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13

2023

issue 2, special XXXVI.

AD ALTA

Journal of Interdisciplinary Research

AD ALTA: Journal of Interdisciplinary Research

Double-Blind Peer-Reviewed

Volume 13, Issue 2, Special Issue XXXVI., 2023

Number of regular issues per year: 2

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MAGNANIMITAS Assn.

## AD ALTA: JOURNAL OF INTERDISCIPLINARY RESEARCH

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SPECIAL ISSUE NO.: 13/02/XXXVI. (VOLUME 13, ISSUE 2, SPECIAL ISSUE XXXVI.)

ADDRESS: CESKOSLOVENSKE ARMADY 300, 500 03, HRADEC KRALOVE, THE CZECH REPUBLIC, TEL.: 498 651 292, EMAIL: INFO@MAGNANIMITAS.CZ

ISSN 1804-7890, ISSN 2464-6733 (ONLINE)

AD ALTA IS A PEER-REVIEWED JOURNAL OF INTERNATIONAL SCOPE.

2 ISSUES PER VOLUME AND SPECIAL ISSUES.

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## **A SOCIAL SCIENCES**

AA	PHILOSOPHY AND RELIGION
AB	HISTORY
AC	ARCHAEOLOGY, ANTHROPOLOGY, ETHNOLOGY
AD	POLITICAL SCIENCES
AE	MANAGEMENT, ADMINISTRATION AND CLERICAL WORK
AF	DOCUMENTATION, LIBRARIANSHIP, WORK WITH INFORMATION
AG	LEGAL SCIENCES
AH	ECONOMICS
AI	LINGUISTICS
AJ	LITERATURE, MASS MEDIA, AUDIO-VISUAL ACTIVITIES
AK	SPORT AND LEISURE TIME ACTIVITIES
AL	ART, ARCHITECTURE, CULTURAL HERITAGE
AM	PEDAGOGY AND EDUCATION
AN	PSYCHOLOGY
AO	SOCIOLOGY, DEMOGRAPHY
AP	MUNICIPAL, REGIONAL AND TRANSPORTATION PLANNING
AQ	SAFETY AND HEALTH PROTECTION, SAFETY IN OPERATING MACHINERY

## THE FEATURES OF FORMING THE ECOLOGICAL CONSCIOUSNESS OF A PERSON

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**Abstract:** In recent decades, people have faced a severe threat of an ecological catastrophe, primarily due to the conflict between culture and the laws of nature. Society has exceeded the capabilities of the biosphere. In this context, there is a need to make all aspects of social life more environmentally friendly, including developing and implementing resource-saving and waste-free technologies, which requires the active participation of ecologically conscious persons. The environment must be provided with the necessary resources for carrying out socially significant work. Knowledge of the interactions between society and the environment, understanding the immediate and long-term consequences of natural changes, appreciation, conservation of natural resources, and love for nature are essential. Technological progress has improved people's financial lives, but unfortunately, it has caused significant damage to the entire biosphere. In these conditions, the understanding of contradictions arising in the "nature-conscious society" sphere lags behind the constant growth of conflicts. Resolving the ecological problems of the current stage of social development requires a new worldview and the formation of people's thinking and attitudes toward the major issues of human life. The formation of this ideology allows people to recognize their honesty and naturalness and transform consumer relations into sustainable consumption. Despite society's attempts to reflect its actions against nature, people's perceptions of the world are still distorted, their natural behavior is ecologically abnormal, and people are not yet ready to actively work in harmony with nature. Therefore, the relevance of the research topic is determined by the need for a deep and comprehensive analysis of information on the formation of ecological consciousness in the context of natural social development. Theoretical research enables the creation of a broad concept of environmental consciousness and the revelation of its nature, functions, and role in the development of the environment. The article hypothesizes that the formation of ecological consciousness depends on the person's age. Based on a sociological study conducted by the Ilko Kucheriv Democratic Initiatives Foundation on behalf of the Environmental Law Association, problems of forming ecological consciousness and age-specific features of ecological perception were identified. As a result, forms and methods of creating ecological consciousness for different age groups were developed: children (preschoolers), adolescents (schoolchildren and students), and adults. The article emphasizes the necessity of educational and awareness-raising activities among the people of each age group to form ecological consciousness effectively.

**Keywords:** consciousness, ecology, frugality, knowledge, formation, age groups.

### 1 Introduction

Changes in the functioning of the environment and human life caused by the ecological crisis require a shift in the worldview of life and social production towards the interaction between humans and nature. In this regard, an innovative psychological approach to ecological education and the upbringing of the younger generation should be aimed at forming basic environmental values in students, developing their ability to perceive and recognize natural phenomena, and engaging them in critically critical ecological issues. Most contemporary research in this field is focused on energy conservation, air pollution reduction, and soil restoration. For instance, Jorgenson & White (2019) found that educators and ecological researchers are focused on studying and promoting energy-saving behaviors with an emphasis on children and youth. The new studies are focusing on energy transitions at regional and national levels. Rousell & Cutter-Mackenzie-Knowles (2020) identified the need for interdisciplinary, creative, and impact-oriented approaches to climate change education, which are currently lacking in the literature. The authors emphasized the necessity of developing new forms of climate change education that directly involve youth in responding to climate change's scientific, social, ethical, and political complexities. Similar research in this field has been conducted by Ardoin & Bowers (2020) and Ardoin, Bowers & Gaillard (2020). Air pollution has been addressed by researchers such as Yuen et al. (2020), who demonstrated the numerous benefits of autonomous transportation in terms of improved safety, comfort, resource utilization (i.e., land and energy), and environmental protection. Chin et al. (2019) highlighted the need for measures to raise public awareness of air pollution, notably

its health risks, and strategies to enhance perceived behavior control, especially regarding automobile usage. Fu et al. (2020) and Elnabawi & Hamza (2019) also emphasized the search for innovative approaches to protect the atmosphere from harmful emissions. Rustam, Wang & Zameer (2020) drew attention to soil protection and restoration in their research, which requires further enhancement of environmental consciousness education based on psychological theory and practice. However, these studies predominantly focus on practical environmental protection approaches. At the same time, it is currently relevant to develop preventive measures for nature conservation through the formation of ecologically conscious behavior.

The problem of studying the process of forming and developing environmental consciousness is relevant for ecological psychologists, particularly the methodological principles and fundamental concepts of environmental consciousness (Scoones et al., 2020), and it unfolds the eco-pedagogical theme. The issues of consciousness (Melloni et al., 2021) and the ecological image of youth and university students (Anthonyamy, Koo & Hew, 2020) have been explored in studying ecological consciousness in psychology and pedagogy. The article by Umarjonovna (2023) illustrates the use of an interactive method of teaching primary environmental education in preschool educational institutions. It includes aspects related to the environment, its pollution, the causes, the prevention of pollution, cleaning, lecture, practical and excursion methods of teaching, and methods of response in pedagogical teaching technology. The research by Pihkala (2020) analyzes the challenges and opportunities that "eco-anxiety" poses for environmental education. Variations of ecological anxiety are examined, and it is asserted that educators must be aware of the numerous forms of this phenomenon. In the study by Šorytė & Pakalniškienė (2019), the directions for forming ecological awareness in children are defined: family, school, diverse literature, computer games, television, and observing the behavior of others. At the same time, there is a lack of specialized research demonstrating the age-related connections of ecological attitudes among younger schoolchildren, gender differences in students' environmental consciousness, and the specific role of gender in orientation. Insufficient attention has been paid to studying psychological conditions and modalities that shape ecological consciousness based on personal attitudes toward the environment and nature.

The analysis of studies by environmental psychologists shows that only a few have dedicated themselves to developing psychology and teaching methods for environmental education. However, none of the authors have set out to investigate age-related aspects. The importance and insufficient development of theoretical and applied aspects of this specific problem have led to the choice of this research topic.

This study aims to analyze contemporary issues in the formation of ecological education of persons in the context of different age groups.

The following tasks were addressed to achieve the aims of the article:

- to clarify ecological issues based on an analysis of a sociological study conducted by the Ilko Kucheriv Democratic Initiatives Foundation;
- to identify differences in the formation of environmental consciousness among different age groups;
- to propose forms and methods for forming ecological consciousness for each age group.

The object of the study is the principles and methods of creating the ecological consciousness of individuals.

The subject of the study is the collective economic and psychological interactions that arise between stakeholders in forming ecological consciousness.

## 2 Materials and Methods

The article presents a theoretical analysis of environmental education based on scientific and literary preparation, the study and generalization of popular and advanced educational experiences, educational observation, posing questions, conversations, essays, and knowledge transfer.

The theoretical significance of this research lies in its potential to complement and refine contemporary notions of the educational potential of different age groups as an essential factor in environmental education. The practical significance of this work lies in the deliberate utilization of family, educators, and caregivers' resources for environmental education, creating a pedagogical prerequisite for forming this process.

The material presented in this study can be used as follows:

- in educational activities in general education schools;
- in the development of methodological guides for primary school teachers and preschool educators;
- in lectures and symposiums for university and secondary school students;
- for enhancing the qualifications, education, and cultural level of parents.

The research results can be seen in the authors' studies, scientific papers, reports, and dissertations.

The scientific background of this research is ensured by the following:

- a comprehensive analytical approach to the problem;
- the methodological and theoretical substantiation of the initial statement;
- the diversity of sources used;
- the compatibility of the research method with its goals, main ideas, hypotheses, and conclusions;
- an extended period of study;
- involvement of a large number of parents, students, and teachers in the experiment;
- the cross-checking of results;
- the representativeness of the research sample.

The hypothesis of the research suggests that the development of ecological culture among preschoolers, students in general education schools, and adults are successful when there is a methodological basis for addressing the problems through the application of systemic activity and research methods, with significant theoretical and methodological aspects in the selection and organization of the ecological content potential. Tutoring primary school students from the standpoint of complementary pedagogy has led to the development of a structural-functional model of environmental and cultural identity. It is determined by the correlation between relevant, material, functional, evaluative, and practical blocks. Numerous educational conditions have been created, which form the basis for the teachers' work in graduate programs on the ecological-cultural development of students in higher education institutions. These include developing and implementing a comprehensive cultural program in the ecological-cultural development of children and students undergoing additional training in general education schools with socially significant value orientations and fostering the students' need for environmental conservation activities.

## 4 Results

Their social environment often shapes the ecological consciousness of a person. Under the same environmental conditions, different social groups, strata, and classes may have varying assessments, attitudes, and approaches to environmental

issues. It also applies to a person's ecological consciousness. Therefore, it is necessary to identify the key factors in forming ecological consciousness, primarily examining the role of the social environment, family, education, culture, mass media, and environmental education in this process.

A study by the Ilko Kucheriv Democratic Initiatives Foundation on behalf of the Environmental Law Alliance Worldwide sheds light on the causal relationships and specificities of forming ecological consciousness in contemporary conditions. This sociological research highlights the influence of factors such as worsening overall environmental conditions on the formation of ecological consciousness.

The report indicates that environmental problems concern Ukrainian citizens and are gaining popularity (Figure 1). The citizens are particularly concerned about soil, water, and air pollution.

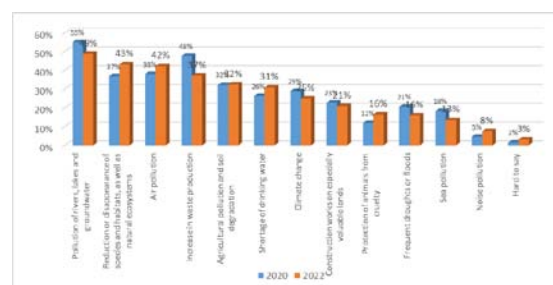


Figure 1. The importance of environmental issues for a person at the present stage

This survey was conducted among people between 18 and 60 years and older. It allowed us to identify differences in the formation of environmental awareness depending on the age category. Thus, the citizens receive information about the ecological situation and problems solving differently (Figure 2).

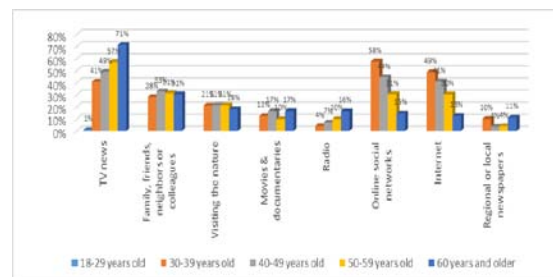


Figure 2. The age-specific peculiarities of perceiving information on environmental changes

Based on the results of the sociological research, the formation of ecological consciousness should vary depending on the people's age. We propose distinguishing the following age groups: children (mostly preschool-aged), adolescents (schoolchildren and students), and adults. Within these proposed age groups, ecological consciousness is shaped based on education. Education enables people to attain awareness and act environmentally responsibly in the future. Figure 3 illustrates the scheme of consciousness formation and environmental education's influence on a person's behavioral aspects.

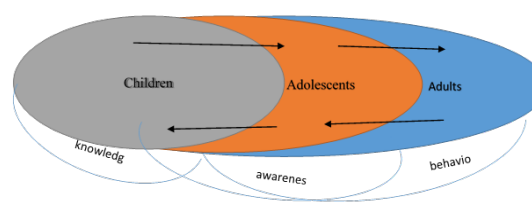


Figure 3. Interaction of different age groups during the formation of ecological consciousness

Thus, the figure shows that ensuring environmental education in preschool age will allow conscious action in adolescence and form the correct environmental behavior in adulthood. At the same time, parents' behavior affects the ecological perception of adolescents and preschool children, as they imitate the actions or

inaction of their elders. Thus, environmental education is vital in every age group. However, the formation and ways, and methods of achieving it differ. Table 1 presents the methods and outcomes of environmental education for each age group.

Table 1. Forms and methods of environmental education for different age groups

Age group	Main goal	Methods	Expected results
Children	Formation of a worldview system that includes a cognitive and effective attitude to nature based on views and beliefs.	The educational content includes introducing children to nature through experiments, observation, educational and environmental games, flower gardens, ecological walks, work parties, and drawings.	The program provides for the achievement of an aesthetic sense and understanding of interrelationships in nature. It creates the foundations of environmental culture and fosters a caring attitude to nature and the basics of ecological culture.
Adolescents	Formation of a positive environmental perception based on an active life position	The educational content is comprehensive. It is based on including an environmental component in academic disciplines (chemistry, biology, etc.) and conducting sightseeing tours, expeditions, training, etc.	The goals and tasks of educational, scientific, and environmental awareness activities are interrelated and contribute to forming a responsible attitude toward nature.
Adults	Eliminating consumerism and conquering attitudes towards the environment.	Informing people about the methods and ways of environmental preservation, reducing the negative impact on nature, and forming positive ecological behavior in the eyes of children.	The goal is achieved through practice-oriented environmental activities and implementing environmentally friendly technologies and measures.

As the table shows, a child's personality learns about the world at preschool age and forms behavior through their impressions. That is why the primary goal of environmental education at this age is to ensure the formation of ecological awareness through educational activities in preschool institutions, extracurricular clubs, and educational events. In this case, the cognitive component of environmental education involves:

- familiarizing children with the environment;
- the mechanisms of life within it;
- emphasizing the close relationship between humans and nature.

This goal is achieved through narratives provided by teachers, educators, and parents at home. The emotional component is formed through children's behavior, their attitudes toward the environment, and various forms of communication with nature. In this context, using games as a component is applied to engage children's interests. The motivational component explains the interdependence between humans and nature and fosters the understanding of the necessity to preserve it. The behavioral part is facilitated through practical interactions with nature, observing and imitating the behavior of adults towards wildlife and environmental conservation. In this component, the close proximity of a child to nature and the opportunity to have direct contact with it at home can play an important role. It is also essential to understand that the formation of environmental education in preschool age serves as the basis for developing ecological behavior in the future.

In adolescence, ecological consciousness is formed through learning, acquiring knowledge about the functioning of the surrounding natural environment, and the practical application of skills for interacting with nature. The emotional component at this age is formed through an interest in gaining knowledge about the mechanisms of the surrounding environment's functioning. This aspect is achieved by appealing to self-assessment, encouraging critical thinking, fostering the person's desire to mature, and developing mechanisms for adapting to a lifestyle in harmony with nature based on these foundations. The motivational component is formed through the awareness of the interdependence between humans and nature and the desire to seek ways to preserve it. The behavioral part at this age is shaped by applying acquired knowledge, engaging in practical role-playing activities, and participating in environmental events and thematic projects.

In adulthood, ecological awareness is also formed through acquiring new knowledge and adapting to changing environmental conditions. Currently, the focus is often on the issues of deteriorating environmental conditions due to hostilities in Ukraine. Prominent issues include energy conservation, protection and restoration of soils, and air pollution. The emotional component will be formed through realizing the necessity of environmental restoration and developing behavior aimed at resource conservation. The motivational part lies in creating correct ecological behavior and conveying the importance of preserving the environment for future generations. The behavioral component entails adopting an environmentally-friendly attitude and educating children and adolescents about protecting the natural environment.

In addition, environmental consciousness includes knowledge of environmental standards, the necessity of implementing measures, citizens' responsibilities towards the natural environment, and environmental protection skills. It is evident that this is possible at different stages of human development. The preschool age is the best period for shaping a person's attitude towards the world, especially nature. Therefore, the role of teachers and educators is to encourage children to acquire knowledge and skills at this stage of development. In the context of environmental culture, modern preschoolers, as future massive consumers of natural resources, should strive to challenge established traditions of relating to nature and fight for alternative algorithms for solving environmental problems.

Environmental education is fundamentally a global problem requiring practical solutions by selecting tasks, principles, means, forms, and methods corresponding to preschool children's work's age-specific characteristics, abilities, and peculiarities. One of the crucial prerequisites for the success of early childhood environmental education is the selection by educators of the most effective natural forms and methods of teaching children.

Extrapolating the characteristics of philosophical consciousness to environmental consciousness enables us to identify the following functions of the latter: worldview and educational, evaluative, and practical. The ideological and educational role of environmental consciousness is to teach children the basic norms of ecological ethics in a more specific and professional form at the initial stage of a child's development and through the process of in-depth and continuous study of environmental problems and disciplines. Forming a new ecological consciousness is the first



step towards an ecology of personal space, which is only possible through environmental education. The evaluative function involves creating a new system of values in which humans and nature form an inseparable whole. It became possible due to the influence of environmental symbolism on the emotional and sensory world of humans through the transmission of information that includes new information technologies and processes of environmental education and upbringing. The most important task of the practical function is the development of environmental responsibility as a universal legal system of interaction between humans and the environment.

The foundation of any civilization's development is education, i.e., a system for transmitting accumulated knowledge, experience, cultural and moral values, and a plan for rational interaction between humans and nature. Humanity's future fate and survival depend on solving the most acute environmental problems. Therefore, one of the essential contemporary tasks is forming a new ecological mindset, i.e., cultivating the corresponding culture. It can only be achieved through the environmental transformation of the entire education and training system. Education can be distinguished as one of the main directions for environmental protection and specialized environmental education in further developing and disseminating ecological consciousness. Ecological education, expressed in theory, ethics, aesthetics, ideology, rights, and personal worldview, should emphasize environmental responsibility, linking the consequences of proposed actions and considering the acceptable ecological impact. Scientific popular literature, articles in specialized periodicals, and materials provided in widely accessible newspapers, radio, and especially television have played an essential role in raising awareness and preparing people to perceive the regularities of real-life circumstances.

