district, Grain and legume cleaning and packaging enterprise in Jalilabad district, lemonade factory in Gadabay district, 35/10 kV "Gadabay" electrical substation, "Chichekli" Hydroelectric Power Station in Goygol district, 110/35/10 kV electrical substation in Gakh district, Neftchala Industrial Quarter in Neftchala district, 110/35/6 kV "Neftchala" substation, 110/35/10 kV "Saricalar" electrical substation in Saatli district, The 110/35/10 kV "Garagashli" substation, the Logistics Center of "Shamkir Agropark", the Shamkir branch of "Azerkhalcha" Open Joint Stock Company, the "Bahmetli" electrical substation in Zagatala district, and other facilities have been put into operation. By using oil revenues efficiently, part of these funds is directed to the development of human capital, the reconstruction of infrastructure to ensure the development of the non-oil sector, and financing measures envisaged in state programs in all areas in accordance with the concept of economic and social development.

The state investment policy of the Republic of Azerbaijan for 2023 is based on the principles of improving the general business environment, protecting private property and improving corporate governance, creating a free competition environment for all investors, ensuring a stable regulatory and legal regime, and maintaining economic stability in order to ensure a more favorable investment environment in accordance with the country's socio-economic development goals, and is aimed at implementing the following priorities:

- development of infrastructure sectors and ensuring their sustainable exploitation;
- stimulation of investment flows to the development of the non-oil sector and regions;
- optimization of the distribution of investments between regions; strengthening the social direction of investment activity in the country, prioritizing investments in human capital and infrastructure;
- ensuring transparency of state investment policy.



Scheme 1. Factors influencing the formation of the investment climate

It should be noted that among the factors influencing the formation of a favorable investment climate, political factors are of greater importance. Because meeting the investment needs of the country's economy requires attracting foreign capital, which is primarily due to political stability in the country. Considerable progress has already been made in this area, our country's position in relation to foreign investments has been clarified, and the attraction of foreign capital has been ensured. However, for now, the vast majority of the investments attracted have been made in the fuel and energy complex. Currently, investment in the non-oil sector is not at the required level and is slow. [8] Therefore, taking into account the vital importance of these areas, the flow of investment to these areas should be stimulated using all possible economic means.

3. Conclusion

İnvestisiya əslində bütün növ əmlak və intellektual qiymətlilərin, tədiyə və maliyyə öhdəliklərinin is an investment in objects of entrepreneurship and other types of activity. Investment is prospective and is carried out in conditions of competitive struggle, uncertainty and risk. Modern investments are innovative, which is conditioned by the need to ensure the dynamic development of the economy and the competitiveness of the national economy. The purpose of investment and investment is to meet current needs and their future, to receive investment profit (income) and to achieve positive social benefits. If we make the above more specific, we can conclude that investment includes all types of capital investments in economic objects in the form of property and intellectual property in order to ensure entrepreneurship and other activities, to receive profit or other benefits in the future.

The dynamics of the investment process requires the application of flexible tools in its regulation, which will cover all stages of investment in the future. Various tools and methods of regulating the investment process are applied at all stages of the country's development, the totality of which forms the investment mechanism.

A special role in the process of regulating investment development belongs to the state. State regulation of investment processes can be viewed as state management of a market economy, carried out by the state through the use of economic levers, stipulated by legislation and other regulatory acts, affecting the behavior of economic entities.

Investment activity of economic entities is an object of state control. This is explained primarily by the essence of investment itself. Thus, investment activity is the basis of dynamic and competitive development of the economy, a factor in ensuring a high social level of development of society, the basis of economic and, in particular, food security of the state.

The state's investment policy should provide for a system of measures to attract investments to the economic and social sphere and the creation of conditions for their efficient use. This can be achieved by improving the legal system for attracting investments and developing innovation, tax and credit incentives, as well as by creating conditions for attracting foreign investments.

Strengthening the role of the state in the economic regulation of investment processes implies the fulfillment of state obligations to finance capital investments in full for the implementation of approved programs and included in the state budget.

It is necessary to create a clear and functional structure for the stock market participants by defining strict rules of the game. It is important to effectively use foreign capital in the national economy of the country, as well as to determine a list of priority industries that require investment at both the government and regional levels.

In order to fulfill the grandiose structural tasks facing the country, we consider it appropriate to implement the model of support for investment processes based on the following principles:

- maintaining a favorable investment climate in our country by further improving legal and regulatory

documents related to investment activity;

- expanding the rights of local government bodies and strengthening the investment base;

- expanding the network of investment banks (usually two bank branches), investment funds, insurance companies;

- using special financing sources (depreciation, profit, funds of the population);

- large-scale attraction of private investments on the basis of entrepreneurship, leasing, concept, partnership and other models;

- development of competition and creation of a competitive environment at all stages of the investment cycle, and above all, at the expense of a trade network (tenders) that ensures transparency

of transactions;

- increasing the specific weight of progressive forms of management of the investment process.

"Project management" or logistics of an investment project will allow us to prevent the isolation of

the investment cycle stage;

- providing state guarantees for insurance of investment risks.

Improving the investment climate in Azerbaijan is connected with the work carried out to increase the flow of foreign investment. The investment rating will not only contribute to the growth of portfolio investments, but will also have a strong impact on the dynamics of direct foreign investments.

This will help attract funds for the creation of new enterprises and modernization of production.

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BASIK PRINCIPLES OF MONETARY POLICY WITHIN THE FRAMEWORK OF ENSURING FINANCIAL SECURITY

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Abstract

The article focuses on the analysis of Azerbaijan's monetary policy in modern conditions. The analysis of Azerbaijan's monetary policy in conditions of economic crisis is carried out. The article shows the impact of monetary policy on the country's economy and growth of gross domestic product. The article shows the important principles and priority directions of the state monetary policy of the Republic of Azerbaijan. Based on the conclusions drawn in this article, proposals are put forward regarding the formation of the country's monetary policy in conditions of instability of the world economy.

Keywords: *financial markets, globalization process, monetary policy, financial transactions, inflation, money circulation, commodity-money relations, commercial banks, central bank, world economy, financial crisis, refinancing;*

1. Introduction

The necessity of the role of monetary policy in the system of ensuring the security of the financial system began to demonstrate itself more clearly after the global financial crisis of 2007-2009 and the assessment of new channels of shocks.

Events in the world economy showed that it is impossible to achieve a solution to many economic problems without ensuring financial security. In a situation where the integration of national financial markets is strengthening, there is a need for innovative measures in the implementation of monetary policy. One of the most important directions of the post-crisis changes was the revision of the objectives, powers and instruments of the activities of national Central Banks. The priority goal was to support the stability of the national financial system, which raised the complex problem of combining the traditional objectives of monetary policy with macroprudential objectives. The high probability that they may conflict with each other, especially in crisis conditions, led to the search for new institutional forms in the activities of Central Banks or bodies responsible for supporting financial stability.

The global financial crisis proved that the regulation and supervision of banking activities were ineffective and largely procyclical.

2. Discussion

Ensuring the financial security of the state is a key issue for many countries. In the conditions of the modern economy, the financial system - a set of economic relations for the formation and distribution of financial resources and monetary funds of economic entities - is able to help increase the security of the national economy, counteract various destabilizing factors, and become a mechanism for ensuring the effective functioning of the economy. Financial relations are so diverse that their distribution across sectors of the financial system is still a matter of debate.

The financial system is a basis for solving the ambitious development problems facing the Azerbaijani economy; it is a key component of the national infrastructure that determines the effectiveness of the transformation of investments into investments and the competitiveness of the Azerbaijani economy.

However, despite all this, in 2024, bank assets in relation to non-oil GDP will account for 76%, loans to the economy for 56.1%, and bank capital for 12.9%.

The mission of the financial system is to provide financial services that meet the needs of the economy and society for investment growth and social stability.

Competitiveness is becoming one of the main characteristics of the national economy, contributing to sustainable economic growth, capital flows and strengthening the country's global economic position. In this regard, the need to ensure financial security and competitiveness is becoming a very important landmark of state regulation in many countries of the world, including Azerbaijan.

Increasing the security of the national economy is possible due to its adaptation and flexibility based on the strengthening and development of the market mechanism of the national financial and credit system.

The problem of assessing the financial security of the state is becoming a topic of discussion when studying various economic relations.

The state and society need objective information about the contribution of the monetary system to the development of the economy.

It was noted above that the state of the monetary system, respectively, the level of monetization of the economy, can be affected by changes in economic conditions in various sectors of the national economy.

Ratings of the largest international agencies are included in the list of criteria that determine the position of financial institutions in financial markets, the volume of investments in national economies, and the course of debt obligations circulating on stock exchanges.

Competing suppliers of market indicators such as Moody's and Standard and Poor's spend a lot of money and time on monitoring individual debtors, debtor countries, and specific debt instruments. However, the study of the dynamics of such ratings, especially in the currency, debt, and banking sectors, has shown that changes in the ratings of debtors are "bad" early warning signals about the impending financial crisis. Often, they are not able to warn about problems in the financial sector at all, and instead report "post factum", therefore, they almost always lag behind current events in the financial and banking sector.

Despite the above-mentioned doubts, there is great scope for the application of precisely defined stability and sustainability indicators to a wider range of macroeconomic indicators, even in emerging market economies, for example, in Azerbaijan.

Fitch Ratings regularly assesses country ratings based on a defined methodology. The ratings are oriented towards future performance based on an assessment of the current situation, potential threats and opportunities. The ranking of country ratings ranges from existing risks to an assessment of possible default probabilities. The rating of each country is considered a serious determinant of future economic activity, investments, and financial stability.

Table 1.

Methodology for determining country ratings (Fitch Ratings)

<i>Rating</i>	<i>Rating description</i>
<i>AAA</i>	<i>It is considered the highest rating grade. The country's default risk is minimal.</i>
<i>AA</i>	<i>There is a very low risk of default.</i>
<i>A</i>	<i>Despite the very low default risk, certain changes in the economic situation may have a certain impact on the fulfillment of payments and financial obligations compared to higher-category countries.</i>
<i>BBB</i>	<i>There are certain default risks. Certain changes in the economic situation may have an impact on the fulfillment of payments and financial obligations compared to higher-category countries.</i>
<i>BB</i>	<i>The risk of default is higher for a higher category. There may be fluctuations in payments and fulfillment of financial obligations due to changes in the economic situation.</i>
<i>B</i>	<i>There is an even higher risk of default.</i>
<i>CCC</i>	<i>The risk of default is imminent. The fulfillment of payments and financial obligations is directly dependent on economic conditions.</i>
<i>CC</i>	<i>Some signs of default are already visible</i>
<i>C</i>	<i>Default is inevitable.</i>
<i>D</i>	<i>The country is already in default.</i>

Source: Fitch Ratings

The rating table given to banks by international agencies is presented in Table 2, and the rating scale and characteristics are shown in Table 3..

Table 2.

Rating table given to banks by international agencies

<i>Rating</i>	<i>Financial situation</i>	<i>External support level</i>	<i>Additional terms and conditions</i>
AAA	<i>Good</i>	<i>High</i>	<i>The financial situation and the level of external support were assessed over a 6-month period, and financial indicators did not deteriorate.</i>
AA	<i>Good</i>	<i>High</i>	<i>The ratings of financial condition and external support levels have not changed for 4 months</i>
A	<i>Good</i>	<i>High</i>	
BBB	<i>Good</i>	<i>Medium</i>	<i>The financial situation and external support levels have not changed over the past 6 months, and financial indicators have not deteriorated.</i>
	<i>Enough</i>	<i>High</i>	<i>Financial condition ratings have been maintained at a level above "adequate" for 4 months</i>
BB	<i>Good</i>	<i>Medium</i>	
	<i>Good</i>	<i>Down</i>	<i>The financial situation and the level of external support were assessed over a 6-month period, and financial indicators did not deteriorate.</i>
	<i>Enough</i>	<i>High</i>	
	<i>Enough</i>	<i>Medium</i>	<i>Financial condition ratings have been maintained at a level above "adequate" for 4 months</i>
B	<i>Good</i>	<i>Down</i>	
	<i>Enough</i>	<i>Down</i>	<i>Financial condition ratings have been maintained at a level above "adequate" for 4 months</i>
	<i>Enough</i>	<i>Medium</i>	
CCC	<i>Enough</i>	<i>Down</i>	
	<i>Suspicious</i>	<i>Medium</i>	
CC	<i>Suspicious</i>	<i>Down</i>	
C	<i>Suspicious</i>	<i>Down</i>	

Table 3.

Rating scale

<i>Rating</i>	<i>Rating characteristics</i>
A	<i>All banks in this group are characterized by a good financial position, which allowed them not only to avoid being squeezed during the crisis, but also to thrive. In addition, they were provided with external support in the event of a sharp deterioration in economic conditions.</i>
B	<i>Credit institutions with ratings from BBB to B meet the requirements for financial stability. The indicators of some of them may exceed the similar indicators of banks from group A. At the same time, as a result of a negative turn of events, they may be left either in a state of acute dependence on external support or completely without support.</i>
C	<i>The financial stability indicators of these banks are below average. However, the likelihood of external support outside the framework of rehabilitation is not very high. Rehabilitated banks automatically fall into it until the end of the relevant procedure.</i>

A comprehensive analysis of the competitive environment in the national banking market involves considering the following issues:

- Is the bank universal, or is its activity limited to certain market segments?
- Does the bank compete with one or two banks of similar size?
- Is the bank the smallest or largest financial institution in the market?
- Is there a surplus or, conversely, a plurality of banking organizations in the market?
- Does the bank provide services and products that put it in a superior position compared to competitors?
- What are the prospects for weakening regulatory influence if the banking market is strictly regulated, and how might such weakening affect the quality of assets and the profitability

of

the bank?

- Other factors include the presence and importance of foreign banks in the domestic market, the share

of the population covered by banking products (primarily the share of the population with bank accounts), as well as the speed of processing information about the changing competitive environment. All these factors shape the characteristics of the competitive environment.

The Central Bank, as a rule, affects its stability, and as a result, its security. In the conditions of the modern world crisis, in all countries, regardless of the body that regulates the banking sector, the coordination of actions between the Central Banks of individual countries and the government, as well as between the Central Banks of different countries, in mitigating and overcoming the consequences of the crisis, including the implementation of monetary and financial stability policies, is monitored.

Guided by the rating table given to banks by international agencies, the tools used by Central Banks in implementing monetary policy are presented in table 4.

Table 4.

Instruments used in the implementation of monetary policy

<i>Classification criterion</i>	<i>Event type</i>	<i>Tools used</i>
<i>Implementation goals</i>	<i>Increasing liquidity</i>	<i>Reduction in reserve requirements Deposit transactions REPO operations Lending Recovery of "problem" debts</i>
	<i>Stimulating lending to the real sector</i>	<i>Changing the discount rates "Conditional" lending by banks</i>
	<i>Strengthening the national currency</i>	<i>Limiting the volume of currency purchases Controlling the size of the open currency position</i>
<i>Period of influence</i>	<i>Short period</i>	<i>Recovery of "problem" debts, Acquisition of bank shares, Control over salaries of top managers</i>
	<i>Long-term period</i>	<i>Strengthening banking sector regulation</i>
<i>Tools used</i>	<i>Classic</i>	<i>Changing the accounting rates Currency policy</i>
	<i>Extraordinary</i>	<i>Providing unsecured loans Acquisition of shares</i>
<i>Coordination of decisions of the Central Banks of the countries</i>	<i>Coordinated</i>	<i>Reduction of accounting rates (EU countries, Great Britain, USA) Investments in financial markets</i>
	<i>Individual</i>	<i>Introduction of the institution of curatorship (observers) Acquisition of bank shares Transfer of assets of problem banks to other financial institutions</i>
<i>Amendment of laws</i>	<i>Those in need of legislative amendments</i>	<i>Buyback of shares of troubled banks Granting of unsecured loans</i>
	<i>Implemented without a change in law</i>	<i>Limitation of the volume of foreign exchange purchases</i>

When applying monetary policy instruments, the following should be taken into account:

- the level of capitalization of financial institutions;
- the interaction between individual segments of the financial market;
- the possibilities of regulatory arbitrage by financial market participants;
- the degree of understanding of the monetary policy applied by market participants.

Depending on the objectives of implementation, monetary policy measures can be divided into three interrelated groups. These measures: to increase the liquidity of the banking sector; to stimulate lending to the real sector; to strengthen the national currency.

In the system of measures to strengthen the banking system, the Central Bank has kept the discount rate at 7.25% in 2024, the lower limit of the interest rate corridor at 6.25%, and the upper limit of the interest rate corridor at 8.25%. The decision of the Central Bank to keep the discount rate unchanged was made taking into account the actual and projected inflation ($4 \pm 2\%$), as well as the dynamics of internal and external factors of inflation. Such a step by the CBA facilitated the increase in the resources of commercial banks and expanded credit expansion. In turn, this should lead to a decrease in credit interest rates in the following year: the lower the interest rate, the lower the cost of bank credit, and the cheapness of borrowing serves to stimulate economic growth.

Measures have been taken in Azerbaijan to strengthen the effectiveness of monetary policy and the efficiency of regulation of the banking system in general, including amendments and additions to the Law "On the Central Bank of the Republic of Azerbaijan".

In the context of financial globalization, increasing risks have significantly complicated the activities of financial regulators, posing issues requiring international cooperation in the field of supervision of financial institutions. In the banking sector (which, unlike other areas of financial activity, is more closely related to the threat of systemic risks), it is necessary to reconsider the approaches to regulating and controlling the risks arising in the activities of credit institutions. It is necessary not only to strengthen regulation by the state, but also to use market-oriented methods of risk management and control of credit institutions. Banking supervision authorities are obliged to rebuild the style and methods of activity, sharply increase its efficiency, optimize the organizational structure, business processes, and improve technologies.

Based on world experience, we considered it appropriate to be guided by the following principles when developing and implementing monetary policy within the framework of ensuring financial security.

First principle. Diagnostics of systemic risk should be based on information obtained as a result of supervision, market indicators and aggregated indicators of systemic risk. The body implementing monetary policy will receive information about the formation of alarm signals about the strengthening of risk factors and will have the opportunity to influence the activities of financial intermediaries. Modern monetary theory identifies various systemic risk factors that have a significant impact on national financial systems. The impact of indicators that assess the significance of various indicators of systemic risk in terms of the effectiveness of macroprudential decisions is also different. Therefore, the national regulator should select the indicators that are most important for the national financial system, taking into account at least the prevailing type of financial intermediation, the level of development of the national financial system and the depth of the national financial market, as well as trends in the dynamics of demand and supply of various credit products.

The second principle. When developing monetary policy, it should monitor the dynamics of interactions between all segments of the national financial market and financial institutions, as well as understand the cross-border relations of national financial intermediaries. Experience in stress situations shows that interdependencies between financial institutions can quickly increase, which, in turn, leads to disruptions in the supply of financial services or the suspension of these offers in the event of an unexpected negative shock.

Financial activity in the provision of equivalent services, depending on their economic content, can shift from one segment of the financial market to another. This feature of financial intermediation requires either a regular exchange of information between national regulators of different financial sectors or the concentration of regulatory powers in the hands of a single authority.

If the relocation of financial intermediation activity can have a negative impact on financial stability, then the monetary authority, through monetary policy, can should be ready to intervene in the financial market. This requires timely and regular collection and processing of accurate information on the dynamics of the financial situation of national financial intermediaries (especially systemically important ones).

The third principle. The monetary authority should use monetary policy instruments to conduct an infrastructure policy aimed at limiting specific factors of systemic risk and financial imbalances that currently pose the greatest threat to financial stability in the domestic market. The instruments it uses should be traditional, but based on prudential requirements that limit excessive (from the point of view of systemic stability) risk-taking by financial intermediaries.

An empirical study of the experience of national central banks has shown that currently there is already a complex set of tools that allow reducing the negative impact of systemic risk factors. Such tools can be set either once or in a time-varying manner. Regardless of the type of setting of the tool used by the macroprudential regulatory authority, its preventive effect should be sufficiently stringent. The introduction of strict requirements at the stage of systemic risk formation reduces the need for more extensive regulation in the event of a shock spreading throughout the national financial system, even if systemic risks materialize.

Principle Four. In order to effectively prevent potential stress, monetary authorities should conduct intensive international information exchange when preparing monetary policy. Its intensity, form and frequency depend on the degree of involvement of national financial intermediaries in cross-border operations. Understanding the external factors of systemic risk and the cross-border interdependencies of national financial intermediaries requires close cooperation between national regulators. This includes not only a regular exchange of information and data between them, but also the development of joint action programs, for example, joint impact (and/or resolution) plans for institutions that carry out their activities in several jurisdictions at the same time. Such cooperation involves the exchange of information

on the situation in financial markets and the financial condition of large financial intermediaries, including supervisory data.

Principle Five. When determining the main directions of monetary policy, the Central Bank should take into account the proposals and recommendations of various bodies, including. The Financial Control Chamber, the Ministry of Finance, the Ministry of Economic Development. However, the final say should be the Central Bank as the body implementing monetary policy.

Sixth principle. Regardless of the institutional model chosen in this jurisdiction, the goals and objectives of monetary policy should be clearly and unambiguously defined in the legislation, as well as the form and frequency of the Central Bank's accountability to society should be specified.

When the mandate of monetary policy in ensuring financial security is clearly and unambiguously defined, it can implement unpopular measures based on its own judgment (assessment of the dangerousness of systemic risk factors). In this case, it can overcome resistance (including political) at the beginning of the business cycle, when there is great pressure on it and the number of demands for easing prudential measures and stimulating economic growth through credit expansion increases, that is, at the beginning of the business cycle. On the other hand, the objectives of monetary policy should be set out in legislation broadly enough so as not to limit the necessary flexibility in responding to the evolution of systemic risk factors and the business models of financial intermediaries.

In addition to granting broad powers to the monetary authority, it should also be required to maintain high levels of accountability and regular communication with the public.

Seventh principle. The nature, form and frequency of the monetary authority's communications with the public should: be consistent with the current assessment of the state of financial stability in the national financial market; explain the monetary policy measures being taken; and enable it to manage public expectations.

We believe that adherence to the above principles will enable the Central Bank to develop and implement monetary policy and to form a governance structure capable of supporting financial stability in the national economy.

In this regard, the CBA Bank should carry out the following in the process of preparing the main directions of monetary policy:

- Continue work on establishing a monitoring system based on a range of indicators using information obtained from the financial sector at short intervals (every month or even every week);
- To the extent possible, analyze risks, vulnerabilities and interactions of banks with other segments of the economy, in particular the public sector, the insurance sector, asset management companies, stocks market, bond market, interbank money markets and foreign exchange markets;
- Pay special attention to the behavior of various bank-type institutions (state banks, private commercial banks, credit cooperatives and other financial institutions);

3. Conclusion

Work should continue on developing a set of financial stability indicators for more relevant segments of the economy. In this regard, it is recommended to develop a sectoral balance system that covers all financial relationships between different sectors of the economy. This can be useful, especially in identifying and eliminating hidden risks and vulnerabilities in the financial sector.

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OPERATIONAL ACTIVITY, THE ESSENCE OF FEATURES

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ОПЕРАЦІЙНА ДІЯЛЬНІСТЬ, ЇЇ СУТЬ ТА ВЛАСТИВОСТІ

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Постановка проблеми. Сучасні ринкові умови розвитку економіки сприяють постійному пошуку резервів і джерел отримання додаткових конкурентних переваг у внутрішньому середовищі суб'єкта бізнесу. Такі намагання стають все складнішими через зниження ефективності функціонування та загострення проблем зовнішнього середовища.

Функціонування бізнесу включає в себе всі процеси та види діяльності, пов'язані з виробництвом товарів і наданням послуг, а також управління цими процесами. Сюди входить широкий спектр видів діяльності, таких як пошук сировини, виробництво, логістика, контроль запасів, контроль якості, маркетинг, обслуговування клієнтів та фінансове планування.

Операційна діяльність може відрізнятися залежно від сектору бізнесу. Наприклад, у виробничому секторі вона включає процеси виробництва продукції, управління виробничими потужностями, контроль якості та інші аспекти, пов'язані з виробництвом. У сфері послуг - це процеси надання послуг, такі як виконання замовлень, обслуговування клієнтів та управління запасами. Оскільки

Актуальність теми дослідження обумовлена тим, що операційна діяльність виступає запорукою цілеспрямованого та результативного функціонування суб'єктів господарської діяльності та потребує подальшого дослідження змістовності.

Виклад основного матеріалу. Важливою складовою аналізу стану та перспектив впровадження нових рішень операційної діяльності є вивчення її змісту та основних характеристик. Відповідно до чинного законодавства існує два основних трактування поняття «операційна діяльність». Згідно з МСБО 7 «Звіт про рух грошових коштів», операційна діяльність – це основна діяльність суб'єкта господарювання, яка приносить дохід, а також інші види діяльності, які не є інвестиційною або фінансовою діяльністю [8]. Відповідно до Національного положення (стандарту) бухгалтерського обліку 1 «Загальні вимоги до фінансової звітності», операційна діяльність – це основна діяльність підприємства, а також інші види діяльності, які не є інвестиційною чи фінансовою діяльністю [10].

Таблиця 1

Визначення поняття “операційна діяльність” в науковій літературі

№ з/п	Автор	Визначення сутності операційної діяльності
1	2	3
1	Г. Ансофф [1]	Операційна діяльність складова довгострокової стратегії розвитку торговельного підприємства.
2	Безкоровайна Л. [2]	Діяльність підприємства з виробництва та реалізації продукції (послуг), за якої досягається одночасне зростання ефекту й ефективності від здійснюваних економічних, соціальних та екологічних заходів і забезпечується задоволення інтересів різних суб'єктів, що з ним взаємодіють
1	2	3
3	Капінос Г., Бабій І. [4]	Діяльність, яка здійснюється в рамках операційної системи з метою створення будь-якої корисності шляхом перетворення входів (ресурсів усіх видів) у виходи (готові продукти та послуги).
4	Кузьмін О., Мельник О. [5, с. 280]	Наскрізна міжфункціональна система взаємозалежних споріднених процедур, реалізація яких призводить до використання ресурсів з метою створення певної продукції, що має цінність для внутрішньоорганізаційних чи зовнішніх споживачів і формування конкурентних переваг підприємства.

5	Ловінська Л.Г. [6]	Сутність операційної діяльності підприємства проявляється через сукупність господарських операцій, здійснених упродовж звітного періоду [40, С. 60]
6	Лозовицький Д. [7]	Операційна діяльність в більшості визначається результатами фінансово-господарської діяльності підприємства, тому, вимагає доповнення шляхом включення до її складу фінансових аспектів.
7	Мосійчук М. [9, с. 105]	Фундамент, що обумовлює повноцінне функціонування підприємства, виконання його статутних завдань... масштаби та напрями операційної діяльності є чинниками, що визначають склад, структуру, динаміку й ефективність використання ресурсів підприємства, його виробничого потенціалу.
8	Сідун В. [13]	Виробничо-збутова або основна для певного підприємства діяльність, яка характеризується наступними показниками: собівартість реалізованої продукції; валовий прибуток від операційної діяльності; інші операційні та комерційні витрати; прибуток від операційної діяльності.
9	Тарасюк Г., Грибук Ю. [15]	Виробництво та реалізація продукції, послуг, робіт.
10	Ткачова С., Іванова Т. [16]	Є основним видом діяльності підприємства, заради здійснення якої воно створене; до операційної діяльності відносять виробничо-збутову або основну для певного підприємства діяльність.
11	Школа І., Михайловська О. [16]	Процес придбання матеріалів, їх перетворення на готовий продукт і постачання цього продукту покупцю; діяльність, пов'язана з навмисним перетворенням (трансформацією) матеріалів, інформації або покупців.

Джерело: узагальнено автором на основі даних з [1-16]

В.М. Гриньова та М.Ю. Явдак виокремлюють два основні підходи щодо визначення поняття «операційна діяльність», а саме: виробничий, який базується на ототожненні операційної та виробничо-збутової діяльності та міжфункціональний, який розширює рамки операційної діяльності на виконання переважної більшості функцій, пов'язаних із соціально-економічною природою підприємства, забезпеченням його участі у процесах розширеного відтворення та ін.) [3, с. 19]

Наведені трактування не визначають конкретних видів діяльності або господарських процесів, які включаються до складу операційної діяльності. Досліджуючи праці науковців потрібно зважити на той факт, що велика їх кількість визначає операційну та виробничу діяльність синонімічними. Однак розвиток різних сфер бізнесу, які взагалі не створюють матеріальні цінності, сприяв тому, що операційна діяльність підприємства почала трактуватись як будь-яка діяльність.

Оскільки операційна діяльність підприємства має багато елементів та індивідуальну специфіку на кожному підприємстві, ефективність операційної діяльності є показником багатокомпонентним. Основні властивості операційної діяльності наведені на рис. 1.

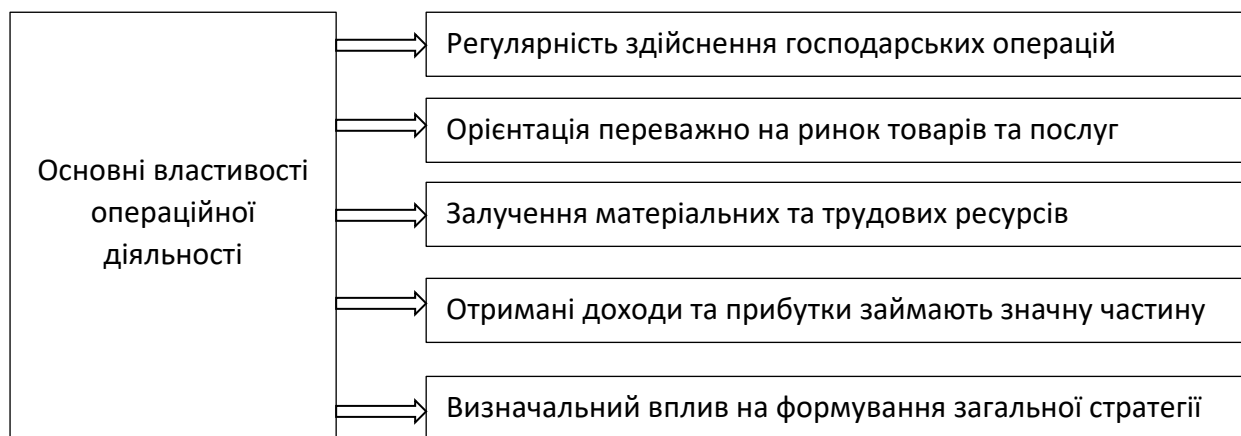


Рис. 1. Основні ознаки, які притаманні операційній діяльності
Примітка: сформовано автором з врахуванням [11].

Висновки. Головною складовою всієї господарської діяльності підприємства та основною метою його функціонування є операційна діяльність. Особливості її здійснення насамперед залежать від специфіки економічної галузі, у сфері якої ця діяльність реалізується. Узагальнюючи вищенаведені думки, під операційною діяльністю варто розуміти, що це основний вид діяльності підприємства, який складається з регулярних для умов функціонування операцій, що впливають на фінансовий результат протягом звітного періоду та спрямовані на забезпечення поставленої мети функціонування суб'єкта господарської діяльності. Операційна діяльність носить пріоритетний характер по відношенню до інших видів ринкової діяльності підприємства.

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Historical sciences

THE TRUTH ABOUT 120 GLOBAL TRENDS AS A BASIS FOR PLANNING THE FUTURE

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ПРАВДА ПРО 120 СВІТОВИХ ТРЕНДІВ ЯК ОСНОВА НООПЛАНУВАННЯ МАЙБУТНЬОГО

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Abstract

The staff of the Department of Ukrainian and Latin Languages of the Private Higher Educational Institution "Kyiv Medical University" offers readers an in-depth analysis of world events and their possible development in the future. Nine articles in 2024 contained a new look at the past and facts from noohistory that are important for educating young people. For 2025, we have chosen the goal of creating noofuturology as a successful science of the future. Today, humanity is overcoming a crisis point with the cumulative impact of the change of presidents in the USA, the World Economic Forum in Davos, etc. In this article, we want to provide readers with 120 facts for independent forecasting of the future. To do this, we analyze the situation of humanity in detail and objectively and determine it by identifying and explaining a large number

of trends and tendencies in all spheres of life. It is obvious that the population of “dual-intelligent Homo (hereinafter referred to as HSS)” is in crisis and is increasing despair due to the inability to indicate a real path of salvation from complete destruction. We have already proposed the concept of noofuturology as a doctrine of saving humanity from all threats to its existence and its further balanced coexistence with the biosphere. We pointed to the beginning in the 21st century of three revolutions of practically unlimited influence that will lead humanity out of crisis and save it from destruction. We point to meganoorevolution No. 1 as the main means of positive development, because since 2000 it began to destroy the destructive productions existing on the planet and to use environmentally ideal and wise — nootechnology or wisetechnology. Meganoorevolution No. 2 after 2010, based on archaeometry, paleogenetics and other young sciences, provides facts about past (Prehistory) and, together with other noosciences, deeply transforms the entire sphere of humanities and knowledge. It has already accumulated the first undeniable evidence that the carriers of Ukrainian genes since Neolithic times have become leaders of progress and salvation of all mankind. Since the fall of 2022, megarevolution No. 3 has been rapidly developing Artificial Intelligence as a means of progress and elimination of negative eschatology — the basis of despair and fear of the future. The text of this article consists mainly of a list and analysis of the significance of 120 world phenomena and influential trends identified by us, knowledge of which will allow readers to correctly assess the Ukrainian and world present and create accurate futurological forecasts and overcome all variants of dangers in individual and collective activities. The examples of saving world trends we have given and the emphasis on the positive activities of the most notable Ukrainian innovators can help readers in their professional activities and increase their futurological competence and activity.