Ecological education is part of a three-fold system: "ecological education-ecological upbringing-ecological behavior." All its components form the basis on which people develop an environmental worldview based on realizing the need to preserve an optimal living environment for humans on a global, regional, and local scale.

Thus, an effective ecological education system is based on principles such as continuity, ease of use, modularity, and regional specificity. Within the framework of formal education, the best choice for incorporating ecological aspects into general subjects would be through the study of related disciplines and subjects such as biology, chemistry, physics, and geography. However, humanitarian issues also have ecological potential, and education should also be viewed from the perspective of ecology, human safety, economics, social engineering, and ethics. Social, philosophical, and ideological perspectives are becoming increasingly important in modern ecological education systems. More attention is being given to developing educational programs for intellectual circles with a distinct humanitarian component. These programs serve as the underlying assumptions based on recognizing the indivisible unity of humans and nature and assessing this unity from past, present, and future perspectives.

Therefore, forming adequate ecological consciousness involves taking ecological principles from science, religion, and folk wisdom as normative foundations of one's worldview.

## 5 Discussion

The interaction between humans and nature is a highly relevant contemporary issue. Its significance grows stronger with each passing year because humans' planned production of material resources sometimes becomes unplanned, which has a detrimental impact on the production of living organisms in the biosphere and the entire external ecosystem. Its dimensions are sufficient to threaten the destruction of all life on Earth, including humans. The most important aspect of addressing the problem of conserving the Earth's natural resources is the ecological education of persons and the entire population, including the younger generation. This thesis is supported by

authors Bergmann & Ossewaarde (2020) and Chen (2019). The formation of ecological awareness and ecological culture is a long-term process that occurs under the influence of ideology, politics, art, scientific knowledge, production practices, education, and other aspects of human life. Molina-Motos (2019) has shown that ecological education was prompted to define its specific nature, distinct from supposedly more integrative educational movements. The preschool age can be considered the beginning of an environmental orientation of the person since it is during this period that the foundation for conscious attitudes toward the surrounding reality is created, and vivid emotional impressions accumulate, which remain in a person's memory for a long time (Demidov et al., 2019). Therefore, the importance of addressing ecological issues, ecological awareness, and culture are directly related to the practice of early childhood education. It has led to an era of increasingly focused environmental education. Everyone who harms nature was once a child. Therefore, preschool educational institutions play a significant role in the upbringing of children from an early age.

A distinctive feature of ecological education is the importance of positive examples of adult behavior. Reid (2019) has demonstrated that problems and dangers of science and research in this field are highlighted by comparing them with various possibilities and potential within a wide range of studies published in this and related areas, such as understanding who teaches and learns about climate change in education, as well as in identifying the conceptual, political, and economic factors and barriers associated with its implementation. Chawla (2020) has determined that direct experiences interacting with nature during childhood contribute to caring for nature throughout life. In response to this, many conservation organizations advocate for establishing a connection between children and nature, and there is an increasing interest in measuring the relationship of young people with nature, understanding how it relates to their well-being and environmental behaviors, and creating programs to enhance this connection. Martin et al. (2020) found that specific types of nature contact and individual differences in nature connection are differently associated with aspects of health, well-being, and pro-environmental behavior. Therefore, educators not only take this into account but also consider collaboration with parents to be very important. Clarity is key here. Parents need to know that they cannot demand that a child follow behavioral rules if adults themselves do not always adhere to them; it is impossible to achieve this. Instilling a positive attitude towards nature in children can only be accomplished when parents possess an ecological culture. The influence of parenthood stems from the conviction of adults in the necessity of environmental values. The family's structure, hierarchy, quality, and lifestyle significantly impact a child's upbringing.

## 6 Conclusion

Environmental consciousness reaches all spheres of society's consciousness. As a multidimensional form of self-improvement, ecological consciousness is reflected in nature and society, serving as a universal spiritual organism. The formation of ecological consciousness and culture among the citizens of Russia and Kazakhstan is an essential condition for the development of modern society, enabling people to engage in practical activities, align them with natural laws, and change their habits. By embracing utilitarian consumption, recognizing the intrinsic value of nature, and adopting an interactive approach to science, we can avoid global ecological crises, climate catastrophes, and environmental problems. Ecological education receives increased attention at all levels of education. It is known that people with ecological culture can live in harmony with their internal and external worlds. In childhood, this ability is formed through specialized knowledge, the development of an emotional environment, practical skills in ecological activities, and the formation of moral values. These values include a sense of responsibility for nature and life in all its manifestations and a deep belief in the necessity of nature conservation. In this regard, the role of schools in shaping ecological culture within the population has grown, making it an essential part of social life. This opinion is supported by the Law

of the Russian Federation "On Education," the Law "On Environmental Protection," the "National Strategy for Environmental Education in the Russian Federation," the "Concept of Education Development of the Republic of Kazakhstan by 2015," the "Strategic Plan for the Development of Kazakhstan by 2030," and others. At the same time, the level of ecological literacy among students is characterized by significant educational deficiencies that are often underestimated. A review of the national and foreign scientific literature reveals that researchers conduct comprehensive and multifactorial studies on ecological education. Through a scientific-theoretical analysis of philosophical, psycho-pedagogical, and sociological literature, the problems of environmental and cultural development of young children in the context of additional education have been analyzed. This issue is likely related to the theory and practice of teaching and requires further theoretical discussion. Through theoretical analysis, the structure of ecological culture in primary school children has been determined, comprising the interconnected components of values, knowledge, and motivation. Each component represents a relatively independent substructure and is subject to the general law of personality development, which reflects the unity of consciousness, actions, and social relations. Based on the requirements of systematic activity, research methods, and literature analysis, we define the concept of "ecological and cultural development of high school students" as acquiring knowledge and forming value orientations regarding the environment. It is crucial to guide the necessary research and practical measures concerning nature and environmental conservation and develop diverse programs for educational activities to foster an ecological culture among young people, transform the sociocultural environment of other educational institutions, and optimize ecological education in schools. The conducted research only considers one aspect of the complex and multifaceted problem of fostering an ecological culture in primary school children within the framework of further education. The most important aspect is to develop various educational activities and programs to develop an environmental culture in youth, change the sociocultural environment of other educational institutions, and optimize ecological education in schools.

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#### Primary Paper Section: A

#### Secondary Paper Section: AM

## POST-TRAUMATIC STRESS DISORDER IN MILITARY PERSONNEL: TIMELY DIAGNOSIS AND OVERCOMING METHODS

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**Abstract:** The article determines that post-traumatic stress disorder (PTSD) occurs among people who have experienced traumatic events. Extreme situations leave a significant mark on the psyche of a serviceman, as they are exposed to decisive psycho-traumatic factors that lead to a shortened life perspective and constant stress. In the hostilities zone, they go through various dangerous situations: shelling, injuries, threats to life, anxiety, and the deaths of their fellows. Accordingly, being in constant tension, they expect new threats and bombings and are ready for any danger if necessary. The other side is emotional numbness, detachment from reality and daily events, and a detached view of oneself and one's life. This paper also considers the specifics of post-traumatic stress disorder symptoms. The authors analyze the data of the Public Health Center of the Ministry of Health of Ukraine, the state guarantee of free psychological assistance to the military, the National Program of Mental Health and Psychosocial Support, as well as the Unified Clinical Protocol for Primary, Secondary (Specialized) and Tertiary (Highly Specialized) Medical Care "Response to Severe Stress and Adaptation Disorders. Post-traumatic stress disorder". The book describes the features of diagnostics and treatment of PTSD patients.

The authors also provide an overview of mandatory and preferred methods of psychodiagnostics assessment, its purpose, and its features. Moreover, they highlight the need for laboratory tests.

**Keywords:** post-traumatic stress disorder (PTSD), trauma, stress, disorders, anxiety, psychological adjustment, serviceman.

### 1 Introduction

Today, the reality of Ukrainian life is the full-scale armed aggression of the Russian Federation against Ukraine. This aggression has changed the lives of millions of Ukrainians. In the face of the ongoing military threat, Ukrainian servicemen and servicewomen are experiencing intense emotions. For most people, feelings of anxiety, anger, and sadness are normal reactions to such events. However, more profound reactions to hostilities for some servicemen and servicewomen can harm their psychological health.

A prolonged stay in a battle zone increases the risk of developing post-traumatic stress disorder. The following situations influence its development:

- using weapons with lethal consequences, even for the enemy;
- witnessing the deaths of fellow soldiers and civilians.

The global statistics show that one in five soldiers participating in military operations suffers from a neuropsychiatric illness, and one in three is among the wounded. The most severe consequences of extreme exposure begin to manifest themselves a few months after returning to normal living conditions. These include a variety of psychosomatic disorders: general health conditions characterized by weakness, dizziness, decreased performance, headaches, heart pain, sexual disorders, sleep disorders, etc. For service members with disabilities, injuries and wounds make the situation even more complicated. Therefore, it is necessary to assess modern methods of researching post-traumatic stress disorder, as well as to review the areas of psychological assistance to soldiers in order to fully restore their military and professional status and adapt to civilian life after being demobilized.

This study aims to analyze the existing theoretical and practical framework for identifying and providing appropriate assistance

to service members with post-traumatic stress disorder. Based on this aim, the following tasks have been set:

- to define the essence of the concept of "post-traumatic stress disorder;"
- to review the system for identifying psychological problems;
- to find out the types and specifics of psychological assistance to service members.

Research goals:

- To examine the features and symptoms of the negative impact of war-related events on the psychological state of military personnel.
- To analyze the state support (laws and programs) for providing free psychological services to rehabilitate affected servicemen and women and the role of public and volunteer centers.
- To specify the specifics of psychological assistance: diagnosis and methods of coping.

### 2 Literature Review

The legislative framework in Ukraine includes the following main documents:

- The Law of Ukraine "On Social and Legal Protection of Servicemen and Members of Their Families."
- The Law of Ukraine, "On Psychiatric Care," based on the Constitution of Ukraine.
- The Law of Ukraine, "On Healthcare," and other regulatory acts.

The article employs statistical data from the Public Life Center of the Ministry of Health of Ukraine. An essential document for analysis is the Unified Clinical Protocol of Primary, Secondary (Specialized), and Tertiary (Highly Specialized) Medical Care (UCPP) "Reaction to Severe Stress and Adaptation Disorders. Post-Traumatic Stress Disorder." It was developed following modern requirements of evidence-based medicine, which considers the peculiarities of diagnosing and treating patients with post-traumatic stress disorder in Ukraine to ensure continuity of medical care stages.

The development and symptomatology of post-traumatic stress disorder have been the subject of numerous studies by specialists in medical and psychological sciences, including Vasiliev, Lytvyn, Halych, Cinderella, Orlovskaya, Sochenko, Monachyn, Bohomolets, and Chervonna.

Candidate of Medical Sciences Danilevska researched and identified amplification, worsening, and structural-dynamic features and factors of post-traumatic stress disorder in service members of the Armed Forces of Ukraine who participated in the anti-terrorist operation.

Omelyanovich performed a bibliographic-analytical analysis of modern American and Polish publications devoted to the study of various factors contributing to the development of post-traumatic stress disorder, as well as the specifics of using methods and assessments for establishing this diagnosis. Zabolotna, Gushcha, Babova, Dmitrieva, and Polskakova also analyzed the experience of organizing rehabilitation systems for service members of the Armed Forces of the United States, France, Germany, the United Kingdom, China, Israel, and some CIS countries.

Kokun, Agaev, Pishko, and Lozinska presented the main concepts and general mechanisms of stress development and revealed traumatic and combat stress concepts. The authors also proposed preventive measures for negative mental states and

post-traumatic stress disorders in servicemen and servicewomen, including hostilities.

Doctor Muzychko developed the "Program for Overcoming Post-Traumatic Disorder in the Intellectual and Volitional Sphere among Servicemen," aimed at targeted overcoming post-traumatic problems, with the main form of impact by program specialists being social-psychological training.

Matviets pointed out the peculiarities of providing psychological assistance, considering the expert's analysis of the dynamics of a serviceman's experience of a traumatic situation and its stages.

Cushing R. E. and Braun K. L. studied the role of psychophysical therapy in overcoming post-traumatic disorder based on the research of service members returning from combat operations in Afghanistan and Iraq after September 11.

Ian C. Fischer, Mackenzie L. Shanahan, Adam T. Hirsh, Jesse C. Stewart, and Kevin L. Rand experimentally analyzed how a sense of life helps adapt to traumatic events. Moore B. A., Pujol L., Waltman S., and Shearer D. S. stated that trauma-focused psychological therapy (TFT) is the first-line treatment for post-traumatic stress disorder. At the same time, pharmacological options are often considered second-line or adjunctive.

Porter B, Bonanno G. A., Frasco M. A., Dursa E. K., and Boyko E. J. identified demographic characteristics, social support, and military characteristics that can mitigate the relationship between the severity of post-traumatic stress disorder and social support among American service members.

As we can see, many researchers have addressed the formation and course of post-traumatic stress disorder, and the diagnosis and prevention of this disorder in war conditions require further study.

### 3 Methodology

A systematic method was used to consider the features of the "post-traumatic stress disorder" concept and the correlation between its symptoms and stages of development. The study employs the method of studying normative, instructional, and methodological documents on the problem under study: laws, programs, strategies, and data from the official websites of relevant ministries and institutions. Also, the authors used the method of systematizing and summarizing the processed materials of the theoretical and practical framework.

### 4 Results

Post-traumatic stress disorder (PTSD) is a prolonged reaction to a stressful situation characterized by a complex of psychological disorders. The cluster of symptoms observed in people who have experienced traumatic stress was labeled "post-traumatic stress disorder" in the 1980s. The diagnostic criteria for this disorder were included in the American National Diagnostic Psychiatric Standard (Diagnostic and Statistical Manual of Mental Disorders). Since 1994, they have been included in the European diagnostic standard ICD-10 (International Statistical Classification of Diseases, Injuries, and Causes of Death).

Post-traumatic stress disorder is a specific mental disorder that develops after direct or indirect exposure to a highly stressful (traumatic) event or series of events. The symptoms of post-traumatic stress disorder include intrusive memories related to the traumatic event, reactions to trauma-related cues, and avoidance of these cues, leading to distress and negative changes in cognition and emotions. These symptoms can be categorized accordingly (Figure 1).

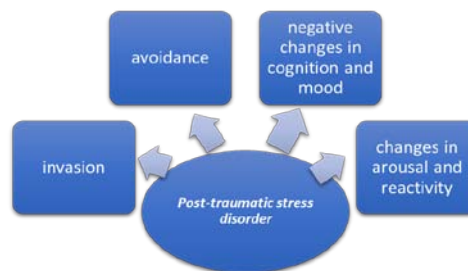


Figure 1. Sectors of post-traumatic stress disorder symptoms

The National Alliance on Mental Illness (NAMI) defines the symptoms of post-traumatic stress disorder (PTSD) and categorizes them into the following broad categories:

- Re-experiencing typical symptoms. This includes repetitive, involuntary, and intrusive distressing memories of the trauma, nightmares, and intrusive thoughts.
- Avoidance. A person actively avoids places or people that might trigger the aforementioned symptoms.
- Cognitive and mood symptoms. These include problems with memory and negative thoughts about oneself. The person may also experience detachment, guilt, anxiety, depression, and difficulties in recalling the traumatic event.
- Arousal and reactivity symptoms. These symptoms include heightened alertness and hypervigilance, being easily startled by stimuli reminiscent of the trauma, sleep problems, or outbursts of anger.

The symptoms are believed to appear at least four weeks after the traumatic event. They can occur mainly within the first three months.

As combatants, military personnel experience physical, moral, and psychological stresses that destroy typical perceptions and change behavior. The prolonged impact of stressors is crucial, which is why post-traumatic stress disorder is also referred to as "chronic military neurosis." The combination of psychological trauma due to an extreme situation, individual psychological characteristics, and the influence of the social environment can trigger the following physical and emotional reactions:

- Physical reactions manifest as insomnia, constant fatigue, eating, and gastrointestinal problems. Thinking about the war can cause headaches, sweating, rapid heartbeat, and breathing, as well as exacerbate existing conditions.
- Emotional reactions include nightmares, frequent negative memories of the war, feelings of anger and hatred, helplessness, fear, tension, feelings of sadness, loneliness, and worthlessness. There may also be feelings of anxiety, excitement, shock, numbness, inability to experience positive emotions, feelings of guilt, shame, high self-criticism, and hopelessness about the future.

The Public Health Center of the Ministry of Health of Ukraine has determined that 20% to 40% of service members require psychological assistance. The symptoms of acute trauma are observed in 60-80% of service members who have witnessed the death of comrades or civilians or have seen dead bodies. The risk of developing mental health disorders is associated with young service members aged 18-24 who exhibit symptoms of depression or have alcohol-related problems. Approximately 12-20% of service members who have experienced combat trauma but have not sought psychological help due to fear of stigma related to weakness, cowardice, or threats to their military career may develop symptoms of post-traumatic stress disorder. The intensity of stress is influenced by the characteristics of combat activities, including:

- The level of military activity (number of military operations, level of actual life-threatening situations).
- The significance of combat actions.
- The level of tension and nature of military actions experienced by the service members.

- The number of losses within the unit or division where the serviceman served.

American researchers point out that post-traumatic stress disorder is a severe mental illness that affects current and former service members disproportionately more often than the civilian population. The studies have also shown that the trajectories of post-traumatic stress disorder symptoms differ between civilians and service members. The significant factors that influence the manifestation and development of stress in a person include the number of past injuries and traumas, concussions, and, if applicable, the circumstances of being taken as a prisoner of war, its duration, and the conditions of captivity. In addition to these factors, particular social, ethnic, religious, family, and other circumstances are also identified as additional contributors to the intensification of disorder symptoms in military personnel. According to the Law of Ukraine, "On Social and Legal Protection of Servicemen and Members of Their Families," the state guarantees the provision of free psychological assistance to servicemen serving on the territory of Ukraine and performing military duties outside its borders. Also, it is guaranteed to military personnel who have become disabled due to service-related illnesses and to members of volunteer associations of territorial communities. Furthermore, psychological assistance for military personnel is provided free of charge during military service. The funds for medical and psychological rehabilitation are allocated from the state budget, with the responsibility lying on the psychological and medical services of the security and defense sector for providing appropriate services. A patient must receive a referral from a family doctor or contact a psychological health specialist for assistance.

The state budget for 2023 allocated UAH 540 million for the implementation of programs by the Ministry for Veterans Affairs in the field of psychological rehabilitation, professional adaptation, and sanatorium-resort treatment for military personnel. This amount is twice as much as the previous year.