Анотація

Колектив кафедри української та латинської мов Приватного вищого навчального закладу «Київський медичний університет» пропонує читачам поглиблений аналіз світових подій і можливого їх розвитку в майбутньому. Дев'ять статей 2024 року містили новий погляд на минуле і важливі для виховання молоді факти з нооісторії. На 2025 рік ми обрали мету створення ноофутурології як успішної науки про майбутнє. Сьогодні людство долає кризову точку з сукупним впливом зміни президентів у США, Світового економічного форуму в Давосі тощо. У цій статті ми хочемо надати читачам 120 фактів для самостійного прогнозу майбутнього. Для цього детально і об'єктивно аналізуємо становище людства й детермінуємо його через виявлення і пояснення великої кількості трендів і тенденцій в усіх сферах життєдіяльності. Очевидно, що популяція «подвійно розумних Ното (надалі — HSS)» перебуває в кризі й посилює розпач через неспроможність вказати реальний шлях порятунку від повної загибелі. Ми вже запропонували концепцію ноофутурології як вчення про порятунок людства від усіх загроз для свого існування та подальше його урівноважене співіснування з біосферою. Ми вказали на початок в ХХІ ст. трьох революцій практично необмеженого впливу, що виводять людство з кризи і рятують від загибелі. Ми вказуємо на меганоореволюцію №1 як головний засіб позитивного розвитку, адже вона з 2000-го року розпочала знищувати наявні на планеті деструктивні виробництва і використовувати екологічно ідеальні та мудрі — ноотехнології (nootechnology or wisetechnology). Меганоореволюція №2 після 2010 р. на основі археометрії, палеогенетики й інших молодих наук надає факти про праісторію (Prehistory) і разом з іншими ноонауками глибоко трансформує всю сферу гуманітарних наук і знань. Вона вже акумулювала перші незаперечні докази того, що носії українських генів з часів неоліту стали лідерами прогресу і порятунку всього людства. З осені 2022 року мегареволюція №3 прискорено розвиває Штучний Інтелект як засіб прогресу й ліквідації негативної есхатології — основи розпачу і страху перед майбутнім. Текст цієї статті складається переважно з переліку й аналізу значення виявлених нами 120 світових явищ і впливових трендів, знання про які дадуть змогу читачам правильно оцінювати українське і світове сьогодення та створювати точні футурологічні прогнози й перемогати всі варіанти небезпек в індивідуальній і колективній діяльності. Наведені нами приклади рятувних світових трендів і наголос на позитивній діяльності найпомітніших інноваторів-українців можуть допомогти читачам у фаховій діяльності і підвищать їх футурологічну компетентність й активність.

Keywords: features of 2025, evolution and achievements of HSS, "three waves" model, bifurcation point, 4th noowave, three meganoorevolutions, 120 global trends, mega feats of carriers of Ukrainian genes, nooleadership of Ukraine and its prospects.

Ключові слова: особливості 2025 року, еволюція і досягнення HSS, модель «трьох хвиль», точка біфуркації, 4-та ноохвиля, три меганоореволюції, 120 світових трендів, мегаподвиги носіїв українських генів, ноолідерство України та її перспективи

1. ВСТУП

1.1. Актуальність дослідження і формулювання проблеми. Ми створили цю статтю під впливом небувалого поєднання всіх форм глобальних впливів в момент фактичного початку Третьої світової війни. Незаперечним фактом є поєднання експоненціального зростання чисельності людства зі ще швидшим створенням загроз для свого існування. Саме сьогодні людство перебуває в короткочасній «**точці біфуркації**». Так молода й ефективна наука синергетика в своєму аналізі еволюції надвеликих систем, що перебувають під впливом безлічі чинників, називає короткочасний момент перетинання кризового стану й подальшого руху в майбутнє. Надалі еволюція людства йтиме непередбачуваним чином по одному з безлічі шляхів, старт якого визначатиметься химерним поєднанням випадкових чинників.

З усіх можливих описів сьогодення України оберемо висловлювання її безперечного інтелектуального лідера і одного зі Справжніх Героїв — Юрія Михайловича Щербака. Він не став офіційним Героєм через абсолютну порядність і несумісність з вимогами всіх варіантів «державних влад» — комуністичних, мафіозних, олігархічних та інших. Свідомо обирає життєвий шлях «Лицаря нації» — від застосування медичної компетентності в небезпечній боротьбі з найсмертоноснішими епідеміями до сміливої підтримки всіх прогресивних національних рухів та організацій. Доля не була поблажливою до пана Юрія й він зазнавав дуже великих особистих втрат, але не зламався і продовжує своїм інтелектом захищати позитивне майбутнє співгромадян.

Наведемо його оцінку сучасності в редакційній статті «Ми уже над прірвою!» чи не найбільш футуристичного видання в Україні з назвою «Універсум» [1]. Насамперед він акцентує небезпеки повної перемоги новообраного 47-го Президента США Д. Трампа з його намірами ліквідувати всі війни на планеті й скерованістю зовнішньої політики не на покарання Росії за її агресію, а на конкуренцію з Китаєм. Ю. Щербак на основі свого багаторічного дипломатичного досвіду має підстави стверджувати, що

«Зовнішня політика України повинна бути позбавлена елементів хамства, роздратованих вимог і розбрату з найближчими союзниками. Звільнення української політичної арени від агентів впливу Росії, цинічних корупціонерів та безнаціональних зайд, яким байдужа доля держави і нації, є обов'язковою умовою нашого виживання. Наступні роки — особливо 2025-ий (його журнал «Економіст» називає періодом «змін і невизначеності») — стануть найважчими в нашій історії. І не тільки тому, що прийшов «час Трампа»: в світі відбуваються величезні зміни, які неможливо не помічати та ігнорувати. Був би радий, якби мої лихі передбачення не збулися» [1, с.2].

Ми цілком поділяємо оцінки і попередження Ю. Щербака, але в своїй діяльності концентруємося на захисті Вітчизни і вихованні молоді не через критичний аналіз висловлювань світових знаменитостей, а шляхом виявлення і пропозиції ефективних і рятівних засобів. А для цього ми здавна здійснюємо пошуки інновацій «проривного характеру (тобто найважливіших)» в усіх доступних джерелах інформації.

Наш аналіз змісту «Універсуму» за багато років свідчить про поєднання позитивних аспектів (прикладом чого є світове поширення) і негативних, до яких ми відносимо маргінальність у цьому виданні практично всіх тем науково-технологічного поступу, що значно звужує цінність і точність прогнозів і передбачень. Свої дослідження і всю нашу ноофутурологію ми будуємо на моніторингу винаходів у найбільш впливових секторах наук і технологій, які невдовзі детермінуватимуть світові події набагато дужче і від Трампа, і від всіх інших політиків та державних керівників.

Нам пощастило у справжньому океані різноманітних наукових повідомлень ще в 2000 році помітити в потоці описів нанотехнологій перші дві **рятівні та екологічно ідеальні** — нанофотокаталізацію та отримання біопластиків від «доместикованих» ціанобактерій. В 2010 році, коли подібних процесів стало чотири, ми доволі необачно запропонували для них назву «**ноотехнології**» на знак приналежності до «ноосферного майбутнього». Пізніше ми цілковито

безуспішно намагалися перевершити шведську школярку Грету Тундберг в увазі ЗМІ і наукової громадськості до запропонованих нами **ноотехнологій і ноонаук**, які вже розпочали надавати людству потрібне й одночасно виліковувати біосферу від індустріальних та інших пошкоджень (саме так, як радив В. Вернадський ще 100 років тому [2]). Автори цієї статті вважають себе безпосередніми послідовниками нашого генія, якого обґрунтовано розглядаємо науковцем №1 всієї першої половини XX століття. Повторюючи долю винахідника екології Е. Геккеля (1834-1919), ми пропагуємо наші відкриття, але свідомі того, що вони будуть використані для порятунку людства трохи пізніше.

1.2. Мета, завдання, методологія, джерельна база, сподівані результати

Оскільки інші науковці не цікавляться ноотехнологіями і взагалі заперечують можливість екологічно ідеальних процесів, то **головну мету** цієї статті ми вбачаємо у наданні читачам великої кількості фактів щодо десятків рятівних ноотехнологій та розвитку на планеті трьох мегареволюцій, що розпочали «змінювати все». Перші дві впливають на матеріальне життєзабезпечення і заміну в усій гуманітарній сфері міфів і припущень на факти (результати вимірів і експериментів), а третя прискорено перетворює Штучний Інтелект у зручне знаряддя для всіх форм діяльності Ното. Докази існування цих мегатрендів ми накопичили нещодавно і винайшли й оприлюднили багато варіантів рисунків «східчастой трихвильової тоффлерівської моделі еволюції людства», а раніше в наших комплексних дослідженнях Природи і Людини вивчили (і навіть створили) багато наук і мало не тисячу публікацій (приклад — велика книга [3]).

На відміну від них у цій статті своїм **головним завданням** ми обрали надання колегам і молоді максимально повного для наших можливостей переліку найбільш впливових світових явищ (трендів), що охоплюють зміст щойно вказаної книги і навіть виходять за його межі. Хотілося б детальніше пояснити кожен зі 120 обраних трендів, але через очевидні обмеження обсягу тексту ми використаємо кілька рисунків і наведемо лише найнеобхідніші попередні публікації. Дуже багато трендів ми не зустрічали в працях інших науковців, тому маємо сподівання на корисність всього списку для всіх читачів, незалежно від особистісних уподобань і фахових завдань.

Ще 2/3 століття тому відповідальний автор під впливом успадкованих генетичних програм і конкретних умов свого соціального оточення розпочав активно шукати відповідь на четверте запитання — ЧОМУ? У межах виконання цього «Фатуму» як невідворотного перебігу людських вчинків була обрана комплексна **методологія** пошуку та використання всієї інформації з доступних джерел на кількох робочих мовах. Маємо чимало відкриттів не тільки матеріально-фактологічного, але й методологічного плану в багатьох секторах знань. Вдячна нам молодь поставила в українську Вікіпедію статтю «Корсак Костянтин Віталійович» з переліком приблизно половини відкриттів.

Серед них відкриттям №1 вважаємо виявлення і дослідження рятівних для людства ноотехнологій і ноонаук, а №2 — докази того, що під впливом обставин носії українських генів з часів палеоліту вже здійснили для порятунку всієї популяції Ното **чотири мегаподвиги** (перехід від канібалізму до аграрного гуманізму; індоєвропейське одуховлення людства; винайдення зороастризму як першої світової монотеїстичної релігії; пропозиція В. Вернадського шляху до ноосимбіоз людства і біосфери) і сьогодні вимушені через напад рашистів виконувати з великими втратами «п'ятий мегаподвиг». Ми спиратимемося на принципи глобального еволюціонізму, історизму та інші не менш важливі, використовуючи переважно нові й мультидисциплінарні методи, правила, підходи і засоби. Ігнорування іншими науковцями ноонаук змушує нас відмовитися від огляду всіх праць попередників і цитувати тільки найнеобхідніші власні твори принципового і стратегічного значення.

Зі щойно сказаного стає очевидним, що використана нами **джерельна база** консолідувалася десятки років, але через усім відомі особливості науково-технологічного поступу в ній найціннішими ми вважаємо твори останніх років і місяців. Саме ця обставина просто примушує нас відмовитися від наявних програм Штучного Інтелекту (чи ШІ), який спирається на енциклопедії і поки-що ігнорує потік інформації з найновіших джерел. Але щойно ми помітили той обнадійливий факт, що ШІ розпочав дорослішати і все краще виявляти помилкові повідомлення [4].

Закінчимо цей підрозділ вказівкою на те, що не будемо використовувати хороший досвід авторів навчальних програм для нашої середньої освіти. Всі вони наводять довжелезний перелік «**сподіваних результатів і досягнень учнів**». Ми усього лише сподіваємося на цікавість читачів до

повного переліку 120 світових трендів та їх спроможність максимально ефективно використати цю нооінформацію для стратегічної реалізації щоденних і перспективних обов'язків та досягнення «значних результатів»

2. Виклад головних наслідків нашого дослідження світових трендів

У доволі давньому минулому спонукальним імпульсом до спроби відповідального автора скласти власний перелік визначальних світових явищ і тенденцій розвитку тріади "Людина — суспільство — освіта" стали дві причини:

1) незадоволення тим, що не лише всі засоби масової інформації (ЗМІ), а й наукові часописи через вимушеність «стислого викладу» пропонують гранично спрощену картину сучасних подій, яка є малокорисною для успішного передбачення майбутнього. А з перших років нового сторіччя головними рисами сьогодення нам взагалі пропонували вважати "глобалізацію" і "тероризм", які сьгодні замінені словами «цифровізація» і «глобальне потепління»;

2) розуміння того, що в суспільних науках більшість проблем настільки складні й комплексні (а до них ми включаємо і «передбачення»), що їх вирішення неможливе у рамках однієї науки. Для успіху необхідне залучення знань багатьох наук (включаючи і природничі). В ідеалі, як пропонував видатний французький історик Ф. Бродель (1902-1985), необхідно спиратися на всі всепланетні знання, що накопичені на момент створення планів і передбачень.

Якщо проаналізувати ті публікації футурологів (мало не на 100% йдеться про зарубіжні праці, адже з усіх «радянських» ми вважаємо по-справжньому якісною в аспекті футурології тільки книгу [5]), в яких вони в останній третині ХХ ст. намагалися передбачити події на зламі сторіч і у більш віддаленому майбутньому, то виявиться, що загалом вони виправдалися лише в окремих своїх аспектах. Можна навіть стверджувати, що у наш час зниження точності передбачень є однією з багатьох всепланетних тенденцій.

Та це аж ніяк не означає, що слід відмовитися від них і перейти на використання павлівського типу суто імпульсивних рефлекторних відгуків на збудники і впливи нашого оточення чи роздавати кошти легіонам жадібних і брехливих «екстрасенсів».

Передбачення як екстраполяція певного явища в майбутнє (руху оточуючих тіл, перебігу найбільш поширених природних явищ та ін.) притаманне всім розвиненим біологічним видам, про що свідчать як дослідження етологів, так і наш особистий досвід спостереження «братів наших менших». Кожен з нас змушений займатися великими і малими прогнозами щоденно, досягаючи непоганих результатів для нескладних побутових випадків і коротких термінів екстраполяції. Набагато кращі показники вчених — астрономів, фізиків, останнім часом — метеорологів.

Протилежна ситуація зберігається щодо результативності передбачень явищ, які вивчені недостатньо і залежать від багатьох факторів (йдеться про аналіз функцій багатьох незалежних змінних, початкові значення і характер зв'язків яких відомі лише наближено). І все ж науковці сподіваються вирішити й ці задачі, безперервно нарощуючи потужність гігантських комп'ютерів, точність і якість моніторингу явищ, а також евристичні можливості математично-аналітичного апарату (приклад — виразний прогрес у ефективності прогнозів погоди на термін кілька днів).

Дуже складною і суперечливою лишається ситуація з соціально-політичними прогнозами, що в черговий раз засвідчує просте правило — результативність наших колективних та індивідуальних дій визначається насамперед повнотою та реалістичністю уявлень про стан і характеристики довкілля (в найширшому значенні цього терміну), про причини і спрямованість процесів і явищ його змін та розвитку. Низька результативність цього типу прогнозів може бути пояснена поєднанням одразу двох явищ:

- наш мозок не є ідеальною аналітичною машиною, яка працює у вільному режимі за оптимальними в усіх випадках алгоритмами. Існують певні закони його діяльності (нейромолекулярна біологія й інші молоді сучасні науки здійснюють все більше відкриттів у цій сфері), тому й результати є не випадковими і довільними, а визначаються алгоритмічним впливом цих законів у поєднанні з накопиченою людиною упродовж свого життя інформацією. Примітивні задачі можуть бути розв'язані на основі короткотермінового навчання (накопичення інформації), складні — дуже довготривалого. Існує багато задач і проблем, вирішення яких можливе лише на основі такого тривалого накопичення інформації, методів і засобів аналізу, для якого бракує людського життя;

- друга причина — експоненціальний процес накопичення об'єктивної (наукової) інформації разом з постійним прискоренням змін самої людини внаслідок впливу на її формування

і діяльність довкілля (соціального, природного і технологічного). Наслідком є явище, яке ми пропонуємо називати “ефект хоттабізації” — спроби пошуку відповідей у змінених умовах щодо трансформованих соціумів на основі безнадійно застарілих і надто звужених даних, алгоритмів і канонів. Те, на що спираються аналітики (соціологи, психологи, політики й ін.) щодо аналізу явищ, які стосуються сучасних людей та їхніх об'єднань, у більшості випадків надто застаріле й було правильним кілька десятків (чи й більше) років тому. Представники цих ділянок знань більше інших страждають від ефекту хоттабізації — набагато дужче, як фізики, біологи чи географи.

Нашим **головним завданням** у цій статті буде створення максимально розширеного переліку світових явищ і процесів, компактування пунктів цього переліку за тими чи іншими ознаками у невелику кількість груп, врешті, висвітлення — в межах можливої деталізації — окремих складових цих груп.

Нижче наведений створений нами перелік 120 провідних світових тенденцій і явищ, які ми поділили на вісім груп. У принципі, кожне з вказаних явищ заслуговує детального аналізу, обґрунтування і формулювання певних висновків. З огляду на доцільний об'єм рукопису обмежимося мінімумом — поясненнями змісту та проявів вказаних трендів і наведенням мінімальної кількості авторських рисунків та схем, яких насправді впродовж всіх років викладання ми винайшли і використали дуже багато.

ГРУПА 1. ЛЮДИНА В ЇЇ ФІЗІОЛОГІЧНИХ (“ПРИРОДНИХ”) АСПЕКТАХ

1. Негативні зсуви в менталітеті і поведінці все більшого відсотка населення планети.
2. Зростання часу “підлітковості”, розрив у часі фізіологічних і соціальних “пиків”.
3. “Атака” мозку дітей неприродними збудниками, збурення сформованих мільйонами років еволюції Ното норм їх розвитку через кілька послідовних стадій.
4. Зростання загрози безпосереднього збудження септуму (активізатора “системи емоцій задоволення”) не тільки хімічними субстанціями (традиційними природними чи синтезованими наркотиками), а й прямим «хвильовим» впливом з допомогою шоломів «віртуальної реальності» чи чогось іншого подібного.
5. Рух еротики і сексоманії до провідних позицій в мас-медія і неконтрольованих світових потоках інформації.
6. Часткова чи мало не повна „мауглізація” всіх дітей через зменшення впливу батьків у момент формування у дітей 0-3 років спеціалізованих мозкових структур.
7. Прояви зростання „адреналінової” залежності і розширення віяла екстремально-небезпечних занять і розваг.
8. Збільшення відсотка осіб з очевидними сексуальними та іншими відхиленнями, які зменшують потяг до відтворення населення.
9. Зменшення опірності людського організму до старих і нових біологічних та інших чинників.

З усієї сукупності сотень наших публікацій значна частина скерована на надання всім працівникам освітньої сфери, сконцентрованим на вихованні дітей і молоді, досягнень одразу багатьох молодих наук (етології, нейромолекулярної біології, когнітології та інших), відкриття та успіхи яких набагато підвищують ефективність бажаного позитивно-скеровуючого впливу, адже пропонують новим генераціям не спогади старших, які зростали в інших умовах, а невблаганні **закони природи**. Багато разів у своєму житті відповідальний автор «з певним запізненням» отримував подяки від тих дорослих осіб, які колись отримували короткі рекомендаційні поради щодо поведінки і стратегії обрання «стежини життя» на основі щойно вказаних досягнень багатьох молодих наук. Ми стежили за такими науками дві третини століття, але з безлічі різноманітних джерел за критерієм точності та інформативності вкажемо усього лише три книги з описом основ етології і даними про мозок людини на момент створення цих творів [6; 7; 8].

Для хоча б мінімального інфографічного повідомлення читачам про особливості винайдених відповідальним автором рисунків і схем (їх навіть у книзі [3] дуже мало), наведемо узагальнене відтворення розвитку і діяльності індивідуальної емоційної сфери кожної людини впродовж життя, яке ми запропонували Інституту обдарованої дитини Національної академії педагогічних наук України [9].

На рисунку, який побудований на основі великої кількості різноманітних джерел, ми намагалися відтворити головні періоди життя й найбільші емоційні сплески. Перший з них являє

собою гостру фізіологічну потребу немовляти у якомога частіших фізичних контактах з матір'ю, за відсутності яких неминучі значні розлади аж до хвороби (т.зв. «госпіталізму»).

Після «відділення» від мами та усвідомлення приналежності до певної статі у віці 6-7 років йде не надто тривалий період підвищеного зацікавлення особами протилежної статі. Набагато важливішим є наступний емоційний максимум, що відповідає формуванню дитячої дружби, яка у природній нормі передбачає ціложиттєву тривалість. У цей же період відбувається (серед абсолютної більшості хлопчиків) формування територіального ієрархічного об'єднання. Як відкрили представники етології (природничої науки, яка виявляє і досліджує приховані та успадковані генетично засади поведінки HSS), утворення подібних пірамідальних структур і формування між її членами глибокої дружби і довіри, що має подібну до стану закоханості молекулярну основу. Це ефективно гарантує єдність племені та його спроможність успішно боротися з іншими племенами за життєвий простір і ресурси життєзабезпечення.

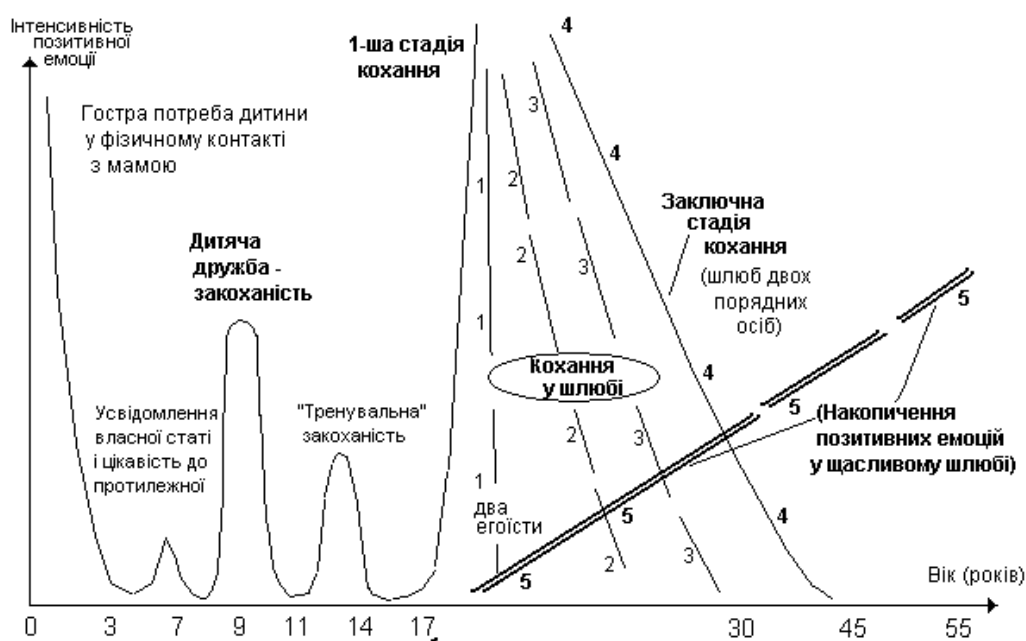


Рис. 1. Спрощений графік вікової активності системи рекомпенсації (чи «задоволення») кожного Ното упродовж життя

У підлітковому віці на фон дитячої дружби накладається «тренувальне» захоплення особами протилежної статі, яке може мати найрізноманітнішу інтенсивність емоціонального сприйняття і переживання. Труднощі для підлітків особливо значні з тієї простої причини, що саме у цей момент для ще не сформованого дорослого виключно важливим стає знак (позитивний чи негативний) ставлення з боку оточення — референтної групи ровесників, батьків і рідних, учителів та інших педагогічних працівників тощо. Все це ускладнюється буквально на порядок з тієї причини, що у роки «підліткової кризи» докорінно перебудовуються структури мало не 80% об'єму головного мозку, що робить його почасти дисфункціональним.

У старшій молоді з майже «перебудованим», але ще не до кінця «професіоналізованим» головним мозком також вистачає власних проблем. Це «**вік кохання**», впродовж якого стан Ромео і Джульєтти — цілком нормальне і не таке вже й рідкісне явище. Шкода, що змушені гранично обмежити потрібні пояснення.

Як свідчить рис.1, інтенсивність позитивної емоції у піку стану Ромео і Джульєтти близька до нескінченності. А от подальший розвиток подій після шлюбу визначається індивідуальними рисами його учасників. Наприклад, два переконаних егоїсти з такою запеклістю вміють створювати один одному прикромі, великі й малі негативно-емоційні «поранення», що від справжнього кохання дуже швидко лишаються жалюгідні рештки і здивовані згадки.

Все кохання в цілому має дуже глибоку й відшліфовану десятками мільйонів років еволюції ссавців наркотичну основу: на 1-ій стадії мозок створює і використовує речовини з групи ендорфінів, які викликають справжній «форсажний режим» усіх фізіологічних систем (за

виключенням посилення аналітично-прогностичних спроможностей головного мозку). Роки спільного життя у шлюбі проходять під впливом «не форсажних» речовин з групи опіатів: приємність стабільна, адаптація розтягується на роки, емоційні збурення перестають бути небезпечними.

Різні варіанти розвитку подій після шлюбу вказані на рис. 1. Гіпотетично найкращим ми вважаємо той варіант, коли порядні люди ще й добре обізнані з досягненням згаданих вище наук, тому увесь свій інтелект і природний артистичний талант скеровують на створення «раю в родині».

Загалом же наші пропозиції вказують на необхідність значного розширення в змісті шкільного навчання частини досягнень ноонаук. Як в аспекті захисту людства від загрози зникнення, так і в формуванні райських умов в сім'ях. Саме такого майбутнього ми бажаємо всім співгромадянам та їхнім нащадкам.

Наприкінці зробимо невелике зауваження: спроба поширити щойно вказаний фрагмент інформації про природу емоції закоханості у «міністерському» всеукраїнському часописі «Вища школа» (колективна стаття [10] з 40 співавторами) мала наслідком заборону будь-яких матеріалів, якщо число авторів «перевищує склад волейбольної команди». Подолати цю перешкоду ми не змогли і пізніше використали короткотривалу можливість оприлюднювати праці науково-дослідних колективів (без обмеження чисельності) у міжнародному виданні «Грааль науки (Grail of Science)». Але й там видавці вирішили «заробити більше і подрібнити колективи», а тому категорично заборонили будь-які статті з великою кількістю співавторів.

Перейдемо до другої групи світових трендів

ГРУПА 2. ЛЮДИНА В СОЦІАЛЬНО-СУСПІЛЬНОМУ ВИМІРІ

10. Зміна сутності "лідерів": перехід від "альфа-самців" до високих професіоналів.
11. Виникнення потреби не в малоефективній екологізації освіти, а в створенні світової конвенції "Про обов'язки Людини".
12. Підвищення потреби в конвенції з етики журналістики.
13. Світові конвенції як наднаціональне законодавство.
14. Ріст розриву між природними і суспільно-необхідними програмами поведінки і життєдіяльності людини.
15. Тенденція збільшення відсотка старих осіб: позитивні і негативні аспекти цього явища.
16. Зменшення "важливості дітей" і проблеми з їх появою.
17. Зміна цілей виховання: перехід від націонал-патріотизму до "економічного патріотизму".
18. Злиття роботи і навчання в єдине ціле для більшості активного населення.
19. Потреба в посиленні захисту "національного" від деструктивного впливу "іншого".
20. Ефект "прозорості" людини на тлі її позірної свободи, автономності та анонімності.
21. Природний цикл розвитку людини збурений надто швидкими змінами антропогенного середовища.
22. Підвищення важливості оволодіння усіма основами психолого-педагогічних, валеологічних і етологічних знань.
23. е-писачів усе більше і більше, а от читачів — усе менше і менше...
24. Зростає поширеність і значення інтелектуальної роботи удома, зменшується — „на робочому місці“.
25. Інтернет діє химерним чином: помітно зменшує небезпеку повної людської самотності, але провокує інші загрози, частина яких загострюватиметься.
26. У Росії, Франції та всюди у світі посилюються негативні наслідки „підліткового ефекту“ і в буденному житті, і у „Великій Політиці“.
27. Після Другої світової війни домінувала політична еміграція, пізніше — економічна. У наш час зростає ще й «екологічна еміграція».
28. Перетворення спортивних змагань на універсальний засіб згуртування мас і відволікання їх уваги.
29. Формування і посилення відчуття приналежності не тільки до референтної групи, а й до „всього людства“.

Наприкінці ХХ ст. ми мали чималі підстави на швидке зростання проявів 29-го тренду, адже в абсолютній більшості футурологічних прогнозів 1990-х років домінувала переконаність у тому, що припинення «холодної війни» між Радянським Союзом і США з таборами прихильників матиме

наслідком мирний рух всього людства в світле майбутнє під мудро-демократичним проводом США. Що сталося на практиці — пояснювати детально не будемо через незаперечну обізнаність усіх читачів й обмежимося фрагментом викладеної нами у багатьох статтях новітньої наукової інформації про поки-що непереборний негативний вплив потужного природно-генетичного явища з поширеною назвою «підліткова криза» на розвиток подій не в одній окремо взятій державі, а на всій планеті.

Розпочнемо з вказівки на необхідність поділу наявних та можливих проблем усіх гуманітарних і точних наук на дві групи. Перша — внутрішні проблеми (інтрапроблеми), а друга група — зовнішні проблеми (екстрапроблеми). Вони, хоч і виникають у межах певної науки, мають настільки широкий і комплексний характер, що перевищують її аналітичні ресурси й можуть бути розв'язаними лише за умови залучення інформації та методів інших наук. Для педагогіки й досі невирішеною екстрапроблемою є **підліткова криза**, для політології і соціології — **феномен лідерства**.

Для ультра-сучасного **ноокогнітологічного пояснення** обох питань ми пропонуємо застосувати досягнення молодих наук про людину і частини ноонаук. Вони "розшифрували" чимало процесів у нашій голові й виявили, що саме генетичні програми мало не форсмажорно (непереборно) керують мисленням і поведінкою підлітків чоловічої статі. У відповідному віці у них прокидається програма дій з непереборного спонтанного включення в територіальне підліткове об'єднання. Вони, як і всі інші чоловічі спілки, завжди мають "пірамідальну" структуру, яку ми відтворюємо на авторському рис. 2.

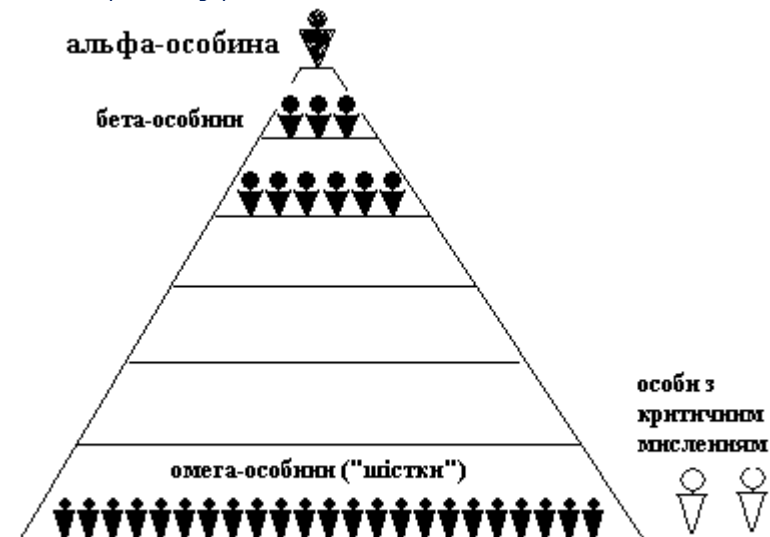


Рис. 2. Схематичне відтворення структури поширених об'єднань осіб чоловічої статі

Відтворена на рис. 2 «піраміда» формується не демократичним голосуванням, а через агресію і конкуренцію. Вершину підліткової чи іншої характерної для людей суспільної піраміди займає лідер (домінант чи альфа-особа). Йому підпорядковуються домінанти другого рангу (субдомінанти чи бета-особи), а тим — особи третього рангу тощо. Пригніченими виявляються "шістки".