Additionally, in August 2022, the "Registry of Providers of Psychological Rehabilitation Services for Veterans and Their Families" began operating. The experts in the field of mental health who wish to engage in the rehabilitation of military personnel submit applications electronically to the Registry. As of December 15, 2022 (the latest available information at the time of publication), 45 healthcare facilities are included in the registry. The establishment of the National Mental Health and Psychosocial Support Program in Ukraine is significant. It involves training psychologists, social workers, and educators in quick techniques of psychological support and assistance. The Ministry of Health of Ukraine pays special attention to the training of family doctors so that they can timely diagnose and provide necessary assistance. The main target groups include people with post-traumatic stress disorder, families of military personnel, and affected civilians.

The Ministry of Health of Ukraine has initiated the establishment of the National Lifeline, where anyone can turn to in moments of despair or hopelessness to receive quality support or specialized assistance. The "Helpline" is a 24-hour assistance line staffed by psychiatrists and psychotherapists. The "Lisova Poliana" Mental Health and Rehabilitation Center, under the Ministry of Health of Ukraine, deals with disorders related to combat stress and the consequences of traumatic brain injuries (post-concussion syndrome). The "Lifeline Ukraine" is a nationwide hotline primarily created to provide crisis psychological assistance to veterans and their family members and later extended to all residents of Ukraine. The "Dim Veterana" is a center for social adaptation and psychological rehabilitation of veterans, their family members, and the families of the deceased. Additionally, the "Pobratymy" is a team specializing in the psychosocial adaptation of veterans. One of their projects is the "Veteran Hub," a space for veterans and non-governmental organizations working in veteran affairs.

The "Open Doors" Center for Psychological Counseling and Trauma Therapy organizes online sessions for initial psychological assistance. The center's experts have experience

working with combatants and provide trauma-focused assistance following the American military standard to service members, their families, and other individuals whose lives have been impacted by war or other traumatic events. The Crisis Center for Medical and Psychological Assistance provides psychological support to internally displaced persons and members of the Armed Forces of Ukraine who have been injured or experienced psychological trauma. The Telegram channel "Office of Support for the Families of Military Personnel" assists in processing social and pension payments, provides consultations regarding the search for missing and captured individuals, and offers legal and psychological advice. The National Program for Mental Health and Psychosocial Support and the Unified Clinical Protocol for Primary, Secondary (specialized), and Tertiary (highly specialized) Medical Care for "Reaction to Severe Stress and Adaptation Disorders. Post-traumatic Stress Disorder," approved by the Ministry of Health's order on February 23, 2016, No. 121, describes the peculiarities of diagnosis and treatment of patients with post-traumatic stress disorder. The scope of psychodiagnostics examination is determined by its purposes, such as diagnosis formulation (assessment of symptoms and syndromes), identification of targets for psychocorrection/ psychotherapy, and individual resources. The diagnosis and treatment should be considered within the context of the time that has passed since the traumatic event.

While providing psychological assistance, the specialists should analyze the dynamics and stages of the military personnel's experience of psychotraumatic situations. In particular, the following stages are highlighted:

- The stage of denial or shock occurs immediately after the traumatic event and is characterized by the person's emotional inability to accept what has happened (psychological defense mechanisms triggered by denial or rejection of the harmful consequences of the traumatic situation).
- The stage of aggression and guilt. The people begin to understand the traumatic event that occurred, may try to understand its causes, seek blame, feel guilt, and direct aggression toward themselves.
- The stage of depression is marked by the realization of the worsening situation, accompanied by feelings of helplessness, self-devaluation, a sense of aimlessness in future life, and loss of interest in communication.
- The stage of healing is characterized by the acceptance and acknowledgment of the experienced traumatic situations, gaining new meanings in life.

The program states that diagnosis begins with a comprehensive assessment of the person's condition, which includes a detailed analysis of the military personnel's life history, taking into account the history of psychotrauma, family status, work capacity, and role in the social environment. It is also essential to analyze the mental state along with the main dimensions of disorders, mental pathologies, suicidal risk, and quality of life. This includes the usage of "high-tech methods of clinical-psychopathological and clinical-anamnestic research (clinical consultations, reviews, telemedicine technologies), neuroimaging (MRI, CT), neurophysiological (somnography), psychodiagnostics, psychometric and psychophysiological research."

At the patient's request, laboratory tests are also undertaken (immunological studies, cortisol levels, and neurotransmitters). Currently, research on post-traumatic stress disorder is conducted in the following main forms: clinical interviews, training, self-report questionnaires, and psychometric and psychophysiological measurements. Overcoming post-traumatic stress disorder in military personnel can be done through individual or group therapy. The specialists have a range of techniques to choose from, including mini-lectures, discussions, psycho-gymnastic exercises, modeling, and therapeutic approaches such as art therapy and psycho-drawing.

Table 1. Main psychodiagnostics methods

	Mandatory	Preferred
Psychodiagnostics methods	<ol style="list-style-type: none"> <li>1. Mississippi Scale for PTSD (Civilian or Military Version)</li> <li>2. Impact of Event Scale-Revised (IES-R)</li> <li>3. Symptom Checklist-90-Revised (SCL-90-R)</li> <li>4. Hamilton Depression Rating Scale (HAM-D)</li> <li>5. Hamilton Anxiety Rating Scale (HAM-A)</li> <li>6. Coping Behavior Inventory for Stressful Situations (Norman S., Endler D.F., James D.A., Parker M.I.) adapted by T.A. Kryukova</li> </ol>	<ol style="list-style-type: none"> <li>1. Trauma Symptom Inventory-TSI</li> <li>2. S. Maddi's Hardiness Test in the adaptation of D. A. Leontiev and Ye. I. Rasskazova</li> <li>3. E. Heim's coping mechanisms psychological diagnostic technique in the adaptation of L.I. Vaserman</li> <li>4. Hospital Anxiety and Depression Scale</li> <li>5. Lüscher's Color Test</li> <li>6. Alcohol Use Disorders Identification Test (AuDIT)</li> <li>7. Spielberg-Hanin's State-Trait Anxiety Inventory</li> <li>8. Minnesota Multiphasic Personality Inventory-2 (MMPI-2) (J. Boucher, W. Dahlstrom, J. Graham, A. Telligen, and B. Kemmer)</li> <li>9. Five-Factor Personality Inventory by J. Howard, P. Medin, and J. Howard, in the adaptation of L.F. Burlachuk and D.K. Koroliiv</li> <li>10. Battery of Neuropsychological Tests by A.R. Luria</li> <li>11. Montreal Cognitive Assessment (MoCA)</li> <li>12. Pittsburgh Sleep Quality Index</li> <li>13. SF-36 Quality of Life Questionnaire</li> </ol>

The National Institute of Mental Health (NIMH) highlights cognitive-behavioral therapy as a widely used type of psychotherapy. It may involve exposure therapy and cognitive restructuring. Exposure therapy helps individuals learn to manage their fears by gradually exposing them to the trauma they experienced in a safe manner. In exposure therapy, people may think or write about the trauma or visit where it occurred. This therapy can help individuals reduce stress-related symptoms. Cognitive restructuring helps individuals understand the traumatic event. Sometimes people remember the event differently from how it actually happened. They may feel guilt or shame for something that wasn't their fault. Cognitive restructuring can help people with post-traumatic stress disorder think realistically about what happened.

The treatment of post-traumatic stress disorder in military personnel is recommended to be combined with physical exercise. Running, swimming, soccer or basketball, and gymnastics can help burn adrenaline, improve mood and overall well-being.

In addition, the support of loved ones is crucial. The results of American studies indicate that social support from civilians and the family environment has a more significant protective effect than social support from military sources regarding the severity of long-term post-traumatic stress disorder symptoms.

## 5 Discussion

There is a problem of defaulting on the part of military personnel with their own psychological disorders, hiding their suffering to continue their military career. There is a lack of trust in psychologists and psychiatrists. Often, service members are unwilling to acknowledge that they cannot deal with their problems independently, and some do not even consider seeking help from a psychologist. Additionally, the assistance offered (or imposed) often annoys rather than helps. The rhetoric used when talking about them as "socially dangerous" or "sick" people in need of treatment creates tension.

The issue of professional psychological training and psycho-educational work with military personnel regarding the impact of complex emergencies on mental health is essential. Factors that contribute to the prevention of post-traumatic stress disorder include the emotional self-control of combatants, a positive self-image, the ability to integrate the traumatic experiences of others into their own, and the presence of social support. The presence of these qualities and the training of military personnel will contribute to protecting them from deep psychological trauma.

The family plays a crucial role as a resource in successfully overcoming post-traumatic stress disorder. Psychological work with the families of military personnel involves two aspects: considering them as one of the most critical factors in the psychological rehabilitation of returning personnel from war and

providing direct psychological assistance to the families of military personnel.

In addition, further areas of research may include psychodiagnostics based on age, sex, and gender characteristics of post-traumatic stress disorder.

## 6 Conclusion

A full-scale invasion of the Russian Federation into Ukrainian territory has contributed to establishing a diagnostic and preventive system for post-traumatic stress disorder in modern wartime conditions. Being at war is an extreme situation when a person is constantly under severe psycho-emotional stress, overcoming it with willpower. Almost all war-zone deployed inevitably experience changes in their physical and mental condition in one way or another.

Many service members may exhibit symptoms of depression, anxiety, acute stress reactions, or depressive reactions in response to combat stress or traumatic experiences. Disorders primarily occur in those servicemen who have been in direct combat, lived in trenches, suffered injuries and disabilities, witnessed the death of fellow combatants, or were taken as prisoners of war. Many of them require assistance from psychologists, psychiatrists, and psychotherapists, as they have a higher risk of developing post-traumatic stress disorder. Accordingly, support for military personnel is provided by a multidisciplinary team comprising relevant specialists who employ various methods and approaches. In addition, volunteers, veterans, social workers, family members of patients, and representatives of regional and international organizations are involved in providing assistance.

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**Primary Paper Section: A**

**Secondary Paper Section: AN**



## UKRAINIAN STATE POLICY UNDER THE MARTIAL LAW

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**Abstract:** The state, as the primary institution of public authority in society, implements its functions through purposeful regulation of social relations in various spheres of activity, ensuring and protecting national interests, as well as implementing socially significant development programs (socio-economic, scientific-technical, spiritual-cultural, etc.) through allocated budget funds and national, regional, and local resources. State policy serves as the necessary instrument of such regulation (governance) and as a strategy that expresses national or regional goals and a program of measures to achieve them. The main goal is transforming state policy in the country under martial law conditions. The article is dedicated to analyzing the external and internal policies of the state during the war. Special attention is given to the possibility of using the method of legal modeling and implementing the special martial law regime. It is emphasized that Ukraine should prepare for a war economy. When analyzing the peculiarities of state policy under conditions of war, it is considered that, depending on the spheres of its implementation, it is formed by state policy in the economic system, social policy, policy in the area of scientific-technical activities, and so on. It is determined that a reactive (situation-based) state policy model is applied under war conditions. Meanwhile, a project-based approach based on budget program development is used in peacetime. One of the key problems is a clear understanding of the national idea in modern Ukraine. This idea should become the basis for building a positive country brand image. The critical problem of modern states lies in the efficiency of national economies and social systems and state institutions' effectiveness. Under any economic, social, or public conditions, the state will be incapable of its institutions cannot ensure its effective functioning. The formation and implementation of state policy in Ukraine during the war are examined using PEST analysis. Factors are identified whose influence resolution will determine the effectiveness of Ukraine's state policy. During martial law in Ukraine, the state rapidly responds to new challenges and problems citizens and businesses face. Legal solutions are developed that significantly improve the country's defense capability, its macroeconomic stability and ensure social security for the population. The conducted research allows identifying the main directions for modernizing state policy in the post-war period. The prospects for further research include determining the peculiarities of the functioning of the military economy in Ukraine and developing a strategy for post-war reconstruction.

**Keywords:** government, state policy, martial law, war, support, foreign policy, internal policy.

### 1 Introduction

When the world was slowly recovering from the pandemic from 2020 to 2023, Europe was hit by a war with Russia's invasion of Ukraine. The ongoing war in Ukraine has profound consequences on the human, social, economic, and environmental levels, not only for the countries involved but also for the entire Europe and the world. Damaged infrastructure, severe disruptions in economic activities, and forced migration have negatively impacted the effectiveness of state policy. The COVID-19 pandemic added another layer of complexity to this already challenging situation, as the virus further disrupted economic activities and burdened healthcare systems.

In response to the attack in Ukraine, martial law was declared as a special legal regime introduced in case of a threat to the national security of Ukraine. For the first time in the history of independent Ukraine, on February 24, 2022, due to the military aggression of the Russian Federation against Ukraine, Decree No. 64/2022 was issued by the President of Ukraine. It introduced martial law on the entire territory, starting from 5:30 a.m. on February 24, 2022. Previously, in 2018, it was only introduced for 10 regions of Ukraine from 2:00 p.m. on November 26, 2018, until 2:00 p.m. on December 26, 2018, without extension.

Martial law is justified when civilian authorities cease to function, are entirely absent, or become ineffective. Furthermore, martial law suspends the operation of all existing laws, civilian authorities, and the regular functioning of the judiciary. Once considered almost absolute, the power of martial law has limitations. For example, military tribunals cannot try civilians while civilian courts are operational. However, within the scope of court decisions, the powers of military administration in martial law conditions are practically unlimited. Martial law significantly affects the formation and implementation of state policy in various spheres, as the country requires prompt and adequate responses to the challenges of extraordinary conditions. Despite numerous studies describing the link between the war in

Ukraine and the state of countries, researching Ukraine's state policy under martial law conditions requires examination and analysis. Such scientific studies are almost nonexistent, as the majority only focus on migration, defense, and food.

Given the above, this study aims to explore the transformation of the country's state policy under martial law conditions.

Achieving this goal is possible by addressing the following objectives:

1. To study the concept of state policy.
2. To identify factors that can strengthen or weaken the influence on state policy, particularly in times of war.
3. To characterize the direction change of Ukraine's state policy during peacetime and wartime.

### 2 Literature review

The current conflict between Russia and Ukraine escalated when on February 21, 2022, Russia recognized the Ukrainian territories of Donetsk and Luhansk as sovereign states and deployed Russian forces in these territories (Allam et al., 2022). The world leaders described this event as the beginning of the war (Pereira et al., 2022). Due to solidarity with Ukraine, the United States, the EU, and the United Kingdom implemented various sanctions against Russia at different times (Liadze et al., 2022).

The majority of scholarly investigations have focused on the impact of the war in Ukraine on various aspects of global life, including food, energy, finance, military, and social security, among others. According to Allam et al. (2022), the COVID-19 pandemic and the Russian-Ukrainian war disrupt the global landscape, affecting supply chains for many industries. The ongoing crisis between Russia and Ukraine, which has escalated into a full-scale war, profoundly impacts the international community in social and environmental spheres and creates adverse economic problems (Allam et al., 2022). Specifically, the war has resulted in a surge in global food shortages, fuel prices, and instability along the entire supply chain between the two countries and their neighbors (Rawtani et al., 2022).

Although conflicts between Russia and Ukraine intensified as early as 2014, the international community inadequately responded to the aggression and only decided to impose severe and unprecedented sanctions against Russia after a full-scale invasion. The sanctions imposed by the United States, the EU, the United Kingdom, Australia, and other countries are aimed at deteriorating the state of the Russian financial sector (mainly banks and capital markets), investments in real estate, import, and export of various goods and services, technologies, among other areas (Mardones, 2022).

According to Mbah and Wasum (2022), the Russian-Ukrainian war differs from other political upheavals and wars, such as the Gulf War, the Russian annexation of Crimea in 2014, and the Iraq War.

Firstly, despite being concentrated in Europe, the Russian invasion of Ukraine has created geopolitical threats and negatively impacted the global economy, necessitating a reevaluation of national policies. Moreover, the attack has disrupted trade and financial intermediation, raising concerns about global economic slowdowns and high inflation rates (Liadze et al., 2022). For these reasons, the impact of the war is much more extensive and profound than previous political catastrophes.

The second aspect worth noting is that several countries have imposed numerous sanctions on Russia due to this war (Qureshi et al., 2022). Finally, unlike previous conflicts, the Russian-Ukrainian war has also affected international supply chains.

Considering that Russia is a significant supplier of energy resources (such as oil and gas), metals, fertilizers (wheat, oil, corn, and sunflower), and other essential commodities, the availability of such goods has diminished due to these invasions (Tank and Ospanova, 2022). Moreover, the global supply chain has also been disrupted by Russia's export bans and its reluctance to transport foreign cargo by air and sea, leading to a significant increase in the prices of goods (Mbah and Wasum, 2022).

Given the prolonged duration of Russian aggression against Ukraine and the transformation of national security into a critical factor for the country's survival, there is a need for further research, discussions within the expert community, and the formulation of precise positions regarding Ukraine's state policy concept, particularly concerning national security. As of now, the position of further priorities and directions of state policy is not clearly defined and justified. It exists only at the discussion level of experts, political scientists, and lawyers related to legislative changes.

### 3 Method

The methodological background is based on an interdisciplinary approach, where the theoretical and methodological component is grounded in the fundamental principles of state governance theory. An unbiased subject analysis became possible by combining general and special scientific knowledge methods. The dialectical method of cognition helped clarify the theoretical peculiarities of state governance in national security and substantiate the key concepts used in studying state policy. Analytical abstraction was employed to understand the essence of state policy under martial law conditions. In turn, the methods of analogy and modeling were utilized to determine the factors of threats of internal and external origin. The comparative method facilitated the examination of shifts in priorities within state policy. By implementing a systematic structural research method, we identified the areas of state policy that underwent the most significant transformations due to the war.

PEST analysis was applied to identify the factors influencing the state policy in Ukraine during the war to identify the political, economic, social, and technological aspects of the external environment as a marketing tool actively used in managing organizations and corporations. PEST analysis is a marketing tool widely used in organizational and corporate management. The authors believe its application is also relevant in studying the environment for forming and implementing state policy.

Furthermore, the normative framework regulating state policy relations, scientific achievements, and practical developments by scholars and experts in Ukraine and abroad served as the informational and analytical basis for the research.

### 4 Result

State policy is an activity characterized by the systematic interaction of the state, private sector, civil society institutions, various social and professional groups, and civic associations in the implementation of personal and public interests, production, distribution, and utilization of social resources and benefits, considering the expression of will by the people or population of certain territories. In the world, there are several models of state policy:

1. The "top-down" model (decisions are made at higher levels of governance and disseminated to lower levels).
2. The "bottom-up" model (policy is formed from lower government structures and then involves public groups and organizations).
3. The "mixed" model combines both approaches and the "democratic" model (which employs mechanisms for involving citizens and civil organizations in policy development while maintaining centralized governance).

In peacetime, the democratic model is typically utilized with its diverse engagement of citizens and local governance bodies. However, urgent decisions are necessary during the war; thus, the first model is applied.

- The content of state policy allows for the disclosure of the following elements:
- Actors and objects;
- The state;
- Goals and priorities;
- Mechanisms and parameters of implementation.