Тут нам слід зробити великий наголос на тому, про що майже не пишуть всі відомі нам автори, яким не пощастило глибоко вивчати етологію хоча б в обсязі книги [6]. Існує просто безліч доказів того, що маленький Володя Путін свого часу опинився унизу локальної субпіраміди нижче від "шісток". Він змушений був виконувати роль «сімки» й часто страждати від реального перебування в... (на рос. мові — в сортире), а тому в даний момент виявляє всі їх головні риси. Для них тотально характерні підлість, підступність, відсутність стратегічного і критичного мислення тощо. Нещодавно точними вимірами доведено, що за роки "підліткової кризи" цілковито перебудовуються 4/5 мозкових структур з перетворенням дитячих у дорослі разом з удосконаленням мозку через його спеціалізацію.

Вища освіта додала В. Путіну знань, але не могла змінити підлітково-генетичні програми. Він спромігся стати безперечним фахівцем в провокаційній діяльності, а випадковість розвитку суспільних процесів в Російській Федерації перетворила його в «державного діяча».

Тут доцільно нагадати, що за століття існування антично-грецьких міні-державок (полісів) були на практиці випробувані всі теоретично можливі варіанти управління. До поганих варіантів належать тиранія і диктатура, але серед них є щось ще гірше — тирані-підлітки (Калігула й кілька подібних у Римі, Карл XII у Швеції, Петро I у Росії, В. Путін у «рашці»). Греки переконалися, що поліс необоротно впадає в екстаз захоплення "сильним лідером", тому рятували його населення спільним нападом одразу багатьох армій та страчували тільки тирана і його найбільш одіозних поплічників.

В історії людства існує аж надто багато прикладів того, як діють лідери-підлітки, яких ще й зараз називають "Великими Політиками" чи "видатними особами". Закони роботи людського мозку легко пояснюють той факт, що навіть сьогодні повага до цих мега-убивць тим вища, чим більше трупів лишилося після них. На основі згаданих молодих і ноонаук дуже легко пояснити не тільки поведінку В. Путіна, його лексикон та дії, а й ейфорію більшості населення Росії від появи "ефективного керівника, який піднімає Державу з колін".

Зі сказаного випливає, що для народу і держави варіант "справжнього" альфа-лідера набагато кращий від підлітка-тирана. Та історія людства свідчить, що найбільшого досягали ті альфа-лідери, хто щиро прислухався до порад нечисленних "непірамідальників" (вказані на рис. 1), обдарованих критичним мисленням і створених Природою для накопичення знань та умінь задля порадиництва і порятунку ближніх. Досить нагадати про успіхи подібного тандему у Греції (Македонський + Аристотель) чи Монголії (Чингісхан + мудрець, який приєднався до нього «з китайськими знаннями»).

Ноонауки і ноокомунікологія засвідчують, що ніколи більше не повернуться часи, коли всі билися з усіма одночасно на всіх кордонах, тому сформовані за десятки мільйонів років розвитку й еволюції зграйних ссавців риси лідерів-агресорів стали зайвими і почасти небезпечними. У наш час найуспішніші соціуми — в Ірландії, Данії, Норвегії, Фінляндії тощо — відзначаються не просто "демократією", а багатопірамідальністю. У них немає ні "національних супер-лідерів", ні потреби в них. Тамтешні соціуми — це багатоманіття паралельних структур і об'єднань на чолі з професіоналами. Жіночий інтелект там так само важливий для суспільства, як і чоловічий. Наявні в цих державах альфа-лідери не мають жодної змоги швидко організувати суперпіраміду засобами демагогії і залякуванням громадян "зовнішнім ворогом".

Україна, на жаль, ще недостатньо доросла як для відмови від міфологізації суспільної ролі "видатних особистостей", так і для використання інтелекту й життєвих програм жіноцтва. Та Бог на нашому боці й посприяв початку поширення з наших теренів "другого одуховлення" людства. Цього разу йдеться про використання ноонаук і ноотехнологій. Але для піднесення іміджу Вітчизни їх створенням, поширенням і пропагандою повинна займатися всі лідери і науковці України разом із загальом населення.

Наш виклад має тенденцію рухатися до гігантизму, тому розпочнемо «ущільнення».

ГРУПА 3. ОРГАНІЗАЦІЯ СУСПІЛЬСТВА, ЙОГО ЦІЛІ І ДІЯЛЬНІСТЬ

30. Прискорення руху країн світу про сходінках суспільної еволюції від доаграрного до суспільства знань та до ще прогресивнішого ноосуспільства на основі ноонаук і ноотехнологій.

31. Зміна „змісту 3-ї хвилі” Е.Тоффлера: зменшення значення ІКТ і зростання впливу надвисоких технологій. Початок 4-ї ноохвилі, основу якої складають екологічно ідеальні ноотехнології як продукт розвитку десятків ноонаук.

32. Дії урядів провідних держав спираються на помилкові припущення і засвідчують нерозуміння перспектив надвисоких ноотехнологій. Для корисно увести поняття «7-ї технологічний уклад».

33. Демократизація суспільного устрою і скорочення можливих полів вияву тоталітаризму.

34. Відмова від примітивної — однопірамідальної — побудови соціумів і перехід до мультипірамідальної.

35. При кожній великій революції до влади приходять бандити (чи фанатики), а не інтелектуали. Україна-XXI — не виняток...

36. Раніше: „похід закінчений і готуємо армію до нового походу”. У наш час: „чемпіонат закінчений, всі готуємося до нового”.

37. Загострення глобальних екологічних загроз існуванню людства.

38. Контрнаступ, який створює біосфера Землі, намагаючись ліквідувати деструктивний вплив людства (СНІД, множинні ментальні збочення та ін.).

39. Активізація релігій і сект.

40. Підвищення суспільного запиту на інтелект жінки та її менталітет.

41. "Атомізація" соціального життя і зміна призначення еліт.

42. Рух до формування нових засад організації і діяльності "держави-лідера" зразка XXI століття.

43. Розпад монолітності "Заходу" — цивілізаційний розрив між США та європейськими розвиненими країнами.

44. Ера масового альтруїзму мала б розпочатися 28-06-2005 р. з початком прийняття колективного рішення держав-лідерів про побудову у Карадаші (Франція) термоядерного реактора. Марно... Будують, але коли запрацює — невідомо.

45. Професії міфотворчого характеру стали масовими, в Інтернеті зростає відсоток брехливої і викривленої інформації.

46. Збільшується кількість інтелектуальних трудівників. Але все потрібніші не просто науковці, а особи з критичним мисленням.

47. Формування анклавів з дефаворизованого населення (бідні, іммігранти та ін.), що пізніше створюють „соціальний вибух”.

48. Зростання суперечності між потребою захисту автохтонів від чужинців і вимогою дотримання міжнародних конвенцій.

Сучасні науки все точніше відтворюють справжню еволюцію Ното — від його дуже віддалених попередників до сучасного варіанту «подвійно розумного» (будемо скорочено позначати його HSS). Відповідальний автор разом з науковцями-попередниками виявив у HSS 104 недоліки мислення і поведінки (більшість вказана у книзі [11]). Реальна кількість безперечно позитивних рис поведінки у «середнього HSS» приблизно удесятеро менша, що спонукає бачити все майбутнє людства у дуже мрячному й похмурому вигляді. Як на те, так звані HSS примудрилися створити і ратифікувати «Світову Конвенцію про права Людини», але активно гальмують прийняття чогось подібного до набагато потрібнішої й актуальнішої «Світової Конвенції про обов'язки Людини».

Але насправді «сьогодення людства» не таке вже й погане, а тому шанси на порятунок все ж існують. Ми хочемо ними закінчити статтю, тому розглянемо спершу інші групи трендів і еволюційних явищ.

ГРУПА 4. ВИРОБНИЦТВО І ТОРГІВЛЯ

49. Перехід від алхімічних технологій спершу до керовано-атомарних (до нано-, піко- і фемтотехнологій), а з 2000 року — до НООТЕХНОЛОГІЙ (необхідно так називати „мудрі” способи життєзабезпечення, що не пошкоджують довкілля).

50. Глобалізація як відкритість усіх ринків і вільна конкуренція товарів, послуг, кваліфікованої робочої сили та ін.

51. Відплив виробництв з холоду в тепло (з північних широт у приєкваторіальні).

52. Посилення міграції робочої сили й набір кваліфікованих працівників лише конкурсним шляхом.

53. Зростання загрози прибуття в Європу десятків мільйонів "зайвих" чоловіків з Індії, Китаю та багатьох інших країн.

54. Посилення опору консерваторів і "старих сил" нововведенням (приклад: нафтогазове лобі заблокувало рух до термоядерного реактора I покоління).

55. Зростання вразливості антропогенних об'єктів до дії природних факторів.

56. Рух розподілу активного населення до співвідношення 1 : 9 : 90 і розширення ринку праці для осіб третього віку.

57. Перехід від традиційних моделей організації економіки до так званої "інноваційної економіки".

58. Держави з „хай-тек” товарами вже відстали, перспектива — лише за групою „надвисоких товарів” 7-го ноотехнологічного укладу

59. Посилюється тенденція вважати нанотехнології головною загрозою для майбутнього. Колись загрозу вбачали і в паротяхах...

60. Початок створення андроїдів, які звільнять людей від більшості примітивних занять.

61. Швидкий розвиток електронної торгівлі.

62. Рух до портативних індивідуальних „продукторів”, в яких поєднані нові матеріали і 3D-програмування (т.зв. 3D-принтери)

ГРУПА 5. ЗБРОЙНІ СИЛИ, ОБОРОНА І НАЦІОНАЛЬНА БЕЗПЕКА

63. Занепад значення збройних сил і перетворення комплексу “наука+освіта” в основу “сили” сучасних держав.

64. Нові засади колективної безпеки, заборона агресивних війн.

65. Зникнення можливості створювати імперії шляхом використання збройних сил.

66. Зростання загрози з боку власної армії до неприпустимих меж.

67. Занепад бажання пересічних громадян жити у наддержаві і мати захист від ворогів. У наш час ліпше жити в мікроскопічних державах мононаціонального складу.

68. Процес регіоналізації став відповіддю на недоліки глобалізації в однополярному світі.

69. Прогрес в озброєнні у напрямі виключення безпосередньої участі людини в бойових діях, напади на електронну інфраструктуру та ін.

ГРУПА 6. НАУКА Й ІНФОРМАЦІЙНА СФЕРА

70. Негативні наслідки “ефекту хоттабізації” як відставання змісту знань особи від сучасних знань в усій сфері Sciences & Arts.

71. Перехід лідерства у науках від фізики до молекулярної біології і до нанонаук.

72. Науки поділяються (є десь 8000), але не можуть інтегрувати здобутки.

73. Завдяки Інтернету і поширенню англійської мови зникає поділ науки на столичну і периферійну, діють світові об’єднання та зростає середня чисельність співавторів найважливіших наукових публікацій.

74. Заміна лінійних підходів в аналізі соціальних та інших явищ на нелінійно-синергетичні.

75. Трансформація етики і моралі, формування цілком нового світобачення.

76. Перетворення медицини з галузі ремісничо-мистецтва в біо-хіміо-інженерію.

77. Прискорення руху до індивідуальних інформаційних центрів для громадян суспільства-4 (член суспільства-1 постійно мав при собі ніж, а суспільства-3 — годинник).

78. Греки мали 2 ворогів: Сциллу і Харибду. Сучасні інтелектуали — трьох: ефекти „5-ти сліпих”, „хоттабізації” і „вівсяний” (це ігнорування щойно народжених «проривних» явищ і технологій).

79. Віднайдення реального шляху до штучного фотосинтезу і перспективи припинення деструктивного впливу людини на біосферу

80. Перехід від класичних лінійних передбачень (приклад — група Д.Медоуза з Римського Клубу) до т.зв. форсайтних — з врахуванням емерджентних подій і відкриттів, які мають настати в найближчі роки.

81. Перехід всього людства від „традиційно-природного” до ноорозвитку як необмеженого у часі його ноосимбіозу з вилікуваним довкіллям.

ГРУПА 7. ОСВІТНЬО-КУЛЬТУРНА СФЕРА

82. Зростання суспільного значення й абсолютної тривалості первинної освіти (це тривале навчання від народження до виходу на ринок праці).

83. Потреба створення та удосконалення роботи трисекторного “освітнього простору” (йдеться про формальне і неформальне навчання та вплив всіх засобів інформації).

84. Втрата старшим поколінням повного контролю над тією інформацією, на якій формується молодь.

85. Занепад природних програм передачі “родинного спадку”.

86. Занепад спадку “мудрих думок і висловів”.

87. Досить у школі 7-8 років вчити ПИСАТИ, адже вже зараз майже ніхто не пише. Час навчати думати і працювати.

88. Хоч нано- і нейромолекулярна біологія та інші науки мають багато досягнень, їх майже не враховують у навчально-виховному процесі.

89. Нечесно-хитра конкуренція: США шкодять нашій освіті, розвалюючи точні науки і нав’язуючи “критичне мислення”, “громадянську освіту” та ін.

90. Загроза “деперсоналізації” освіти — зниження особистісних контактів на всіх рівнях освіти у парі “вчитель-учень”.

91. "Ринковізація" освіти — загроза етосу вчительства, шлях перетворення навчально-виховного процесу у другорядну і платну "освітню послугу".
92. Формування світового ринку відкритої освіти і втручання в нього Світової організації з торгівлі.
93. Тема "якість освіти" стає суспільно-пріоритетною разом з демократизацією і рухом до суспільства знань.
94. Обов'язковість отримання вищої освіти. Науковий ступінь як передумова успіху на ринку праці і в суспільній діяльності.
95. Конкуренція між ЗВО за потенційного студента і формування "наскрізних" навчально-виховних комплексів.
96. Посилення перешкод на шляху формування у молоді необхідної для життєвого успіху цивілізаційної компетентності.
97. Занепад традиційного співвідношення між становищами учителя та учнів, пошуки нової навчально-виховної парадигми.
98. Підвищення мікронаціональної різноманітності населення більшості розвинених держав і зростання загрози для їх суспільної стабільності.
99. Явище часткової «мауглізації» у циган (сучасні мови), росіян (сфера кохання) і негативні соціальні наслідки цього.
100. Трансформація мережі аптек в головний засіб поширення наркотиків та інших шкідливих сполук.
101. Створення інформаційної техніки з властивістю мовлення викличе чергові зміни в організації масового навчання і профпідготовки.
102. Виглядало, що Китай знищує деструктивний вплив „Великої Вісімки” і започатковує фазу позитивної нооеволюції всього людства. На жаль, поява в країні «лідера з підлітковим мисленням» перетворило Китай у світову загрозу.
103. В 2013 р. перовскіт знизив ціну сонячних фотоелементів приблизно у 100 разів, є плівкові акумулятори, з 02-2014 вільно розвиваються 3D-принтери. Це шанс для України, який ігнорують наші керівники.
104. ЗМІ стають засобом масового зомбування через емоційний шок. В.Путін призначив 300 медалей для своїх кращих брехунів (як аналога 300 спартанців)
105. Японія обрала шлях повної е-інформатизації, що у 1996-2006 рр. знищило грамотність учнів. Довелося заборонити ПК у початкових класах шкіл.
106. Інформаційне суспільство існує в Японії понад 30 років. Наслідок — деформація відносин обох статей і відмова від створення родин заради дітей.
107. Європа — джерело іншого ідіотизму, що полягає в антизаконах для нормальних осіб і великих перевагах для збоченців (геїв, лесбіянок та ін.)
108. Початок витіснення "міфічної історії" через точне датування артефактів на основі успіхів Sciences. Невигідне імперським націям.
109. Подальше зростання економічної нерівності на планеті, що дуже прискорює рух до глобального Колапсу-XXI (активізується тероризм, еміграція тощо).
110. Новітні відкриття надали шанс українцям знати правду про свою справжню історію та колосальний внесок пращурів у прогрес всього людства. «Шанс» ще не реалізований.

ГРУПА 8. НАЙНОВІШІ ПРОЦЕСИ

111. З настанням 2023 року прискорилося ТРЕТЯ глобальна революція — швидке «подорослішання» Штучного Інтелекту.
112. ПЕРША світова глобальна меганоореволуція як заміна шкідливих виробництв на екологічно-лікувальні прискорилося з 2019 року і сьогодні наш список ноотехнологій досяг 44 процесів.
113. ДРУГА світова глобальна меганоореволуція як створення правдивої історії народів і людства прискорилося з 2010 року. Але є труднощі! Вони полягають у впливі накопичених за тисячоліття даних і висловлювань міфологічного і гіпотетичного характеру. Вони цілковито спотворюють справжню історію українців, адже Захід помилково вважає нас «степовиками» і носіями дикунських звичок. Ігноруючи поняття «пенеплени», загал зарубіжних науковців вважає витоком гуманізму і культур заплавні землі південних рік — Нілу, Тигру, Євфрату, Інду, Гангу й інших. Початок «всього» вони датують з межі 6-7 тисяч років тому, хоч насправді спалах культури і гуманізму удвічі старший і відбувся на анатолійських пенепленах і в Східному

Середземномор'ї. Туди ще 50 тис. років тому прийшли носії українських, вірменських, курдських, єврейських і палестинських генів. Так сталося, що лідерами винаходів у світогляді, моралі і технологіях в цій групі племен стали носії українських генів — переможці канібалізму й винахідники гуманізму, творці сільського господарства, організатори Великого Трипілля й формування «всього індоєвропейства» ([12] та ін.).

114. Захід страждає від заборони в 1960-х роках використання термінів з літерами «ноо-» і виданнях Science&Arts, що все дужче й дужче гальмує прогрес.

115. Це гальмування виявило себе в нерозумінні появи епідемії ожиріння як прояву ендокринної пандемії й відсутності пропозиції засобів їх усунення. А засіб — ноотехнології й використання ціанобактерій для отримання біопластиків [13].

116. Третій світ переходить до стадії досягнення «рівноправної участі» у світових справах, але процес ще не оформився належним чином.

117. Обставини складаються на планеті так, що Україна може стимулювати «друге одуховлення світу» — НОООДУХОВЛЕННЯ. Це необхідно задля успіхів делегації України на всіх запланованих на майбутнє «Самітах миру».

118. Для прискорення втілення в життя цього позитивного явища керівники України і всі громадяни мають скоординовано й усюди поширювати правдиву інформацію про лідерський внесок наших пращурів в прогрес людства після припинення останнього Льодовикового періоду. Кожні значні світові археологічні дослідження на західних теренах Євразії надають докази цих «українських подвигів». Ми будемо розвивати і пропагувати свої попередні дослідження ([14-16] та ін.).

119. Світ намагатиметься вийти з сучасної кризи через реформування ООН й активізацію інших міжнародних засобів в умовах сьогодишньої появи Альянсу Демократії, сил Зла і великої за чисельністю «групи амбівалентних», які надто суперечливі в своїх намірах через незнання рятівних ноотехнологій і сподівань на «продовження минулого і сьогодення». Україна повинна докласти цілеспрямованих зусиль для розвитку позитивних процесів на всій планеті.

120. Прикро, але цей поступ йде неприпустимо повільно. Головною причиною ми вважаємо антиморальність світових традиційних та електронних джерел, що зумовлена свідомим опором створенню і ратифікації «Світової конвенції з етики журналістики». Тому найпершими кроками людства в світліше майбутнє повинна стати поява цієї Конвенції разом зі «Світовою конвенцією з обов'язків Людини». Ці заходи повинні супроводжуватися швидким удосконалення Штучного Інтелекту й перетворенням його в «глобального аудитора» і захисника прогресивних ресурсів усього людства.

Закінчуючи виклад великого переліку головних виявлених нами світових трендів і явищ, вкажемо на те, що в цій статті він оприлюднений уперше для ознайомлення з ними наших читачів і використання як для точного прогнозування майбутнього, так і для оцінювання будь-яких матеріалів ЗМІ чи наукових видань, автори яких пропонують власні передбачення майбутнього і рекомендують ті чи інші заходи.

У своїй професійній діяльності відповідальний автор завжди використовував їх, насамперед, з першої і сьомої груп. Більшість з майже тисячі різноманітних опублікованих праць спираються на цей список світових трендів і досягнення наймолодших наук.

Звернення до повного списку з детальними поясненнями відбувалося у винятковому і єдиному випадку, коли доводилося викладати студентам різних ЗВО Києва унікальну дисципліну з назвою «Філософія глобальних проблем сучасності — ФГПС». Міністерство освіти та науки України з настанням нового тисячоліття вирішило розширити кількість дисциплін введенням ФГПС для формування у молоді об'єктивного уявлення про сучасність разом зі спроможністю передбачати майбутнє. Наслідком стало створення перших навчальних посібників з ФГПС, серед яких вкажемо [17; 18].

У цих, як і в усіх відомих нам інших творах, після різного обсягу викладу появи і розвитку філософських знань зроблений наголос на переліках і особливостях демографічних, екологічних та всіх інших загроз для існування людства, на пропозиції шукати шляхи ліквідації цих небезпек і забезпечення руху до так званого «сталого розвитку». Як ми вже згадували вище — всі пропозиції мали характер побажання «хорошої поведінки», а не конкретних кроків і засобів досягнення якісного і безпечного життя всього людства в умовах зростання його чисельності й скорочення доступних природних ресурсів.

3. Заключні висновки і пропозиції

У згаданих та інших своїх публікаціях ми пропонуємо гарантовано рятівні для всього все більш численного людства засоби (ноотехнології і ноонауки - знайомитися радимо через пошук по слову «Nooglossary»), спроможні поєднати якісне життєзабезпечення з ліквідацією вже накопичених пошкоджень всього земного довкілля.

Але не тільки ми піклуємося про «порятунок людства і відновлення біосфери». Це завдання розглядають «майже всі HSS», насамперед ті, хто за своїми фаховими обов'язками покликаний рятувати і захищати все людство. Зробимо наголос на ювілейному 55-му Світовому економічному форумі в Давосі, який успішно відбувся 20-24 січня 2025 року з активною участю представників України [19]. Понад півтисячі штатних працівників-організаторів спільно з керівництвом майже тисячі спілок і фірм з глобальним впливом створили в Давосі умови для зібрання інтелектуалів, обговорення світових проблем і формування стратегічних і всеохопних пропозицій.

Робота скеровувалась на свідоме уникнення «Епохи фрагментації» (досить вдале формулювання, що не вимагає уточнень на кшталт «Війна в Україні», «Вступ у Третю світову війну» та ін.) і рух планети до «Інтелектуальної Епохи», яку не деталізували у сподіванні на її «очевидне значення».

Основні «рятівні ідеї» 55-го Світового економічного форуму в Давосі стануть для нас цілком зрозумілими, якщо навести повний опис вказівок організаторів щодо теми «Захист планети»:

Інноваційні партнерства та діалог, які дають змогу інвестувати та впроваджувати кліматичні та чисті технології, матимуть вирішальне значення для прогресу у досягненні глобальних цілей у галузі клімату та природи, а також для вирішення «енергетичної трилеми» — забезпечення доступного, безпечного та стійкого енергопостачання.

За даними Міжнародного енергетичного агентства, технології на ринку сьогодні можуть дозволити нам досягти 66% глобальних скорочень викидів, необхідних у разі досягнення чистого нуля до 2050 року — значно більше, ніж два роки тому, але ще багато що треба зробити. Необхідне нарощування амбіцій, управління, партнерств та капіталу для прискорення зусиль з декарбонізації з метою досягнення чистого нуля, інвестування у сприятливі для природи шляхи переходу, а також забезпечення циклічності та стійкості ресурсних систем загалом.

Як ми можемо активізувати дії щодо захисту клімату та природи за допомогою інноваційного партнерства, збільшення фінансування та впровадження передових технологій?

У цьому контексті дуже важливо, щоб бізнес, уряди та громадянське суспільство працювали разом, щоб знайти спільні рішення та вжити рішучих заходів. Всесвітній економічний форум через свої Центри об'єднує зусилля державного та приватного секторів для досягнення більших результатів» [19].

Два слова «чистий нуль» дуже вдало і «всезагально» характеризують уявлення організаторів вказаного Форуму й загалу його учасників (включаючи десятки доповідачів) і про стан людства в даний момент, і про сукупність думок, планів, заходів та всього іншого на всі наступні десятки років аж до кінця століття. Не помічаючи кількох запеклих воєнних конфліктів, багатьох осередків голоду і виникнення епідемічних загроз (всі інші небезпеки для Ното перераховувати не будемо), провідні представники майбутньої «Інтелектуальної Епохи» вимагають від усіх восьми мільярдів землян в режимі 24/7 рятуватися від глобального потепління рухом до вказаного «чистого нуля» — до припинення поповнення атмосфери вуглекислим газом, включаючи і промислові процеси, і життєдіяльність тварин, і, очевидно, дихання самих Ното.

Та вказана однастайність висловлювань тисяч осіб щодо «чистого нуля» і «глобального потепління» не робить їх Істиною, Правдою і просто «мудримі міркуваннями». Це банальна **помилка** і результат повної необізнаності у досягненнях і пропозиціях сучасних наук і науковців — як провідних кліматологів США і СРСР 1970-х років, так і набагато менш титулованих авторів цієї статті.

Згадані кліматологи і представники інших наук в рамках теми «Ядерна війна і наслідки для клімату» як «додатковий результат» отримали докази того, що наявне і сподіване на майбутнє підвищення концентрації вуглекислого газу в атмосфері матиме виключно позитивні наслідки, адже значно підвищить продуктивність біосфери, зумовить «позеленіння» планети з цілковито незначним впливом на катастрофічні природні явища.

Саме так йдуть сьогодні процеси на Землі, чого не хочуть визнавати політики, економісти, менеджери, маркетингологи і навіть офіційні футурологи з Давосу.

В 2024 році відбувалося багато наднаціональних зібрань і конференцій — G7, G20 у Бразилії, СРТ29 в Сеулі та інші мега-акції під егідою ООН, локальніші імпрези — і всі концентрувалися на обговоренні відсутньої небезпеки — **глобального потепління**. То чи може людство в цілому обґрунтовано вважати, що воно складається з «подвійно розумних Ното»?

Формулювання відповіді на це запитання покладемо на наших читачів.

А закінчимо ми наведенням доказів того, що ООН «та всі інші» помиляються у твердженні, що підвищення середньої температури тропосфери на півтора градуса Цельсія матиме наслідком зникнення людства і звільнення планети для тих комашок, які нам неприємно згадувати.

Серед понад 40 відомих нам ноотехнологій виокремимо бактеріальне перетворення довільної органіки (включаючи всі види «продукцій» організму HSS) в ідеальний білковий мікрофарш, придатний для негайного споживання. Це з феноменальною активністю за 3-4 доби в побутових умовах здійснюють не всім відомі шампінйони, печериці чи гливи, а знайдені в гейзерах США мікрогрибки «*Fusarium yellowstonensis*», тому зазвичай цю космічну технологію, яка створена для забезпечення їжею учасників дуже тривалих перельотів у Сонячній системі, називають «протеїн Фу». Зняття сучасних обмежень на використання цього патенту дуже швидко і назавжди ліквідує все індустріальне тваринництво разом з відповідною частиною с/г. В поєднанні з іншими бактеріальними ноотехнологіями HSS припинять плюндрувати довкілля, адже створюватимуть якісну їжу, як радив В. Вернадський [2], без пошкодження біосфери. Євросоюз проголосив себе лідером в цій сфері ліквідації протеїнового голодування [20], але серйозних капітальних вкладень ще немає, а Давос-2025 і всі інші подібні зібрання навіть не думають розвивати рятівні для HSS ноотехнології.

В Україні необхідно поєднувати ноопрогрес в гуманітарній сфері (прикладом є критика «західного трансгуманізму» і рекомендація будувати нашу освіту-XXI на основі «ноогуманізму» [21]), з орієнтацію всіх планів післявоєнного відновлення на використання ноотехнологій «з майбутнього». Тут ми не радимо виконувати хибні плани урядових структур і Національної академії наук ([22; 23] та ін.), скеровані на виконання помилкових вказівок з Давосу і керівних структур ЄС щодо побудови екологічно небезпечної «Індустрії 4.0», а орієнтуватися на масове використання наявних і найбільш можливих ноотехнологій.

Радимо прилучатися до інноваційної діяльності Д. Золотарьова з його ідеальним 3d-принтером для створення комфортного нового житла для всього населення України [24]), а також до ще ефективнішого підприємця І. Ліскі, який швидко створює комплексну нооекономіку України-XXI ([25] та ін.). Їм слід допомогти в аспекті захисту цих інноваторів від «ретроградів при владі», адже об'єднання навколо них й започаткування власних ноостартів гарантовано перетворить Україну-переможницю в комбінованого лідера планети — і в хоробрості, і в рятівних для всього людства ноодосягненнях.

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THE TRAGEDY OF JANUARY 20 OF OUR INDEPENDENCE HISTORY

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MÜSTƏQILLIK TARIXIMIZIN 20 YANVAR FACİƏSİ

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Abstract

Thirty-five years have passed since the events of January 20, 1990, which entered the history of Azerbaijan as the Bloody January tragedy. Our people are still living with the pain of this tragedy. On January 20, 1990, the people of Azerbaijan gave many martyrs for their freedom and independence. However, his will was not broken and his national spirit was not shaken. During that massacre, the children of the Motherland, who gave their lives for the protection of national interests and rose to the height of martyrdom, wrote a new bright page in the annals of heroism of our nation with their incomparable sacrifice. Azerbaijan always appreciates the bravery of these fighting sons and daughters, respects their spirit, and always cherishes their memory. It is with deep sadness that we once again commemorate the dear memory of our compatriots - the innocent victims of Bloody January - who sacrificed their lives for the territorial integrity of our country, the freedom of our people and the independence of our state. This article is dedicated to the tragedy of January 20.

Xülasə

Azərbaycan tarixinə Qanlı Yanvar faciəsi kimi daxil olmuş 1990-cı il 20 Yanvar hadisələrindən otuz beş il keçir. Xalqımız indiyədək bu faciənin ağrı-acısı ilə yaşayır.

1990-cı ilin 20 yanvarında Azərbaycan xalqı öz azadlığı və müstəqilliyi uğrunda çox sayda şəhid verdi. Lakin onun iradəsi sınımadı və milli ruhu sarsılmadı. Həmin qırğın zamanı ümummilli mənafeələrin müdafiəsi naminə canlarından keçmiş və şəhidlik zirvəsinə ucalmış Vətən övladları misilsiz fədakarlıqları ilə xalqımızın qəhrəmanlıq salnaməsinə yeni parlaq səhifə yazdılar. Azərbaycan bu mübariz oğul və qızlarının şücaətini daim yüksək qiymətləndirir, onların ruhuna ehtiram göstərir, xatirəsini hər zaman uca tutur. Ölkəmizin ərazi bütövlüyü, xalqımızın azadlığı və dövlətimizin müstəqilliyi yolunda canlarını fəda etmiş həmvətənlərimizin – günahsız Qanlı Yanvar qurbanlarının əziz xatirəsini bir daha dərin hüznə yad edirik. Bu məqalə 20 yanvar faciəsinə həsr olunub.

Keywords: January 20 tragedy, country's independence, Martyrs, Soviet Empire, a bloody massacre, an independent state, the national leader Heydar Aliyev, President Ilham Aliyev, freedom and integrity of Azerbaijan.

Açar sözlər: 20 Yanvar faciəsi, ölkə müstəqilliyi, Şəhidlər, Sovet imperiyası, qanlı qırğın, müstəqil dövlət, ümummilli lider Heydər Əliyev, Prezident İlham Əliyev, Azərbaycanın azadlığı və bütövlüyü.