The actors of state policy are authorities, organizations, and institutes. While influencing society, each policy actor can also be a target of influence from other actors. Ukraine operates under a unified mobilized vertical of executive power: President-Cabinet of Ministers-Verkhovna Rada, with information about their activities classified or restricted. President Volodymyr Zelensky, remaining in his country and consolidating power in his hands, has become a national leader with international recognition, fulfilling foreign policy, economic, and military functions.

The military administrations in Ukraine's regions and certain territories have been established to facilitate community decision-making during the war. Instead of local self-government bodies, they are authorized to make decisions regarding the budget, population evacuation, payment of wages, property matters, termination of employment relations, and the provision of communal services to residents, including those in occupied territories during hostilities. These administrations carry out the powers of state administrations but additionally implement certain military functions, such as supporting the Ukrainian Armed Forces and others in organizing population mobilization, resources, implementing a specific economic regime, curfew, and other measures envisaged during martial law.

However, military administrations face various problems, including lacking understanding community needs, personnel shortages, and other resources. Thus, the transition to a wartime economy is being discussed.

In 2021, the Strategy for the Development of the Defense Industry Complex of Ukraine was adopted in Ukraine, and 2020, the National Security Strategy of Ukraine was implemented. However, these documents do not contribute to developing the defense industry sector, even during the war, as the state orders are primarily oriented towards Western partners. There is no responsible agency for defense procurement, and the dissolution of the State Concern "Ukroboronprom" is necessary since its reform, adopted in 2021, is clearly ineffective, especially in the military economy. It is essential to centralize the management of the defense industry complex, entrusting the corresponding powers to the Ministry of Strategic Industries, considering the involvement of all parties in the process of forming defense orders. Additionally, military science should focus on rapidly developing innovative high-tech equipment and armaments that meet NATO standards, while tactical medicine should be significantly improved.

During martial law, ensuring the maximum provision of defense needs in military equipment and other machinery and equipment is crucial. Ukraine has several enterprises that produce the necessary range of products but face bankruptcy or other operational difficulties. Their revitalization and orientation towards military provisioning can be achieved through nationalization. Even if these enterprises are owned by Russians, the Law of Ukraine "On the Fundamental Principles of Compulsory Acquisition of Property Rights Objects of the Russian Federation and Its Residents" has been adopted, allowing for temporary alienation of assets necessary for defense purposes following the Law of Ukraine "On Transfer, Compulsory Alienation, or Seizure of Property in the Conditions of the Legal Regime of War or State of Emergency."

The objects of state policy during martial law include the spheres of social life (economy, budget, natural resource management, social processes of society such as pension provision, social insurance, human rights, education, science and culture systems, healthcare, ethnonational development, national security, and civil defense, etc.), groups of regions (or their parts), territorial communities, local self-government, electoral system, labor potential, and others. During martial law and considering the state of Ukrainian territories, changes have been made to certain legislative acts of Ukraine regarding the principles of state regional policy and policies for restoring regions and territories. Thus, it is envisaged to review the content of state regional policy and identify territories and communities based on the consequences of destruction and according to the indicators determined by the Cabinet of Ministers: territories for restoration, poles of economic growth, regions with special conditions for development, territories of sustainable development. Currently, this work is not being conducted.

The main objects of state policy in wartime are internally displaced persons, war veterans and disabled individuals, conscripts, mobilization, budget, defense orders, the provision of defense needs, critical infrastructure, media, civil protection of the population, and emergency events and situations resulting from hostilities.

The state is an important institution of the state policy. The state has a particular institutional structure, each link of which performs specific functions. The goals of state policy in peacetime are to ensure the socio-economic activity of the population, protect citizens, and property, resolve socio-economic conflicts, and ensure continuity. However, this is only in peacetime. In the event of martial law, the Presidential Decree of Ukraine specifies an exhaustive list of constitutional rights and freedoms of individuals that are temporarily restricted due to the introduction of martial law, indicating the duration of these restrictions, as well as temporary restrictions on the rights and legitimate interests of legal entities with the indication of the period of these restrictions. Among them are the suspension of elections to government bodies at all levels, a ban on holding referendums, demonstrations, rallies, etc. Also, suppose regulatory acts are adopted on the introduction and implementation of measures of the legal regime of martial law under the Plan for the introduction and provision of measures for the implementation of the legal regime of martial law, approved by order of the Cabinet of Ministers No. 181-r of February 24, 2022. In that case, the procedures provided by the legislation do not apply. If it concerns acts unrelated to the provision of measures of the legal regime of martial law, regulatory activities are carried out according to established rules.

State policy encompasses all spheres of society and addresses its strategic tasks, aiming at accounting for and implementing national interests. When national and political divergences intertwine, national interests can escalate into conflicts and clashes. Therefore, coordination of national interests is necessary. National issues manifest in economic, social, political, spiritual, and other spheres. State policy should consider not only the specificity of national interests but also the shifting national sentiments.

During wartime, state policy in Ukraine is formed within a specific environment, with the most important factors being: In the social environment: the emergence of a new category, "forced migrant," requiring state assistance; the increased role of social institutions; popularization of procurement of social services from civil society organizations; the need for additional funding for specific social services; job loss during the war; mobilization of conscription-age men; population decline, particularly of working age individuals.

In the economic environment: damage and destruction of infrastructure, industrial facilities, and social institutions; loss of human capital and resources spent on defense; business closures and job cuts; inflation; foreign currency exchange rate growth; loss of real GDP; central bank emissions; reduction of state

budget revenues; increase in debt portfolio credits, grants, and war bonds.

In the technological environment: nuclear terrorism and the capture of the Kakhovka Hydroelectric Power Station and the Zaporizhzhia Nuclear Power Plant, numerous damages/destruction of critical infrastructure, further digitization, problems in energy and fuel sectors, the lack of incentives for private innovation and investment, diminishing role of science; the development of information-psychological technologies impacting society, the strengthening of information security to prevent cyberattacks on state information resources, the development of military science and logistics, the military-industrial complex.

In the political environment: the transformation of the international security system; the weakening of the Ukrainian oligarchy; the need to establish new social orders based on social justice and the rule of law; the improvement of the legal environment; self-organization of territorial communities and activation of various forms of social activity, including volunteer movements; formation of a united Ukrainian political nation, and more.

The priorities of state policy are the issues that government authorities address primarily. In choosing state policy priorities, government authorities act based on situational considerations and rely on strategic goals (security, stability, justice). In conditions of war, there is a shift in priorities, with the main focus of the state being security. In his address on May 18, 2023, President Zelensky emphasized that Ukraine's priorities shortly include:

- Additional air defense systems.
- Additional missiles.
- Training and aircraft.
- Long-range weapons to protect the civilian population.
- The de-occupation of Ukrainian territories.

The implementation parameters of state policy encompass both domestic and foreign policy. The implementation of state policy is a systematic process that involves the use of resources at the disposal of public authorities and civil society institutions to achieve set goals.

During martial law, Ukraine's foreign policy aims to further European integration with the EU and join NATO, achieving victory in the war and maximum isolation of Russia from the international community. During the war, Ukraine's foreign policy (diplomatic front) has been quite effective in all directions. For instance, these include the following:

- The policy of strengthening Ukraine's relations with countries and international organizations, including via United24;
- The policy of disseminating objective information;
- Improving Ukraine's international image and authority (Ukraine as a well-known brand);
- Providing external support for resisting Russian aggression;
- Promoting Ukrainian initiatives on international platforms;
- Protecting the rights of Ukrainians abroad;
- Promoting the interests of Ukrainian businesses in global markets, etc.
- Ukraine aims to become a full-fledged strategic player in the geopolitical arena.

State policy development is based on the following approaches: prospective, responsive, and rational. The prospective approach is based on the analysis of forecasting trends and situation development. Annually, the President of Ukraine delivers a Message to the Verkhovna Rada of Ukraine on the internal and external situation of Ukraine. The responsive approach is applied when a problem becomes significant for society and the state. The rational approach is based on economic-mathematical methods and the principle of rationality. In 2023, Ukraine is employing a situational (responsive) approach, although, during

peacetime, a prospective approach was implemented, including developing strategies for various spheres of activity and operational plans. It is worth noting that even before the war, the main issues of foreign policy included:

- Creating a coalition to counter Russian aggression.
- European and Euro-Atlantic integration.
- Entering new markets in Asia.

However, the aspects of foreign policy regarding Iran, the Visegrád Group, the Western Balkans region, non-proliferation of nuclear weapons, and international security were insufficiently developed.

The main method of addressing large-scale socio-economic problems is the program-targeted approach. It involves precise formulation, goal systematization, and monitoring of implementation. As a result of the full-scale invasion on February 24, 2022, the Ukrainian government was operating in a situational mode. However, by 2023, it had formulated and implemented a plan of priority actions for the year. Additionally, Ukraine has synchronized sanctions against Russia and Belarus with its partner countries.

The internal policy of Ukraine also required significant changes. The main risks in the socio-economic situation were the considerable influx of internally displaced persons, infrastructure and national economic system destruction, logistics centers, and more. The state swiftly responded to the following challenges:

- Financial system: the National Bank of Ukraine (NBU) formulated the Core Principles of Monetary and Credit Policy during Martial Law to ensure the reliable and stable functioning of the banking and financial system of the country, as well as to maximize the defense needs of Ukraine, uninterrupted functioning of the state finance system, and critical infrastructure objects. Before the war, in 2021, the government, amidst economic growth and stability, approved the Budget Declaration for 2022-2024. It outlined priority goals and principles of budgetary policy based on medium-term budget planning to enhance competitive positions in foreign markets and improve the investment climate. The changes were also made to the Budget Code of Ukraine and other legislative acts to improve the promptness of financial support for citizens' security and social protection. The primary sources of revenue during wartime are military bonds, bilateral loans, and grants. Therefore, after the war, the debt policy will require revision. In peacetime, the main directions are macro-financial stability and reducing the national debt to 50,8% of GDP.
- Energy sector: specific obligations have been imposed on electricity exporters from EU member states, tariff regulation on the electricity market, energy storage on the electricity market, systemic changes in the electricity market, and encouraging renewable energy producers to operate without state support based on market principles, along with obligations for producers to sell electricity exclusively through electronic auctions based on bilateral contracts.
- Housing policy: the government has made decisions regarding partial compensation for the cost of utility services to individuals and legal entities temporarily accommodating internally displaced persons. The aspects of temporary housing arrangements were formed before the war. They include social housing registration for internally displaced persons, providing housing for those who defended the independence, sovereignty, and territorial integrity of Ukraine, the State Program for Affordable Housing, providing preferential long-term state loans to internally displaced persons and participants of anti-terrorist operations and/or United Forces Operation for housing purchase, cost reduction of mortgage loans, support for individual housing construction in rural areas, preferential mortgage lending to internally displaced persons through grant funds provided by the Credit Institution (KFW,

Federal Republic of Germany) for reconstruction, the State Fund for Youth Housing Construction. However, for internally displaced persons, these are temporary solutions, and for the state in wartime, they pose an excessive burden. It is well known that Ukraine received loans from various countries, even for public sector salaries.

- Foreign economic relations: the issues related to customs clearance of humanitarian aid, armaments, registration of volunteers, export of agricultural goods (including the introduction of quotas, licensing, and restrictions on the export of certain items); determination of a list of goods with deferred payment of customs duties upon importation into the customs territory of Ukraine; critical imports, setting maximum terms for settlements in export and import operations; the establishment of a "green corridor" for fuel import, transfer of confiscated goods from customs warehouses for the needs of the Ukrainian Armed Forces, simplification of specific customs procedures; further digitalization of customs, and the establishment of the Black Sea Grain Initiative for secure grain exports from specific ports were addressed. However, the exemption of customs authorities from VAT administration functions remains crucial. Nevertheless, more is needed to restore Ukraine's export potential. Hence the search for new markets and the establishment of logistical routes remain unresolved issues of Ukrainian state policy.
- Educational policy: ensuring continuity and equal access to education while considering the security situation in specific territories, transitioning to distance learning, developing platforms for educational delivery, establishing safety requirements for the educational environment (including the construction of shelters), rebuilding damaged schools in collaboration with UNICEF, organizing special learning conditions (blended learning, externship for those abroad), evacuation and relocation of educational institutions from occupied territories and areas affected by active hostilities, ensuring the organization of External Independent Testing/National Multisubject Test and the admission campaign for 2022-2023, addressing the enrollment of internally displaced persons into general secondary education institutions under conditions of martial law in Ukraine, and more. Internet resources for learning, online platforms, and communication between participants in the educational process have gained significant importance. Therefore, the education and human development strategies developed during peacetime need to be reviewed and revised, including in line with EU requirements. The development of preschool, secondary, higher, and inclusive education, the establishment of a modern educational environment in vocational (vocational-technical) education institutions, and school nutrition reform, initiated during peacetime, remain priorities both during wartime and in the post-war period.
- Employment policy: the state liberalized labor relations, including defining issues related to the organization of employment during wartime (such as the form of employment contracts, probationary periods, changing the status of holidays and days off, procedures for replacing absent (including temporarily absent) employees, changing significant working conditions, the employer's right to transfer an employee to another job not specified in the employment contract without their consent, termination of indefinite-term employment contracts initiated by the employee, termination of employment contracts undertaken by the employer, working hours and rest time during the war, specificities of engaging specific categories of employees during the war, wage payment during martial law, leave without preserving wages, suspension of employment contracts), changing the procedure for unemployment benefits appointment, providing compensation to employers from the state for employing internally displaced persons, and providing a payment of 6,500 UAH to Ukrainians who lost their jobs due to the war.
- Economic policy: it involved supporting food producers, reducing the tax burden, simplifying and improving tax regulations, suspending planned and unscheduled business

inspections, temporarily canceling licenses and regulations, easing requirements for obtaining and verifying permits (licenses), simplifying business conditions for individual entrepreneurs, supporting the agribusiness and food industry sectors, relocating businesses, revising approaches to public procurement, etc.

- Social policy: the state continued its programs to support civilians during peacetime, provided social services to internally displaced persons, including partial financial compensation to establishments, institutions, and organizations of all forms of ownership for temporary accommodation, implemented the social service "Psychological Rehabilitation of Internally Displaced Persons due to Armed Aggression by the Russian Federation against Ukraine," ensured food provision for internally displaced persons, responded to requests from other regional military administrations in need of food supply, facilitated the transportation of evacuated population and humanitarian aid, including for the needs of internally displaced persons, partial compensation for the placement and arrangement of the Coordination Center for Assisting Internally Displaced Persons and Temporary Short-Term Accommodation Centers for Internally Displaced Persons, providing assistance for accommodation, joint projects with UNICEF for additional social support measures for the most vulnerable population categories, and the e-Dopomoha (e-Help) platform. The state also developed a strategy for state policy on internal displacement until 2025 with a corresponding operational plan.
- Digital policy: it involved reinforcing the Ukrainian Armed Forces with IT front specialists, launching e-Voroh (e-Enemy), using artificial intelligence and social engineering for defense needs, utilizing Starlink technology, continuing the development of Diia app ("The State and I" app, literal translation - an "Action"), establishing a state crypto fund, providing digital services to entrepreneurs and citizens, creating a unified digital integrated information-analytical management system for the reconstruction of real estate and infrastructure objects and/or an information-telecommunication system, e-Restoration (e-Vidnovlennia), e-Dwelling (e-Oselia) – a revolutionary digital mortgage, implementing digitization processes in the healthcare and education sectors, financial services sector, and tourism services sector, continuing digital education, introducing an e-prescription, and e-work.
- In the medical field: planned hospitalizations were suspended, and reserves were established for the wounded. Simplified access to primary medical care was provided for internally displaced persons, and prescription rules were modified for chronic diseases. Free insulin distribution to patients was implemented as part of the "Accessible Medicines" program. Changes were made to the payment terms under contracts with the National Health Service to ensure stability in the industry. The principle of "money follows the patient" was temporarily suspended. The introduction of the "Readiness and Provision of Medical Care for the Population in Areas of Armed Conflict" package aimed to ensure the availability of medical assistance in conflict zones. Amendments were made to the Program of Medical Guarantees, expanding mental health and rehabilitation services. They were made to provide assistive devices and rehabilitation for individuals undergoing medical treatment. A State Standard Rehabilitation Plan for Persons with Disabilities and guidelines for individual rehabilitation plans were developed. Standardized rehabilitation routes were established for conditions such as spinal cord injuries, traumatic brain injuries, burns, amputations, and complex skeletal injuries. The development of the hospital network, the public health system, and the pharmaceutical sector were regulated.

## 5 Discussion

The results of the conducted research are a bit limited in their universality and orientation towards Ukraine in general due to

the abstraction from the national specificities of different countries and the consideration of state policy as a model of the socio-economic system. Therefore, a promising direction for further research in the field of state policy may be the study of its migration aspect in martial law conditions. After all, it concerns the most significant displacement of people in Europe since World War II. It affects nearly 13 million individuals, with 7-8 million abroad. Considering the complexity of studying this issue and the lack of statistical information, this study has yet to investigate it.

Obikhod (2022) proposed orienting state policy toward three principles of economics:

- Preserving the compliance of economic interests in the best condition.
- The ability to use various life factors in a market economy for organizing economic activity.
- The importance of flexibility of the National Bank to maintain stability in Ukraine's financial sector during wartime, as well as the executive power in the energy sector and increasing employment.

Protsiuk, Boichuk, and Chyzhov (2023) emphasize that the war has significantly deepened social policy issues as an essential component of Ukraine's state policy. Vulnerable groups of citizens, including people with disabilities, suffer the most during this time, and they receive assistance not only from the state but also from volunteers, the EU, its member states, and international organizations.

Another issue of state policy in martial law conditions is the legality of the activities of state authorities in Ukraine during wartime, which is the subject of research by Yakovleva, Dubinskiy, and Kotenko (2022). They noted the transformation of state policy in Ukraine, balancing between the private interests of oligarchic groups and the public good. The latter should currently be the direction of state policy in our country during times of war.

As rightly noted by a group of researchers (Hvozdk et al., 2022), the state policy in conditions of martial law requires improving the mechanisms of public participation since the needs, state, and problematic aspects of the interaction between civil society institutions, communities, and local self-government bodies change as well.

Kaneva and Halaburda (2022) also note, particularly regarding budget policy, that there is a change in budget policy priorities under martial law conditions and highlight the financial support from international organizations. The budget execution should allow financing priority goals such as national defense and social security.

The research by Marchuk (2021, 2022) indicates prioritizing European integration and NATO accession for Ukraine's state policy. It also emphasizes the need to develop ethnopolitics, political consolidation, and preserve national identity in the Ukrainian information space, which is crucial during wartime to counter the enemy (Marchuk, 2012). These elements also form the basis for developing state policy on nationalism in Ukraine.

## 6 Conclusion

Russia's war against Ukraine has transformed Ukraine's domestic political landscape, defining its role in global food security, the overall world economy, and European security. Currently, the state policy needs to consider changes in partner countries and the formation of an economic and security alliance, studying the political landscape during and after the martial law regime. The state policy should be shaped to prevent the restoration of oligarchy and its influence on political processes in Ukraine. Additionally, despite the ongoing war and corresponding limitations of martial law, democratic institutions in Ukraine, including Ukraine's candidacy for EU membership, require further development.

- The study of the following new challenges has become extremely important:
- The peculiarities of the military economy functioning in a market environment.
- The search for effective ways to reform the defense industry, intensify innovation processes in the military economy, and improve the military budget process.

The military contracting system and pricing of military products. There is a growing need for organizing specialized research to develop scientifically grounded military-economic policies and strategies that meet modern requirements, aiming for a radical overhaul of the entire mechanism of resource support for Ukraine's national security.

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**Primary Paper Section: A**

**Secondary Paper Section: AD**

## POLITICAL ASPECTS OF DECISION-MAKING

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**Abstract:** The political aspects of decision-making are critical in various activities, including public administration, business planning, and social initiatives. These aspects include the interaction of different political actors, the relationship between the government and the public, and the influence of geopolitical factors and national interests on decision-making. In this topic, the authors explore different approaches to the political decision-making process, including consideration of democratic principles, the role of lobbying and corruption in the decision-making process, and the interaction of government at different levels, including international and regional. This article aims to study the political aspects of decision-making to reveal the importance of political factors in making various decisions and to determine their impact on the development of democracy, human rights, social justice, and good governance. The methods used in writing the article were analysis, synthesis, generalization, explanation, and data qualification. The fundamental literature on political science related to decision-making includes the works of recognized authorities in the field, such as Robert Dahl, Herbert Simon, Kenneth Arrow, and others. Robert Dahl, in his studies, highlights the relationship between the government and the public in the political decision-making process. Herbert Simon examines the decision-making process in the context of decision theory, developing the concepts of multi-criteria analysis and risk management. Kenneth Arrow explores the idea of voting and democracy, arguing that a perfectly democratic process is impossible. In turn, John Rawls, in his book "The Theory of Justice," lays out the basics of the theory of justice that can be applied in the political decision-making process. The study of political aspects of decision-making is vital for developing democracy, ensuring human rights, social justice, and effective management of various activities.

**Keywords:** Political sciences, decision-making, authority, democracy, decision-making theory, multi-criteria analysis, risk management, voting theory, justice, public, corruption, lobbying, international relations, regional development, effective administration.

### 1 Introduction

Decision-making is an integral part of the management process of any organization, including the state. However, the political aspects of decision-making include various factors, such as power, democracy, corruption, lobbying, public opinion, international relations, and others, which significantly complicate the decision-making process.

In this regard, the study of political decision-making aspects in political sciences is a relevant and important topic that helps to understand the main problems and challenges any government faces in making various types of decisions. Understanding these problems can lead to developing effective governance strategies and policy decisions that will promote democracy, human rights, and social justice and improve governance in various areas such as regional development, economy, healthcare, and others.

Also, political decision-making aspects are essential for studying international relations, as they determine cooperation between countries, conflicts, and ways to solve global problems (Janis, I. L., 1982).

Decision-making theories and multi-criteria analysis are the primary tools for studying the political aspects of decision-making. Risk management is also important in political decision-making, especially in areas with many adverse outcomes, such as military conflicts or global environmental issues.

Understanding voting theory is critical to studying democracy and various forms of public participation in decision-making. In addition, the concept of justice plays a vital role in determining

what decisions will be made in the political sphere and how they will affect citizens' social and economic well-being (Lasswell, H. D., 1951).

Finally, the issues of corruption and lobbying are becoming increasingly important in the political aspects of decision-making, as they can influence the decision-making process and lead to misconduct on the part of politicians and public figures. Therefore, understanding these problems and finding ways to solve them is an essential task in political sciences.

Thus, studying the political aspects of decision-making is very important for developing effective politics, administration, and socio-economic development. In addition, it helps to understand how political decisions affect citizens and their lives and how to ensure more effective and fair state governance.

This article aims to study the political aspects of decision-making and their impact on socio-economic development. As part of the research, various theories and approaches to political decision-making will be examined, their effectiveness in different situations will be assessed, and the issues of corruption and lobbying in decision-making will be considered. In addition, the research suggests possible ways to address these issues and improve the decision-making process to achieve better results for all citizens.

### 2 Literature Review

The study of political decision-making aspects is one of the key topics in political science, and much scientific literature has been written on this topic. Here are some fundamental sources that may be useful in studying this topic:

- "Political decision-making" by Herbert A. Simon. This book highlights the conceptual understanding of the decision-making process and its relationship with political systems.
- "Political Science and Decision Making" by David Roberts and Jennifer Schmitt. This book examines various theories and approaches to decision-making in political science and offers methodological approaches to analyzing this process.
- "Decision Making under Uncertainty" by Howard Reiff. In this book, the author examines decision-making under uncertainty and proposes a methodology based on game theory.
- "Lobbying and Corruption in the Political Process" by Robert K. Caldwell. In this book, the author explores the role of lobbying and corruption in political decision-making and suggests possible ways to counteract these phenomena.
- "Decision Making and its Impact on Society" by Edward Johnson. In this book, the author examines the impact of political decisions on society and identifies the key factors that affect decision-making effectiveness.

### 3 Results

Decision-making is an extremely important process in any sphere of life, including politics. The political aspects of decision-making may include a variety of factors, such as party ideologies, public sentiments, economic circumstances, international relations, and others.

One of the key issues in political decision-making is the balance between power and the population's interests. Therefore, political leaders must consider the public's opinions and needs while ensuring effective and stable governance (Simon, H. A., 1957).

International relations and diplomacy play an essential role in foreign policy decision-making. Countries must balance their

interests with their partners while ensuring international peace and stability.

One of the most critical aspects of decision-making is efficiency and responsibility. Political leaders must be prepared to make difficult decisions that can significantly impact the population's lives and, at the same time, be responsible for the results of their actions.

In today's world, where political problems are becoming more complex, it is vital to ensure a dialog between political leaders and the population to find solutions that meet the needs of all parties.

Another critical aspect of decision-making is the role of science and expertise. In many cases, political leaders must base their decisions on scientific research and expert opinion to make informed decisions.

It is also essential to consider social and ethical aspects. Therefore, political leaders should be prepared to consider moral and ethical aspects when making decisions that may impact society.

With the spread of information technology, new challenges have emerged in political decision-making related to collecting and processing large amounts of data. This is how the term "big data" was coined to describe the possibilities of using large amounts of data for decision-making. However, using big data can also raise questions about privacy and personal data protection (Sunstein, C. R., 2003).

Thus, political decision-making is a complex process that requires consideration of many different factors. Therefore, political leaders must be prepared to make difficult decisions that provide effective and stable leadership while being responsible and sensitive to the population's needs and social aspects.

In addition, it is important to consider policy guidelines and strategies formulated by the national state or international organizations. Decision-making should align with the overall goals and priorities set by the authorities.

In addition, political decision-making should be a democratic and open process. It is important to involve the public and stakeholders who may be interested in the decision. Openness and transparency are vital to ensuring legitimacy and support for decisions (Tetlock, P. E., 2005).

Finally, the effectiveness of decisions taken also depends on their implementation and control mechanisms. Therefore, compliance and implementation of decisions require appropriate resources, institutions, and tools for monitoring their implementation.

Therefore, political decision-making is a complex and multi-faceted process. Consideration of various political, scientific, social, and ethical factors, democratic approaches, and mechanisms for monitoring implementation are crucial to ensuring effective and stable leadership.

In addition, various factors may limit political decision-making, such as economic, social, cultural, and other circumstances. For example, in an economic crisis or increased threat to national security, political leaders may take extraordinary measures that remove restrictions on decision-making that do not comply with democratic standards.

Furthermore, political decision-making may depend on the involvement of experts from different fields, including economics, science, law, and others. Experts can provide scientific and technical arguments that help policymakers decide based on facts and evidence.

Depending on the political system, decision-making may be carried out by different branches of government, such as

legislative, executive, and judicial bodies. Each of these bodies has its own competencies and powers determined by law.

Finally, it is important to note that decision-making is a continuous political process. Therefore, political leaders must constantly monitor the situation and make necessary corrections to the decisions that correspond to changing conditions and societal needs.

In conclusion, decision-making in politics is a complex and multi-faceted process that depends on various factors, including political guidelines, democratic standards, economic, social, and cultural factors, the involvement of experts, and the powers of different branches of government. It is important to remember the need for continuous monitoring and corrections in decisions made to ensure their effectiveness and relevance (Grofman, B., Owen, G., & Collet, C., 2015).

There are many different political systems in the world where decision-making is carried out differently. For example, in democratic systems, decision-making is usually done through voting in legislative bodies, where each member has one vote. Meanwhile, in totalitarian regimes, decision-making may depend on one person or party with absolute power.

In practice, decision-making in politics is a complex process requiring consideration of various aspects and interactions between participants. However, if democratic principles are taken into account and transparency and openness of the process are ensured, decision-making can become an effective tool for achieving political goals and ensuring the democratic development of society (Kernell, S., 2014).

One of the critical aspects of decision-making is the role of experts and scientific research in forming a political strategy. Experts can provide necessary information and analysis to evaluate the effectiveness of different options and their possible consequences. Scientific research can help understand complex socio-political situations and highlight critical issues that require attention.

However, decision-making based on expert assessments and scientific research can be challenging as different experts and researchers may have different views on the problem and research methods. In addition, there may be problems with limited access to necessary information and dependence on the interests of those who finance the research.

Another important aspect of decision-making is the role of the public and its ability to influence the decision-making process. The public can express its views and positions through mass protests, petitions, social media, and other communication channels. In some cases, public pressure can influence decision-making, particularly in democratic systems where people have the right to express their will through voting.

It is important to remember that decision-making is an integral part of the political process and requires interaction among different stakeholders, involvement of various sources of information and assessments, discussion of ideas, and formulation of decision options.

Transparency, openness, and the democratic nature of the decision-making process are essential for ensuring legitimacy and trust in the government.

It is also important to take into account different political, economic, and social contexts in which decisions are made. Countries with different systems of governance, economic conditions, and cultural traditions may have other priorities and approaches to decision-making (Bendor, J., & Hammond, T. H., 2019).

In the end, decision-making is a process that should be oriented toward achieving specific goals and solving problems. It may involve implementing reforms, introducing new policies and



programs, changing legislation, etc. The decision-making process is complex and multi-faceted, so it is essential to consider all factors that influence it and ensure maximum efficiency and legitimacy of the decisions made.

#### 4 Discussion

The discussion on this topic can involve various perspectives and arguments that reflect different political, economic, and social contexts. For example, one discussion may focus on the role of the public in the decision-making process. Someone may argue that the public should have an active role in decision-making as it ensures greater legitimacy and support for the decisions made. Others may say that efficiency and speed in decision-making are more important so that the public may be less involved in the process.

Another discussion may center on the role of political parties in the decision-making process. Some may believe that parties significantly influence decision-making as they represent the interests of different groups and have their own views on issues. Others may argue that ensuring expertise and objectivity in decision-making is more critical so that parties may be less involved.

Yet another discussion may focus on the role of experts and scientific research in decision-making. Some may believe experts are crucial in providing objective information and recommendations in decision-making. Others argue that expert information may be biased and controlled.

It is important to note that people may need more education and information to understand political issues and participate in decision-making. Thus, education and access to information are critical elements in ensuring a successful democratic process.

Finally, it is worth noting that political aspects of decision-making can be very complex, especially when dealing with issues that have various social, economic, and cultural consequences. However, it is essential to know that the decision-making process is a necessary element of the functioning of any societal system, and all possible means should be used to ensure the effective operation of this process (Zaller, J. R., 1992).

Another aspect to consider when making political decisions is the influence of external factors, such as international cooperation, geopolitical and economic interests, national and cultural ties, and others. In a world where more and more countries depend on each other, it is essential to consider these factors and interact with other nations to achieve common goals.

In addition, it is important to consider ethical aspects when making political decisions, such as justice, equality, humanism, and others. Political leaders should act based on these principles and ensure that their decisions do not violate the rights and freedoms of people, do not increase social inequality, and do not lead to ecological disasters.

Therefore, it can be argued that political aspects of decision-making are essential for the functioning of any social system, so they need to be carefully studied and ensured that decisions are made based on objective data, ethical principles, and consideration of the influence of external factors.

Given the complexity of making political decisions, more and more research focuses on methods and techniques that help political leaders make evidence-based decisions. One such method is the "evidence-based approach," which involves using evidence and scientific research to support decision-making.

In addition, it is important to remember that political decisions have consequences for society and every individual, so it is vital to ensure public involvement in the decision-making process and allow the public to express their views and opinions freely. It can be achieved through the participation of public organizations, consultations with experts, and conducting public debates.

Finally, it is important to note that decision-making is a process that can be a constant work in progress. Therefore, political leaders must be prepared to change and adapt their decisions in response to changes in society, the economy, and the world at large (Dahl, R. A., 1997).

So, to summarize the discussion, decision-making is crucial to the political process. It is a process that must take into account the interests of various groups, personal beliefs, and values, as well as international obligations and standards. Moreover, decision-making has many challenges, including ignorance or uncertainty about data, political pressure, and legal constraints.

It is necessary to develop mechanisms for interaction between participants and apply a scientific approach to data analysis and forecasting consequences to ensure rational and effective decision-making. It is also required to provide access to information and promote its discussion among the public to ensure broad support for the decision.

#### 5 Conclusions

Therefore, political decision-making is a complex and multi-faceted process that requires careful data analysis, discussion, and consideration of different perspectives and interests. Ensuring effective decision-making is crucial in providing for the development of society and achieving its goals.

It is necessary to ensure openness and transparency of the process, promote interaction between different stakeholders, and provide access to information to ensure effective decision-making. Developing a scientific approach to data analysis and forecasting the consequences of decisions is also important.

Finally, it is crucial to continuously update and improve the decision-making process in response to new challenges and societal needs. In this context, developing cutting-edge technologies and tools that will help ensure the efficiency and democracy of the decision-making process is essential.

Even when all principles and best practices are followed, the decision-making process can be flawed and error-free. In some cases, problems may arise, such as insufficient information, incorrect analysis, bias, and even corruption.

Therefore, every country needs effective mechanisms to control the decision-making process. Such means may include independent expert evaluation, openness and accessibility of information, the responsibility of process participants, and the possibility of complaints and appeals.

In addition, developing civic awareness and participation in the decision-making process is essential. If citizens have the opportunity to express their opinions and views, this will help ensure a more democratic and representative process.

Overall, it can be argued that political decision-making is an important component of any democratic system. If this process is open, transparent, and effective, it will help ensure the development of society and the achievement of its goals.

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**Primary Paper Section: A**

**Secondary Paper Section: AD**

## PECULIARITIES OF FORMING COMMUNICATIVE COMPETENCE IN STUDENTS OF NON-PHILOLOGICAL SPECIALTIES

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**Abstract:** The current reorientation of modern higher education towards European standards necessitates the development of competent specialists who possess the ability for personal and professional growth, as well as active self-realization. A fundamental aspect of this development is the acquisition of foreign language communicative competence. Consequently, it becomes crucial for contemporary professionals to proficiently acquire professionally-oriented foreign language communicative competence to enhance their competitiveness within the global labor market. This study aims to examine the present status of foreign language communicative competence among higher education students pursuing non-language majors in domestic higher education institutions. The object of analysis is the process of professional training provided to future specialists within higher education institutions. A comprehensive set of methods was employed to achieve the stated objective. The theoretical aspect involved an analysis of relevant theoretical and methodological sources, psychological and pedagogical literature, as well as educational regulatory documents. The empirical dimension encompassed the observation of the educational process, administration of questionnaires, conducting of interviews, and implementation of a pedagogical experiment. Statistical analysis was utilized to analyze the collected data, while graphical representations aided in visually representing the findings. The current level of development of the investigated competence among higher education students during the process of professional training has been assessed. While there exists a substantial body of theoretical research on this subject, practical implementation reveals the presence of unresolved issues and challenges. The analysis of the survey findings revealed that a significant majority of students acknowledge the importance of learning a foreign language for the enhancement of their personal and professional qualities. However, the results also indicate that a considerable percentage of students possess an average level of foreign language communicative competence. Consequently, to enhance the mastery of this competence, the educational process within the HEI incorporated organizational and methodological conditions for its development, as determined through expert evaluation. Following the implementation of these organizational and methodological conditions, an assessment of students' proficiency levels was conducted, confirming the validity and effectiveness of the proposed measures for fostering the development of foreign language communicative competence among higher education students.

**Keywords:** Foreign language communicative competence, higher education students, organizational and methodological conditions, professionally oriented English communication.

### 1 Introduction

In light of Ukraine's integration into the European educational arena, its commitment to European quality standards for professional training, and the increasing emphasis on international collaboration, the development of foreign language communicative competence (hereinafter FLCC) in future graduates becomes a matter of utmost significance. This is because the successful implementation of institutional reforms and the attainment of socio-economic progress in the country depend on the formulation of a robust European strategy within the educational sphere. Therefore, it is imperative to consider and implement the most effective outcomes derived from European practices in the domestic context.

At present, Ukraine is experiencing significant transformations in the fundamental conceptual underpinnings of its national education system. Despite the challenging circumstances, including the real threat to our country's sovereignty due to armed aggression from the Russian Federation and the paramount value placed on every Ukrainian life, the integration of national education into the European educational landscape persists. The imperative to revitalize Ukraine's education sector arises from its inadequate alignment with contemporary societal needs, the demands of intercultural communication, and the

challenges posed by linguistic globalization. Consequently, efforts are ongoing to enhance the conceptual framework of state policy concerning the formation and development of future specialists' FLCC during their higher education studies.

In March 2023, the Ministry of Education and Science of Ukraine presented the "Methodological Recommendations for Ensuring Quality Learning, Teaching, and Use of English in Higher Education Institutions of Ukraine" (2023). This publication offers guidance to both institutional management and English language educators in Ukrainian higher education institutions, aiming to facilitate the achievement of contemporary foreign language education objectives and national goals of enhancing the teaching, learning, and utilization of English in higher education throughout Ukraine. Furthermore, the document acknowledges the importance of collaboration with international partners and emphasizes the necessity of participating in international projects. With a focus on post-war recovery, the document outlines its potential for maximum implementation during this crucial period for the country.

The instruction of the English language in Ukrainian higher education institutions aligns with several key documents, including the "Methodological Recommendations for Ensuring Quality Learning, Teaching, and Use of English in Higher Education Institutions of Ukraine" (2023). Additionally, the draft law "On the Functioning of English as a Language of International Communication in Ukraine" and the European Union Council Recommendations (2008) issued on April 23, 2008, on key competencies for lifelong learning play crucial roles in shaping the English language education framework.

The analysis of scholarly sources reveals that the establishment of FLCC is often examined within the context of intercultural communication, highlighting the necessity of a cosmopolitan approach that expands the foundation of intercultural interaction (Holliday, 2011). Scholars have also explored the development of intercultural competence within the global educational landscape (Chugai, 2017), its role in fostering critical thinking within educational settings (Khatami & Hassankiadeh, 2015), the application of an intercultural approach to English language instruction (Corbett, 2022), the implementation of sociocultural theory in second language learning (Lantolf & Thorne, 2007), and the utilization of virtual reality for practicing English communication skills (Bonner & Hayo, 2018).