Introduction

"Martyrs do not die, they live forever in our hearts."
Ilham Aliyev, Azerbaijan President

Although 35 years have passed, the bloody incident that took place in Baku on the night of January



19-20, 1990, has left indelible marks in the memory of our people. This event, which went down in world history as the January 20 tragedy, played a huge role in the national independence movement of Azerbaijan and once again confirmed that the path to freedom was not bloodless. The popular movement that began against the uprising of Armenian separatism and the insidious policy of the USSR leadership later gained a wider scope and led to the strengthening of the national liberation movement. The Azerbaijani people, who rose in protest against the cutting down of the Topkhana forest and the annexation of Upper Garabakh to Armenia, made

a statement to the whole world. To suppress this movement, the Kremlin once again started the machine of repression against Azerbaijanis. On the orders of Gorbachov, who became the mouthpiece of the Armenian lobby, on the night of January 19, the Russian army was sent to our capital - to peaceful residents. "Women, children, and the elderly were shot and killed without mercy. The tragedy of January 20 was the culmination of our people's freedom movement."(4)

Our youth must know the historical truths. Studying and investigating our recent history is an important task. The tragedy of January 20, 1990, must also be studied and conveyed to future generations as it was.

The January 20 tragedy led to the organisation of Azerbaijanis around the world. After the tragedy, the Soviet Empire lost all its moral and social foundations in Azerbaijan, the idea of the country's independence became a nationwide practice, and for the first time in our new political history, the Azerbaijanis of the world began to organise in different countries to promote our national tragedy and eliminate its consequences. (3)

The January 20 events are a crime committed against the Azerbaijani people.

On the night of January 19-20, 1990, military units of the former Soviet army committed an



unprecedented massacre against the civilian population in Baki who had risen to establish an independent state and gain their sovereignty. This bloody crime could not extinguish the people's love of freedom, and our people, albeit at the cost of their lives, gained their state independence. The crime committed against the Azerbaijani people thirty-five years ago is actually a terrible act of terrorism against humanity, humanism, and humanity. (1)

The path to the January 1990 tragedy began in 1987 when the next mass deportation of Azerbaijanis from their historical lands in Armenia

and attempts to annex Garabakh to Armenia became widespread. Instead of preventing the growing tension, the Soviet leadership committed a terrible crime against the Azerbaijan people.

On the night of January 19-20, 1990, directly by order of the General Secretary of the Central Committee of the Communist Party of the Soviet Union Mikhail Gorbachev, units of the USSR Ministry of Defense, the State Security Committee and the Ministry of Internal Affairs were deployed to Baki and several regions of Azerbaijan and the civilian population was subjected to mass murder under heavy equipment and various types of weapons.

The occupation of Baki by a large contingent of special forces of the Soviet army and internal troops was accompanied by special cruelty and unprecedented brutality. Before the introduction of a state of emergency was announced to the population, military personnel mercilessly killed 82 people and mortally wounded 20 others. After the declaration of a state of emergency, 21 people were killed in Baki within a few days. In regions and cities where a state of emergency was not declared - 8 people were killed in Neftchala on January 25 and in Lankaran on January 26.

Thus, as a result of the illegal deployment of troops, 131 people were killed in Baki and the surrounding regions, and 744 were injured. Among the dead were women, children and the elderly, as well as emergency workers and militiamen.

The illegal deployment of troops was also accompanied by mass arrests among the civilian population. During the operations, 841 people were illegally arrested from the capital Baki and other cities and regions of the republic, 112 of whom were sent to prisons in various cities of the USSR. Military personnel opened fire on 200 houses, 80 cars, including ambulances, and a large amount of state and private property was destroyed as a result of fires caused by incendiary bullets. The actions of the Soviet troops showed all the signs condemned by the international tribunal held in 1945-1946 and known as the Nuremberg Trials.

The victims of January 1990 are symbolically called the "Martyrs of January 20". (2)

After the January 20 events in Baki, the national leader Heydar Aliyev, who came to the permanent representation of Azerbaijan in Moscow, sharply condemned this brutality at a press conference, calling the terror committed against the people an act contrary to law, democracy, and humanity. The fact that the Great Leader made such a statement at a time when the Soviet empire still existed once again proved that only great personalities take great steps in politics. Martyrdom in the cause of the Motherland is the peak of true zeal, skill, honour and dignity.

Great leader Heydar Aliyev highly appreciated the selflessness of the sons of the Motherland, who conquered such a peak and gained the right to eternal life on the night of January 20, 1990, and said: "The heroism of the martyrs of January 20 is an example for the Azerbaijani people, for the youth of Azerbaijan. Both the current and future generations of Azerbaijan will take an example from the heroism of these martyrs. They will constantly fight to protect the national freedom and independence of the Azerbaijani people. They will constantly show examples of heroism and patriotism. Therefore, the more grief and sorrow the death of these martyrs causes for us, the more heavy a loss it is, the more it is an example of heroism for our people, an example of our national wealth, national pride."

After the national leader Heydar Aliyev returned to political power in our country, the tragedy was given a political and legal assessment at the state level. At a special session of the Milli Majlis held in February 1994, the brutal killing of innocent people on January 20, 1990 was assessed as military aggression and a crime, and as a result of the discussions, a decision was adopted in March of that year "On the tragic events committed in Baku on January 20, 1990".

On November 20 of the same year, at the session of the Supreme Assembly of the Nakhchivan Autonomous Republic, national leader Heydar Aliyev assessed the January tragedy as an attack on the sovereign rights of the Azerbaijani people: "I believe that this tragedy that occurred on January 19-20 is both the result of the great sin of the political leadership of the Soviet Union, personally Gorbachov, a situation that arose from his dictatorial tendencies, and at the same time, the result of the betrayal and crime of the Azerbaijani leaders against the people. I believe that after the end of the Great Patriotic War, there has never been such a bloody massacre on this scale anywhere, in any region, in the Soviet Union, within the country. The Soviet army did this, too. And the scale of this can be measured by the fact that the Minister of Defense of the USSR Yazov and the Minister of Internal Affairs of the USSR Bakatin arrived ahead of time to carry out this military action. They sat in Baki and led these operations.

On March 29, 1994, at the initiative of national leader Heydar Aliyev, the January 20 tragedy was first assessed at the level of the highest legislative body - Milli Majlis. The decision of the Milli Majlis states: "To suppress the national liberation movement that has spread in Azerbaijan, to break the faith and will of the people who stood up with the act of creating a democratic and sovereign state, to humiliate their national identity, and to demonstrate the power of the Soviet military machine to any nation that embarks on such a path." On January 20, 1990, the Soviet Armed Forces entered the city of Baki and several republic regions, as a result, for the sake of protecting rights and justice. The brutal killing of unarmed people on the streets should be considered military aggression and a crime by the totalitarian communist regime against the people of Azerbaijan.

This is military aggression against the Azerbaijani people, an insult, a crime against the Azerbaijani people. (2)

The tragedy of January 20 received its political and legal value precisely after the principled and consistent struggle of the great leader Heydar Aliyev. The honorary title "Martyr of January 20" was established by the Decree of Great Leader Heydar Aliyev.

The state and people of Azerbaijan do not forget their martyrs. The social situation of the families who were martyred as a result of the events of January 20 is always at the centre of attention of the

state. During the events of January 20, 1990, the people of Azerbaijan gave many martyrs for their freedom and independence.

The President of the Republic of Azerbaijan Ilham Aliyev constantly focuses on perpetuating the memory of the martyrs of January 20, exalting their names, as well as strengthening the social protection of their families, and important measures are being taken in this direction. The January 20 tragedy, a symbol of national unity and patriotism, is a glorious history of our people's struggle for sovereignty.

As President Ilham Aliyev said, "Azerbaijan constantly appreciates the bravery of these fighting sons and daughters, respects their spirit, and always cherishes their memory." As a result of the successful



social policy of President Ilham Aliyev, a reliable social protection system was formed for persons with disabilities and families of martyrs in connection with the events of January 20. The Azerbaijani people and state always hold high the memory of the martyrs of January 20. President Ilham Aliyev, who successfully continues the path of our great leader Heydar Aliyev, also pays special attention to holding high the memory of the martyrs and resolving the social issues of the martyrs' families. Every year on January 20, he visits the Alley of Martyrs and lays a wreath in

front of the "Eternal Flame" monument complex. (3)

The people and the state of Azerbaijan always honour the memory of the martyrs of January 20. President Ilham Aliyev, who successfully continued the path of our great leader Heydar Aliyev, also pays special attention to honouring the memory of martyrs and addressing the social issues of martyr families. (4)

Care for the families of the January 20 martyrs is always in the focus of the state. President Ilham Aliyev has also done important work to perpetuate the memory of our sons and daughters who were martyred in January 1990, to exalt their names, and to strengthen the social protection of their families and children. By the Decree of the Head of State "On the Establishment of the Pension of the President of the Republic of Azerbaijan for the Family of the January 20 Martyr" dated January 19, 2006, a monthly pension is provided to the families of martyrs to increase state care. (3)

Being a national grief the January Tragedy also showed the unshakable and firm will of the Azerbaijani people. Despite the ruthlessness and cruelty of the Soviet army and the imposition of a state of emergency in Baku, the Azerbaijani people held a mourning procession on January 22 in the capital's "Azadlig" Square in connection with the burial of the martyrs of January 20. About 2 million people attended the funeral ceremony in the Alley of Martyrs.

Millions of people visit the Alley of Martyrs, built at the highest point of the capital, and commemorate the memory of their heroes on the anniversary of the tragedy every year. While remembering the dear memory of the martyrs with deep respect, these thoughts of our national leader Heydar Aliyev come to mind once again: "Those who died in the January 20 tragedy are national heroes, they are the heroes of our nation. Their death is a great loss for us, for our people. At the same time, their martyrdom is a symbol of the heroism of our people. Their shed blood is the blood of all our people. Every drop of that blood contains the power and heroism of our people, our people have dreams of national freedom and independence. The bloodshed of that night is the blood on our national flag, which demonstrates the independence of Azerbaijan." (1)



The Azerbaijani people cherish the memory of the martyrs of January 20. Every year the anniversary of the tragedy is accompanied by crowded visits, the people arrange red carnations, which

have become symbols of the tragedy, on the graves of the independence fighters, proudly commemorate them, curse their murderers, and express their deep hatred for the perpetrators of this tragedy.

Every year on January 20 at noon (12:00) Baki time, the memory of the martyrs of January 20 is commemorated with a minute of silence throughout Azerbaijan, sound signals are sounded from ships, cars, trains and national flags are lowered as a sign of mourning.

The events of January 20 had both a symbolic meaning and a phenomenal role in the struggle for Azerbaijan's sovereignty, independence and territorial integrity. The collapse of social and political reality caused by the January 20 tragedy spurred a chain of historical processes, first in the Azerbaijan SSR, and then in independent Azerbaijan, against the background of the geopolitical situation in the approaching USSR and the international arena on the eve of the end of the Cold War.

The role of culture in imprinting the events of January 20 in the historical memory of the people is undeniable: The painting "20 Yanvar" - ("January 20") by the honoured artist Arif Alasgarov, the painting "Faciələrımız" - ("Our Tragedies") by the artist Bayram Gasimkhanli, "Nakamların dəfni" - ("Burial of the Innocents") by Mikayil Abdullayev, "Təcavüz" - ("Attack") by Rasim Babayev, "Matəm" - ("Mourning") by Ogtay Guliyev, "Faciələrımız" - ("Our Tragedies") by Bayram Gasimkhanli, "Şəhidlər ağsı" - ("The Cry of Martyrs") by Emin Sabitoglu to the words of Bakhtiyar Vahabzadeh, "Çingiz" - ("Chingiz") by Ogtay Rajabov's oratorio. The films "Qanlı Yanvar" - ("Bloody January"), "Boz qurdun harayı" - ("The Howl of the Gray Wolf"), "Azadlığa gedən yollar" - ("Roads to Freedom"), "Bakıda insan ovu" - ("Human Hunting in Baki"), "Şəhidlər və qazilər" - ("Martyrs and Veterans"), "Qanlı Bakı" - ("Bloody Baki"), "Matəm" - ("Mourning") were dedicated to the January 20 event in Azerbaijani cinema. After the event, elegies and protest poems were written by Bakhtiyar Vahabzadeh, Mammad Aslan, Gabil, Khalil Rza, Fikret Goja and others. The play "Mənim ağ göyərçinim" - ("My White Dove") by writer-playwright Tamara Valiyeva has been staged in various state theatres since 1999. (3)

Every Azerbaijani should know and should not forget the details of the January 20 events.

The January 20 tragedy is an event that gave impetus to the development of the national ideology. January 20 is not only a tragedy in the history of Azerbaijan, but also the first peak of Azerbaijan's path to independence, the day of the awakening of the desire for freedom of our national ideology. This is a glorious date when the people, who lived in the captivity of the Soviet Empire for many years, raised their voices for freedom and demonstrated courage for their sovereignty.

The crime of January 20 could not break the will and integrity of the Azerbaijani people. The hatred of the people for the Communist Party of the Soviet Union and the current regime reached its peak, and members of the Communist Party massively threw away their party cards and left its ranks.

Every Azerbaijani should know and not forget the details of the events of January 20. The January 20 events are a military and political crime committed against Azerbaijan. The January 20 events are a manifestation of international legal hypocrisy.

The investigation group of the USSR Prosecutor General's Office, Colonel of Justice V. Medvedev, concluded that the actions of the military did not constitute a crime and on July 20, 1990, a decision was made to terminate the criminal case. 68 volumes of 100 volumes of investigation materials were taken from Baki to Moscow, to the former USSR Prosecutor's Office, and were not returned.

The events of January 20 should also be considered an international crime. The January 20 crime is among the bloodiest terrorist acts committed by totalitarianism in the 20th century. It was a terrible act committed against humanity. During the punitive measures taken against the civilian population, numerous provisions of the Geneva Convention of 1949, the Statute of the International Military Tribunal, the Universal Declaration of Human Rights, and other international acts on human rights were violated. (3)

It can be said with certainty that today the souls of the martyrs of January 20 are happy. Their struggle for the freedom and integrity of Azerbaijan resulted in victory. On October 18, 1991, Azerbaijan gained independence. It is true that shortly after independence, due to the incompetence of those in



power, our lands were occupied by Armenians, and about a million refugees and internally displaced persons were displaced from their ancestral lands. But 30 years later - in September 2020, our Army achieved a brilliant victory under the leadership of the Supreme Commander-in-Chief İlham Aliyev. On September 20, 2023 our Army hoisting the tricolour flag of Azerbaijan in Khankendi, fully restored the sovereignty of our country.

Thus, the dreams and goals of our people - the victims of the January 20 tragedy 35 years ago - have been fully realized. At the heart of every success we have achieved, at the foundation, is the heroism of our brave men who demonstrated their steadfastness in front of Soviet tanks 35 years ago. The January 20 tragedy has become a source of national pride for the Azerbaijani people, and the Alley of Martyrs has become a sacred place of pilgrimage. Every person, young people and schoolchildren who visit the Alley of Martyrs feel a sense of national patriotism. The Alley of Martyrs, where our heroic sons and daughters are buried, is also dear to us as the cradle where love for the Motherland was born.

This year is the 35th anniversary of the January 20 tragedy, which was written in bloody letters in the history of Azerbaijan. The January 20 massacre changed the fate of not only people but also the fate of the carnation flower, which is the main symbol of this day. Since January 1990, the carnation has been known as a mourning flower. Both white and red. Mostly, the red carnation has engraved all the mourning on it. However, there have been times when this flower was given as a gift to the dearest people. Until then, the carnation was known as a symbol of passionate love and excitement. After the events of January 20, 1990, the red carnation became a mourning flower in Azerbaijan. Even before January 20, 1990, the most widely planted flower was carnations in Baki. Everyone planted them in their yards. People also made a good profit from this flower. After January 20, people did not plant carnations, the flower became a mourning flower. It seems that all the sighs and groans of that massacre fell on this flower. The poem "Ağla, qərənfil, ağla!" ("Cry, Carnation, Cry!") was written by the famous Azerbaijan poet Mammad Aslan:

Qərənfil - şəhid qanı,	Bu günahsız qanlara,	Bu bədənsiz qollara,
Ağla, qərənfil, ağla!	Bu didilmiş canlara,	Bu uçunan yollara,
Ağla, inlət meydanı	Bu cansız cavanlara,	Bu yiyəsiz qullara,
Ağla, qərənfil, ağla!	Ağla, qərənfil, ağla!	Ağla, qərənfil, ağla!

Conclusion

The widespread celebration of January 20 as the National Day of Mourning in our republic has a great impact on the historical memory and the formation of a sense of patriotism in our teenagers and young people. Even if hundreds of years have passed, the holy memory of our martyrs who wrote history with their blood will always be remembered."

Our people, who spent 40 days in the squares, showed that the military crimes and repressions of the Soviet Army, which shook the whole world, could not break our determination to fight. In those days, the Azerbaijanis from all over the world showed solidarity and supported the freedom movement. The tragedy of January 20, which will live forever in the bloody memory of our people, is widely celebrated in our republic every year as the National Day of Mourning.

"The Azerbaijani people remember the events of that fateful night and the victims of freedom every year, and they commemorate and pay tribute to the Martyrs by going to the Alley of Martyrs."

"The widespread celebration of January 20 as the National Day of Mourning in our republic every year has a great impact on historical memory and the formation of a sense of patriotism among our teenagers and young people. Even though hundreds of years have passed, the sacred memory of our martyrs who wrote history with their blood will always be remembered."

The January 20 tragedy was the starting point of a new stage on Azerbaijan's path to independence. The Bloody January event of 1990 is not only a great tragedy for the people of Azerbaijan. It is a glorious page in the history of a people who are ready to make any sacrifice to protect their dignity. The tragedy of January 20 has been engraved in the history of Azerbaijan as both a national tragedy and the peak of the national liberation movement of our people for independence, independence and freedom. (4)

May God have mercy on our Martyrs!

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Journalism

PRESERVING NATIONAL IDENTITY AND THE DEMAND FOR KAZAKH CONTENT ON TELEVISION

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СОХРАНЕНИЕ НАЦИОНАЛЬНОЙ ИДЕНТИЧНОСТИ И ВОСТРЕБОВАННОСТЬ НА ТЕЛЕВИДЕНИИ КАЗАХСКОГО КОНТЕНТА

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Abstract

The authors propose that the Kazakh audience is more inclined to engage with television projects that feature a highly artistic script, where the concept and content align with the national mentality. To test this hypothesis, empirical data derived from a study of the preferences of the Kazakh-speaking audience were analyzed.

The study evaluates television projects and their ratings, employing comparative analysis to explore the current state of Kazakhstan's media landscape. The findings reveal a significant correlation between public events and the preferences of television viewers. The research shows that viewers in Kazakhstan respond positively to discussions on relevant topics presented in the Kazakh language. Based on these results, the authors suggest reducing entertainment-focused content and shifting the emphasis toward socially significant and culturally educational programming to increase the impact of television on the audience.

Аннотация

Авторы предполагают, что казахская аудитория фокусирует свое внимание только на тех проектах, где сценарий создан в высокохудожественном стиле, концепция и содержания соответствуют национальному менталитету. Для проверки гипотезы использовались эмпирические данные, полученные в результате исследования предпочтений казахскоязычной аудитории.

В исследовании рассмотрены телепроекты и их рейтинги, сравнительный анализ применен для изучения современного состояния казахстанских СМИ. Результаты исследования указывают на взаимосвязь между общественными мероприятиями и предпочтениями телеаудитории. Исследование показывает, что телезрители в Казахстане позитивно реагируют на обсуждение актуальных тем, представленных на казахском языке. Основываясь на этих результатах, для усиления воздействия телеканалов на аудиторию, авторы предлагают сократить развлекательный контент, сместив акцент в сторону социально значимых и культурно-познавательных программ.

Keywords: media market, television, language preferences, information policy, audience engagement.

Ключевые слова: медиарынок, телевидение, языковые предпочтения, информационная политика, охват аудитории.

Введение

Коммуникационные технологии снижают информационное неравенство в казахском обществе. Модель развития медиа рынка в Казахстане реализуется исходя из принципов открытого информационного пространства с учетом национальных интересов. Принимаются во внимание национальные особенности, специфика восприятия населением технологических новшеств (Yessenbekova, 2020b; Chernova et al., 2019; Davydov et al., 2020; Revina et al., 2020; Smirnova, 2020).

Показательным примером является проводимая информационная политика в Казахстане, где придается важное значение телевизионному рынку (Barlybaeva, & Rusetmova, 2007; Nair et al., 2020). Исследования по выявлению предпочтений и запросов аудитории казахстанских телеканалов показывают устойчивую тенденцию роста развлекательного контента за последние годы (Yessenbekova, 2020a). Создается впечатление, что менеджеры телевидения недооценивают просветительские возможности телепрограмм, его содержательный и познавательный потенциал. Телевизионный формат сейчас не в полной мере отвечает требованиям социальной ответственности (Halkos & Skouloudis, 2016).

Результаты исследования могут представлять интерес для научных кругов, заинтересованных в анализе особенностей телевизионной аудитории и ее запросов, улучшению взаимоотношений медиа с государственными органами, институтами гражданского общества. Недостаточная изученность закономерностей влияния духовного и культурного опыта, запросов людей на формирование рейтингов телеканалов также определяет актуальность данного исследования.

Материалы и Методы

Объектом исследования является телевизионный рынок. Несмотря на возрастающую роль новых медиа в общественной коммуникации, телевидение в Казахстане сохраняет лидерство. Телевидение обеспечивает массовый охват, имеет огромное влияние на зрительскую аудиторию и пользуется доверием со стороны общества, занимает первое место среди других СМИ на текущий момент.

В понимании авторов качественный контент не только полезный, структурированный и легкий информативный материал, который отвечает запросам большинства телезрителей. В данной статье мы понимаем под качественным контентом материал с большим познавательным и просветительским потенциалом, созданный с учетом национальных традиций, культуры и менталитета казахского народа. Такой материал также должен отличаться уникальным, информативным, полезным и актуальным содержанием.

По нашему предположению телевизионная аудитория Казахстана избирательно подходит к выбору контента для просмотра, – предпочтительно выбирается качественный телевизионный контент на родном языке. При этом телезрителю интересен не весь контент.

Аудитория акцентирует свое внимание только на тех проектах, где сценарий создан в высокохудожественном стиле, концепция и содержание соответствуют национальному менталитету. Исходя из этого, мы стремимся проанализировать важность установления форм и критериев влияния социального, культурного и духовного уровня развития общества на функционирование телевизионного рынка в стране.

Для проверки научной гипотезы исследования был проведен социологический опрос жителей города Астана. В опросе участвовало 300 человек, в том числе учащиеся вузов города. Целью эксперимента было выявление наиболее значимых событий за январь-февраль 2017 года и наиболее популярных телевизионных программ на казахстанских телеканалах за этот период. Была установлена зависимость рейтингов телеканалов от различных общественных событий в стране. Участникам эксперимента было предложено выбрать наиболее интересные общественные истории и интересные телепроекты за первые два месяца 2017 года.

В работе применялись методы исторического, комплексного и сравнительного анализа. В ходе исследования просматривались телевизионные проекты и их сценарии, был применен компаративный анализ при изучении современного состояния казахских медиа. Были изучены многочисленные видео материалы телеканалов и ресурсы в интернете, архивные материалы телевизионных фондов. Основными эмпирическими материалами исследования послужила сетка вещания общенациональных телеканалов, результаты измерений телевизионной аудитории и рейтингов, проведенные компанией TNS Central Asia, а также социологические опросы по восприятию аудиторией телевизионных программ в Казахстане.

Обсуждение

В рамках исследования был проведен анализ рейтингов государственных телеканалов, вещающих на казахском языке. При анализе рейтингов было установлено, что «живой» язык, с лексическим разнообразием привлекает телевизионную аудиторию. Данное утверждение основывается на контент-анализе 140 публикаций, где были отмечены пожелания и рекомендации экспертов относительно телевизионных проектов, сериалов и развлекательных передач, не соответствующих художественным стандартам и канонам казахского языка. Связь прослеживается в положительной корреляции общественной востребованности телепроектов, где фигурирует лексически разнообразный язык.

Особенностью телевизионного рынка Казахстана является наличие крупных государственных телевизионных холдингов. Национальные телеканалы финансируются из бюджета, они выполняют государственный заказ на проведение информационной политики. На проведение государственной информационной политики в 2017 г. было выделено 43,973 млрд тенге, в 2018 г. – 46,7 млрд тенге (Yessenbekova, 2020b). Несмотря на столь внушительное финансирование, по данным исследовательской компании TNS Central Asia, рейтинги главных телеканалов «Казахстан» и «Хабар» находятся на 9-10 местах соответственно. При составлении рейтингов опрашивалось 1005 домохозяйств – 2750 респондентов. В городах, где проходил опрос проживают 7,2 млн. человек, это всего 39% населения страны. Остальная часть населения проживают в малых городах и аулах, сельской местности (где более 90% составляет казахское население). Именно сельское население выпадает из выборки медиа анализа TNS Central Asia и их телевизионные предпочтения остаются вне фокуса измерений. Поэтому результаты рейтингов имеют серьезные погрешности. Подтверждение этому встречается в анализе специфических социокультурных факторов, которые необходимо учитывать при реализации стратегии увеличения аудитории (Batyrrshin & Sharikov, 2016).

Проведенный анализ показал, что ключевыми драйверами роста суточной доли канала стали оригинальные выпуски телепроектов «Áiel baqyty», «Tańsholpan», «Aıtýǵa oǵaı», «Túngi stýdiada», «Parasat maidany», телесериал «Aıman-Sholpan», последние серии индийского телесериала «Келин». Если первые 4 проекта всегда собирали хорошие рейтинги, то «Parasat maidany», телесериал «Aıman-Sholpan» были новыми проектами телеканала. Все эти проекты телеканала в этот период показали высокие рейтинги.

Такие же показатели были получены по результатам социологического опроса, проведенного среди жителей города Астана. В январе-феврале наибольший интерес был проявлен следующим общественно-политическим событиям:

– Проведение Всемирной зимней универсиады в Алматы и успешное выступление казахстанских спортсменов, за которых болела вся страна (73% опрошенных).

- Скандал с отказом телеканала «1 канал Евразия» ставить в сетку вещания программу айтыс «Алтын домбыра», для казахов олицетворяющий вершину народного искусства (51% опрошенных).

- Выступление молодого певца Д.Кудайбергенова на международном конкурсе «I am a Singer», транслировавшегося в прямом эфире китайской Hunan TV. Многомесячный марафон исполнителей закончился феноменальным успехом неизвестного казахского исполнителя, занявшего 2-место на престижном конкурсе (67% опрошенных).

- Начало внедрения 3-х языков (казахский, русский и английский) в образовательные программы страны всегда вызывало горячие дискуссии. 2017 г. был началом реализации этой реформы, в январе-феврале в обществе развернулись острые дебаты по этому поводу (46% опрошенных).

- Произошедшие в феврале изменения в топ-менеджменте республиканской телерадиокорпорации «Казахстан» стали самыми обсуждаемыми темами (39% опрошенных).

- Недовольство качеством передач на телеканалах, превалирование развлекательных программ на единственном канале, вещающего на казахском языке, всегда находятся в топ-3 вопросов медиа повестки (53% опрошенных).

- и др.

На наш взгляд, указанные события послужили положительным социальным фоном для телевизионных программ «Áiel baqytu», «Aıtýǵa oǵal», «Túngi stýdiada», «Parasat maidany». Эти телепрограммы были отмечены участниками опроса как наиболее интересные за январь-февраль 2017 года. Каждое из этих событий стало значимым информационным поводом, увеличив аудиторию телеканала. Именно этим можно объяснить резкий скачок рейтинга канала «Казахстан» в начале 2017 года. Контент обзор Интернет-ресурсов и социальных сетей за этот период также показывает наличие интереса аудитории к обозначенным темам.

Анализ аудитории телеканала «Казахстан» за январь-февраль 2017 года по модели Шарикова А.В. (Sharikov, 2006) демонстрирует совпадение социокультурной среды, ожиданий населения (благоприятных внешних факторов) с содержанием и уровнем, формой подачи телепередач (внутренних факторов). Заключительными выводами исследования могут служить следующие обобщения.

Во-первых, в современных условиях массовая культура может выступать как информационный и коммуникативный феномен с лингвистическими свойствами. О тревожных тенденциях в сфере сохранения национальных языков и культур заявляют не только ученые, но и авторитетные международные организации. По данным ЮНЕСКО, ежегодно более 10-ти народов теряют свой родной язык. Как известно, утрата языков ведет к исчезновению культуры, вместе с ним и способов восприятия и утрате национальной идентичности. Сохранение языков народов мира является важной задачей развития человеческой цивилизации. Для этого предлагается инициировать принятие специальной программы ООН «Языковое наследие человечества», которая будет помогать в сохранении языков малых народов.

Во-вторых, для улучшения социальной коммуникации и создание высоких стандартов языкового поведения в медиа казахское информационное поле нуждается в принятии лингвистической концепции на уровне средств массовой информации. В этой связи, предлагается уполномоченным государственным органам в сфере информационной политики рекомендовать разработку концепции, а крупным медиа структурам Казахстана создание подразделений по улучшению лексических форм коммуникаций.

В-третьих, необходимо качественное лингвистическое сопровождение медиа источников, направленное на улучшение использования художественных стандартов казахского языка в информационном пространстве. По этому направлению автором инициирована разработка компьютерной программы по созданию Большого каталога слов казахского языка, где будут собрано максимальное количество уникальных слов и словоформ. Этот каталог может служить лингвистическому обогащению языка, вернуть в языковой оборот забытые и редко используемые слова казахского языка.

Практическая ценность полученных результатов заключается в возможности использования отмеченных закономерностей при формировании информационной политики, стратегий развития телеканалов и других средств массовой информации. Исследование будет полезно как государственным органам, так и субъектам информационного процесса. Информационное пространство Казахстана недостаточно освещено в международной научной литературе. Озвученные в работе исследовательские темы могут представлять интерес для

научных кругов, изучающих особенности поведения казахской телевизионной аудитории и ее запросов, ознакомить зарубежных ученых с особенностями взаимоотношений казахских медиа с государственными органами, институтами гражданского общества.

Заключение

Современная телеаудитория стала более изысканной и выбирает когнитивный, интеллектуальный контент. Поэтому информационные, публицистические, культурные и познавательные программы должны привлекать лексическим богатством, а не только внешним оформлением. В исследовательской работе раскрыта взаимозависимость между речевым фактором и качеством выполнения телевизионных программ, отвечающим требованиям зрителя. Полученные данные на примере телевизионного рынка Казахстана указывают на то, что запросы аудитории изменились, и она требует от медиа контента высокого художественного языкового поведения. В статье была рассмотрена взаимосвязь между качественными телевизионными программами, созданными красочными и выразительными средствами языка и рейтингом телепередач. Нами было подтверждено, что формат языка во многом определяет содержательный уровень контента, его рейтинг.

Результаты исследования и социологического опроса позволяют утверждать, что казахстанская аудитория сохраняет потребность в телепередачах национального, духовно-культурного содержания. Выросли требования и запросы телеаудитории к этническо-познавательному контенту про историю и народное искусство, культуру. Аудитория стала избирательной и требовательной, чутко и живо реагирует на интеллектуальные телепередачи на серьезные темы, умеет отличать познавательную и содержательную программу от продукции масс культуры. Нами выявлены причины искажения казахстанского медиа рынка, которое заключается в неравных условиях конкуренции государственных и негосударственных СМИ. Отсутствие здоровой конкуренции способствует дисбалансу и стагнации информационного рынка.

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MULTIFACTORIAL ANALYSIS OF ETIO-PATHOGENETIC ASPECTS AND CLINICAL-DIAGNOSTIC APPROACHES IN CERVICAL CANCER

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Abstract

This scientific and analytical work presents modern global and local regional data regarding the incidence, mortality and five-year survival rate of such a common oncological pathology as cervical cancer. The issues of etiology and pathogenesis, features of distribution, clinical manifestations, modern principles of early diagnosis and prognosis results for future decades are covered in detail. The achieved successes and modern developing directions for the prevention of this pathology in the form of HPV vaccination and the screening programs used are carefully described. The epidemiological characteristics of this pathology in our republic are presented in the context of regions of the country.

Keywords: *oncology, cervical cancer, epidemiology, incidence, human papilloma virus, screening, diagnostics, Pap test, smear for oncocytology, mortality, five-year survival rate, prognosis.*

Cervical cancer (CC) is a disease that occurs as a result of malignant transformation of the epithelium of the cervix. Considering that this nosological form of malignant neoplasms refers to visually accessible localizations, the possibilities for its early detection are practically unlimited. For this, it is sufficient to correctly use accessible and informative methods of morphological and endoscopic diagnosis. In addition, timely detection and treatment of background and precancerous processes of the cervix can prevent the development of CC. It is known that CC is preceded for many years and even decades by precancerous lesions - cervical intraepithelial neoplasia (CIN). Timely diagnosis and treatment of CIN become the prevention of invasive CC. CIN initiates in the cervical transformation zone and is maintained by persistent infection caused by human papillomaviruses (HPV) of high carcinogenic risk. In

1980-1990, the connection between HPV and dysplasia and squamous cell cancer was clearly shown. Using hybridization methods, it was found that 80-100% of CC contain HPV DNA. A rough correlation was found between the frequency of CC and the detection of HPV in the population. Moreover, in squamous cell cancer, HPV type 16 was most often encountered (in more than 50% of cases), while HPV type 18 was more often associated with adenocarcinoma and poorly differentiated cancer. In 95% of cases, HPV is localized in the zone of transitional epithelium, where about 90% of dysplasias, which are classified as cervical precancer, occur. It is precancerous diseases, in which HPV types 16 and 18 are detected, that have the greatest risk of developing into invasive CC. Intraepithelial lesions are, in fact, stages of cervical carcinogenesis. Conventionally, three degrees are distinguished: CIN 1 (mild dysplasia); CIN 2 (moderate dysplasia); CIN 3 (severe dysplasia and pre-invasive cancer - carcinoma in situ, CIS). At the same time, there are two concepts of the occurrence of CC against the background of persistence of HPV of high carcinogenic risk. The first, classic, reflects the sequential change of CIN 1, 2, 3 to invasive cancer. The second, more recent one, suggests that CIN 2-3, which are severe intraepithelial lesions, can occur bypassing CIN 1 [1].

The diagnostic criteria for CC are as follows [2]: 1) complaints of acyclic bloody, watery, purulent discharge from the genital tract; pain in the lower abdomen and lumbar region of a pulling nature; bleeding due to menopause; 2) anamnesis: there are no pathognomonic complaints; as a rule, the disease has a pronounced pre-invasive stage, which can last from 1 year to 5 years or more; microinvasive cervical carcinoma is most often discovered during accidental presentation; the reason for women diagnosed with CC in stages Ib1-IIa2 to visit a gynecologist is bloody discharge from the genital tract; in later stages (IIb-IVa) there are complaints of pain in the lumbar region, lower abdomen; 3) physical examinations: gynecological examination (condition of the external genitalia; examination of the vagina and cervix on speculum (presence of vaginal infiltration, metastatic foci on the vaginal walls, size, condition of the cervix); presence of pathological discharge (purulent, bloody); bimanual examination (size and shape of the uterus; condition of the appendages; infiltration of the anterior and posterior vaginal fornix); 4) laboratory tests: cytological examination with Papanicolaou staining - PAP test (increase in cell size up to giant, change in the shape and number of intracellular elements, an increase in the size of the nucleus, its contours, different degrees of maturity of the nucleus and other elements of the cell, changes in the number and shape of nucleoli (pronounced cellular polymorphism, increase in cell size, pronounced hypochromia, large nuclei contain one or more nucleoli, there are glandular structures); from cancer cells in the form of rosettes, many cells in a state of mitosis); 5) instrumental studies: ultrasound of the pelvic organs (if CC is suspected, the size of the cervix will be normal or increased, its structure is heterogeneous, the condition of the uterus and ovaries is also assessed); magnetic resonance imaging of the pelvic organs (with CC, the size of the cervix will be normal or increased, its structure is heterogeneous, the condition of the uterus and ovaries is also assessed); computed tomography of the chest, abdominal cavity and pelvis (assessment of pelvic lymph nodes and retroperitoneal space, organic changes in the chest and abdominal organs); cystoscopy according to indications (for the purpose of diagnosing the germination of the tumor process into the bladder); sigmoidoscopy or colonoscopy according to indications (for the purpose of diagnosing the spread of the tumor process to the colon or rectum); skeletal scintigraphy (prescribed for suspected bone metastases); positron emission tomography of the whole body (performed to diagnose the extent of the tumor process or to assess the dynamics of the effectiveness of special treatment).

GLOBOCAN estimates that in 2020, there were 604,000 new cases and 342,000 deaths from CC worldwide, of which 80% occurred in low- and middle-income countries, mainly in sub-Saharan Africa, South-East Asia, and Latin America and the Caribbean [3].

As noted by Torres-Roman J.S. et al. [4], CC remains a major public health problem in low- and middle-income countries. Due to the high burden of this disease, in 2020 the World Health Organization (WHO) adopted a global strategy to decrease the number of new CC cases, with the aim of maintaining an incidence rate below 4 per 100,000 women. Currently, 29 of the 47 countries (and territories) in the Latin American and Caribbean region have implemented vaccination programs for girls and almost all countries have screening services in place, and while certain screening programs in the region achieve considerable coverage, the ambitious goals set by the CC elimination strategy have yet to be achieved. Researchers evaluated the mortality trends of CC among young women from 16 Latin American and Caribbean countries (and territories) and predicted mortality rates until 2030. Downward trends were observed in Chile, Colombia, Cuba, El Salvador, Mexico, Nicaragua, Panama, and Peru for the entire period; whereas Brazil, Argentina, Chile, and Costa Rica showed initial downward trends from - 0.9% to - 6.2% followed by significant upward trends from 2.5 to 4.8% (for the period~ 2006-2017). In the last

4 years of study (2014-2017), Paraguay and Venezuela had the highest mortality rates, whereas Puerto Rico had the lowest mortality. By 2030, authors projected that mortality for CC will increase in some countries that were examined. Colleagues considered CC mortality in young women only because of the lack of research in the Latin American and Caribbean region, which has focused on CC mortality in general. They point out that because HPV infection is the most important risk factor for CC, younger women are likely to have experienced higher rates of HPV infection compared to older women. The authors also note that CC mortality rates among young women in Latin America and the Caribbean are higher than in Eastern Europe. While Western and Southern Europe recorded rates below 2 deaths per 100 000 population in 2017, rates were below 6 deaths per 100 000 population in Northern and Eastern Europe. In conclusion, the researchers emphasize that most countries in Latin America and the Caribbean experienced a decline in mortality rates between 1997 and 2017. The variations of the mortality rates between countries during the last period of observation can be largely explained by the timing of implementation of nation-wide screening campaigns in different time periods and the variation of public health programs within each country, among others. Despite favorable downward trend, the mortality rate in some Latin America and the Caribbean countries remains high. HPV vaccination, screening, and early diagnosis and treatment are necessary to accelerate a rapid decline in CC mortality by 2030.

As noted by Abu-Rustum N.R. et al. [5], an estimated 13,960 new cases of carcinoma of the uterine cervix (ie, CC) will be diagnosed in the United States in 2023, and an estimated 4,310 people will die of the disease. Overall, CC rates are decreasing in the United States, although incidence remains high among Hispanic/Latino, Black, and Asian populations. In 2020, the global new cases of and deaths from CC were estimated to be 604,127 and 341,831, respectively. It is the fourth most common cancer in individuals assigned female at birth worldwide, with 85% of cases occurring in developing countries, where CC is a leading cause of cancer death in individuals assigned female at birth. Squamous cell carcinoma (SCC), adenocarcinoma (AC) or adenosquamous carcinoma (ASC) are the 3 common histologies of CC. SCC accounts for approximately 80% of all CCs and AC accounts for approximately 20%. In developed countries, the substantial decline in incidence and mortality of SCC of the cervix is presumed to be the result of effective screening and higher HPV vaccination coverage, although racial, ethnic, and geographic disparities exist. However, AC and ASC of the cervix have increased over the past 3 decades, probably because cervical cytologic screening methods are less effective for AC/ASC because the lesions are located deeper than the ectocervix. The ASC subtype is rare and accounts for approximately 5% to 6% of all cervical carcinomas. Presently, there is no difference in treatment between SCC and AC/ASC CC subtypes, although the clinical features and prognosis of disease vary considerably between these subtypes. Persistent HPV infection is a major factor in the development of CC. The incidence of CC appears to be related to the prevalence of HPV in the population. In countries with a high incidence of CC, the prevalence of chronic HPV is approximately 10% to 20%, whereas in low-incidence countries it is 5% to 10%. Screening methods using HPV testing may increase detection of adenocarcinoma. Vaccination with HPV vaccines may also decrease the incidence of both SCC and AC. In 2020, the WHO updated the Female Genital Tumors classification of CC by subdividing the CC lesions into HPV-associated and HPV-independent tumors based on new pathologic findings. Among these subtypes, HPV-associated SCC is the most prevalent, with very rare occurrences of HPV-independent SCC. The HPV-independent AC subtype has a less favorable prognosis compared with HPV-associated AC. The NCCN CC Panel acknowledges that although the prior versions of the WHO classification discussed these tumors based on morphologic features, the integration of the immunohistochemical and molecular profiles has led to a better classification system, which is now adapted in the 2020 WHO Classification of Female Genital Tumors for CC.

Screening plays an important role in improving early diagnosis and treatment outcomes for CC. According to the Guidelines for Early Diagnosis of Cancer by Ilbawi A. et al. [6], screening aims to detect unrecognized cancer or its prior lesions in a typically healthy, asymptomatic population through tests (e.g., HPV test), screenings (e.g., visual inspection of VIA with acetic acid), or other procedures that can be applied quickly and are widely available to the target population. In screening, the target population is assessed for unrecognized cancer or precancer, and most people tested will not be diagnosed with the disease. Screening should be seen as a process and not as the performance of a specific test, examination, or procedure. The screening process includes a system of informing and inviting the target population to participate; administering the screening test; following-up with test results and referral for further testing among those with abnormal test results; ensuring timely pathologic diagnosis, staging and access to effective treatment with routine evaluation to improve the process. A screening programme encompasses the process from invitation to treatment and requires planning, coordination and

monitoring and evaluation.

As pointed out by Pimple S.A., Mishra G.A. et al. [7], CC is highly preventable and can be easily treated if detected at early stages. However, there is disproportionate high burden of CC incidence and mortality in low-middle income country settings that lack organized screening and prevention programs. Robust evidence for prevention and screening of CC is currently available. However, there are barriers for country specific adoption and implementation. These pose unique challenges such as organizing prevention and screening services delivery through the current health infrastructure, access to screening facilities, follow-up management and adequate linkages for confirmatory diagnosis and subsequent treatment. Overall rates of CC screening and cancer screening among women remain suboptimal in many low- and middle-income countries.

Brisson M. et al. [8] demonstrate in their work that in May, 2018, WHO issued a global call to eliminate CC as a public health problem. To inform its global strategy to accelerate CC elimination, WHO created the CC Elimination Modelling Consortium (CCEMC) to examine the following key questions: what elimination threshold should be used; what prevention strategies can lead to elimination; when could elimination be reached for different countries; and how many cancers could be averted. The current working definition of elimination is an age-standardised CC incidence of four or fewer cases per 100 000 women-years. Alternative definitions, such as an incidence of ten or fewer cases per 100 000 women-years and an 80-90% reduction in incidence, have also been suggested. The only previous multicountry modelling study of CC elimination suggests that global elimination is possible through girls-only human papillomavirus (HPV) vaccination at 80-100% coverage with a perfectly effective 9-valent vaccine and twice-lifetime HPV-based screening. Herewith less than 30% of low- and middle-income countries have introduced HPV vaccination compared with more than 85% of high-income countries. Additionally, only about 20% of women in low- and middle-income countries have ever been screened for CC compared with more than 60% in high-income countries. Given that models necessarily include simplifying assumptions, the goal of the consortium is to use multiple models, taking into account their respective strengths and limitations, to illustrate the robustness of predictions. A systematic comparative modelling approach was used. To form the CCEMC, WHO selected three models that met the predefined eligibility criteria: HPV-ADVISE, Harvard, and Policy1-Cervix. The models projected reductions in CC incidence over time based on standardised HPV vaccination and cervical screening scenarios determined after consultations at various WHO technical expert, advisory group, and global stakeholder meetings. Three elimination thresholds were examined (CC incidence of four or fewer cases per 100 000 women-years, ten or fewer cases per 100 000 women-years, and $\geq 85\%$ reduction in incidence). The three CCEMC models (HPV-ADVISE, Harvard, and Policy1-Cervix) have been used extensively to inform recommendations on cervical screening and HPV vaccination in Australia, Canada, the UK, the USA, and at a global level [8]. Although developed independently, the models have common features. First, they are transmission-dynamic models of HPV infection and the natural history of CC. Second, they include the following components: sexual behaviour and HPV transmission, natural history of CC, vaccination, and screening, diagnosis, management, and treatment of cervical lesions and cancer. HPV transmission and cervical carcinogenesis are modelled for the HPV types in the 9-valent vaccine (HPV types 16, 18, 31, 33, 45, 52, 58) and other high-risk types. The models simulate type-specific HPV transmission through sexual activity, based on different risk groups and sexual mixing. The models reproduce the type-specific natural history of CC, from persistent HPV infection to CC via precancerous cervical lesions (cervical intraepithelial neoplasia grade 1 to 3). All models assume that HPV vaccines are prophylactic and capture post-vaccination herd effects. They can also simulate complex cervical screening and treatment algorithms at the individual level, by tracking and simulating each woman's screening history. Finally, all models were calibrated to highly stratified sexual behaviour and epidemiological data, validated to clinical trials or post-vaccination data, or both, and reproduce the age-specific CC incidence estimates from the Global Cancer Observatory (GLOBOCAN) 2018 for all 78 low- and middle-income countries.

A comparative modelling analysis by Brisson M. et al. [8], which includes projections from three independent transmission-dynamic models, provides consistent results predicting that CC can be eliminated as a public health problem by the end of the century, based on WHO's proposed elimination threshold (i.e., CC incidence of four or fewer cases per 100 000 women-years). This modelling study shows that girls-only HPV vaccination would lead to CC elimination in most low- and middle-income countries, if high coverage is reached ($>90\%$ coverage) and the vaccine provides long-term protection. However, countries with the highest CC incidence at present (>25 cases per 100 000 women-years), more than 90% of which are in sub-Saharan Africa, would not reach elimination by vaccination alone. To achieve CC elimination in all 78 low- and middle-income countries, these models predict that scale-up of

both girls-only HPV vaccination and twice-lifetime screening is necessary, with 90% HPV vaccination coverage, 90% screening uptake, and long-term protection against HPV types 16, 18, 31, 33, 45, 52, and 58. If this global elimination strategy, which includes a combination of intensive scaling up of HPV vaccination and cervical screening, is implemented, the results suggest that CC elimination can be achieved in all countries by 2100. In doing so, CC incidence would be reduced by 97% and more than 74 million cases would be averted over the next century.

An interesting and important study was conducted by Simms K.T. et al. [9], who in their work modeled the global situation with CC for future decades depending on the coverage of the population with HPV vaccination and screening. In this study, the authors aimed to quantify the potential cumulative effect of scaled up global vaccination and screening coverage on the number of CC cases averted over the 50 years from 2020 to 2069, and to predict outcomes beyond 2070 to identify the earliest years by which CC rates could drop below two absolute levels that could be considered as possible elimination thresholds-the rare cancer threshold (six new cases per 100 000 women per year, which has been observed in only a few countries), and a lower threshold of four new cases per 100 000 women per year. In this statistical trend study and modeling, our colleagues conducted did a statistical analysis of existing trends in CC worldwide using high-quality cancer registry data included in the Cancer Incidence in Five Continents series published by the International Agency for Research on Cancer. Next, the authors used the comprehensive and extensively validated simulation platform, Policy1-Cervix, to do a dynamic multicohort modelled analysis of the impact of potential scale-up scenarios for CC prevention, in order to predict the future incidence rates and burden of CC. Data are presented globally, by Human Development Index (HDI) category, and at the individual country level. As a result of the study, the following conclusions were drawn. In the absence of further intervention, there would be 44.4 million CC cases diagnosed globally over the period 2020-2069, with almost two-thirds of cases occurring in low-HDI or medium-HDI countries. Rapid vaccination scale-up to 80-100% coverage globally by 2020 with a broad-spectrum HPV vaccine could avert 6.7-7.7 million cases in this period, but more than half of these cases will be averted after 2060. Implementation of HPV-based screening twice per lifetime at age 35 years and 45 years in all low- or middle-income countries with 70% coverage globally will bring forward the effects of prevention and avert a total of 12.5-13.4 million cases in the next 50 years. Rapid scale-up of combined high-coverage screening and vaccination from 2020 onwards would result in average annual CC incidence declining to less than six new cases per 100 000 individuals by 2045-2049 for very-high-HDI countries, 2055-2059 for high-HDI countries, 2065-2069 for medium-HDI countries, and 2085-2089 for low-HDI countries, and to less than four cases per 100.000 by 2055-2059 for very-high-HDI countries, 2065-2069 for high-HDI countries, 2070-2079 for medium-HDI countries, and 2090-2100 or beyond for low-HDI countries. However, rates of less than four new cases per 100 000 would not be achieved in all individual low-HDI countries by the end of the century. If delivery of vaccination and screening is more gradually scaled up over the period 2020-2050 (eg, 20-45% vaccination coverage and 25-70% once-per-lifetime screening coverage by 2030, increasing to 40-90% vaccination coverage and 90% once-per-lifetime screening coverage by 2050, when considered as average coverage rates across HDI categories), end of the century incidence rates will be reduced by a lesser amount. In this scenario, average CC incidence rates will decline to 0.8 cases per 100 000 for very-high-HDI countries, 1.3 per 100 000 for high-HDI countries, 4.4 per 100 000 for medium-HDI countries, and 14 per 100 000 for low-HDI countries, by the end of the century. At the same time, the researchers emphasize that more than 44 million women will be diagnosed with CC in the next 50 years if primary and secondary prevention programmes are not implemented in low- or middle-income countries. If high coverage vaccination can be implemented quickly, a substantial effect on the burden of disease will be seen after three to four decades, but nearer-term impact will require delivery of cervical screening to older cohorts who will not benefit from HPV vaccination. Widespread coverage of both HPV vaccination and cervical screening from 2020 onwards has the potential to avert up to 12.5-13.4 million CC cases by 2069, and could achieve average CC incidence of around four per 100 000 women per year or less, for all country HDI categories, by the end of the century.

In our country, according to Decree of the Government of the Republic of Kazakhstan dated February 20, 2024 No. 102 [10], the list of diseases against which mandatory preventive vaccinations are carried out as part of the guaranteed volume of medical care at the expense of the republican budget includes routine preventive vaccinations against diseases caused by HPV (Annex 1). According to Annex 2 of this Resolution, girls aged 11 and 11.5 years will be vaccinated.

Now, as for this pathology in our republic. CC in the structure of all malignant tumors of both sexes of the population in 2022 took 6th place with a share of 5.51% (2021 - 4th place, 5.54%), in women -

stable 2nd place - 9.7% (9.7%) [11].

The incidence rate per 100 thousand population increased from 9.4 to 9.92. In 10 regions of the republic, the incidence rate is higher than the national average: Pavlodar - 17.2 per 100 thousand people (2021 - 16.7) - the highest level, East Kazakhstan - 14.3 (10.8), North Kazakhstan - 14.3 (10.2), Atyrau - 13.2 (13.8), Zhetysu - 11.7, Karaganda - 11.7 (12.0), Abay - 11.1, Akmola - 11.1 (11.9), Mangistau - 11.1 (9.7), Kostanay - 10.8 (10.6) regions.

Low incidence rates in Zhambyl region - 5.8 per 100 thousand population (5.7), Turkestan region - 6.1 (5.2), Aktobe region - 8.3 (11.6), Kyzylorda region - 8.5 (8.2) areas.

CC in the structure of causes of death from malignant tumors of the population of both sexes in 2022 rose from 9th to 8th position, with a share of 4.6% (2021 - 4.3%), mortality from CC is stable at 3.1 per 100 thousand population (3.1).

The mortality rate from CC in 10 regions is higher than the national average: Akmola - 4.2 per 100 thousand population (2021 - 3.1) - maximum level, West Kazakhstan - 4.1 (4.8), Pavlodar - 3.8 (5.6), Almaty - 3.7 (2.5), Zhetysu - 3.7, Atyrau - 3.4 (4.0), East Kazakhstan - 3.3 (3.8), Karaganda - 3.2 (4.7), Kostanay - 3.2 (2.4) regions and Almaty city - 3.4 (2.9).

Below the national average mortality rate was registered in the Kyzylorda region - 1.7 (3.5) - the best result; North Kazakhstan - 2.0 (2.6), Aktobe - 2.2 (3.0), Turkestan - 2.3 (2.2), Mangystau - 2.8 (3.0), cities of Astana, Shymkent - and Abay region - 2.9 per 100 thousand population [11].

In 12 regions, a 100% level of morphological verification of the diagnosis is ensured. The lowest or worst indicator for the third year in a row was recorded in the Kyzylorda region - 94.3%. Below the national average, this figure was noted in Akmola - 98.8%, Atyrau - 98.9%, Kostanay - 98.9%, Mangistau - 97.6%, Pavlodar - 96.6% regions and Almaty city - 98.5 %.

In a number of regions, the frequency of diagnosis of stage I-II CC was lower than the national average (88.1%) - in Akmola - 76.2% - the worst result in the country, in Karaganda - 77.2%, Pavlodar - 81.3%, Zhetysu - 82.9%, Abay - 83.8%, Kostanay - 84.3%, Aktobe - 85.5%, West Kazakhstan - 85.7% regions. In the Atyrau region there is a 100% result.

The proportion of stage IV CC is higher than the republican average (2.7%) in the following regions: the worst result is in the Zhetysu region - 6.1%; next come: Karaganda - 5.1% (2021 - 5.6%), Akmola - 4.8% (2.3%), Kostanay - 4.5% (4.4%), North Kazakhstan - 3.9% (7.4%), Shymkent city - 3.8% (5.9%), Almaty - 3.7% (5.1%), Almaty city - 3.6% (1.8%), Zhambyl - 2.9% (0.0) regions. No advanced forms were registered in 3 regions. The lowest neglect is in the East Kazakhstan region - 1.0% (0.7%).

Indicators of late diagnosis of this pathology, as visually accessible localization (III-IV stages) are higher than the national average - 11.9% (15.4% in 2021) were noted in the Akmola region - 23.8% (2021 - 26.4 %) - worst result; Karaganda - 22.8% (35.2%), Pavlodar - 18.8% (20.8%), Zhetysu - 17.1% (24.2%), Abay - 16.2% (12.8%), Kostanay - 14.6% (15.6%), Aktobe - 14.5% (9.6%), West Kazakhstan - 14.3% (32.4%) regions. The least neglect is in the Mangistau region - 6.0% (20.8%).

Across the country, the five-year survival rate of patients with CC registered in 2018 was 59.9% in 2022, with a decrease from the level of 2021 (67.5% for those registered in 2017), and with a significant range in by region, from the maximum - 72.9% (2021 - 70.7%) in the North Kazakhstan region, to the minimum - 34.9% (64.4%) in the Atyrau region [11].

Next, regarding CC screening. CC screening is a periodic, comprehensive examination of women of a certain age group as part of a special medical program to prevent and reduce incidence and mortality from CC.

Type of screening - population. The purpose of screening is to identify pre-invasive diseases of the cervix with subsequent recovery. The screening method is a cytological examination of a smear for oncocytology from the cervix (traditional and liquid cytology) - Pap test. Interval - 1 time in 4 years. Target group: women aged 30-70 years who are not registered in the dispensary for CC. The expected results are a decrease in incidence and mortality from CC.

Screening steps:

1) Preparatory - formation of target groups, information support and invitation to screening. The preparatory stage is carried out by the nurses of the primary health care organization responsible for preventive measures and includes: annual compilation of a list of women subject to screening in the coming year by November 15 of the current year, followed by monthly correction; informing target groups of the female population about the need for screening; screening invitation; ensure timely screening.

2) Screening - filling out a statistical card of a preventive medical examination (screening) of an outpatient (form 025-08/y), a register of patients subject to cytological screening and taking material

for cytological examination from the cervix. The screening examination of the target groups of the female population is carried out by a specially trained midwife of the primary health care organization.

3) The final one is obtaining the results of cytology, informing the woman and developing further management tactics, fill out accounting and reporting statistical documentation. Responsible for the final stage of screening is the obstetrician-gynecologist of primary health care [12].

Cytological screening of CC is a complex of organizational and medical measures aimed at early detection of precancerous and neoplastic diseases of this localization and at reducing the mortality of this cohort of patients. For traditional cytology, a smear containing 8-12 thousand cells of stratified squamous epithelium (including cells of metaplastic epithelium) is considered adequate; for liquid cytology - 5 thousand cells. For both methods, the number of cells of endocervical epithelium and/or metaplastic epithelium (from the transformation zone) must be at least 10 (single or in clusters). If more than 75% of the cells of the stratified squamous epithelium are covered with erythrocytes, leukocytes, etc., then the quality of the smear is considered unsatisfactory.

Interpretation of the results of a cytological study is carried out according to the Bethesda-terminology cytological system:

Intraepithelial changes and malignant processes are absent (NILM). This group includes cytological conclusions about the normal state of the epithelium, as well as the presence of various non-neoplastic diseases. Normally, squamous epithelial cells, groups of cells of columnar epithelium and metaplastic epithelium, a small number of leukocytes, and rod/mixed microflora are found in preparations. In the presence of non-neoplastic processes, their nature and, if possible, the cause are specified: atrophic changes, reactive changes associated with inflammation, including typical regeneration. In addition, the presence of microorganisms is indicated: *Trichomonas vaginalis*, fungi, morphologically corresponding to *Candida* spp., bacterial vaginosis, cellular changes corresponding to the defeat of Herpes simplex virus, squamous epithelial cells with atypia of unknown significance (ASC-US), squamous epithelial cells with atypia of unclear significance, not excluding the presence of a high degree of intraepithelial changes (ASC-H). Low-grade squamous intraepithelial changes (LSIL) include lesions associated with HPV and CIN I, high-grade squamous intraepithelial changes (HSIL) include CIN II, CIN III, carcinoma in situ and cases suspected of invasion, squamous cell carcinoma, cervical (glandular) epithelium with atypia of unknown significance, cells of the cervical (glandular) epithelium, possibly neoplasia, endocervical adenocarcinoma in situ, endocervical adenocarcinoma, endometrial adenocarcinoma, secondary adenocarcinoma, unclassified carcinoma, other malignant tumors.

There are certain features when taking material for oncocytology: firstly, the examined woman should be informed about the exclusion of sexual intercourse, vaginal manipulations, including douching, baths, tampons, etc. 2 days prior to sampling. Taking material for cytological examination is carried out by the midwife of the examination room of the department of medical examinations of the primary health care organization: the traditional method (2 glasses - with obligatory fixation in 96% alcohol, it is preferable to use glass slides with a polished edge, which are easily marked) or the liquid cytology method (one container with stabilizing liquid); the code or surname of the patient, identical to the code and surname in the form for sending material for cytological examination, should be clearly marked on the glasses or container [12].

At the same time, when using the traditional method, the biomaterial is delivered to the cytological laboratory as soon as possible after its collection in specialized containers for glass slides with 96% alcohol. If there are visible visual changes in the cervix, then the material is taken from the woman and, without waiting for the results, she is referred for an examination by an obstetrician-gynecologist.

A cytological study is carried out in centralized cytological laboratories at oncological institutions, where an archive of cytological preparations of patients involved in the screening examination is formed, regardless of the result, for a period of at least 10 years with the formation of a computer database.

What material and technical equipment is required to take material for a Pap test? It is as follows: soap and water for washing hands, a light source for cervical examination, a gynecological chair, a disinfected speculum and gloves, an Eyre spatula, a glass slide and a marking pen, a container with a stabilizing solution for liquid cytology, a fixative solution (96% alcohol), a container with warm water for lubricating and warming the vaginal mirrors, a 0.5% chlorine solution for disinfecting gloves and instruments, or another approved for this purpose. And, of course, the registration form itself.

For carrying out liquid cytology, you additionally need: a disposable cervix brush, a container with a stabilizing solution for liquid cytology, and a fixing solution.

At the same time, a smear for oncocytology cannot be taken: during menstruation, earlier than 48 hours after sexual contact or after using lubricants, vinegar or Lugol solution, tampons or spermicides,

after vaginal examination or douching, and also during the treatment of genital infection.

The results of CC screening are as follows. In 2022, 771,282 women of the target group aged 30 to 70 years were examined during cytological screening (in 2021 - 757,454).

During cytological screening in 2022, 392 cases of CC were identified (319 in 2021). The detection rate increased from 0.42 to 0.51 per 1000 women examined [11].

High detection of CC during screening is ensured in Aktobe, Almaty, Atyrau (1.59 is the best result), East Kazakhstan, Kyzylorda, Pavlodar, North Kazakhstan, Turkestan regions and Shymkent city.

The detection rate in these regions ranges from 0.55 to 1.59 per 1000 women examined. Compared to 2021, there is an increase in detection in 10 regions, with the exception of Akmola, Aktobe, Zhambyl, Kostanay, Mangistau, North Kazakhstan regions and Shymkent city. The worst result in Astana city is 0.15 per 1000 women examined.

Cytologically, cervical precancer was detected in 1.16% of those examined (2021 – 0.99%). The detection rate of precancer below 0.6% (the planned indicator for 2022, according to the Comprehensive Plan) was noted in Aktobe, Karaganda and Kostanay regions.

A high proportion of stage I CC (70% or more) was detected in 6 regions of the country (in 8 in 2021): Kostanay, Mangistau (94.7% - best result), North Kazakhstan, Turkestan regions, cities of Almaty and Astana. Low levels of early detection of CC (below 50%) were not observed in any region.

Localized processes (stages I-II) were identified in 99.2% of all cases of detected cancer (96.5% in 2021). In the Akmola and Karaganda regions, cases of SS were identified not only in the localized, but also in the widespread stages of the process. A total of 3 cases of SS were identified in stage III and not a single case in stage IV (in 2021 - 11 and 0, respectively) [11].

Summarizing the above, we can conclude that cervical cancer occupies a significant place among all available nosological forms of malignant tumors. At the same time, despite the small percentage of patients detected at stages III and IV of the disease, as a visually accessible localization, taking into account a number of factors, early diagnostic indicators do not allow oncologists and gynecologists to "sleep peacefully." Variability, nonspecificity and veiledness of symptoms, its similarity with various non-tumor processes, leads to neglect of the tumor process. All this requires both oncologists and, first of all, primary health care workers and, of course, gynecologists to increase the level of oncological alertness, inform the population about early symptoms that may indicate this pathology or the onset of proliferative changes and carrying out high-tech diagnostic measures and, as a result, timely treatment. Patients at risk with precancerous diseases should undergo routine examination within the prescribed time frame. The development of screening technologies and methods of primary prevention in the form of vaccination of adolescent girls against HPV allows us to hope for a reduction in the incidence of this disease in the female population.

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ФАКТОРЫ РИСКА ПЕРЕКРУТА КИСТЫ ЯИЧНИКА НА СОВРЕМЕННОМ ЭТАПЕ**Айгырбаева Алтыншаш Нурсыдыковна**К.М.Н., Ассоциированный Профессор
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Abstract

Ovarian cyst torsion is an acute gynecological condition requiring immediate intervention. The main symptoms include lower abdominal pain, nausea, tachycardia, and other signs of an acute abdomen. This article is based on an analysis of the clinical cases of women diagnosed with ovarian cyst peduncle, as well as on the study of risk factors contributing to the development of this condition.[1]

Ovarian cysts are one of the most common gynecological diseases. With a significant increase in the size of cysts or a violation of blood flow, an acute abdomen may develop.[2]

Аннотация

Перекрут кисты яичника – это острое гинекологическое состояние, требующее немедленного вмешательства. Основные симптомы включают боли внизу живота, тошноту, тахикардию и другие признаки острого живота. Настоящая статья основана на анализе клинических случаев женщин, у которых диагностирован перекрут ножки кисты яичника, а также на изучении факторов риска, способствующих развитию данного состояния.[1]

Кисты яичников — одно из самых частых гинекологических заболеваний. При значительном увеличении размеров кист или нарушении кровотока может развиваться острый живот.[2]

Keywords: Ovarian torsion, gynecology, hormonal status, ovary**Ключевые слова:** Перекрут яичника, гинекология, гормональный статус, яичник

Перекрут яичника — это процесс, который происходит, когда яичник перекручивается через связки, которые поддерживают его в придатках. Иногда киста яичника перекручивается вместе с маточной трубой, и тогда это называется перекрутом придатков. Яичник поддерживается несколькими структурами в тазу.[3] Одна связка, на которой он подвешен — это воронкотазовая связка, также называемая подвешивающей связкой яичника, которая соединяет яичник с боковой стенкой таза. Эта связка также содержит основные яичниковые сосуды. Яичник также соединен с маткой маточно-яичниковой связкой.[4]

Яичник имеет двойное кровоснабжение от яичниковых артерий и маточных артерий. Перекручивание этих связок может привести к венозному застою, отеку, сдавливанию артерий и, в конечном итоге, к потере кровоснабжения яичника. Это может вызвать совокупность симптомов, включая сильную боль при нарушении кровоснабжения.[5] Перекрут происходит, когда яичник перекручивается через поддерживающие связки, воронкотазовую связку и маточно-яичниковую связку.[6] Это вызывает отек и затруднение кровотока. Первоначально венозный отток затрудняется, а позже артериальный приток также прерывается из-за увеличенного отека, что приводит к некрозу яичника, инфаркту, кровоизлиянию и, возможно, перитониту. Правосторонний перекрут кисты яичника наблюдается чаще, чем левосторонний, который, как полагают (Л-ра), вызван увеличенным пространством в правой половине таза из-за расположения сигмовидной кишки слева.[7] При несвоевременной диагностике и лечения, осложнения неотложного состояния, вызванное перекрутом яичника, может привести к некрозу, удалению яичника, спаечному процессу малого таза и бесплодию. [8,9,10]

Цель работы — выявить ключевые факторы риска перекрута кисты и основные клинические проявления.