The investigation of FLCC among future specialists encompasses various aspects. These include enhancing regional competitiveness in the labor market (Koval, Polyezhaev & Bezkhlibna, 2018), improving professional communication within a global business context (Louhiala-Salminen & Kankaanranta, 2011), employing subject and language-integrated teaching as an educational approach to foreign language learning (Marsh, 2012; Coyle, 2008), fostering intercultural communicative competence and intercultural sensitivity among foreign students (Vu, 2021), and exploring language acquisition through art (Fleming, 2021).

Within the domestic research context, scholars such as Zadorozhna and Datskiv (2022), Pinchuk (2022), and others have examined the issue of developing FLCC among higher education students.

The development of foreign language communicative competence among higher education students necessitates the establishment of an environment conducive to positive professional growth, psychological well-being, and creative expression. A crucial aspect involves nurturing the capacity to effectively articulate personal perspectives on professional situations through oral and written communication in a foreign language. Consequently, the search for methods and approaches

to cultivate foreign language communicative competence in higher education students across diverse fields of study emerges as one of the most pressing challenges.

This article delineates the distinct characteristics of the training of foreign language communicative skills among prospective specialists pursuing non-philological disciplines within higher education institutions. It considers contemporary approaches and methodologies in English language instruction.

To enhance the competitiveness of future Ukrainian specialists in non-linguistic fields within the global labor market, they must attain a foreign language proficiency level of no less than B2. Hence, we deem it necessary to foster the development of FLCC among higher education students throughout their academic journey. Consequently, the purpose of this article is to investigate the issue of FLCC among higher education students specializing in non-linguistic disciplines within modern Ukrainian HEIs and delineate the distinctive aspects of its formation and development.

The achievement of this objective can be realized through the implementation of intermediate tasks, the resolution of which will ensure the gradual attainment of the desired outcome. These tasks encompass the following: 1) examining the current state of FLCC development among Ukrainian higher education applicants in non-linguistic fields; 2) establishing criteria and levels of FLCC proficiency; 3) identifying organizational and methodological prerequisites for cultivating and advancing this targeted competency; and 4) evaluating the effectiveness of their implementation to foster the development of the specified competence.

## 2 Literature review

The matter of developing and cultivating FLCC among future specialists holds considerable significance in the present era. To comprehensively investigate this issue, an analysis of the scientific advancements of the subject will be conducted, both within Ukraine and abroad. We believe that valuable insights into the particularities of foreign language communicative training for higher education students can be derived from the extensive body of work produced by foreign researchers.

In the methodological study, Konishi (2016) examines the efficacy of a Japanese language program implemented by a governmental institute based in northern California in fostering communicative competence among higher education students. The researcher emphasizes several key dimensions of communicative competence, including linguistic, sociocultural, discursive, and strategic aspects. Furthermore, she identifies five challenges associated with the development of communicative competence observed within higher education institutions in the United States. The study's objectives encompass assessing the level of students' FLCC necessary for living and working in Japan, as well as evaluating teachers' confidence in adequately preparing their students for such scenarios.

Flores (2012) conducts a comprehensive investigation of English-language communicative competence within educational institutions in Chile, to enhance and optimize the developmental process. Among the proposed strategies for teaching English as a foreign language, the author emphasizes the significance of planning, goal setting, idea generation, and design, with a particular focus on writing skills. To assess the level of communicative competence under scrutiny, the researcher employs essays and interviews, which, in their perspective, positively contribute to the enhancement of English language proficiency. Additionally, the author suggests the implementation of self-assessment questionnaires as a valuable tool for students to engage in critical reflection on their learning progress. The researcher advocates for theatricalization as one of the most effective approaches to fostering FLCC. The utilization of plays provides students with opportunities to not only practice English speaking, but also to simulate authentic communication scenarios, expand and apply grammatical structures and

vocabulary, refine pronunciation accuracy, and encourage collaborative group work, which serves as a motivating factor for foreign language acquisition.

Felemban (2012) provides insights into the process of developing Foreign Language Communicative Competence (FLCC) in Saudi Arabia, highlighting that while second language learners excel in acquiring linguistic competence, the speech aspect assumes greater significance for social interaction with native speakers. In light of this, the researcher delineates several principles aimed at enhancing the formation of FLCC, including cooperative learning, the principle of polite communication, and the principle of irony. Notably, the author delves further into the principle of polite communication, recognizing its crucial role in real-life situations and interpersonal interactions among communicators.

Kiessling and Fabry (2021), German researchers, delve into the development of FLCC within the realm of medical education. Specifically, they explore the extent to which findings on motor and social skills can be applied to the domain of communication, as well as how communication competence can be effectively taught and acquired based on a skills model. Recognizing the inherent limitations of individual cognitive resources, the authors propose learning tasks that are tailored to students' existing knowledge levels. The article provides examples of simulations frequently employed to enhance communication skills. For instance, to construct a patient's medical history in a patient-centered manner, a student must possess an understanding of the relevant content, actively listen to the patient, and regulate their communication behaviors, such as employing open-ended questions. Simultaneously, future physicians are encouraged to be attentive to the patient's non-verbal cues, allowing them to discern and empathetically respond to emotional signals. The authors advocate for the development of FLCC through the application of communication skills in authentic scenarios. By engaging in such practice, students have the opportunity to employ their acquired knowledge, skills, and abilities within the communication domain, thereby facilitating systematic training in the targeted competency.

Järvenpää and Karrbom Gustavsson (2021), Swedish researchers, tackle the development of FLCC as a crucial element contributing to the success of multinational and inter-organizational infrastructure projects. In such projects, individuals from diverse cultural backgrounds are required to communicate in a shared language and collaborate in decision-making processes. Drawing upon empirical data derived from contemporary infrastructure projects, the researchers examine the communication dynamics within multinational infrastructure initiatives. The analysis centers on the linguistic framework of communicative competence, with particular emphasis on the formulation of cooperation models in construction project management. In this regard, the authors propose the concept of contextual communication competence, which underscores the significance of adapting communication approaches to specific project contexts.

Corbett (2022) examines the distinctive aspects of intercultural education for English as a Second Language (ESL) teachers. The author delineates the intellectual and pedagogical traditions that have influenced intercultural language education, encompassing ethnography, critical pedagogy, and cultural studies. By highlighting the practical implications of these traditions, Corbett explores their influence on curriculum design, classroom communication strategies, and assessment methods. Furthermore, the author discusses the impact of digital resources on English language learning and presents compelling arguments in favor of fostering intercultural communicative competence.

In addition to the aforementioned foreign scholars, the formation of FLCC has been examined from various perspectives. For instance, Rizakhojayeve et al. (2017) investigate the development of this competence among tourism professionals. Kakoulli-Constantinou (2018) examines the process of learning English for specific and academic purposes through the

utilization of cloud technologies. Plutino (2017) compares different approaches employed by language teachers in language learning and social media integration. Furthermore, Rosell-Aguilar (2018) demonstrates the impact of social media, specifically highlighting Twitter as a tool for both formal and informal language learning.

The issue of foreign language training for future specialists in non-philological fields has been the subject of scientific investigation by several domestic researchers. Liubashenko and Kornieva (2019) examine the development of English dialogic interactive speech skills among students in technical disciplines. Luchaninova et al. (2019) explore the formation of communicative competence in future specialists through group work. Lytovchenko et al. (2018) describe methods for teaching English for Specific Purposes to university students. Mykytenko et al. (2022) focus on the development of intercultural communicative competence among future journalists. Nykyporets and Ibrahimova (2021) highlight the specificities of forming communicative competence in students from non-linguistic higher education institutions using Mind Maps and CLIL (Content and Language Integrated Learning) in foreign language classes. Lastly, Romanenko (2016) investigates the role of communicative competence in the field of public policy. Therefore, the issue of forming FLCC has garnered significant attention from numerous foreign and domestic researchers. However, the current circumstances, such as the need for distance and blended learning due to the neighboring country's aggression, compel us to explore novel approaches and conditions for enhancing this crucial competency among future specialists in non-philological fields within higher education institutions.

### 3 Method

To assess the efficacy of the strategies employed to foster FLCC, an anonymous survey was administered to higher education students from eight non-philological disciplines at three prominent institutions: Ivan Franko National University of Lviv, Ternopil Ivan Puluj National Technical University, and the National University "Odesa Maritime Academy." The survey was conducted utilizing the Google Form service and encompassed a series of key inquiries, which can be found in Appendix A.

The survey revealed the students' strong motivation and dedication to enhancing their FLCC proficiency. Subsequently, the next phase involved assessing the students' initial level of knowledge. To achieve this, a standardized test was employed, specifically designed following the European language education guidelines and made available on the website of the British Council in Ukraine (<https://www.britishcouncil.org.ua/english/learn-online/test>).

Considering the analysis of scientific and educational sources, it is deemed appropriate to consider the following levels of foreign language communicative competence formation when assessing future specialists: high, sufficient, intermediate, and low (Table 1).

Table 1. Levels of FLCC formation of higher education students

Authors' title	British title	Title per European language education guidelines
High	Upper-Intermediate / Advanced	B2 / C1
Sufficient	Intermediate	B1
Intermediate	Pre-Intermediate	A2
Low	Basic / Elementary	A1

Concurrently with determining the levels of students' FLCC, the study employed an expert evaluation methodology to identify significant coefficients of organizational and methodological conditions that contribute to the formation of FLCC among future specialists. To accomplish this, an expert group of foreign

language teachers from the aforementioned HEIs was assembled. Through the process of expert ranking, three predominant organizational and methodological conditions for fostering FLCC among students were identified. The first condition entailed the establishment of a remote foreign-language interactive platform focused on professional-oriented discussions, which operated through a Telegram channel. The second condition involved the interdisciplinary integration of foreign language education content with professional training, including the instruction of professional training disciplines in a foreign language and interactions with foreign individuals in related fields. The third condition encompassed the utilization of technology to enhance critical thinking in foreign language classes. These aforementioned conditions were implemented within the educational frameworks of the domestic higher education institutions mentioned earlier.

Through the utilization of various research methods, including observation, interviews, surveys, questionnaires, and an analysis of the effectiveness of organizational and methodological conditions for fostering students' FLCC, several problematic aspects related to the proposed conditions were identified. These findings led to adjustments being made in their implementation.

### 4 Result

During the research, the formation of FLCC was identified as the dependent variable, while the organizational and methodological conditions for FLCC development in higher education institutions of Ukraine during professional training served as the independent variable. To ensure the validity, reliability, and credibility of the study, specific measures were taken. Validity was ensured by maintaining consistent factors of influence such as the student cohort, their level of training, and the experimental and control group conditions while varying the organizational and methodological conditions for FLCC development. To enhance the reliability of the obtained data, independent experts from the teaching staff of higher education institutions were planned to be involved. Ensuring reliability aimed to establish comparable conditions for conducting the pedagogical experiment within the real educational environment of higher education institutions.

Consequently, the establishment and enhancement of FLCC necessitate a solid foundation to attain a B2 level of proficiency in a foreign language, which serves as a prerequisite for admission to a master's program. Upon analyzing the results of the FLCC assessment conducted on students, it was determined that proficiently mastering all forms of speech activities in a foreign language, incorporating specialized vocabulary, contributes to improved foreign language communication. Each industry-specific term holds functional significance, representing a distinct phenomenon or process that students have acquired through the study of specialized subjects, enabling them to comprehend the appropriate context for using such lexemes.

Aligned with the objectives and rationale of the experimental study, distinct stages were identified and substantiated for its implementation: the theoretical and introductory stage, the formative stage, and the analytical stage. Each stage was characterized by specific tasks, suitable forms, and organizational methods (see Figure 1).

During the implementation of the experimental study, careful consideration was given to the intricate, diverse, and multifaceted nature of developing FLCC among higher education students. To ensure a comprehensive approach, the types of speech activities were selected as the foundation for the FLCC formation process. Through an examination of these activities, the proficiency levels of higher education students in FLCC were determined (Table 2).

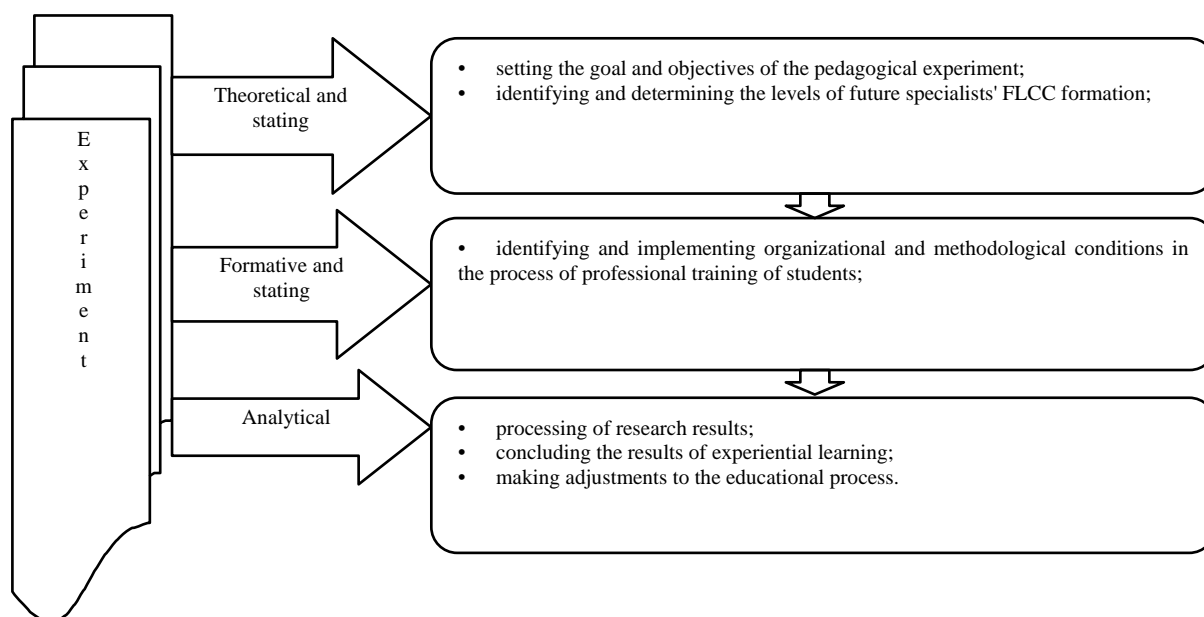


Figure 1. Stages of the pedagogical experiment on the formation of higher education students' FLCC

Table 2. Levels of FLCC formation by types of higher education students' foreign language activity at the beginning of the study

Levels Types of foreign language activities	High		Sufficient		Intermediate		Low	
	persons	%	persons	%	persons	%	persons	%
Reading	11	7,97	67	48,55	52	37,68	8	5,80
Listening	23	16,67	57	41,30	54	39,13	4	2,90
Speaking	18	13,04	43	31,16	76	55,07	1	0,73
Writing	9	6,52	46	33,33	71	51,45	12	8,70
Mean value		11,05		38,59		45,83		4,53

During the theoretical and fact-finding stage of the experiment, it was observed that contemporary students excel in foreign language listening skills, whereas they encounter challenges when it comes to written tasks in a foreign language. On average, the majority of higher education students (over 80%) demonstrate sufficient (Intermediate, B1) or intermediate (Pre-Intermediate, A2) levels of foreign language proficiency.

Following the implementation of organizational and methodological conditions for the development of higher education students' FLCC during the formative stage of the experiment, the proficiency levels of higher education students in FLCC were assessed and recorded (refer to Table 3).

Table 3. Levels of FLCC formation by types of higher education students' foreign language activity at the end of the study

Levels Types of foreign language activities	High		Sufficient		Intermediate		Low	
	persons	%	persons	%	persons	%	persons	%
Reading	13	9,42	68	49,28	53	38,40	4	2,90
Listening	26	18,84	60	43,48	50	36,23	2	1,45
Speaking	21	15,22	45	32,61	71	51,45	1	0,72
Writing	12	8,70	48	34,78	70	50,72	8	5,80
Mean value		13,05		40,04		44,20		2,72

As depicted in the table, it can be observed that, after the experiment, there was an increase of approximately 2% in the number of participants who attained high and sufficient levels, respectively. Notably, positive changes were also observed in the low-level category, as there was a decrease in the percentage of respondents categorized as having low and intermediate levels of FLCC.

The findings from the study lead to the conclusion that the implementation of specific organizational and methodological conditions serves as a motivation for students to engage in communication in a foreign language. Additionally, it fosters an awareness of the significance of self-improvement at FLCC levels for the successful execution of professional activities and the necessity of enhancing professional competence. Consequently, the proposed conditions for the development of FLCC among future specialists, as suggested by the authors, have been subjected to testing and are suitable for further adaptation and implementation.

## 5 Discussion

Communication competence is a crucial component of human capital that contributes to enhanced productivity and competitiveness at various levels, consequently bolstering the effectiveness of a specialist's work and augmenting their socioeconomic status. Furthermore, the enhancement of an individual's FLCC provides them with the opportunity to enhance the market value of their labor, leading to improved employment prospects and additional benefits in the workplace. These benefits can manifest as higher salaries, opportunities for intellectual growth and the enhancement of personal and professional skills, the ability to hold multiple positions concurrently, and accelerated career advancement.

Students in higher education institutions are acutely aware of the importance of FLCC, as evident from the findings of their survey and questionnaire. However, the study reveals that the proficiency level of future specialists in non-philological fields mostly falls within the average range and necessitates

improvement. To address this, students must dedicate themselves to enhancing their foreign language vocabulary, mastering grammatical rules, and actively engaging in communication. However, not all students are prepared to undertake these endeavors. Consequently, the main factors contributing to the low level of FLCC among students have been identified, including a low initial proficiency in the foreign language upon university admission, a reluctance to demonstrate language skills among peers, a strong focus on professional disciplines at the expense of foreign language learning, and insufficient time allocated to regular study and discussion of foreign language materials.

Furthermore, it is important to consider the prevailing conditions in Ukraine, namely distance and blended learning, which often pose challenges for teachers in assessing students' independent thinking, expression of ideas, and completion of all assigned tasks. The subjective element of teachers who were involved in the development of FLCC and the implementation of organizational and methodological conditions during the educational process should also be taken into account.

## 6 Conclusion

The findings of the study underscore the undeniable significance of developing the FLCC of higher education students. The abundance of theoretical and practical contributions from scholars, the emergence of relevant courses, and the growing awareness among future specialists about the importance of FLCC for successful professional performance all validate the relevance of this work.

Possessing FLCC is a crucial attribute for modern professionals. However, the majority of Ukrainian higher education students in non-linguistic disciplines exhibit an average level of FLCC, which somewhat hampers their professional growth and prospects in the global labor market.