Материалы и методы

Проанализированы анамнестические данные, гормональный профиль и клинические показатели женщин, госпитализированных с перекрутом ножки кисты яичника.

Исследованы сопутствующие заболевания, размеры кист и симптомы при обращении.

Результаты исследований

1. Факторы риска:

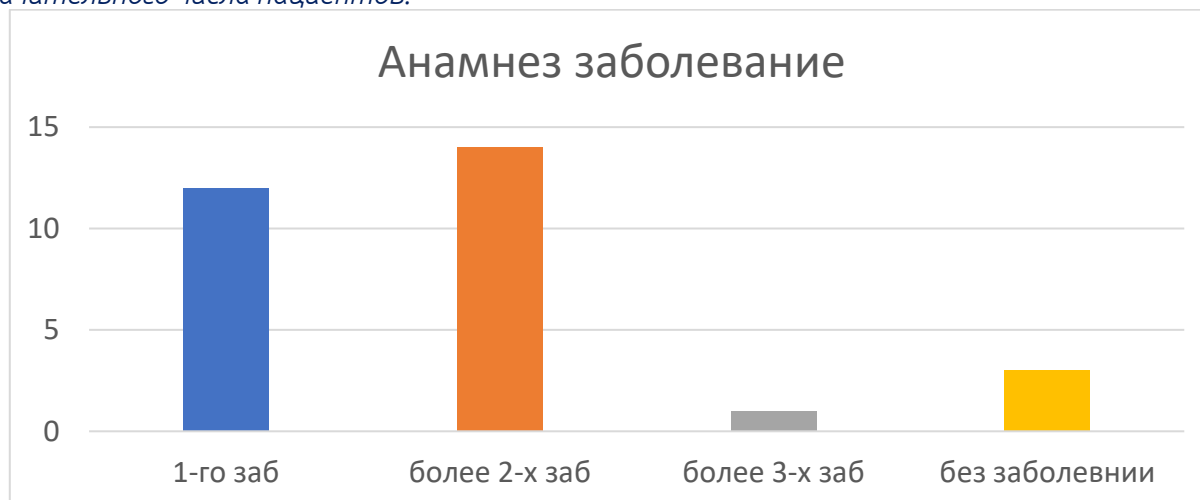
- *Нарушения менструального цикла и наличие синдрома поликистозных яичников (СПКЯ) отмечены у 30% женщин.*
- *У 13,3% пациентов диагностированы опухоли яичников.*
- *Избыточный вес и ожирение (%) связаны с инсулинорезистентностью, что может повышать риск формирования кист.*

2. Клинические проявления:

- *Основные жалобы при перекруте: сильные боли внизу живота (у 100% пациентов), тошнота, рвота, тахикардия и повышение температуры.*
- *УЗИ выявило кисты значительных размеров, что подтверждает гипотезу об их взаимосвязи с перекрутом.*

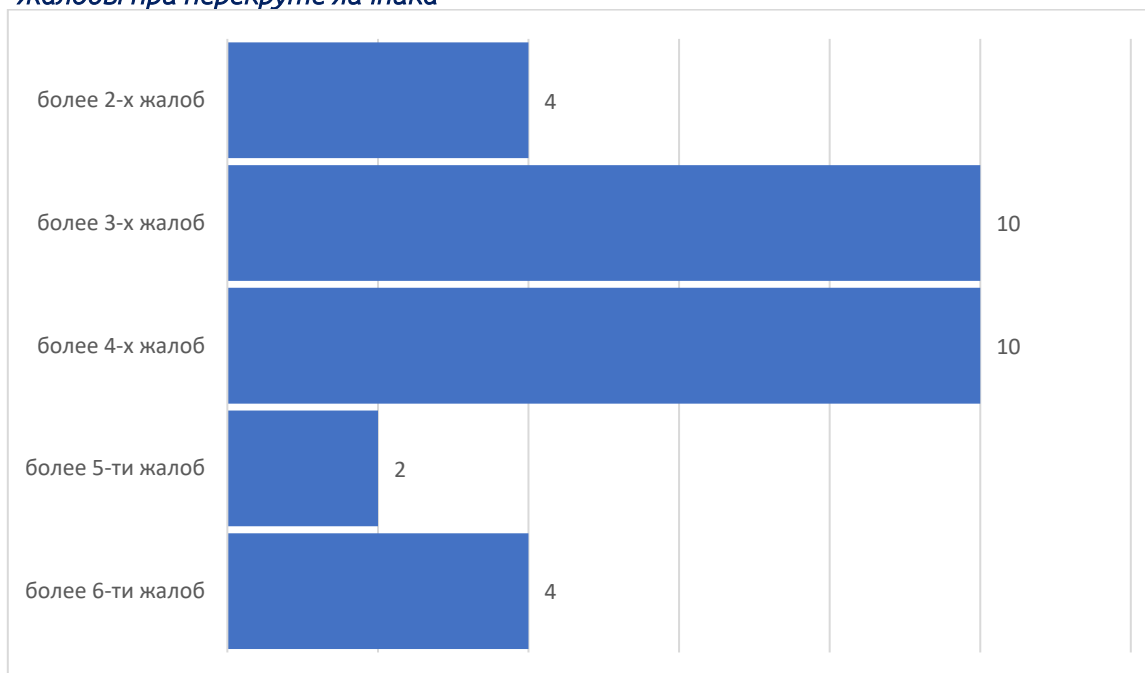
3. Гормональные изменения:

- *Дисбаланс эстрогенов и прогестерона, а также гипотиреоз были выявлены у значительного числа пациентов.*

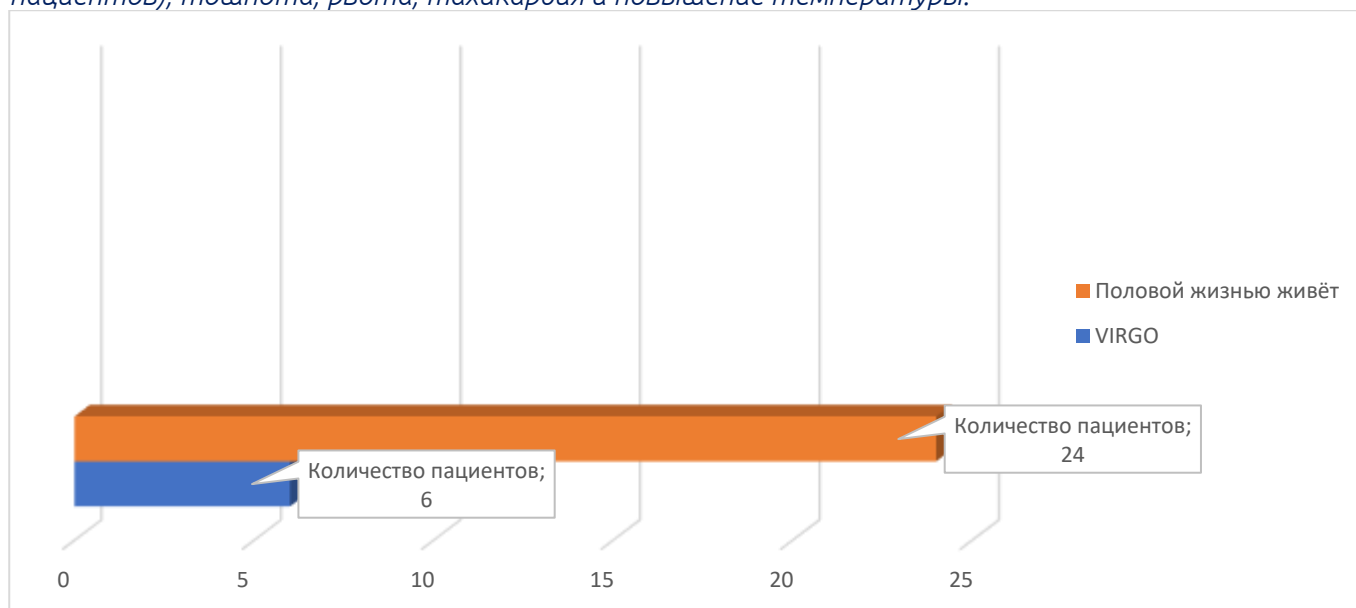


При изучении анамнестических данных исследуемых женщин, выявлено, что у 14 (46,7%) женщин диагностировалось одно заболевание, у 12 (40,0%) женщин диагностировалось два заболевания, у 1 (3,3%) женщин диагностировалось три заболевания. При исследовании 3 (10,0%) женщин хронические заболевания у не выявлены. Среди выявленных заболеваний чаще всего отмечаются нарушения менструального цикла, СПКЯ, спаечная болезнь малого таза.

Жалобы при перекруте яичника

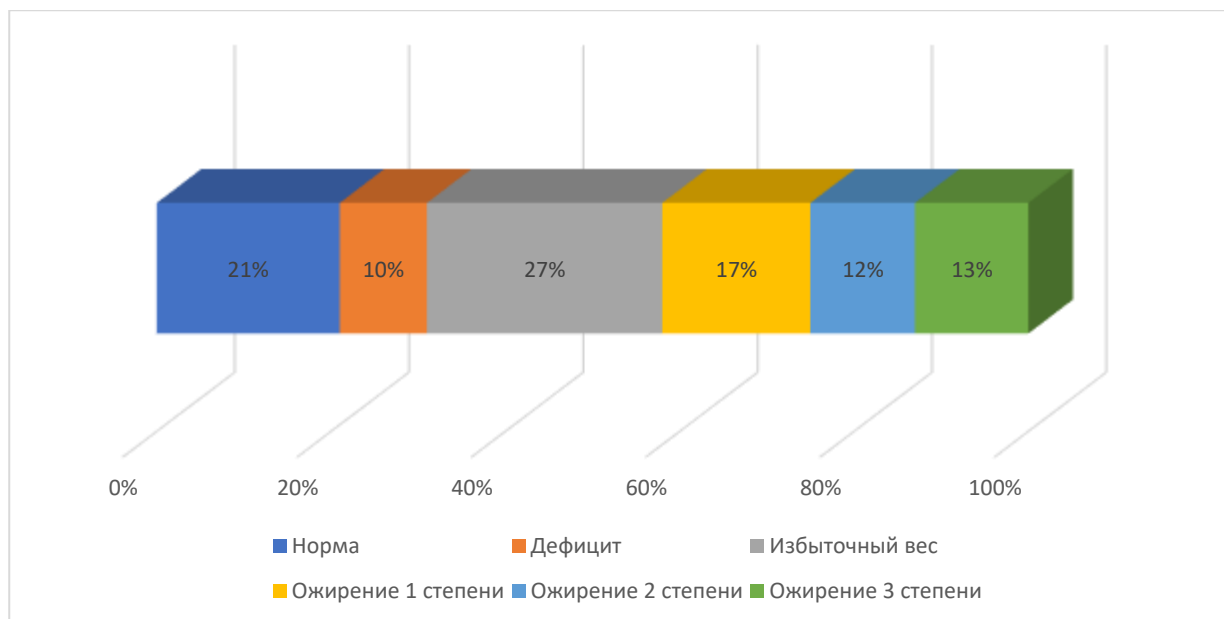


Основные жалобы при перекруте: сильные боли внизу живота, слабость (у 100% пациентов), тошнота, рвота, тахикардия и повышение температуры.



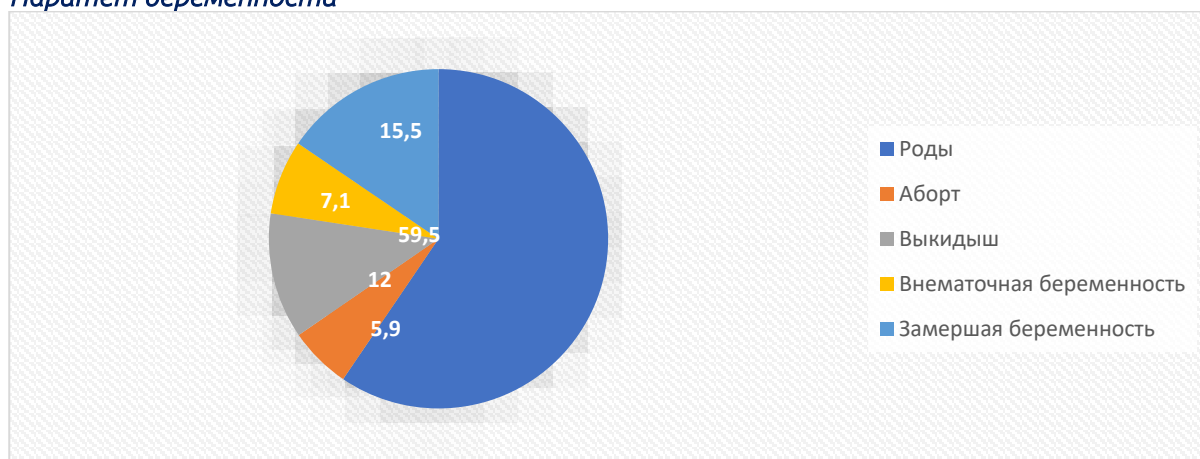
Из числа госпитализированных женщин с диагнозом «Перекрут ножки кисты яичника», женщин VIRGO! было 20%.

ИМТ



Избыточный вес и различные степени ожирения взаимосвязаны с гормональными нарушениями, в частности с инсулинорезистентностью, что может способствовать развитию кист яичников, особенно при наличии СПКЯ.

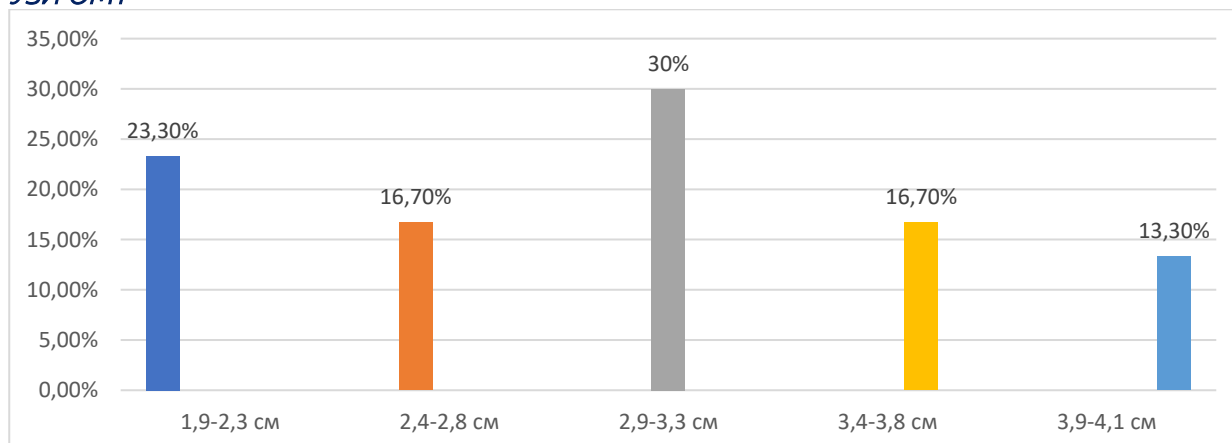
Паритет беременности



В анамнезе 24 женщин, живущих половой жизнью, с одной беременностью - 1, с двумя- 7, с тремя- 6, с 4 и более -9.

Среди них женщин, беременность которых завершились родами (59,5%), в анамнезе одни роды – 7случаев, с двумя- 9 случаев, с тремя- 3 случая, с 4 и более -3 случая. Аборты были одни - 5, выкидыш были одни – у 6 женщин, с двумя- 2 женщин. Внематочная беременность односторонняя -4 случая, с двусторонней - в 1 случае. Замершая беременность по одному случаю наблюдалась у 6 женщин, по два- у 2женщин, с тремя у -1.

УЗИ ОМТ



В нашем проведенном исследовании перекрут кисты яичника наблюдались при увеличении размеров кист от 1,9 см до 4,1 см. Но чаще всего перекрут кисты яичника, диагностировались при размерах кист с 2,9 – 3,3см. Возможно перекрут яичника, при данных размерах и весе, увеличивают вероятность вращения яичника вокруг его связок.

Эстродиол (12.4-233)			Прогестерон (0.181- 38.1)	
Норма	повышен	снижен	норма	повышен
25	3	2	27	3
83.3%	10%	6.7%	90%	10%

Эстродиол в норме у 25 (83.3%) женщин, повышен у 3 (10%) и снижен у 2 (6.7%) женщин. Прогестерон в норме у 27(90%) пациентов, повышен у 3 (10%) пациентов.

Изменения в гормональном статусе, особенно в балансе показателей эстрогенов и прогестерона, могут приводить к образованию функциональных кист. Например, если овуляция не происходит (анновуляция), фолликул может продолжать увеличиваться и превращаться в кисту

ТТГ (0.38-5.33)		Т4св (9.0-22.0)	
Норма	повышен	норма	снижен
19	11	20	10
63.3%	36.7%	66.7%	33.3%

ТТГ в норме у 19(63.3%) и повышен у 11(36.7%) женщин.

Т4 в норме у 20(66.7%) и снижен у 10(33.3%) женщин.

Гипотиреоз: Недостаток гормонов щитовидной железы может приводить к нарушению менструального цикла и возникновению кист.

Глюкоза(4.4-6.38)		Инсулин(1.90-23.00)	
Норма	повышен	норма	повышен
21	9	27	3
70%	30%	90%	10%

Глюкоза в норме у 21(70%) и повышен у 9(30%) пациентов.

Инсулин в норме 27(90%) и повышен у 3(10%) пациентов.

Заключение:

Результаты проведенного нашего исследования позволяет сделать следующие выводы:

1.Наличие сопутствующих акушерско-гинекологических заболеваний и отягощенный акушерский анамнез увеличивает риск возникновения различных кист яичника, среди частых жалоб были сильные боли внизу живота, слабость (у 100% пациентов), тошнота, рвота, тахикардия и повышение температуры.

2. Различные степени нарушения обмена веществ, гормональные нарушения, в частности с инсулинорезистентность, может способствовать развитию кист яичников.

3.Беременность, не завершившийся родами, является одним из факторов риска возникновения кист яичников.

4. Вероятность возникновения перекрута кист яичника наблюдались чаще при средних размерах кист (2,9 – 3,3см).

5. Изменения в гормональном статусе, особенно в балансе показателей эстрогенов и прогестерона, могут приводить к образованию функциональных кист. Например, если овуляция не происходит (анновуляция), фолликул может продолжать увеличиваться и превращаться в кисту

6. Гипотиреоз: Недостаток гормонов щитовидной железы может приводить к нарушению менструального цикла и возникновению кист.

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Pedagogical sciences

THEORETICAL FOUNDATIONS FOR STUDYING THE VOLUME OF A SENTENCE IN A MODERN LANGUAGE

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ҚАЗІРГІ ТІЛДЕГІ СӨЙЛЕМ КӨЛЕМІН ЗЕРТТЕУДІҢ ТЕОРИЯЛЫҚ НЕГІЗДЕРІ

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Abstract

This article discusses the theoretical foundations of studying the volume of a sentence in a modern language. The research of foreign, Russian and Kazakh scientists is analyzed, grammatical, stylistic, diachronic aspects of sentence volume are described, as well as the role of volume in sentence structure. The expansion of the sentence volume is widely analyzed, especially in terms of the semantic and formal properties of syntactic units. It is established that the volume indicators of the sentence in the Turkish and Kazakh languages affect the definition of the level of readability and complexity of the text. In addition, the Kazakh language explains the ways to expand the volume in relation to simple and complex sentences, reveals the meaning of sentence expansion at the semantic and structural level. The study of the sentence volume is aimed at identifying the communicative function of language units, which allows a deeper understanding of the syntactic structure of the Kazakh language. The article emphasizes the relevance of determining the author's style, genre specificity of the text and grammatical factors by studying the volume of the sentence.

Аннотация

Бұл мақалада қазіргі тілтанымда сөйлем көлемін зерттеудің теориялық негіздері қарастырылады. Шетелдік, ресейлік және қазақ ғалымдарының зерттеулеріне талдау жасалып, сөйлем көлемінің грамматикалық, стилистикалық, диахрониялық аспектілері, сондай-ақ сөйлем құрылымындағы көлемнің рөлі сипатталады. Сөйлем көлемінің кеңеюі, әсіресе синтаксистік бірліктердің семантикалық және формалық сипаттары тұрғысынан кеңінен талданған. Түрік тілі және қазақ тілтанымында сөйлемнің көлемдік көрсеткіштері мәтіннің оқылымдылығы мен күрделілік деңгейін анықтауға әсер ететіні анықталды. Сонымен қатар, қазақ тілінде жай және күрделенген сөйлемдерге қатысты көлемді кеңейту тәсілдері түсіндіріліп, сөйлемнің семантикалық және құрылымдық деңгейде кеңеюінің маңызы ашылады. Сөйлем көлемін зерттеу қазақ тілінің синтаксистік құрылымын терең түсінуге мүмкіндік беріп, тіл бірліктерінің коммуникативтік функциясын анықтауға бағытталған. Мақалада сөйлемнің көлемін зерттеу арқылы автор стилін, мәтіннің жанрлық ерекшелігін және грамматикалық факторларын анықтаудың өзектілігі ерекше аталып өтілген.

Keywords: sentence volume, simple sentence, complex sentence, complex sentence, stylistic factor.

Кілтті сөздер: сөйлем көлемі, жай сөйлем, күрделенген сөйлем, құрмалас сөйлем, стилистикалық фактор.

Кіріспе

Қазіргі таңда мәтінді зерттеу ерекше қарқынды, өнімді болуда. Алайда сөйлем қазіргі синтаксис ғылымының негізгі бірлігі сөйлем болып қала береді, өйткені дәл осы сөйлем арқылы

тілдің маңызды қызметтері жүзеге асырылады: коммуникативті (қарым-қатынас құралы), танымдық және экспрессивті (сезім, көңіл-күйді білдіру).

«Қазіргі кезде тілімізде мәтін, абзац, күрделі синтаксистік тұтастық сияқты категориялар да объектіге алына бастады. Сонда сөйлемді күрделі синтаксистік тұтастықты құрайтын элемент ретінде де қарауға мүмкіндік аламыз. Бірақ қолданылуы жағынан алғанда жеке сөйлемнің қызметі ерекше. Сөйлем – синтаксистің ең көп аспектілі бөлімі. Олардың бойынан екі үлкен мәселені, яғни сөйлемнің жасалуын және сол арқылы олардың семантикалық белгілерін айқындауымыз керек» [1, 370 б.].

Қазіргі синтаксис мәселелері арасында сөйлем көлемі (СК) жаңа, өзекті мәселелерінің бірі. Дегенмен сөйлемнің бұл сипаттамасына қызығушылық лингвистика бойынша классикалық зерттеулерде байқалады (Виноградов В.В., 1941; Адмони, 1960; Лесскис Г.А., 1962, Павлова К.Г., 1971 және т.б.). Сөйлем көлемін зерттеу «тілдік құбылыстар бойынша сапалық талдауды толықтырып, оларға объективті сипаттамма беруге мүмкіндік беретін тілдік құбылыстардың зерттеудің сандық әдістерінің дамуымен» [2, 12 б.] байланысты болды және екі бағытта қарастырылады: стилистикалық (Г.А.Лесскис, М.Н. Кожина, О.Б. Сиротина т.б.); грамматикалық (синтаксистік) (В.Г. Адмони, Павлова К.Г., Г.Н. Акимов, Н.И. Котюхова және т.б.).

Ресейлік ғалымдардың пікірінше, ғылыми және көркем әдебиет мәтіндері орташа сөйлем көлемімен ерекшеленеді, мұның өзі тұрақты жанрлық көрсеткіш болып табылады (В.В. Виноградов, Г.А. Лесскис, Г.Н. Акимов және т.б.). Бұл мәселеде диахрониялық аспект маңызды рөл атқарады (түрлі жазба стильдегі сөйлем көлемінің азаю бағытындағы өзгерісі).

Қазіргі қазақ тілі синтаксисінде сөйлем көлемі және оның кеңею жолдарын семантикалық, стилистикалық, формалық тұрғыдан зерттеп, жүйелеу мәселесі әлі күнге дейін ғылыми жолға қойылған жоқ.

Материалдар мен әдістері

Зерттеудің негізгі нысаны қазіргі қазақ тіліндегі ұсыныс көлемі ұғымы болып табылады. Талдау үшін отандық және шетелдік ғалымдардың лингвистикалық еңбектері, соның ішінде В. Г.Адмони, К. Г. Павлова, Г. Н. Акимованың зерттеулері, сондай-ақ қазақ тілінің грамматикасы мен стилистикасы бойынша еңбектері (А. Байтұрсынов, М. Балақаев, К. Аханов және т. б.) пайдаланылды. Әртүрлі құрылымдағы сөйлемдердің грамматикалық, семантикалық және стилистикалық аспектілері зерттелді, бұл қазақ тіліндегі сөйлем көлемін кеңейту тәсілдерін анықтауға және басқа тілдермен салыстырмалы талдау жүргізуге мүмкіндік береді.

Зерттеу аралас әдістерді қолдану арқылы жүргізілді: сандық талдау (сөйлемдердің физикалық және предикативті көлемін өлшеу), салыстырмалы талдау (қазақ тілінің синтаксистік ерекшеліктерін басқа тілдердің грамматикалық және стилистикалық факторларымен салыстыру үшін), статистикалық әдіс (сөйлемдердің орташа ұзындығын, күрделі және қарапайым құрылымдарды қолдану жиілігін есептеу және әртүрлі жанрлардағы сөйлемдердің көлемін салыстыру), семантикалық және стилистикалық талдау (сөйлем көлемінің мәтінді қабылдауға, оның оқылуына және коммуникативті құндылығына әсерін анықтау).

Нәтижелер және талқылау

Ұлттық лингвист ғалымдар тұрлаусыз сөйлем мүшелерінің, үйірлі мүшелерінің семантикалық қызметінің интерпретациясында «сөйлем көлемінің кеңеюі» негізгі мәселені жан-жақты түсіндіруге көмектесетін қосымша деталь ретінде қысқа ғана сипаттамалы тұжырымдар түрінде берілген. Мұның өзі қазақ тілі синтаксисінде «сөйлем аясының кеңею» мәселесінің негізгі зерттеу нысаны болмауымен қатар термин ретінде де толық қолданыс таппағанын көрсетеді.

Сөйлемнің мағыналық және пішіндік көлемінің кеңею жолдарын зерттеу – қазақ тілі синтаксисінде сөйлемді семантикалық, формалық, стилистикалық аспектіде қарастырып, сондай-ақ сөйлемді құрайтын тілдік материалдардың «сөйлем көлемін кеңейтуші қабілетін» айқындап, салыстыруда жаңа ғылыми нәтижелерге қол жеткізері анық.

Барлық тілдерде толық коммуникативті қызметі бар синтаксистік единица ретіндегі сөйлемнің семантикалық және пішіндік көлемінің кеңею арақатынасын анықтау, сөйлем іргесін кеңейтуге қатысатын тілдік материалдар жүйесін зерттеу қазіргі таңда тіл білімінің актуалды мәселелерінің бірі болып табылатынын бірқатар лингвист ғалымдар айтып кетті (В.Г.Адмони, К.Г.Павлова, М.Я.Блох).

Лексикасы өте бай, синтаксистік құрылысы алуан түрлі болып келетін қазақ тілі үшін де сөйлем аясының кеңею жолдарын зерттеу – әрі өзекті, әрі өте қажет мәселе. Бұл зерттеуіміздің басты мақсаты – қазіргі тілтаным теориясында сөйлем көлемінің зерттелуінің теориялық негіздерін зерттеу. Сол арқылы сөйлем және оның құрамындағы тілдік материалдардың семантикалық, стилистикалық, формалық жағынан жүйелі түрде зерттеуге жол ашу болып табылады. Сонымен қатар қазіргі синтаксис ғылымындағы сөйлем көлемі және оның кеңею мәселесінің зерттелу тарихына назар аударылды.

Зерттеудің әдіснамалық және теориялық негіздері ретінде отандық және шетелдік ғалымдардың еңбектері қызмет етті: жалаң сөйлем мен жайылма сөйлем (А.Байтұрсынов, К.Аханов), жай сөйлем іргесін кеңейтуде тұрлаусыз мүшелердің қызметі (М.Балақаев), күрделенген жай сөйлем категориясы мен қазақ тіліндегі жай сөйлемнің күрделену жолдары (Қ.Есенов, Т.Сайрамбаев) және т.б. сонымен қатар зерттеу жұмысымызда ресейлік және батыс еуропалық ғалымдардың сөйлем көлеміне қатысты тұжырымдары мен қорытындылары пайдаланылды: В.В. Виноградов, К.Г. Павлова, Г.А. Лесскис, Г.Н. Акимова, В.Г. Адмони, Т.И. Сильман, М.Я. Блох және т.б.

Синтаксис пен стилистика сөйлем іргесінің ұлғаю мүмкіндіктерінің ерекшеліктері жайлы жаңа бір қырынан теориялық білім беріп, сөйлемді синтаксистік талдауда да қолдану арқылы жеңілдік тудырады.

Ертеден-ақ «сөйлем көлемі» секілді синтаксистің жаңа аспектісі тілші мамандары қызықтырып келген және оны зерттеуге арналған еңбектер жеткілікті. Біріншіден, бұл параметр түрлі тілдердің материалында біркелкі зерттелмеген: көбінесе зерттеу орыс және неміс, ағылшын тілдерінің материалында жүргізілген. Айталық, орыс тілі Г.А. Лесскис, Г.Н. Акимованың еңбектері арқылы зерттелді, ал неміс тілі – В.Г. Адмонидің еңбектері, ағылшын тілі – М.Я. Блох т.б. Ал қалған тілдер жете зерттелмеген. Екіншіден, сөйлем көлемі түрлі аспектілерде біркелкі зерттелмеген. Сөйлемнің сандық параметрі XVIII-XX ғасырдағы орыс тілі, неміс тіліндегі материалдар зерттелген, ал ертедегі кезеңдер мүлдем зерттелмеген.

В.Г. Адмони және Г.Н. Акимова еңбектерінде сөйлем көлемі мәселесінің грамматикалық жағына көп көңіл бөлген. Сөйлем көлемін өлшеудің ортақ әдістемесі болмауы да жеке мәселені құрайды: сөйлем көлемін есептеу барысында түрлі бірліктердің қолдану түрлі зерттеушілердің тарапынан алған нәтижелерін бір-бірімен салыстыру қиынырақ болады [3, 9 б.].

Сөйлем көлемінің кеңею мәселесі жөнінде шетел лингвистикасында тиянақты ғылыми зерттеулер жүргізілген. Айталық, ғалым В.Г.Адмони сөйлем және сөз тіркесі көлемін (размер предложения и словосочетания) синтаксистік қатар құбылысы (явление синтаксического строя) ретінде қарастырған. Сонымен қатар, ғалым бұл мәселені шешу барысында практикалық мәніне көп көңіл бөлген. Жоғарыда аталған ғалымдар тіл білімі ғылымы тарихында «размер предложения», «объем предложения» деген терминдерді енгізіп, оның мәнін ашып, ғылыми қорытындылар жасады. Ескере кететін бір жайт, бұл синтаксистік өзекті мәселе В.Г.Адмони және К.Г.Павлова тарапынан орыс және неміс тілі материалдары бойынша ғылыми-теориялық зерттеу жұмыстары жүргізілген. Сондай-ақ профессор М.Я.Блох ағылшын тіліндегі сөйлем көлемін физикалық және предикативтілік көлемі деп екіге бөліп қарастырады.