The study was conducted to accomplish a series of tasks. The first task involved analyzing the perspectives of domestic and foreign scholars regarding the development of FLCC among higher education students in non-linguistic disciplines. The analysis revealed the continued relevance of the research topic, despite the extensive attention it has received from scholars both domestically and internationally. The second task focused on selecting speech activities (listening, speaking, reading, writing) as criteria for assessing FLCC and evaluating students based on four proficiency levels (high, sufficient, intermediate, low). Additionally, a ranking of expert evaluations was conducted to identify the organizational and methodological conditions conducive to the development of the targeted competence. This ranking comprised 20 proposed conditions, ultimately highlighting three dominant factors that served as instrumental means for fostering students' FLCC during the formative phase of the study. Lastly, the effectiveness of implementing these conditions was tested, and the results are detailed in this research paper.

Further research prospects involve the development of an electronic manual aimed at enhancing the professionally-oriented English-language communicative competence of higher education students. This manual would serve as a valuable resource for English language instructors in Ukrainian higher education institutions to support their teaching practices.

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**Primary Paper Section: A****Secondary Paper Section: AM**



## APPENDICES

## Appendix A

## Questionnaire for higher education applicants on the need to develop the FLCC

№	<p><i>Dear students, we are asking you to help us study the problem of developing foreign language communicative competence (FLCC). Please answer the questions below. Thank you!</i></p> <p><b>Tell us about yourself:</b>          Course of study – _____.          Specialty – _____.          Educational institution – _____.</p>	
1.	Please rate the importance of foreign language communicative competence for your future professional activity on a scale of 1 to 5. In this scale, 5 represents a high level of importance, while 1 indicates low importance.	5 4 3 2 1
2.	Do you believe that there is a necessity for the deliberate cultivation of professionally oriented foreign language communicative competence among future specialists during their academic tenure at the university?	1) Yes; 2) No; 3) Maybe; d) I am not sure.
3.	<p>Please indicate the methods employed for the development of foreign language communicative competence among higher education students at your institution:</p> <p>a) Instruction in a foreign language (specifically for professional purposes)          b) Instruction of professional subjects in a foreign language          c) Conducting extracurricular activities in a foreign language at the university          d) Engagement in foreign language discussion platforms for students          e) Participation in external academic mobility programs          f) Other (please specify): _____.</p>	a) b) c) d) e) f)
4.	Do you have a need to master foreign language communicative competence for your future professional activity?	4) Yes; 5) No; 6) Maybe; d) I am not sure.
5.	Does learning a foreign language lead to an increase in professional competence?	7) Yes; 8) No; 9) Maybe; d) I am not sure.

## BLENDING LEARNING - A NEW EDUCATIONAL PARADIGM

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**Abstract:** The article aims to explore blended learning as a novel educational paradigm. Blended learning is examined as a form of organizing the educational process that combines traditional face-to-face instruction with online learning. Furthermore, the study characterizes the state of blended education in Ukraine, elucidating its defining attributes, distinctive features, and prevalent trends. The analysis also encompasses the development of a blended learning strategy in Ukraine, outlining the key stages involved in its implementation. Additionally, the research determines the requisite legislative changes and requirements for higher education institutions. The study focuses on elucidating the fundamental nature of blended learning as a new educational paradigm. The object of the study pertains to the present state of higher education in Ukraine. Research methods employed in this work include description, analysis and synthesis, comparison, generalization, and modeling. The present paper investigates the existing landscape of blended learning in Ukraine. Blended learning is comprehended as an emerging educational paradigm, encompassing the harmonious integration of traditional face-to-face instruction and distance learning modalities, serving as an effective means of implementing educational concepts. Concurrently, the salient features of blended learning are delineated, encompassing formal education within educational institutions, knowledge acquisition as a focal point, utilization of computers and mobile devices for educational objectives, and the incorporation of information and communication technologies during instructional sessions. The study undertakes an analysis of the methods and models employed in blended learning, while also delineating the associated merits and drawbacks of this pedagogical approach. Drawing upon the findings and the examination of the development strategy of blended learning in higher education institutions, a novel model is proposed, consisting of six distinct stages. Subsequently, a comprehensive description is provided for each stage, encompassing its present state, the characteristics of potential future modifications, and the legislative requirements and institutional mandates that are imperative for implementation. Throughout the investigation, it was ascertained that blended education, as a mode of organizing the educational process in Ukraine, is still in its nascent stage of development. This can be attributed to the adoption of blended learning as a response to the exigencies arising from military conflicts, rather than a deliberate shift towards a new educational paradigm. Consequently, the present state of blended learning is marked by inherent challenges in its implementation.

**Keywords:** Teacher, higher education institution, HEI, blended learning, student, traditional learning, university.

### 1 Introduction

Ukraine's contemporary education sector is experiencing noteworthy transformations. While the realm of secondary schools predominantly adheres to unified regulatory frameworks, compliance with which is obligatory for continued operations, the domain of higher education institutions lacks comparable regulation. Although legislative measures exist to govern the activities of higher education entities, the prescribed requirements are less stringent, granting rectors and institutional leaders considerable discretion in decision-making processes. Additionally, the higher education sector comprises a substantial proportion of private universities, academies, and institutes.

Consequently, the matter of blended learning assumes considerable significance within the context of higher education institutions as an educational paradigm. It is noteworthy that following the eruption of hostilities on February 24, 2022, blended learning has emerged as the optimal approach for delivering educational services, ensuring the safety of both students and educators while enabling the continuity of educational endeavors. Moreover, given the destruction or damage incurred by certain higher education institutions, and their proximity to conflict zones or occupied territories, blended learning has not only evolved as an educational paradigm but has become the sole viable option for facilitating educational activities. Thus, the relevance of this issue remains paramount in the present time.

### 2 Literature review

The issue of blended education as a novel educational paradigm has garnered attention from numerous domestic and international scholars. Notable among them are K. Bugaichuk (2016), N. Kurysh (2021), Yu. Ladanivska (2022), K. Lalima (2017), and K. Thorne (2022). Their respective studies offer significant insights into the implementation mechanism of blended learning, particularly in the context of traditional learning dominance and crises.

Renowned researcher K. Bugaichuk places significant emphasis on the intricate and time-consuming nature of implementing blended learning, necessitating thorough preparations within higher education institutions. In his article titled "Blended Learning: Theoretical Analysis and Strategy for Implementation in the Educational Process of Higher Education Institutions" (Bugaichuk, K., 2016, p. 2), he advocates that university administrations should prioritize the objective of integrating blended learning into their educational processes. Bugaichuk asserts that, before adopting blended learning, educational institutions must establish clear goals, define primary objectives, envision desired outcomes, and identify appropriate methods and approaches for implementation. Moreover, it is crucial to consider the technical capabilities of the HEI to effectively provide blended learning services to students. Additionally, attention must be directed toward evaluating the proficiency levels of the institution's teachers in utilizing information and communication technologies.

In her scholarly work titled "Implementation of the Bichronic Mode of Online Learning in Postgraduate Pedagogical Education Institutions" (Kurysh, N., 2021, p. 200), researcher N. Kurysh substantiates the significance of blended learning as a key component of modern Ukrainian higher education. Kurysh argues that transformative processes in education are influenced by crisis phenomena, such as the coronavirus pandemic. Consequently, the adoption of online learning has become imperative, serving as a means to ensure students' access to knowledge amidst the escalating prevalence of dangerous viruses and the limited availability of safe travel options. Through an analysis of existing research on blended learning, Kurysh discovers that approximately half of the surveyed students expressed support for a combination of online and in-person classes. This attests to the genuine societal demand for the implementation of this educational approach.

In his scholarly contribution titled "Blended Learning: How to Integrate Online and Traditional Learning" (Thorne, K., 2022, p. 21), researcher K. Thorne highlights that, in contemporary circumstances, blended learning represents the most effective approach for ensuring the quality of students' knowledge. Thorne posits that blended learning proves advantageous when students aspire to acquire both theoretical and practical knowledge. Accordingly, within the classroom setting, students can engage with available educational materials and partake in meaningful discussions with their instructors. Simultaneously, at home, students have the opportunity to cultivate their skills through independent assignments, which are electronically submitted, thereby facilitating practice-oriented components. Furthermore, Thorne contends that online classes should adopt a training format aimed at reinforcing foundational knowledge.

Nevertheless, the existing body of literature indicates that the topic of blended learning remains relatively underexplored in scientific research. This dearth of comprehensive coverage can be attributed to the prevailing prominence of traditional learning approaches, stemming from the technical constraints faced by higher education institutions and the proficiency levels of teachers in information and communication technologies.

The paper aims to illuminate the fundamental nature of blended learning as a novel educational paradigm. The research goal is

derived from the significance of blended learning in organizing the educational process within Ukraine and safeguarding the well-being and safety of students amidst military operations. Its implementation necessitates the development of a tailored strategy for blended learning in Ukraine, hinging upon enhancements to the regulatory and legislative framework, as well as fostering effective collaboration between university administrations, students, and teaching staff.

### 3 Objectives of the study

Aligned with the research purpose, the specific objectives are as follows:

- to elucidate the fundamental nature and conceptual underpinnings of "blended learning";
- to provide a comprehensive overview of the current state of blended learning within the educational landscape of Ukraine;
- to formulate a distinct strategy for the advancement of blended learning within higher education institutions, tailored to the specific context and requirements.

### 4 Research methods

The study employed the following research methods: description, analysis and synthesis, comparison, generalization, and modeling. The method of description was utilized to elucidate the fundamental nature of "blended learning," including its defining features, methodologies, and models. The method of analysis and synthesis facilitated the exploration of the current state of blended learning in Ukraine, examining the challenges and opportunities associated with this educational approach, and considering existing strategies for its implementation in higher education institutions. The method of comparison was employed to assess the advantages and disadvantages of blended learning, identify the factors contributing to difficulties, and explore prospects for further development. Lastly, the method of generalization allowed for the concise presentation of the study's key findings.

The modeling method employed in this study unveils the systematic framework for constructing a strategy aimed at the advancement of blended learning within higher education institutions in Ukraine. This method incorporates an examination of both causal and consequential relationships while forecasting trends in the field. Consequently, it is built upon the foundation of generalizing and analyzing the prevailing state of blended learning in Ukraine.

### 5 Results

The topic of blended learning holds significant relevance in the present-day context. Its pertinence arises from the substantial impact of the coronavirus pandemic and military operations in Ukraine on the organization of the educational process. Given these circumstances, the Ukrainian education system necessitated prompt and transformative measures that accounted for the interests of educators, educational institutions, as well as pupils, students, and learners. Moreover, the implementation of interactive and innovative learning approaches aimed to foster the advancement of European educational standards within Ukraine. Consequently, blended learning has emerged as a pressing issue for HEIs in our country.

At present, a universally accepted definition of blended learning remains elusive. The lack of a consensus can be attributed to several factors, including the relative novelty of the term and its limited incorporation into the legal framework of higher education in Ukraine, as well as the scarcity of comprehensive studies on blended learning. Broadly speaking, "blended learning" can be defined as "the organization of the educational process wherein a portion of learning occurs under the guidance of an instructor in a physical classroom, while another portion is undertaken independently by students outside the classroom through the utilization of electronic resources" (Caner, M., 2022,

p. 20). In essence, it represents the integration of traditional and distance learning approaches (Tolochko, S., 2021, p. 30).

It is worth noting that within the educational landscape of Ukrainian higher education institutions (HEIs), four distinct models of blended learning can be identified.

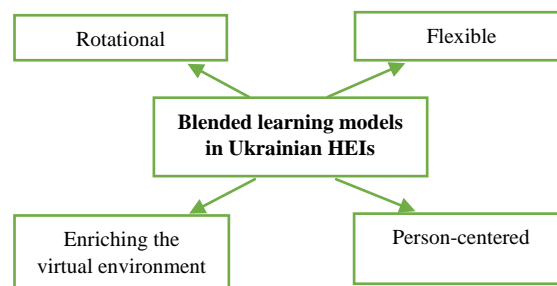


Figure 1. Blended learning models in Ukrainian HEIs.

The rotational model of blended learning entails students receiving a portion of the course material in the classroom and subsequently engaging with it at home through the utilization of electronic resources. In this model, teachers have the flexibility to offer some students the opportunity to access the material virtually, while others continue to receive instruction in a traditional classroom setting, after which the roles may be reversed—an approach commonly referred to as "rotation". This model is particularly advantageous when the course material is extensive and cannot be fully covered within a limited number of class sessions, or when visual content cannot be effectively reproduced using the technical resources available at the university. As a result, this form of blended learning facilitates the acquisition of foundational knowledge outside of the classroom, while offering opportunities for students to actively participate in discussions and explore complex topics during in-person sessions (Marienko, M., 2022, p. 540).

One manifestation of the rotational model is the implementation of a learning process where certain students attend classes in a physical classroom setting, while others engage in remote learning. After a designated period, the roles are reversed, and the students switch between in-person and remote learning. This approach not only alleviates the teacher's workload but also ensures the continuity of the educational process, particularly during extended unfavorable circumstances (McKee, M., Murphy, A., 2022, p. 548).

The flexible model of blended learning primarily focuses on the implementation of the educational process in an online format. This approach enables students to acquire knowledge predominantly through remote means, with visits to the educational institution limited to administrative purposes or examinations. Within this model, teachers maintain continuous electronic communication with students, soliciting feedback, offering guidance for further learning, coordinating the educational process, providing necessary learning materials, assessing assignments, and monitoring student progress. Additionally, the adoption of this model ensures a smooth transition back to traditional learning, minimizing any interruptions in the learning of new material (Krasulia, A., 2022, p. 5).

The person-centered model of blended learning focuses on providing information in a convenient and adaptable manner. Under this approach, students physically attend a higher education institution, but traditional classroom instruction is supplemented with the utilization of virtual space. As a result, instructional materials are presented through a combination of traditional paper textbooks, electronic manuals, demonstration programs, and educational websites. During classes, students often engage in videos, presentations, and educational films, and in certain instances, they may even participate in computer simulations or games to simulate real-world professional situations (Bugaichuk, K., 2016, p. 6).

The virtual environment enrichment model holds significance in the current stage of education. This model is characterized by conducting all training activities online, following a specially designed curriculum. Physical attendance at the educational institution is not required, or it may be limited to specific lessons. This model is particularly relevant for higher education institutions that have suffered extensive damage, and are located in occupied territories or war zones, where visiting the institution is infeasible from both technical and security perspectives. In such cases, education predominantly takes place through distance learning, with occasional classes held in remaining classrooms specific to certain disciplines. In instances where an educational institution is situated in a war zone or under occupation, education is solely conducted remotely (Kormiltsyna, S., 2016, p. 30).

In general, several characteristics of blended learning can be discerned:

- incorporation of formal training methodologies (Khader, N., 2016, p. 225).
- enhanced efficiency and optimization in delivering educational material (Stryuk, A., 2015, p. 13).
- utilization of computers and mobile devices for educational purposes (Osadcha, K., Osadchy, V., 2021, p. 412).
- integration of ICT into the learning process (Lalima, K., 2017, p. 130).

Blended learning in Ukrainian higher education institutions is implemented through various approaches. The first approach involves a combination of face-to-face and distance learning. This method is widely adopted and closely aligned with the capacity of teachers to deliver content through electronic resources as well as in traditional classroom settings. This form of education enables students to attend classes when there is no immediate threat to their safety and well-being, allowing them to physically gather in the same learning environment. In cases where students are unable to attend the educational institution and face potential risks to their life and health, distance learning provides the flexibility to study from home. Additionally, the integration of different modes of education ensures the

continuity of the learning process even when the physical infrastructure of the educational institution is not suitable, such as during renovation or repair work (State Education Quality Service of Ukraine).

The second approach involves blending face-to-face and distance learning within a single academic group. This method is employed when certain students within the group are unable to attend classes in person. By adopting this approach, educational activities can continue, ensuring that all students have the opportunity to pursue their studies. Students who can attend the educational institution receive traditional face-to-face education, while those unable to be physically present engage in remote learning. This approach is particularly relevant in situations where students from the same group are undertaking internships in different cities, enabling them to participate in the educational process despite their geographical constraints (Kurysh, N., 2021, p. 200).

The third approach involves blending independent study and classroom-based work. In this method, students have the option to either primarily engage in traditional face-to-face education with occasional periods of distance learning, or predominantly participate in distance learning with intermittent traditional classroom sessions. This approach provides flexibility, accommodating situations where a student may be ill or unable to exclusively rely on a specific mode of learning due to personal circumstances (Ladanivska, Yu., 2022, p. 52).

The fourth approach involves combining traditional textbooks with electronic resources. This blended form offers convenience in accessing a diverse range of knowledge. Electronic textbooks, in particular, provide an interactive learning experience, enhancing visualization and facilitating better comprehension. This approach proves beneficial for students studying in fields that demand meticulous attention to detail, such as medicine, engineering, and architecture (Thorne, K., 2022, p. 35).

In general, the advantages and disadvantages of blended learning for HEI students can be identified.

Table 1. The Advantages and Disadvantages of Blended Learning for HEI Students.

Number	Category	Essence
<i>Advantages</i>		
1	Lower time costs	During online classes, students allocate more time to the virtual learning environment, resulting in reduced time spent in physical classrooms. Consequently, this reduction in classroom time contributes to a decreased workload for HEIs, allowing for increased availability of classrooms. Additionally, teachers benefit from reduced on-campus commitments, as they spend less time physically present at the university
2	Independent study of the material	Blended learning allows students to allocate more time to self-directed study. Consequently, they can engage with the learning material at their convenience and during a timeframe that best suits their individual needs, thereby enhancing learning efficiency
3	Choosing a convenient mode of learning	Students and teachers have the flexibility to choose the mode of class participation that suits them best, whether it involves traditional in-person attendance, communication through chat or email, or engaging in video conferencing sessions
4	Choosing a convenient class schedule	The blended learning approach facilitates the organization of classes in various formats, such as question-and-answer sessions, discussions, polls, and other interactive activities, based on convenience and instructional objectives
<i>Disadvantages</i>		
1	Difficulties in time management	Optimal time allocation for studying the material and organizing the learning process can be challenging during both traditional and distance learning approaches
2	Technical problems	The educational process can be disrupted by the absence of computer equipment or reliable internet connectivity, leading to difficulties in accessing and participating in online learning activities
3	Lack of discipline	Students may exhibit low attendance or show a lack of engagement in remote classes, as the virtual nature of the learning environment reduces the ability to exert direct influence and supervision over their behavior
4	Poor quality of educational material	E-books and traditional textbooks may present different pedagogical approaches to learning and may lack consistency and alignment with each other. Additionally, electronic resources used in blended learning environments may vary in quality and reliability

Blended learning currently presents both advantages and disadvantages in the context of Ukraine. Its implementation in the educational system has been primarily driven by the need for

adaptation rather than a carefully planned strategy. As a result, the development of curricula for students across various disciplines did not adequately consider the specific requirements

of educational and professional programs, students' technological capabilities, institutional educational policies, or the availability of electronic textbooks in different fields. Consequently, this has led to organizational challenges and difficulties for students in acquiring knowledge. Nonetheless, despite these challenges, significant progress has been made in the field of education, enabling many students from occupied territories or war zones to continue their higher education (Korniyat, V., 2022, p. 195).