Бірқатар шетел лингвист ғалымдары өздерінің ғылыми-зерттеу еңбектерінде бұл терминнің нақты өзін қолданбағанымен, біршама ғылыми тұжырымдар жасаған (Мысалы, В.И.Кодухов, Е.И.Шутова және т.б.). Қазақ лингвист ғалымдары жайлы да осыны айтуға болады (мысалы: М.Балақаев, Т.Қордабаев, К.Аханов, Т.Сайрамбаев және т.б.). Түрік ғалымдарының арасында сөйлем көлемі категориясын (cümle boyutu, cümlelin uzunluğunu) тіл үйренушілерге арналған мәтіннің оқылымдылығы не жеңіл оқылу ұғымдарымен байланыстыра зерттейді (Ateşman, E. (1997); Zorbas, K. Z. (2007); Durukan, E. (2014)).

Сандық әдіс-тәсілдердің көмегімен сөйлем көлемін зерттеу синтаксистің маңызды мәселелердің бірі болып табылады. Синтаксистің бұл аспектісі зерттеушілерді ертеден қызықтырады, алайда сөйлемнің бұл параметрін белсенді зерттеу XX ғасырдың екінші жартысында басталды.

Сөйлем көлеміне бірқатар факторлар әсер етеді, оны шартты түрде грамматикалық және стилистикалық деп жіктейді [3, 11 б.].

В.Г. Адмони пікірінше, сөйлемнің көлеміне бірінші кезекте адам жадының көлемі мен сипаты ықпал етеді. «Возникновение новых сфер речевой коммуникации с новым тематическим наполнением может привести выработке таких пластов языка, которые будут, как правило,

тяготеть к тем или иным размерам предложения, отличающимся от прежде преобладавшего в данном языке среднего размера предложения» [4, 114 б.].

Сөйлем көлеміне сондай-ақ грамматикалық факторлар әсер етеді. С.А. Рыловтың пікірінше, сөйлемнің ұзындығына сөздің валентілік секілді қасиеті ықпал етеді [5, 81 б.]. Егер құрмалас сөйлемнің көлемі жайында айта болсақ, онда «екі не одан да көп сөйлемді бір тұтасқа біріктіру мүмкіндігі» факторы әрекет етеді [6, 38 б.].

Сөздердің басқа бірліктермен синтаксистік байланысқа түсе алу қабілеті, синтагмалардың кеңеюі секілді грамматикалық факторлардың сөзсіз сөйлем көлеміне әсерін тигізетінін атап кетуге болады, алайда синтаксистік құрылымдарды таңдау және олардың кеңею деңгейі автордың алдына қойған міндеттеріне тәуелді.

Г.Ф. Калашников сөйлемнің ұзындығына әсер ететін экстралингвистикалық факторларға, әсіресе «адамның сөйлеу қызметін басқаратын және сөйлеу хабарламаларының көлемін шектейтін психофизиологиялық механизміне» көңіл бөледі [7, 37 б.]. Зерттеушінің тұжырымдауынша, байланыстың түрлі типтерінің өзара әрекеттесуі кездесетін сөйлем ұзынырақ болып табылады. Осылайша, сөйлемнің көлемі оны құрастыратын предикативті бірліктердің санына тәуелді емес, ондағы байланыстың түрлі типтеріне тәуелді.

Автор байланыстардың үш түрлі типтері жайында айтады: сабақтаса, салаласа және жарыса бағына байланысу, бұлар өз кезегінде ойды білдірудің үш түрлі амалымен байланысады: логикалық кешендерді терең өрістеу, көлденең және сәйкесінше танымның бір объектісін түрлі қасиеттерін айқындау. Құрмалас сөйлемде бір, екі немесе үш түрлі байланыс түрі бар: предикативті бірліктердің орташа саны қосымша байланыстардың болуы барысында көбейеді. Логикалық тұрғыдан, компоненттердің санының көбеюімен сөйлемді қабылдау қиындайды. Алайда «тілде предикативті күрделену процесінде құрылымдарда ақпараттық сыйымдылықтың өсуін шектейтін механизмдер болады». Байланыстың бірнеше типтерін бар синтаксистік құрылымдар құрмалас сөйлемдердің қабылдауын/түсінуді жеңілдетеді, себебі «олардың құрамында компоненттердің (предикативті бірліктердің) одан ірірек блоктарға топтасуы іске асады да, олар жедел жады бірліктері ретінде қызмет етеді» [7, 43 б.].

Сөйлемнің ұзындығы мәтіннің стильдік және авторлық сипаттамасы болып табылады. Мәтінде сөйлемнің орташа көлем ұзындығы белгілі бір тілде болатын синтаксистік құрылымдарды таңдаумен анықталады. Сөйлемді құрастырудың синтаксистік моделін таңдау, біріншіден, коммуникация міндеттерінен, екіншіден, мәтін авторының жеке талғамына байланысты.

Т.М. Веселовская мәліметтері бойынша, көркем прозада сөйлемнің орташа ұзындығы 21,1 сөзден тұрады, алайда бұл көлем түрлі жазушылардың шығармашылықтарында түрлі маңызды өзгеріске ұшырайды (Веселовская, 1987 ж.). Зерттеуші сөйлемнің орташа ұзындығының көрсеткішін қолдана отырып, жазушыларды «ұзын жазушы» және «қысқа жазушыға» бөледі.

Т.М. Веселовскаяның мұндай жіктелісі прозаның қандай түрі – синтагматикалық немесе бөлшектенген – нақты автордың шығармаларында басымдылығымен байланыстырады. Прозаның синтагматикалық түрі жайылмалы синтаксистік құрылымдармен, құрмалас сөйлемдердің көп санымен ерекшеленеді.

Г.А. Лесскистің пікірінше, «зерттелетін құбылыстың табиғаты тек автордың қай жерде нүкте қоюды және жаңа сөйлем бастауды жол беріп қана қоймайды, жобалайды» [8, 92 б.]. Г.А. Лесскис ғылыми, публицистикалық, эпистолярлық және көркем прозаның әртекті мәтіндерінде сөйлемдерді ұзындығы бойынша салыстырып арнайы зерттеді. Автор «сөйлем көлемін сипаттайтын негізгі параметрлер (мәтіндегі ең ұзын сөйлем, сөйлемнің ықтимал көлемі, сөйлемнің орташа көлемі, орташа квадраттық ауытқу, медиана және т.б.) көркем прозада жаппай авторлық баяндауда статистикалық белгілі интервалда орналасқан, бұл ғылыми еңбектерге қарағанда төмендірек, ал эпистолярлық прозаға қарағанда жоғарырақ» деген тұжырымға келеді. Алынған деректерге талдау жасай отырып, зерттеуші келесі қорытындылар жасайды: біріншіден, жазбаша тілдің әрбір жанры сөйлем көлемінің таралымы және өзінің параметрлерімен сипатталады; екіншіден, сөйлем көлемінің таралым типтері орыс әдебиетінің үш үлкен тарихи кезеңдері үшін – ежелгі, XVIII ғасыр және жаңа әртүрлі; үшіншіден, сөйлем ұзындығы бойынша таралымы әрбір шығармада индивидуалды болады және тұтасымен автордың стилінен гөрі, бұл шығармадағы автордың жазу мәнерін сипаттайды.

Г.А. Лесскис пікірінше, сөйлемнің көлемі кездейсоқ мөлшер секілді ерекше «авторлық талғам» деп ғана анықталмайды, сонымен қатар стильдің басқа элементтері, шығарманың композициялық құрылымынан және автордың жалпы түпкі ойына тәуелді бола алады.

В.Г. Адмонидің еңбегі сөйлем көлемінің грамматикалық аспекті бойынша зерттелуіне арналған. Ғалым стилистикалық және грамматикалық екі фактордың өзара әрекеттесуіне де назар аударады. Неміс тілінің материалында сөйлемнің көлемін зерттей отырып, В.Г. Адмони «зат есім тобы шексіз өрістеу қабілетіне ие, себебі зат есімдер жоғары тіркесімділік ие, сондай-ақ зат есімге анықтауыштар да бағыныңқы сыңарларға ие болуы мүмкін» дегенді ерекше ескертеді [4, 115 б.].

В.Г. Адмонидің ізінше, басқа да ресейлік ғалымдар неміс тілі материалында грамматикалық және стилистикалық аспекті арасындағы байланысты табуға тырысты. Айталық, Л.Н. Иноземцев неміс тілі материалында зат есім тобының көлемі грамматикалық факторға да, стилистикалық факторға да тәуелді екенін анықтады [9, 10 б.].

К.Г. Павлова неміс тіліндегі субстантивация процесін зерттей отырып, ғылыми публицистикалық проза тілінде зат есімдер тұтас сөйлемдерді сіңіріп алады, бұл сөйлем сыйымдылығының ұлғаюына алып келеді [2, 15 б.] дейді.

С.А. Шубик XX ғасырдағы көркем және ғылыми прозадағы сөйлем көлемін салыстырады. Сөйлемнің орташа көлемі ғылыми прозада көркем шығармаға қарағанда кішірек, бұл ретте жай сөйлемдердің үлесі көркем стильде анағұрлым жоғары. Зерттеушінің ескертуінше, сөйлем көлемі ғылыми прозада да, көркем прозада да ең алдымен қарапайым сөйлемнің көлеміне ықпал етеді, себебі құрмалас сөйлемдердің көлемі екі стильде шамамен бірдей [10, 96-97 б.]. Осылайша, сөйлем көлемі жазушылардың стильдері мен көркем әдебиет стильдерін анықтау үшін маңызды деңгейде көрнекті болып табылады. Зерттеуші-лингвист М.Я.Блох «сөйлем көлемі» жөнінде нақты, толық түсінік берген. Ғалым сөйлем көлемін физикалық және предикативті деп екіге бөледі.

Ғалымның сөйлемнің физикалық және предикативті көлеміне қатысты берген мәліметтерін түсінікті болу үшін, графикалық формада беріп, кестеге түсіріп қарастыралық.

Кесте №1.

Ағылшын тіліндегі жай сөйлемдердің физикалық және предикативтік көлемін салыстыру.

1) At that time Aunt Clementine was herself preparing a breakfast of scrambled eggs and hot milk for her dearest little nephew Johnny in the kitchen.		
2) The Aunt returned to find Johnny at table, finishing his breakfast.		
1-нші сөйлемнің физикалық көлемі – 25 сөз	>	2-нші сөйлемнің физикалық көлемі – 11 сөз
1-нші сөйлемнің предикативті көлемі: 1) The aunt Clementine preparing a breakfast (scrambled eggs and hot milk) for herself and her little nephew Johnny	<	2-нші сөйлемнің предикативті көлемі: 1) The aunt returned. 2) The aunt found Johnny. 3) Johnny was at table. 4) Johnny was finishing his breakfast.

№1 кестеде ағылшын тіліндегі берілген жай сөйлемдердің физикалық көлемі мен предикативті көлемі салыстырылады. Ағылшын тіліндегі сөйлемді қазақ тіліне аударып, кестеде берілген деректерді түсіндіріп көрелік.

1) Бұл уақытта Клементина тәтей асүйде өзінің қымбатты жиені Джонниге омлет және ыстық сүттен тұратын таңғы асты өзі дайындады.

2) Тәтей үстелде таңғы асын жеп бітірген өзінің жиенін табу үшін қайтып келді.

Бұл сөйлемдердің физикалық көлемін түрлі тілдік единицалар тұрғысынан өлшеуге болады:

Фонологиялық аспекті анализі бойынша бұл (физикалық көлем) сөйлемді құруда қолданылған фонемалардың жалпы санымен және олардың жазудағы әріптік репрезентациясына сәйкес анықталады.

Жазба-әріптік аспекті анализі бойынша бұл көлем сөйлемді жазу немесе басу үшін жұмсалған әріптердің санымен анықталады.

Сонымен қатар, лексикалық аспекті тұрғысынан сөйлемнің физикалық көлемін қанша лексема (сөзді) қолданылғанымен анықтауға болады.

Қай аспекті тұрғысынан қарастырғанда да алғашқы сөйлем физикалық көлемі жағынан басымырақ.

Физикалық көлемі: Ағылшын тіліндегі түпнұсқасында – бірінші сөйлем 101 фонема, 120 әріп және 25 сөзден тұрады. Ал қазақ тіліндегі аудармасында – бірінші сөйлем 110 фонема, 106 әріп және 18 сөзден тұрады.

Ағылшын тіліндегі түпнұсқасында – екінші сөйлемде 45 фонема, 54 әріп және 11 сөзден тұрады. Ал қазақ тіліндегі аудармасында – екінші сөйлем 65 фонема, 63 әріп және 12 сөзден тұрады.

Сөйлемнің предикативті көлемі ондағы предикативті мағынамен өлшенеді. Сөйлемде предикативті мағына хабарлаудың түрлі бірліктері арқылы беріле алады: бұл бірліктер толық

предикативті статусқа ие сөйлем ретінде көрініс табуы мүмкін, сондай-ақ сөйлемнің бөліктері толық емес (жартылай) предикативті статусы білдіруі мүмкін. Бір сөйлем құрамында 3-4 базалық предикативті бірліктер кездесуі мүмкін (не толық предикативті, не ішінара предикативті).

Предикативті көлемі: 1) Бұл уақытта Клементина тәтей асүйде өзінің қымбатты жиені Джонниге омлет және ыстық сүттен тұратын таңғы асты өзі дайындады. 2) Тәтей үстелде таңғы асын жеп бітірген өзінің жиенін табу үшін қайтып келді.

Ағылшын тіліндегі түпнұсқасында – бірінші сөйлем 1) *The aunt Clementine preparing a breakfast (scrambled eggs and hot milk) for herself and her little nephew Johnny.* Ал қазақ тіліндегі аудармасында – бірінші сөйлем Клементина тәтей өзіне және кішкентай жиені Джонниге арнап (омлет және ыстық сүт) таңғы ас әзірледі.

Ағылшын тіліндегі түпнұсқасында – екінші сөйлемде 1) *The aunt returned;* 2) *The aunt found Johnny;* 3) *Johnny was at table;* 4) *Johnny was finishing his breakfast.* Ал қазақ тіліндегі аудармасында – екінші сөйлем 1) Жиені үстелде; 2) Джонни таңғы асты жеп бітірген; 3) Тәтей жиенін табу үшін; 4) Тәтей қайтып келді. Демек, профессор М.Я.Блох тіл білімінде жалпы, сипаттамалы түрде айтылып келген «сөйлем көлемі» ұғымының мәнін тереңірек ашып, маңызды классификациясын жасап берді [11, 76-77 б.].

Ал түрік тілтанымында «сөйлем көлемі» мәселесі түрік тілін оқыту әдістемесі аясында қарастырылған. Айталық, Е. Атеşман пікірінше, оқылымдылық, көбінесе мәтіннің сандық ерекшелігі, яғни сөйлем мен сөз ұзындықтары және таныс емес сөз санын есепке ала отырып, мәтін күрделілігін анықтауға бағытталған [12, 71 б.]. Ғалым мәтіннің жеңіл оқылуын сөйлем ұзындықтары мен бейтаныс сөздер санына байланысты қарастырып отыр.

Сонымен қатар, K.Z. Zorbaz «Түрік оқулықтарындағы ертегілердегі сөйлем-сөз ұзындықтары мен оқылымды деңгейінің бойынша бағалау» («Türkçe ders kitaplarındaki masalların kelime – cümle uzunlukları ve okunabilirlik düzeyleri üzerine bir değerlendirme») деген мақаласында бастауыш мектеп түрікше оқулықтарындағы ертегінің сөз және сөйлем ұзындықтарының сынып бойынша өзгерісі мен мәтіндердің оқылымды деңгейлері зерттелген. Ғалымның ескертуінше, 2,-4 жас (Acarlar, Dönmez, 1992: 177) және 4-5 жас (Gülyüz, Dönmez, 1992: 214) арасындағы Түрік балалары тілдерінің құрылысын зерттеген екі ғылыми еңбекте жас ерекшелік пен балалардың қолданған сөйлем ұзындығы арасында тікелей пропорционалды байланыс бар екені анықталған болатын [13, 89 б.]. Ғалымның тұжырымдауынша, «қысқа және қарапайым құрылымды сөз және сөйлемдер түсінуге оңай және үйренуге де жеңілдірек болады. Сол себептен де оқулықтар үшін мәтін таңдалу барысында баланың жасының өсуіне қарай сөз-сөйлем ұзындықтары да артады» [13, 89 б.].

Сонымен қатар, E. Durgan оқу жылдамдығы мен мәтінді түсіну жылдамдығы арасындағы өзара байланысты анықтау оқушыларға мәтіннің жеңіл оқылуы үшін сөйлем ұзындығының да негізгі фактор бірі ретінде рөл атқаратынын атап кетеді [14, 69 б.]. Зерттеуші өзінің ғылыми еңбегінде «Мәтіндегі сөз және сөйлем ұзындықтары студенттердің оқу жылдамдығы мен мәтінді түсіну деңгейлеріне теріс ықпал етеді. Нәтижесінде сөз және сөйлем ұзындықтарының артуына параллель болатын сөз бен сөйлем құрылымындағы өзгерістер (дарадан туынды және күрделіге қарай) бірлікте мәтіннің күрделі құрылымына әсер ететінін түсінеміз» [14, 74 б.] деген тұжырымға келеді. Яғни, зерттеуші сөйлемнің физикалық көлемі (М.Я. Блох ұсынған термин) мәтінді қабылдау процесіне тікелей әсері бар жайында баяндап отыр.

Қазақ ғалымдары да «сөйлем көлемі» деген терминді тікелей қолданбаса да, жай сөйлем аясының кеңею жолдарына қатысты құнды пікірлер білдірген. Айталық, қазақ лингвистикасының негізін қалаушы, тұңғыш тілтанушы, қазақ тілінің ғылыми терминдерінің жасаушы ғалым А.Байтұрсынұлы сөйлемнің көлемінің сыйымдылығы жайында алғаш пікірі білдірген. Қазақ тіл білімінде құрмалас сөйлемді топтастыру мәселесіне алғаш көңіл аударған А. Байтұрсынұлы «Тіл-құрал. Сөйлем жүйесі мен түрлері» атты еңбегінде құрмалас сөйлемге қатысты түсінік береді [15, 300-310 б.].

1. Қарабай мен Сарыбай аңға шықты.

2. Екі дос бірін-бірі сүйді, құшты.

Бұл сөйлемдердің әрбірі бірнеше сөйлем сыйысып құрмаласқаннан болған сөйлемдер. Мәселен, бірінші сөйлем екі сөйлем сыйысып, қосылғаннан болған: қосылмай бөлек тұрғандағы түрлері мынау: Қарабай аңға шықты. Сарыбай аңға шықты. Бұларды екі қайта айтып жатпас үшін, екеуін сыйыстырып қосып, бір-ақ айтқан. Екінші сөйлем де екі сөйлем сыйысып, қосылғаннан болған. Қосылмағандағысы мынау: Екі дос бірін-бірі сүйді. Екі дос бірін-бірі құшты.

Сыйысулы сөйлемдердің белгісі – бірнеше мүшелері бір өңкей болу. Мәселен, 1-інші сөйлемде екі мүшесі бір өңкей: Қарабай, Сарыбай – екеуі де бастауыш. 2-інші сөйлемде де екі мүшесі бір өңкей: сүйді, құшты – екеуі де баяндауыш.

Сыйысулы сөйлемнің бір өңкей мүшелерінің аралары кіші тыныспен (,) айырылады. «Мен», «жана», «жана да» деген сөздер араларында тұрған шақта ғана кіші тыныс қойылмайды. Сыйысулы құрмалас екі түрлі айтылады: 1) Шұбалаң түрі. 2) Ықшам түрі [15, 252 б.].

Оны сыйыса құрмаласу және қиыса құрмаласу деп бөліп қарастырады. Автордың сыйыса құрмаласу деп берген сөйлемдері (Қарабай мен Сарыбай аңға шықты) қазіргі замандағы тілдік таным тұрғысынан талдағанда бірыңғай мүшелі жай сөйлем деп танылғанымен, аталған сөйлемнің оны құрмалас сөйлеммен барабар ететіндей әлдебір тілдік заңдылықтың негізінде қалыптасқандығын жоққа шығара алмаймыз (салыстырыңыз: Қарабай да аңға шықты, Сарыбай да аңға шықты). Қиысқан құрмаластарды салалас, сабақтас деп жіктеп, салаластарды мағынасына қарай жиылыңқы, қайырыңқы, айырыңқы, сұйылыңқы және қойылыңқы деп бөлсе, сабақтастарды бастауыш бағыныңқы, анықтауыш бағыныңқы, пысықтауыш бағыныңқы деп бөледі [15, 231 б.]. Құрмалас сөйлемді «күрделі сөйлем» деп атаған Қ.Жұбанов оны салалас және сабақтас деп жіктеп қарастырады.

М.Балақаев жалаң сөйлемді жайылмаға айналдырып, оның іргесін әрі қарай кеңіте беруге діңгек болатын тұрлаусыз мүше, алдымен толықтауыш [16, 142 б.]. Ғалым жай сөйлемнің іргесін кеңейтуге негіз болатын тұрлаусыз мүшелердің қызметін ерекше атап өтеді. Сонымен қатар, ғалым сөйлем құрамындағы сөздің саны аз болуы, көп болуы ой ерекшелігімен, стиль ерекшелігімен байланысты [16, 99 б.] деп қарастырады.

Қазақ тілі синтаксисінің дамуына үлкен үлес қосқан ғалымдардың бірі Қ.Есенов жай сөйлем мен құрмалас сөйлемнің арасындағы белгілі семантикалық та, құрылымдық та айырмашылықтардан өзге сөйлемнің семантикалық көлеміне тікелей қатысы бар күрделенген жай сөйлем категориясын ұсынады.

Ғалым қазіргі әдеби тіліміздегі сөйлемдер жасалу құрылысы жағынан үш салаға жіктейді: 1) Жай сөйлем; 2) Күрделенген жай сөйлем; 3) Құрмалас сөйлем. Бұлардың әрқайсысы өзара іштей жекелеген құрамдарға ажыратылады. «Жай сөйлемдердің бір предикаттық қатынастың төңірегінде ұйымдасып, сонымен қатар бұлардың құрамында түрліше айқындауыштық конструкциялар, оралымдар (обороты) орын алатын түрін жай сөйлемнің күрделенген жай сөйлем ретінде қарастырамыз» [17, 8 б.].

Күрделенген жай сөйлемдерді ұсынушы ғалымдардың айтуынша, олардың жай сөйлемдерден айырмасы екі предикаттық единицадан тұратындығында, ал құрмаласдан айырмасы сол екі предикативтілік қатынастың да бір бастауышқа телінуінде. Профессор Қ.Есенов қазақ тілінде бір бастауышқа телінген сөйлемдерді жай сөйлемнің күрделенген түрі деп таниды және осындағы баяндауыштарды пысықтауыш деңгейімен бірдей қарайды. Профессор Т.Қордабаев ондай құрылымдарды сабақтас деп танып, олардағы тиянақсыз формаларды баяндауыш деп таниды.

Бір субъектіге телінген, бірін-бірі толықтыратын немесе бір әрекетті бірігіп атайтын баяндауыштарды бірыңғай баяндауыштар деп есептеп, ондай құрылымдағы сөйлемдерді жай сөйлем деп таныған дұрыс. Бірақ ортақ бастауышқа телініп, баяндауыштары әр шақта келетін және әр сөз табынан жасалатын сөйлемдерді сабақтас бағыныңқылы сөйлемдер деп таныған дұрыс. Өйткені олардың сыңарларының арасы әр түрлі мағыналық қатынаста келеді. Мысалы: Қарағанды көмірін тапқалы, жүзге жуық жылдар өтті (Ғ.Мұстафин). Бүгін бірер кітабын алып шықпақ болып, өзі жалғыз кіріп еді (М.Әуезов).

Ортақ бастауышты сөйлемдерді тек бастауыштың соңына қарай бөлу жеткіліксіз. Алдымен, бағыныңқы-басыңқы сөйлемдер арасындағы мағыналық қатынастарға қарау керек. Және құрмалас жасаушы бөліктер пысықтауыш дәрежесінде ме, әлде баяндауыш дәрежесінде ме – соны өлшеуіш етіп алған дұрыс. Егер көсемше, есімше тұлғалары арқылы жасалған баяндауыштарды қалыпты пысықтауыштар емес, баяндауыш деп танитын болсақ, онда есімше, көсемше тұлғалы бағыныңқылы баяндауыштары бар ортақ бастауышты сөйлемдерді сөз жоқ құрмаластар қатарына жатқызамыз [17, 704 б.].

Қорытынды

Қорыта айтқанда, ресейлік және шетел тілдер синтаксисінде сөйлем көлемі құрылымдық аспекті, семантикалық аспекті, стилистикалық аспекті және диахрониялық аспекті тұрғысынан жан-жақты зерттелген категориялардың бірі болып табылады. Ғалымдар сөйлем көлемін мәтін авторының стилін, тіпті мәтіннің авторлығын айқындауға мүмкіндік беретін

синтаксистік маңызды категориялардың бірі деп бағалайды. Шетел және ресейлік лингвистикасында «сөйлем көлемі» грамматикалық, стилистикалық, диахрониялық аспектіде жан-жақты қарастырылған, қазақ тілтанымында «сөйлем іргесі» (сөйлем аясы) бірыңғай мүшелі сөйлем, жайылма сөйлем және күрделенген сөйлемнің құрылымдық сипаттарына қатысты жанана қарастырылған. Ал түрік тіл білімінде «сөйлем көлемі» түрік тілін оқытуда пайдаланылатын мәтіндердің сандық-сапалық көрсеткішін танытатын күрделілік фактор ретінде зерттелген.

Қазіргі қазақ тілі синтаксисінде жай сөйлем көлемі – жалаң сөйлемнен күрделенген жай сөйлемге (жайылма сөйлем) қарай пішіндік жағынан да, мағыналық жағынан да дамуының бір қырын танытатын синтаксистік категория. Қазіргі қазақ тілі синтаксисінде «сөйлем іргесі», «сөйлем аясы» деген терминдер арқылы жалаң сөйлем көлемінің жайылма сөйлемге айналу, жай сөйлемдердің күрделенген жай сөйлемге айналу жолдары, жай сөйлем мен құрмалас сөйлемнің мағыналық, құрылымдық айырмашылықтарына статистикалық талдау жасалды.

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THE EFFECTIVENESS OF COMPUTER-ASSISTED LANGUAGE LEARNING (CALL) APPROACH IN THE FOREIGN LANGUAGE TEACHING (FLT) CLASSROOM

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Abstract

The adoption of Computer-Assisted Language Learning (CALL) in Foreign Language Teaching (FLT) has transformed the field by utilizing technology to improve language learning outcomes. This article provides a wide range of the advantages, implementation strategies, and challenges associated with CALL in FLT classrooms. The list of benefits includes tailored learning experiences, enhanced interactive engagement, real-time feedback, access to authentic resources, and increased student motivation. The paper also highlights peculiarities of CALL approach and effective methods for integration, such as incorporating multimedia tools, language learning applications, and digital assessments. Practical examples of CALL activities, including interactive storytelling, educational games, video conferencing for speaking practice, and cultural exploration projects, illustrate its application in real-world settings. However, there are specific challenges such as ensuring equitable access to technology, addressing digital literacy issues, and maintaining a balance with traditional teaching approaches must be addressed. Foreign language teachers increasingly rely on multimedia tools, online platforms, and various web-based resources to enhance the learning process. By integrating these technologies, every teacher can simplify the execution of educational tasks, ensuring that activities are well-structured and aligned with students' learning objectives. Effective use of these tools enables instructors to manage class time efficiently, prioritizing essential tasks while avoiding unnecessary delays or redundancies. Moreover, computer-assisted approach helps to clarify complex concepts, ensuring students remain focused on the intended context without becoming confused or distracted by extraneous information. By presenting new material in manageable segments and leveraging interactive resources, educators can prevent cognitive overload and create a more engaging and supportive learning environment. This method not only optimizes the teaching process but also encourages students to develop their autonomy and confidence in navigating digital resources for language learning.

Keywords: foreign language, computer, multimedia, interactive, platforms, resources.

Enhancing EFL instruction through CALL integration.

Scientific article by Ghufon and Nurdianingsih explored the use of a flipped classroom approach combined with Computer-Assisted Language Learning (CALL) in teaching writing to English as a Foreign Language (EFL) students.[1] Their study, which utilized a mixed-methods design and included 150 university students in Indonesia, demonstrated that this approach enhanced learner independence, optimized teaching and learning practices, and allowed for more in-class time to focus on writing activities. Additionally, it fostered active participation, accountability among students, and collaboration with peers. The findings concluded that incorporating CALL within a flipped classroom framework positively impacts EFL writing instruction. Scientific paper by Mohamed investigated how Computer-Assisted Language Learning (CALL) influences the performance of English as a Foreign Language (EFL) students, emphasizing aspects such as individualized learning, teacher support, and collaborative activities.[2] The study revealed that CALL enhances language learning by offering instant feedback, improving communicative skills, and fostering greater learner independence. The findings showed that students utilizing CALL outperformed those taught through conventional teaching approaches. A study featured in Symmetry evaluated the impact of combining Computer-Assisted Language Learning (CALL) with innovative collaborative learning strategies.[3] The research, conducted with four student groups, demonstrated that participants who engaged in CALL alongside these collaborative methods showed superior English proficiency in listening, reading, speaking, and writing compared to those in traditional collaborative settings. The study emphasized that CALL empowers students to take control of their learning process, fostering greater confidence and enhanced language acquisition skills. The study "Integrated Technology for Classroom Management Strategies in a Computer-Assisted Language

Learning" by Christian Bernard Nichols Djami explored the role of technology integration in managing classrooms within a CALL environment.[4] Conducted with 27 students and one lecturer from an English Language Education Study Program, the research utilized a mixed-methods approach. Data collection involved questionnaires, interviews, and observational notes, with the quantitative findings analyzed through descriptive statistics and the qualitative results examined using thematic analysis. The study revealed that the use of technology in CALL classrooms significantly enhanced classroom management by actively engaging students, streamlining material delivery, and fostering an immersive learning experience through tools such as gamification and internet-based resources. The findings underscored that incorporating computer-assisted methods not only improves classroom dynamics but also supports learning both during class sessions and beyond.

Transforming Language Learning through CALL Technologies.

Computer-Assisted Language Learning (CALL) has revolutionized Foreign Language Teaching (FLT) by providing innovative tools that enhance both teaching efficiency and learner outcomes. A prominent advantage of CALL is its ability to support personalized learning by adapting to individual learners' needs, enabling customized pacing and instructional approaches that cater to diverse learning styles. This adaptability fosters a more effective and engaging educational experience.[5] Moreover, CALL integrates multimedia components, such as interactive games, videos, and exercises, which actively engage learners and increase their motivation to participate in the learning process.[6] Another key benefit is the immediate feedback provided by CALL tools, allowing learners to promptly identify and correct errors, thereby facilitating better retention and improving language acquisition efficiency.[7] Additionally, CALL offers access to an extensive range of authentic materials, including native speaker texts, audio, and videos, which expose learners to the target language in its natural context and help them build cultural and contextual understanding.[8] Finally, the gamification and interactive elements embedded in CALL environments serve as powerful motivators, making the learning experience enjoyable and encouraging sustained effort in mastering a new language.[9] These features collectively underscore the transformative potential of CALL in advancing FLT practices and optimizing learning outcomes. Computer-Assisted Language Learning (CALL) offers innovative strategies to enhance foreign language acquisition. One key approach is the integration of multimedia resources, such as videos, podcasts, and online articles, to expose learners to diverse and authentic language inputs. These resources help to improve listening and comprehension skills, while student-created multimedia presentations foster productive language use and creative expression. [10] Another effective method is the use of language learning applications like Duolingo, Babbel, and Memrise. These tools provide engaging activities for practicing vocabulary and grammar, offering a self-paced environment for skill development. Teachers can also assign specific tasks within these apps as homework or independent study to supplement classroom instruction. [11] Online collaboration tools further enhance language learning by enabling real-time group work and communication. Platforms such as Google Docs and Padlet allow students to collaborate on projects, promoting teamwork and interaction. Additionally, forums and discussion boards facilitate asynchronous communication in the target language, helping to build a collaborative learning community. [12] Emerging technologies, including virtual reality (VR) and augmented reality (AR), create immersive environments that enhance contextual learning. VR offers realistic scenarios for language practice, improving fluency and situational competence. AR applications, on the other hand, provide interactive and contextualized vocabulary activities, making language acquisition engaging and effective.[13] Lastly, online assessment tools such as Kahoot and Quizlet enable dynamic evaluations of student progress through quizzes and interactive tests. These platforms deliver immediate feedback, which aids in reinforcing learning. Additionally, self-assessment through digital journals or blogs encourages students to reflect on their progress and develop critical metacognitive skills. [14]

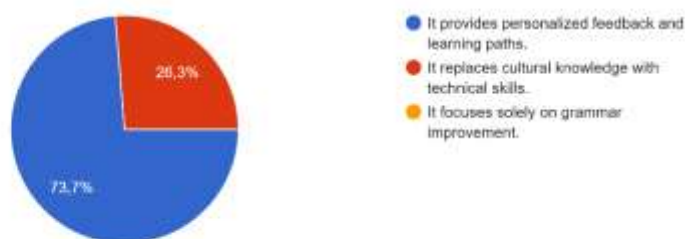
Exploring CALL in Language Learning at AIU.

An investigation was carried out to explore the distinctive features and challenges of the CALL method, targeting third-year undergraduate students at Astana International University. The study employed an online survey as its primary research tool. Nineteen participants from the Faculty of Foreign Languages responded to a structured questionnaire, providing insightful data. The survey comprised eight multiple-choice questions, each requiring participants to select a single response.

The findings revealed that 73.7% of respondents recognized the CALL method as a tool for delivering individualized feedback and customized learning experiences. Meanwhile, 26.3% highlighted a drawback, stating that it emphasizes technical skills at the expense of cultural knowledge. This highlights the need for a balanced approach in CALL implementation, ensuring that while leveraging its technical benefits, cultural elements are not neglected.

What is one advantage of CALL in FLT classrooms?

19 ответов

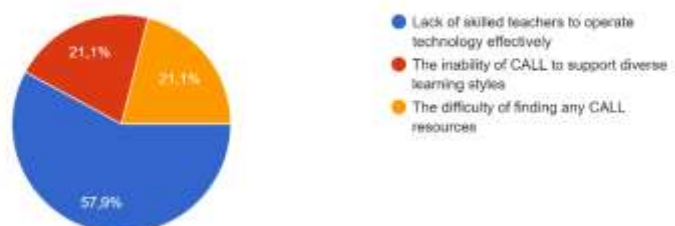


Pic. 1

The subsequent question identified common challenges associated with implementing CALL in FLT classrooms. According to the responses, 57.9% of participants cited the lack of skilled teachers capable of effectively utilizing technology as a primary obstacle. Additionally, 21.1% highlighted the inability of CALL to accommodate diverse learning styles, while another 21.1% pointed to the difficulty in accessing appropriate CALL resources. This question provides valuable insights into the barriers to effective implementation of the CALL method in FLT classrooms. The predominant concern regarding the lack of skilled teachers emphasizes the need for targeted professional development and training programs to equip educators with the necessary technological competencies. The concerns about CALL's inability to support diverse learning styles and the difficulty in accessing resources highlight areas where the method requires refinement and adaptation. Addressing these challenges can enhance the effectiveness and accessibility of CALL, making it a more inclusive and widely applicable tool in foreign language education.

What is a common challenge of implementing CALL in FLT classrooms?

19 ответов

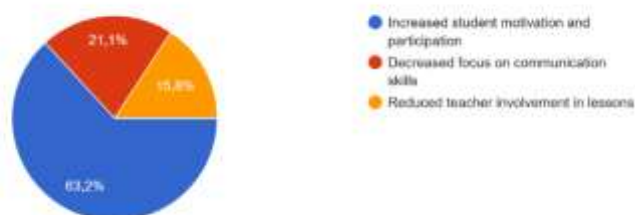


Pic.2

The next question explored outcomes commonly associated with the effective use of CALL in language learning. A majority of 63.2% of respondents reported that CALL increases student motivation and participation, highlighting its potential to enhance engagement in the learning process. However, 21.1% of participants noted a decrease in the focus on communication skills, and 15.8% observed reduced teacher involvement in lessons. These results underscore the dual nature of CALL's impact: while it fosters greater student engagement and motivation, it may inadvertently diminish emphasis on essential language skills and teacher-guided instruction. Consequently, these findings suggest that CALL should be integrated with traditional teaching methods to maintain a balanced approach, ensuring that key aspects of language learning, such as communication skills and teacher involvement, are preserved.

What outcome is often associated with the effective use of CALL in language learning?

19 ответов



Pic.3

Conclusion. Computer-Assisted Language Learning has emerged as a transformative method in Foreign Language Teaching, providing innovative solutions that enhance both teaching practices and student outcomes. With features like personalized feedback, interactive activities, and access to authentic materials, CALL significantly boosts student motivation and autonomy. However, the study also highlights several challenges, including insufficient teacher training, the inability to fully accommodate diverse learning styles, and limited availability of resources. To fully realize the benefits of CALL, a balanced approach is crucial—one that integrates CALL with traditional teaching strategies to mitigate its shortcomings, such as reduced emphasis on communication skills and teacher involvement. Addressing these challenges through targeted teacher training, the development of accessible and inclusive CALL resources, and the adoption of emerging technologies like virtual and augmented reality can further enhance its effectiveness. In conclusion, CALL represents a powerful and flexible tool for modern FLT classrooms. Its thoughtful and strategic implementation can transform language learning, making it more engaging, inclusive, and adaptable to the needs of learners in an increasingly globalized educational environment.

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INVESTIGATING AWARENESS OF EFFECTIVE 21ST-CENTURY PEDAGOGICAL COMPETENCE**Ibrokhim I. Sagdullayev***Acting associate professor, Doctor (PhD),
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Turkestan, Kazakhstan***Roza Aлымzhanova***2nd year master's degree student of
Akhmet Yassawi International Kazakh-Turkish University***Abstract**

The development of knowledge, skills and abilities necessary for the professional performance of activities and their advanced practical application by a specialist is called pedagogical competence. Pedagogical competence requires a specialist to perform independent actions in all directions and to assimilate integrated knowledge, as well as to acquire specialized knowledge and abilities. The purpose of the study was to explore attitudes of participants about pedagogical competence. The descriptive research study was used, in addition, quantitative research design was utilized in order to achieve research objective. Overall, 30 learners participated from Khoja Akhmet Yasawi International Kazakh-Turkish University. From Foreign Languages Teaching Department participated third and fourth course learners (13 learners from 3rd course and 17 learners from 4th course). Purposive sampling approach was used to select the participants. After collecting the relevant data, the Statistical Package for Social Sciences (SPSS) version 23 was used to generate the results of the study. Descriptive analysis and Mann-Whitney U-test was used to calculate results. In accordance data participants' perception was positive and there were no significant difference between gender and grades.

Keywords: *competence, 21st century skills, teaching, pedagogical skills, undergraduate learners.*

Introduction

The term "competence" has been drawn-out person's ability to do something well, moreover, performance based on acquired knowledge, skills and experiences of people. The dimension of a tutor is called competence. Conducting educational process is defined competence of teachers, which deliberate actions in accordance with predetermined standards. Standards of teaching and learning in schools can be raised through the effectiveness of mentoring programs, professional networks and learning communities. The organizational structure of the mentoring program, the employment contract, the nature of the mentor, the activities that take place from start to finish and the number of sessions are examples of factors that need to be taken into account when implementing effective mentoring. It should be planned in a way that optimizes the benefits and features of mentoring. This requires a change in structure and culture as well as leadership support from educational institutions and affiliated groups.

The teacher's job is becoming more complex and challenging in the 21st century due to the environment, changing demographics, globalization, scientific and technological advances, and significant and rapid changes in the educational environment. For professional educators to be recognized as competent teachers in the 21st century, they need to be able to build relationships with learners in order to raise the standard of education in their institutions. They must also be able to be learners and change agents in the classroom. According to Sudargini and Purwanto (2020) teachers need help to have a good professional development. One of the best ways to increase the professionalism of teachers in the 21st century is mentoring. Improving the quality of teaching and learning in schools can be realized through professional connections, mentoring and professional learning communities.

As stated Susanto, Rozali and Agustina (2019) effective mentoring practice should take into account various factors that influence the quality of the mentoring relationship. These factors include the quality of the mentor, the employment contract, the structure of the organization and the activities that take place from the beginning to the end of the mentoring sessions. Mentoring should be programmed in such a way as to enhance its characteristics and advantages. For this to happen, the structure, culture and leadership support of educational institutions and associated organizations need to change.

As mentioned Lukiianchuk, Kharahirlo, Sakhno, Tataurova-Osyka and Stadnik (2022) it is said that psychological and pedagogical competence is the main system-forming element of a teacher's professional competence, which guarantees the quality of professional and pedagogical activities, ensures the effectiveness of the multi component system of professional competence and determines the style of work of each teacher. Xabilova (2023) stated that expertise in the subject and methods is one of the most important qualities of a teacher. As a result, the reputation of the educator increases. Loving children, being interested in their lives, respecting each individual is one of the most basic qualities and criteria of the teaching profession.

Effective professional development, especially orientation, is necessary for teachers to achieve this. Mentoring in the 21st century is one of the best ways to help teachers become more professional. According to Kurnia Irmawati, Widiati and Cahyono (2017) pedagogical competence has emerged as one of the most important elements to be examined among the competences that EFL teachers should possess as it directly affects how teachers manage the teaching and learning process which aims to help learners learn the target in achieving their learning goals. Teaching English as a foreign language requires EFL teachers to be competent in a variety of areas, including lesson planning, creating learning environments and resources, implementing teaching strategies that support students' learning, assessing students' progress and conducting teaching reflection. This skill is known as "pedagogical competence".

According to Murkatik, Harapan and Wardiah (2020) the tutor is dominant and strategic element in the education sphere. The capacity or competence of teachers has an affirmative role in the realization of learning objectives and in solving learning problems. A significant part of what learners learn at school is taught in the classroom. And the teacher's endeavor to integrate the curriculum into learning activities is crucial for everything that happens in the classroom. To ensure that the learning process runs smoothly and that learners receive a high quality education, teachers need to be able to create appropriate learning environments for their learners. Due to teaching involves more than just imparting knowledge; it also involves sharing experiences and being an example of engagement throughout the learning process.

As the research of Voss, Kunter and Baumert (2011) there can be illustrated various kinds of pedagogical competence elements.

- awareness of teaching techniques;
- awareness of classroom management;
- awareness of classroom assessment;
- a structure for learning objectives and lesson process;
- capacity for lesson preparation and assessment;
- adaptability to work with different learning groups in the classroom;

According Afalla and Fabelico (2020) the benefits of tutors' pedagogical skills extend beyond the teaching staff to include significant benefits for students. For learners, the numerous benefits of the teacher's pedagogical competence include The teacher satisfies students' curiosity by encouraging critical thinking throughout the learning process through contextualized activities that students find engaging, as evidenced by the questions they ask. Pedagogically competent teachers provide students with the opportunity to voice their opinions in addition to imparting course information. Build your students' self-confidence. With the right pedagogical skills, teachers can design learning activities that directly and actively engage students.

While teachers and educational researchers have recently been discussing pedagogical efficacy, there has not been much exploration of the concept from the perspective of education in the twenty-first century, especially from the perspective of pre-service teachers or future teachers. Numerous studies of exemplary qualities and professional development experiences of professional English language trainers confirm that professional development for English language trainers is now an indisputable necessity. Kazakhstan is currently going through a period of growth in which social and political interest in the moral and spiritual development of young people involved in ethno cultural education is clearly visible. A fundamental responsibility in the search for national identity is to ensure the quality of education based on the preservation of basic nature, ensuring compliance with the demands of society and the state, the needs of the individual, national identity in the maintenance and development of ethno-culture. . The new educational paradigm of ethno-cultural education is built on values. The need for knowledgeable, informed pedagogical assistance at every stage of the learning process is one of the most urgent concerns of modern pedagogy.

The objective of the study

The recent research study aimed to investigate perception of pre-service teachers about 21st century teaching pedagogical competence and review of pedagogical competences' effectiveness. In accordance research objective presented above, the following research questions seek out:

Research questions

RQ1 What are the participants' attitudes of 21st century pedagogical competence in teaching?

RQ2 Are there significant differences of perceptions regarding to gender?

RQ3 Are there significant differences of attitudes according to academic year?

Methods and Materials

The research design

The descriptive research study was utilized in the recent research study. As stated Thuillier, Valentin, Marchal and Dacremont (2015) descriptive research technique is utilized to examine the current situation. In addition it addresses the questions of who, what, why and how. Moreover, quantitative research design was used. According to Lowhorn (2007, May) by quantitative research design representative sample of the population, it obtains statistically significant findings about the population.

Participants of the study

Totally 30 participants took part in the recent research study. 14 male and 16 female learners selected from Khoja Akhmet Yasawi International Kazakh-Turkish University. From Foreign Languages Teaching Department participated third and fourth course learners (13 learners from 3rd course and 17 learners from 4th course). Purposive sampling approach was used to select the participants. In addition to the assessment of teaching abilities, pre-service students' opinions, attitudes and concepts of pedagogical competence were also assessed.

Data collection instrument

The questionnaire refined by Wichadee (2010) effective EFL teachers' pedagogical competence and the framework of 21st-century pedagogical competence of National Educational and Technological Standard. Overall, 14 items in the questionnaire, recycled to explore EFL learners' perception of 21st century pedagogical competences. The instrument was used in the form of 5 point Likert scale: (1-not important at all, 2-not very important, 3-neutral, 4-important, 5-very important).

The internal reliability of the scale was determined as $\alpha = .883$, which shows that the scale used in this study is safe to use. The reliability scale presented in Table 1.

Table 1

Reliability scales	
Cronbach's Alpha	N of Items
,883	14

Data collection procedure and analysis

The questionnaire was elected according to the grade and level of knowledge of participants. Each question was easy to understand, had precise answers and had already been answered. Items were clear, did not make any difficulties for learners, options were explained in advance. All items were understandable for participants. It was explained that the results of findings would be used for the academic purposes. First participants were asked fill opinions to the questionnaire on the Google form, additionally they were asked to express their options honestly. After collecting whole results the Statistical Package for the Social Sciences (SPSS) version 23 was used to calculate the results. The test of normality was calculated in order to identify whether parametric or non- parametric would be appropriate. Accordance the results of Kolmogorov-Smirnov and Shapiro-Wilk tests, Kolmogorov-Smirnov test showed normal distribution of variables, it was decided to use non-parametric tests to the data.

Findings

The first research question was about "What are the participants' attitudes of 21st century pedagogical competence in teaching?" In order to calculate data of the first research question descriptive analysis was used. The results presented in Table 2.

Table 2

Descriptive analysis					
	N	Minimum	Maximum	Mean	Std. Deviation
Total	30	3,00	4,15	3,5301	,21235

In order to calculate results of the first research question descriptive analysis was used. In accordance results mean rank illustrates high results: $M=3,35$. It means that learners' attitudes of 21st century pedagogical competence were confident. The results illustrate that EFL learners aware of 21st century capabilities and competences.

Furthermore, a descriptive analysis was made to examine each item in the questionnaire. Each issue was analyzed separately. The results are illustrated in Table 3.

Table 3

Descriptive analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Setting the learning growth and outcomes as the main priority, not the content taught.	30	2,00	5,00	3,4798	,68745
Being both a facilitator and an inspiration to students.	30	2,00	5,00	3,9780	,54123
Utilizing, designing and developing digital media (video, audio, multimedia, etc) to build a good learning material, learning experience, and evaluation.	30	1,00	5,00	3,7845	,74561
Building discussion habit to promote communicative learning.	30	2,00	5,00	3,3564	,84123
Establishing and maintaining good classroom atmosphere	30	2,00	5,00	3,6458	,58963
Motivating students by supporting their self-efficacy	30	1,00	5,00	3,9062	,74120
Assessing what students have learned rationally	30	2,00	5,00	3,9635	,65231
Arranging students into pairs or groups to develop their language and communication skills.	30	3,00	5,00	3,8502	,41230
Allowing students have some control over the learning process.	30	1,00	5,00	3,4231	,86541
Encouraging the students to learn English outside the classroom.	30	1,00	5,00	3,5937	,94553
Avoiding direct criticism of students when they make errors	30	2,00	5,00	3,7188	,64561
Appreciating students for good ideas or for their effort.	30	2,00	5,00	3,9745	,74561
Teaching subject matter in ways that are accessible to all learners	30	1,00	4,00	3,5012	,83520
Providing constant feedback	30	2,00	4,00	3,7410	,62365

As results of descriptive analysis the highest results obtained by items (2,6,7,8,12 and 14). "Being both a facilitator and an inspiration to students" $M=3.97$, "Motivating students by supporting their self-efficacy" $M=3.90$, "Assessing what students have learned rationally" $M=3.96$, "Arranging students into pairs or groups to develop their language and communication skills" $M=3.85$, "Appreciating students for good ideas or for their effort" $M=3.97$ and "Providing constant feedback" $M=3.74$. It means that tutor's motivation, facilitating learners, inspiration to learners, support in order to evolve learners' self-efficacy. Moreover, pedagogical competence is crucial when advancing communicative skills of learners'.

The average results obtained by (1,3,4,5,9,10,11 and 13). "Setting the learning growth and outcomes as the main priority, not the content taught" $M=3.47$, "Utilizing, designing and developing digital media (video, audio, multimedia, etc) to build a good learning material, learning experience, and evaluation" $M=3.78$, "Building discussion habit to promote communicative learning" $M=3.35$, "Establishing and maintaining good classroom atmosphere" $M=3.64$, "Allowing students have some control over the learning process." $M=3.42$, "Encouraging the students to learn English outside the classroom" $M=3.59$, "Avoiding direct criticism of students when they make errors" $M=3.71$ and "Teaching subject matter in ways that are accessible to all learners" $M=3.50$. It demonstrated that by using digital Medias like video, audio, multimedia and others can motivate learners. In teaching and learning are the tutors' competences of guiding and supporting EFL learners' dominant thing.

The second research question was about "Are there significant differences of perceptions regarding to gender?" The results presented in Table 4.

Table 4

Results of Mann-Whitney U-test

	Gender	N	Mean Rank	U	p
Total	male	14	14,85	85,200	,321
	female	16	16,67		

* $p < 0.05$

In order to calculate results of second research question Mann-Whitney U-test was used. According to the results male participant's attitudes presented average results $M=14,85$, furthermore, female

learners' perception illustrated positive results $M=16,67$. As demonstrated in Table 4, there was no significant difference between male and female participants' perception of 21st century skills and pedagogical competence. In addition, $U=85,200$ and $p=,321$.

The third research question was about "Are there significant differences of attitudes according to academic year?". The results demonstrated in Table 5

Table 5

Results of Mann-Whitney U-test

	Grade	N	Mean Rank	U	p
Total	3	13	15,77	114,000	,712
	4	17	17,00		

* $p<0.05$

Notwithstanding, to obtain consequence of last research question Mann-Whitney U-test was used. Mann-Whitney U-test used to identify contrasts among things. The table promotes that 3rd course learners attitudes showed normal results according to mean rank: $M=15,77$. Furthermore, 4th course learners (undergraduate learners) perspectives presented higher results than 3rd course participants. The mean rank showed results $M=17,00$. There can be shown marginally contrast regarding to the number of participants. Additionally, $U=114,000$, $p=,712$.

Discussion

The purpose of the recent research study was to explore undergraduate learners' attitudes towards 21st century skills and pedagogical competence. The first research question was "What are the participants' attitudes of 21st century pedagogical competence in teaching?". According to the results above, participants have high level of awareness about 21st teaching and learning skills and pedagogical skills.

Similar findings were also found in the studies of Ecem and Bedir (2020).. The aim of this study was to examine how EFL teachers perceive 21st century learning and innovation skills and how they apply them in their classrooms. The results showed that the participants recognized the importance of 21st century skills in English language teaching and learning. They recognize them but still need help from the government and their employers. Not only do they need to broaden their perspectives, but they also need to better understand when and how to use these skills.

In addition, Anagün (2018) and Sartika (2023) research also reached similar results. The purpose of this study was to use structural equation modeling to examine the relationships between primary school teachers' judgments of their 21st century skills competencies and their views of supervising constructivist learning environments. Teachers' perceptions of constructivist classroom practices and 21st century skills competencies were assessed using the Constructivist Learning Environment Scale and the 21st Century Skills Scale. According to the findings, instructors' perceptions of constructivist learning environments are positively related to 21st century skills. The clear implication of these results is that teachers with strong beliefs in problem solving, critical thinking, collaboration, communication and creativity provide learning environments that are more open to students' enquiry and investigation. This increases the support for positive student attitudes.

The aim of Tican and Deniz (2019) research is to determine pre-service teachers' views on teacher and student competences for the twenty-first century. According to the findings of the study, pre-service teachers' views on 21st century learners and teacher competences differ significantly depending on variables such as gender, department attended, academic achievement, private course experience and teaching practice (practical teaching in primary and secondary education). The findings show that pre-service teachers have an understanding of both teacher and 21st century learner skills (cognitive, autonomous, collaborative, flexible and innovative skills) as well as techno-pedagogical, management, validation, flexible teaching and productive skills. In addition, it was also revealed that pre-service teachers could not fully benefit from learner and teacher skills during their classroom practice. There is a positive, moderate and significant relationship between 21st century educator competences and 21st century student skills. The second and third research questions were about analyzing differences between gender and grade. According to the results there were no significant difference between gender and grades.

Conclusion

Anyone who wants to work as a professional teacher must have a pedagogical qualification. Among the incredibly wide range of pedagogical qualifications, technical education management is only one area. Understanding the unique characteristics of each student is one of the pedagogical competences that educators need to fulfill their job tasks (teaching and training), even if they are

members of a diverse community such as classrooms and school organizations. Students will receive the material presented by the teacher if the trainer is aware of their personal situation. To summaries, the basic element of pedagogical competence that an educator should possess is the ability to teach.

In addition to a firm grasp of ideas, a teacher should be able to read the personalities of the students. If a teacher is knowledgeable about contemporary learning theories, he/she can easily make judgments about the learning process, including strategies and methods appropriate to the course material. It is important to have the capacity to put together teaching resources such as lesson plans and syllabus. The lecturer's ability to organize learning resources can be seen in how well the teaching materials meet the needs of the learners. Developing educational learning activities is a skill that a teacher with a solid grounding in pedagogy will possess.

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STRATEGIC DEVELOPMENT OF UNIVERSITIES IN AZERBAIJAN: A CASE STUDY OF NAKHCHIVAN STATE UNIVERSITY

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Abstract

This thesis examines the strategic development of universities in Azerbaijan, focusing on Nakhchivan State University and its 2023–2027 strategic plan. Grounded in national policy frameworks, especially alignment with the Bologna Process, the research investigates how modernization and internationalization shape governance, academic freedom, and technological innovation in higher education. A qualitative case study approach, incorporating semi-structured interviews, document analysis, and on-site observations, reveals how NSU identifies and addresses its strengths, weaknesses, opportunities, and threats. Key findings highlight four priority areas—education, research, internationalization, and resources—and propose a multi-tier action plan with six main goals, thirteen targets, and seventy-two sub-targets. A distinctive development indicator formula is used to measure progress and foster accountability. Through a systematic analysis of institutional challenges and potential solutions, the findings highlight the necessity of continuous adaptation and collaborative leadership in bolstering teaching excellence and institutional resilience.

Despite significant achievements, including enhanced digital infrastructure and expanded international partnerships, NSU faces challenges related to sustained funding, faculty training in ICT, and balancing localized needs with global standards. The thesis discusses how inclusive decision-making mechanisms, exemplified by NSU's Strategic Development Commission, contribute to transparent governance and stakeholder engagement. Recommendations emphasize continuous faculty development, strategic resource allocation, and targeted collaborations with industry to align curricula with emerging job markets. Moreover, the study calls for robust accreditation measures and data-driven policy interventions, underscoring the importance of integrated reporting systems and performance metrics in driving quality improvements.

Ultimately, this thesis contends that NSU's experiences offer valuable insights for other Azerbaijani institutions seeking to implement meaningful reforms. By illustrating the interplay between policy directives, institutional autonomy, and stakeholder participation, the research underscores the transformative power of strategic planning in higher education. Accordingly, it serves as a guide for policymakers, administrators, and academic scholars in designing future-oriented strategies that enhance educational outcomes and global competitiveness.

Keywords: Strategy, education, research, internationalization, stakeholders, reporting system, outcomes

1. Introduction

Higher education sector of Azerbaijan transforms rapidly and one of the main reasons behind such a drastic change is the country's aim to enrich its economic, cultural, and academic ties globally. As a result, universities throughout the country are heavily involved in reimagining their strategies and contemplating new priorities as a means of staying relevant and competitive in the era of globalization. **Nakhchivan State University (NSU)**, being situated in the autonomous region of Nakhchivan, is a vivid example of these endeavors.

Believed to have been established in 1967, NSU experienced a noteworthy growth from a tiny division of a pedagogical institute to a full university that hosts more than 10,000 students, including international learners. NSU made an important step in 2023 by organizing a **Strategic Development Commission** to help in the planning of the university's growth for the period between 2023 and 2027. The university first conducted a SWOT analysis of the university to identify its strengths, weaknesses, opportunities, and threats before it decided to focus specifically on **education, research, internationalization, and resources**. This led to a well-thought-out and comprehensive action plan that contained **6 main goals**, 13 targets, and 72 sub-targets, for each of which the university aptly determined

timelines, responsibilities, and success indicators. This study deals with the strategic development of NSU and it starts with an introduction to the higher education system in Azerbaijan, then it goes on to show how NSU implements it. It surveys the university's planning course by means of interviews, document surveillance, and observations, points out the problems and success stories and in the end suggests the takeaways from there which may be useful to the other universities in Azerbaijan.

2. Literature Review

2.1 Higher Education Reforms in Azerbaijan

Even though the country gained her independence formally in 1991, Azerbaijan pursued a consistent course to modernize and internationalize its universities. The main goals of this process were to get compliance with the Bologna Process, to adopt the highest teaching standards, and to build the strongest possible global partnerships respectively (Egron-Polak & Hudson, 2014). Research shows that not only the modernization in higher education but the quality of these universities, in particular the reforming of their system of governance, academic freedom, and digital infrastructure, should also be considered to make them more competitive internationally (Heyneman, 2010).

2.2 Strategic Management in Universities

Strategic management is reckoned as an invaluable instrument for organizations that are planning to innovate and restructure. It is equally a widely employed tool in the higher education system for the strategic planning that often includes the steps of formulating the precise mission, setting clear objectives, and gathering the data to monitor progress (Bryson, 2018). These principles guide universities in adapting to an ever-evolving landscape shaped by new technologies, changing job markets, and international developments.

2.3 SWOT Analysis Approach

Every institution has its strengths that can be effectively utilizes to improve the overall performance. SWOT analysis is a perfect tool for responding to external forces as it can identify threats, opportunities and weaknesses (Gürel & Tat, 2017). Such an approach allows leaders to combine the strategy of the university with its capabilities and set achievable goals without irrational expectations.

2.4 The Case of Nakhchivan State University

Nakhchivan State University stands out in the world due to its location and historical aspects which nurtures its strategies to expand. Surrounded by mountains, NSU is known for its high-quality educational services, outreach programs and international partnerships (Ismayilova & Valizada, 2021). This paper explores the strategies that NSU has formulated to help achieve the national framework for the development of the education sector.

3.1 Research Design

This research adopts a single case study as the research method to understand how NSU designs and puts its strategic plan into practice (Yin, 2014). It will enable deep insights into one university's experiences that could provide ideas to other institutions faced with similar challenges.

3.2 Data Collection

1. Review of documents

Key documents will include NSU's strategic plan for 2023-2027, annual and semiannual reports, meeting notes from the Strategic Development Commission, and Azerbaijani government policy guidelines with regard to higher education.

2. Interviews

Ten semi-structured interviews with members of the Strategic Development Commission, faculty deans, and administrators were conducted. These discussions covered the reasons behind choosing certain goals, how progress is tracked, and overall expectations for the future.

3. Observations

The researcher attended selected meetings of the Strategic Development Commission and visited different parts of the campus-faculties, centers, administrative offices-to observe how the plan is carried out in practice.

3.3 Data Analysis

Thematic analysis (Braun & Clarke, 2006) was used to organize information obtained from documents, interviews, and observations into sets of themes on priority areas, details of the action plan, measurement methods, and challenges. Findings were consistent and reliable since there was repeated review of data.

4. Results

4.1 Four Main Priority Areas

Through a careful SWOT analysis, NSU identified **education, research, internationalization, and resources** as its core areas for 2023–2027:

- **Education:** Updating curricula, encouraging blended learning, and improving faculty qualifications.
- **Research:** Increasing publications, forming interdisciplinary teams, and aiming for international recognition.
- **Internationalization:** Expanding exchange programs, welcoming more foreign students, and collaborating with overseas universities.
- **Resources:** Strengthening financial stability, upgrading facilities, and investing in people and infrastructure.

4.2 Action Plan and Measurable Indicators

The university's strategic plan is made up of **6 main goals, 13 targets, and 72 sub-targets**, each with specific timelines and milestones. A key feature is the **development indicator** formula:

Development Indicator = $\frac{(C - B)}{(C - A)}$

- AAA = Base indicator
- BBB = Target indicator
- CCC = Current indicator

Depending on the calculated percentage, each sub-target is labeled as **Unable to be implemented (0–50%), Needs improvement (51–70%), Acceptable (71–85%), or Successfully implemented (86–100%)**.

4.3 Reporting Cycles

• **Faculties and Centers:** Submit reports every semester (twice a year) and once a year, aligned with the academic calendar.

- **Departments and Divisions:** Prepare annual reports following the standard calendar year.

Each goal or sub-target has its own evidence, which is uploaded to a central database. This might include updated syllabi, training records, or partnership agreements. After everything is documented, the Strategic Development Commission reviews the progress and then shares the outcomes with the **Scientific Council**.

4.4 Strengths and Observed Challenges

• Strengths:

- The clearly defined goals make it easier to hold people accountable.
- Short- and medium-term check-ins help the university adjust quickly.
- Involving different faculty and staff members fosters a sense of shared ownership.

• Challenges:

- Gathering evidence for each sub-target can be time-consuming.
- Some faculty need more training in how to use and interpret the development indicator system.
- Infrastructure upgrades depend on funding that must be stable over time.

5. Discussion

5.1 Implications for the Greater Azerbaijani Context

NSU's strategy is in tune with the national drive for digitalization, international standing, and quality research performance. It also underlines how a regional university can maintain quality standards despite relatively peripheral conditions. In the development of Azerbaijan as a player on the world scene, NSU's strategic road map can serve as an example for other institutions with regard to framing strategic priorities in a balance between tradition and innovation.

5.2 A Commission Dedicated

Perhaps most powerfully, NSU established a Strategic Development Commission that brings administrators and faculty-together and sometimes students-to ensure that real voices, not top-down mandates, shape policy. Research has demonstrated that when individuals throughout an organization feel their voices have been heard, they are more likely to see big changes through (Rowley & Sherman, 2001).

5.3 Highlighting Quantifiable Goals

Having a clear formula for measuring progress will make NSU's plan more transparent. This approach certainly aligns with calls for data-driven accountability in higher education (Bryson, 2018). Success there will depend on collecting good data and then training staff on how to interpret it appropriately. Helping everyone understand the system and its purpose and how to use it will be critical to long-term success.

5.4 Ongoing Resource Needs

To maintain momentum, NSU will need to continue updating its facilities and technology, and invest in ongoing faculty development. Securing new funding streams, from either government grants or industry partnerships, could help alleviate these pressures. Given Nakhchivan's geographical isolation, there is a particular premium on developing good digital infrastructure to enable online collaborations and e-learning.

5.5 Lessons for Other Universities

NSU's experience well illustrates that the structured plan-one that had set realistic goals, tracked them with transparent metrics, and encouraged feedback-might just give birth to real transformation. Other universities in Azerbaijan may take up the model developed at NSU but tailor priorities to their own contexts while keeping the same sense of clarity and accountability. This can build a culture of continuous improvement and innovation.

6. Conclusion

Nakhchivan State University's strategic development journey gives an interesting insight into how a higher education institution can shape its future through reflective planning and inclusive governance. By focusing on education, research, internationalization, and resources, NSU aligns its own initiatives with Azerbaijan's broader vision of a modern, globally engaged higher education system.

Key Insights:

1. Explicit Action Plans: With 6 key objectives, 13 targets, and 72 sub-targets, nothing significant that happens at the university will be missed.

2. Measurement and Accountability: In this way, the formula for development indicators will enable clearly numerically traceable progress, enabling success to be celebrated and obstacles tackled more easily.

3. Structured Reporting: Requiring reports on a semester and annual basis, uploading evidence on a shared database, promotes transparency and timely problem-solving.

4. Collaboration Throughout the Organization: A team representative of a cross-section of the university assists in creating buy-in and shared responsibility.

5. Future-Focused: The NSU plan has a good start, but continuous investment in digital infrastructures, faculty training, and resource management in the future are very concerning in meeting the goals.

As the universities of Azerbaijan increasingly compete and collaborate on the international stage, NSU's model may serve as a blueprint. Its lessons in setting clear goals, participatory governance, and data-driven evaluation may inspire institutions throughout the region-and beyond-to forge their own paths toward academic excellence and sustainable development.

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