Currently, a unified blended learning strategy for Ukrainian higher education institutions is lacking. Each educational institution autonomously decides whether to adopt blended learning or maintain traditional learning, along with the choice of implementation methods, conditions, organization of the educational process, and distribution of teachers' workload. Consequently, the administration of each HEI independently implements blended learning based on their discretion (Kartashova, L., Sorochan, T., Sovkina, O., Sheremet, T., 2022, p. 50).

The researcher K. Bugaichuk proposes a distinct strategy for the implementation of blended learning in higher education institutions. This strategy is organized into well-defined stages that, when followed, contribute to the advancement of blended learning in higher education. Bugaichuk presents the strategy as follows (Bugaichuk, K., 2016, p. 10):

1. Goal establishment;
2. Model selection;
3. Consideration of technical and human resources;
4. Provision of methodological and regulatory support for changes (Bugaichuk, K., 2016, p. 15).

Moreover, considering the aforementioned aspects, we can propose our strategy for the development of blended learning in higher education. This strategy comprises sequential stages that can be applied to the development and implementation of this approach in universities where the security situation permits.

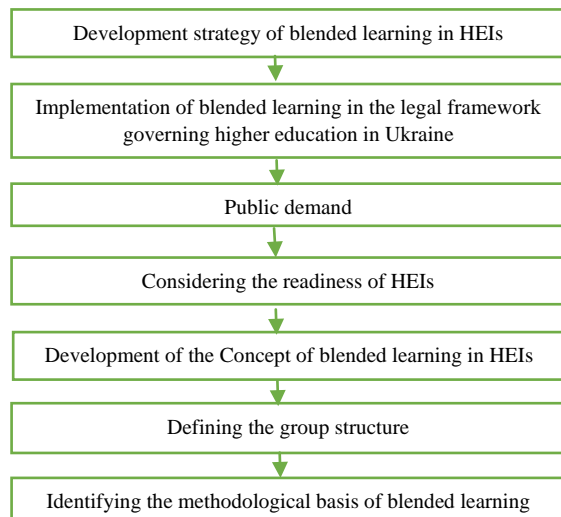


Figure 2. Strategy for the development of blended learning in HEIs

First stage: Incorporating blended learning into the legal framework governing higher education in Ukraine. Currently, the definition, implementation conditions, requirements, and conceptual framework for blended learning are not explicitly outlined in the legislation. This absence of clear guidelines hampers the progress of blended learning in Ukrainian higher education institutions (Kozinchuk, V., Kuzmenko, A., Malona, S., Matvienko, L., & Sonechko, O., 2022, p. 170).

Simultaneously, all higher education institutions (HEIs) adhere to the recommendations provided by the Ministry of Education and Science of Ukraine. These recommendations are outlined in

the document titled "Recommendations regarding the implementation of blended learning in institutions of professional pre-higher and higher education". According to this document, "blended learning" is defined as an approach, pedagogical and technological model, and methodology that combines online technologies with face-to-face interaction between students and teachers in the classroom. However, it is important to note that blended learning is not obligatory but rather an initiative undertaken by the respective universities. The document also makes a distinction between "blended learning" and "high-tech learning," although the differentiation lacks clarity, and the significant differences between these approaches are not explicitly addressed (Ministry of Education and Science of Ukraine, 2022, p. 28).

Therefore, it can be argued that current domestic regulations do not position blended learning as the primary form of education but rather prioritize traditional education as the most effective approach. Consequently, it is only through the amendment of regulations pertaining to blended learning in HEIs that a transition to subsequent stages can be considered advisable (Pysmenna, O., 2022, p. 210).

The second stage involves assessing the public demand for blended learning. Before implementing blended learning, it is crucial to determine whether there is a need for it among students and teachers. The evaluation should consider various factors such as the effectiveness of organizing the educational process, the enhancement of knowledge acquisition, the development of students' personal growth, and the opportunity to obtain a comprehensive education. Given the current security situation in Ukraine, the demand for blended learning arises from the necessity to ensure the safety and well-being of both students and teaching staff. It is essential to acknowledge that even though blended learning may present certain implementation challenges, they are secondary to the fact that traditional education is infeasible or morally and ethically unjustifiable in occupied cities, villages, war zones, or frontline areas.

In relatively safe regions of Ukraine where there are no significant enemy attacks or critical military installations, prioritizing the public demand becomes crucial. To assess this demand, surveys should be conducted among students and teaching staff, and various forums such as meetings, consultative gatherings, and Academic Councils should be organized. These platforms will facilitate informed decision-making based on well-founded conclusions (Petrenko, L., 2022, p. 207).

The third stage involves assessing the readiness of the HEI to implement blended learning. This assessment focuses on determining whether the HEI possesses the necessary material, technical, financial, and human resources to support blended learning. Specifically, it involves evaluating the potential economic costs associated with organizing activities that facilitate the implementation of blended learning, conducting cost estimates, developing budgets, and formulating financing programs. Material and technical resources encompass the availability of adequate computer and presentation equipment for such training, access to electronic resources and manuals, and the presence of online learning platforms and virtual communication tools. Human resources entail ensuring a sufficient number of teachers who possess the skills to conduct both traditional and virtual classes, thereby emphasizing the importance of teachers' proficiency in modern technologies (Buimister, L., 2022, p. 207).

The fourth stage involves the development of the Concept of blended learning in HEI within the respective institution. While changes to the legislative and regulatory framework for higher education are unable to address all aspects of blended learning, the development of a comprehensive concept becomes necessary. This concept serves as a policy document that elucidates the essence of blended learning, its defining features, characteristics, and operational peculiarities within the higher education context. Furthermore, the concept outlines the various

ways of implementation, the mechanisms through which it can be executed, and the methods and channels for exchanging educational materials between teachers and students. Essentially, the concept serves as a roadmap, providing clear guidelines on how blended learning should be implemented within the HEI (Horbatyuk, O., Polishchuk, S., 2023, p. 8).

The fifth stage involves defining the group structure for blended learning implementation. This step entails gathering comprehensive information about students in different groups within the higher education institution. The collected data may include parameters such as the number of students in each group, their age range, gender composition, individual preferences, and learning orientations. This information proves crucial in determining the optimal organization of blended learning, selecting appropriate models and types of learning, and identifying potential innovations. For instance, if a substantial portion of the student group resides in a different locality than the university, it becomes pertinent to consider the balance between traditional and online learning approaches (Kyrychenko, M., Prosina, O., Kravchinska, T., Shven, Ya., 2022, p. 115).

The sixth stage involves the identification of the methodological basis for blended learning. This entails assessing the availability of electronic textbooks specifically tailored to the relevant academic disciplines. It is crucial to ensure an adequate abundance of educational materials accessible in the virtual space, which facilitates the optimal acquisition of knowledge. This necessitates the existence of a wide range of freely available educational resources. In cases where the online resources are insufficient, the higher education institution should take the initiative to develop and expand the necessary foundations to support blended learning. By doing so, all students can be provided with ample resources for their learning needs.

## 6 Discussion

Despite the relevance of blended learning, there exist divergent perspectives on this matter. On one hand, some researchers highlight that blended learning has emerged as a necessity of the times, particularly during periods of conflict or war when it serves as the sole viable method of imparting knowledge to students. These proponents underscore the numerous advantages and opportunities associated with blended learning. Consequently, these scholars express confidence that a majority of HEIs will transition to blended learning in the foreseeable future.

On the contrary, some researchers hold a less optimistic view. According to their perspective, blended learning was introduced before the February 24, 2022 war and the onset of the coronavirus pandemic, providing Ukrainian HEIs ample time to develop distinct and tailored blended learning models that align with their specific institutional needs. However, these researchers argue that various challenges arose during the implementation phase, impeding the rapid adoption of blended learning. As a result, the anticipated swift implementation of blended learning did not materialize as envisioned.

Considering the divergent perspectives, the existing material and technical infrastructure of Ukrainian higher education institutions, the proficiency level of educators in information and communication technologies, and the absence of comprehensive regulations in the legislative domain, it can be inferred that the implementation of blended learning within Ukrainian HEIs will be a protracted process. This process entails incorporating foreign experiences while adapting them to the Ukrainian education system and the exigencies of wartime conditions.

## 7 Conclusions

The present article elucidates the advancement of blended learning as an emerging educational paradigm. It posits that blended learning in Ukraine represents a novel approach to

organizing the educational process, functioning as a transitional phase between traditional and online instruction by encompassing both modalities. Consequently, blended learning is characterized as a progressive stage in the evolution of domestic higher education.

The concept of "blended learning" is explicated, elucidating its essence as a mode of organizing the educational process that integrates traditional and distance learning approaches. Notably, key characteristics of blended learning encompass the utilization of information and communication technologies for educational purposes, the incorporation of computer devices and smartphones in instructional delivery, the emphasis on class effectiveness, and the formal presence within physical classrooms. To enact blended learning, diverse models such as personality-oriented, flexible, rotational, and virtual environment enrichment models are employed. Prominent approaches to implementing blended learning include combining face-to-face and distance learning, integrating independent study with classroom activities, and incorporating a blend of traditional textbooks and electronic resources.

The current state of blended learning in Ukraine is depicted, revealing that its utilization within Ukrainian higher education institutions is predominantly a response to contemporary challenges rather than a thoroughly planned educational paradigm. Specifically, blended learning was extensively adopted during the COVID-19 pandemic, and in the wake of the war outbreak on February 24, 2022, it has become a means of imparting knowledge while ensuring the safety of students. The primary advantages and disadvantages of blended learning in Ukraine are examined, highlighting both the possibilities and challenges associated with this approach for Ukrainian students. The author appraises K. Bugaichuk's strategy for the advancement of blended learning in higher education institutions, which entails justifying the purpose of blended learning, determining the appropriate model, assessing the technical infrastructure and human resources of the institution, analyzing the existing methodological framework for blended learning, and securing regulatory support for the educational process.

A self-developed strategy for the advancement of blended learning in higher education institutions (HEIs) has been formulated. The authors have provided a solid rationale for their strategy, which encompasses various stages that facilitate the development and implementation of blended learning in the higher education context. These stages consist of:

- 1) implementing blended learning within the legal framework governing higher education in Ukraine;
- 2) taking into account the public demand for blended learning;
- 3) assessing the readiness of HEIs to embrace blended learning;
- 4) developing the Concept of blended learning specific to HEIs;
- 5) defining the appropriate group structure for blended learning;
- 6) identifying the methodological foundations of blended learning.

In summary, research on blended learning will continue to grow in importance in the coming years. Furthermore, it is foreseeable that blended learning will emerge as the predominant approach across all types of Ukrainian HEIs, irrespective of the security circumstances. The implementation of blended learning will also have a profound impact on the educational paradigm and policies of Ukraine, necessitating revisions to the regulatory and legislative frameworks governing higher education.

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#### Primary Paper Section: A

#### Secondary Paper Section: AM

## SPIRITUAL EVOLUTION AS A DIRECTION FOR IMPROVING HUMAN DEVELOPMENT

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Abstract: In light of the ongoing processes of civilizational progress and the impediments that impede its continued advancement, the matters concerning the establishment and reciprocal integration of the science and practice of spiritual evolution have gained heightened significance. This entails the scientific, theoretical, and methodological substantiation of spiritual development across multiple generations. Presently, our society is confronted with a state of global instability, which is evident in the form of political unrest and economic and political crises that exert influence over all aspects of public life. These phenomena are characterized by a decline in the prevalence of humanitarian values and the disregard for moral principles in the lives of individuals. The objective of this article is to elucidate the intricacies of spiritual evolution as a significant constituent of the human developmental process. Furthermore, it aims to underscore the trends observed in the examination of the spiritual aspect of societal development as documented in the scientific literature by researchers hailing from diverse countries. Methodology. Throughout the composition of this paper, various methods of data processing were employed, including induction, deduction, information synthesis, systemic analysis, structural analysis, comparative analysis, abstraction, and idealization. The study draws upon the findings of scientific research conducted within the domains of psychology, sociology, anthropology, and other relevant scientific disciplines. These research endeavors facilitated the establishment of connections between spirituality and human development. The study encompassed the identification of the primary and crucial theoretical aspects of the matters of spiritual evolution concerning its role in human development. Furthermore, it unveiled the principal trends observed in the research conducted by scientists worldwide concerning topics about spiritual development. The aim of the article was realized by analyzing peculiarities and the role of linguistic and cultural features of the concept of "war" in English and Ukrainian languages. The examined examples allowed the formulation of the following conclusions. First, mental representations may differ due to linguistic and cultural features. In a particular language and culture, the historical experience of its speakers is concentrated, and the mental representations of these speakers may differ from those of speakers of another language and culture. Secondly, the linguistic picture of the world is the leading research object in modern linguistics. It is a complex process, the study of which is dictated by both the development of linguistics and its specific directions, including linguoculturology. It has been proven that the concept serves as the central unit of this research, defining the historical component of the linguistic picture of the world and intending to explore the English language in conjunction with the culture and consciousness of the people. It is noted that in society, the linguistic and cultural concept of war plays a vital role as it occupies one of the central positions in the life of any nation. The historical-etymological and etymological analysis of words that appeared in the English language during the XXth century during armed conflicts allows identifying additional, previously unnoticed lexical-semantic features in the content of the key lexeme of the linguistic and cultural concept of war. The conclusion is drawn that the English language is undergoing another stage of development and enrichment with new words due to current armed conflicts. As this process still needs to be completed, it will continue attracting special attention from linguists to track changes in vocabulary in real time. Thus, the conceptual characteristics of the concept of war in Ukrainian and English language consciousness are a branching multitude of features, the central part of which is reflected with a significant degree of completeness in the definitions of explanatory dictionaries. Beyond these definitions, there remain characteristics of two types - etymological characteristics of concepts, on the one hand, and the most significant emotionally evaluative representations of war for the bearers of linguistic and cultural, on the other hand. The analysis of definitions in explanatory dictionaries, thesauri, and synonym dictionaries shows that the content of the conceptual component of the concept of war largely coincides with the mass and professional consciousness of Ukrainian and English speakers. The significant civilizational similarity between them can explain it. Differences are secondary and additional in nature, established in the associative field of concepts, and mainly come down to two points: the idea of eradicating the enemy in case of war in Ukrainian language consciousness (which is determined by the concentrated collective memory of the Ukrainian people regarding wars with ethnic groups that did not take prisoners of war, but exterminated them) and the idea of competitiveness as one of the characteristics of war in English consciousness (this understanding corresponds to the medieval knightly code of conduct).

Keywords: spiritual values, morality, spirituality, humanistic development, directions of spiritual renewal, cyclical nature of the spiritual needs of the individual

### 1 Introduction

The existence and normal development of society rely on the attainment of a suitable level of moral and spiritual principles. The formation and development of an individual's spiritual

values in the context of professional training necessitate the acknowledgment of specific conditions that can impede or foster the widespread adoption of moral and spiritual principles.

The theoretical section of this study provides a substantiation of the concept, essence, and significance of spiritual evolution as a pivotal domain for enhancing individual development.

The practical component of the study encompasses an evaluation of the foremost driving forces contributing to the humanization of contemporary society. It examines prominent trends in spiritual development that have recently gained momentum across a wide array of countries. Additionally, the practical part outlines areas for future research in the realm of human spiritual development that currently enjoy considerable effectiveness and popularity within both scientific and practical domains.

The study revealed that a prominent trend in the advancement of spirituality within contemporary society is the establishment of an environment characterized by interaction, mutual understanding, interethnic harmony, and the resolution of regional demographic challenges.

The objective of this study is to elucidate the intricacies surrounding the examination of the primary stages and trajectories of spiritual evolution as documented in the works of prominent global scholars.

### 2 Literature Review

The intricate composition of needs, motives, interests, goals, worldviews, ideals, and beliefs, which collectively shape an individual's orientation and manifest their attitude towards objective reality, serves as a socio-psychological and socio-pedagogical foundation for the process of human development. These elements also contribute to the formation of societal value orientations (Evans, 2023), (Liu, Tu, & He, 2023).

An individual is required to autonomously formulate and execute decisions, cultivate life plans, and construct their path in life. During spiritual development, individuals transition from perceiving and comprehending the world to actively engaging in its transformation. They commence actively asserting themselves within their professional endeavors (Balsa-Barreiro et al., 2019), (Hassan, 2023).

Spiritual activity is rooted in a specific theoretical and practical framework of knowledge encompassing the criteria necessary for effective problem-solving. It involves an ethical system of principles and values that govern interpersonal interactions with colleagues and various authorities. An individual's spirituality is inherently intertwined with humanistic and democratic ideals, and its values are founded upon the reverence for human beings and their inherent dignity (Btool et al., 2022).

The occupational requirements placed upon a professional necessitate a strong foundation in both general and specialized knowledge, an elevated sense of responsibility, the capacity for self-assessment and self-development, and adept interpersonal relationship management. The cultivation of spiritual values within an individual assumes a critical role in enhancing the psychological and pedagogical aspects of professional education. It engenders an environment conducive to fostering an active life stance, a sense of duty, courage, determination, and responsibility, as well as integrity and sincerity in interpersonal interactions. This entails the profound comprehension of the social significance of one's actions in any given situation (Mohamed et al., 2021), (Al-Kuwari, Al-Fagih & Koç, 2021).

In light of the foregoing, it is essential to underscore that the transition into adulthood within human society entails an individual's engagement in the acquisition of a comprehensive system of knowledge, norms, and skills. This process equips



individuals with the capacity to fulfill social roles, shoulder social responsibilities, and contribute to the creation of both material and spiritual values (Disli, Yilmaz & Mohamed, 2022). When assessing the role of spirituality in shaping the structure of an individual's personality, researchers contend that spiritual values embody humanity's most significant accomplishments. They represent purposeful ideals that foster the progressive development of both the individual and civilization as a whole. The psychological and educational dimensions of spiritual values encompass the personal attributes exhibited by individuals with heightened spirituality. These attributes serve as motivators and regulators of spiritually driven actions and behavior. Moreover, they serve as subjects of personal development and self-expression, while also preparing individuals for new advancements and achievements in the realm of humanity (Adshead et al., 2019).

Psychologists and sociologists delineate specific categories of spiritual values in their scholarly works, placing particular emphasis on ethical, aesthetic, heroic, humanistic, and altruistic values (Hayes & Hofmann, 2023), (Belisle, Dixon & Stanley, 2018).

An individual, functioning as a subject of spiritual development, and possessing a well-established system of values, assumes an active role as a bearer of moral norms. Other individuals can rely upon such individuals in resolving their own spiritual and practical dilemmas, as they possess an understanding of what holds general significance, stability, and perpetuity, as well as discernment regarding what lacks utility (Colbert et al., 2018). According to H.W. Wellman's research, the psychological mechanism underlying the formation of spiritual values can be perceived as a series of cognitive processes within the individual. This encompasses the development of elevated spiritual needs and motives, the exploration and absorption of pertinent spiritually significant information, the establishment of ideas, goals, plans, and programs for highly spiritual activities, behavior, actions, and deeds, as well as the attainment of emotional and psychological reinforcement through the consolidation of spiritual accomplishments (Wellman, 2018).

Francken et al. (2022) observe that a distinguishing attribute of a personality lies not in the mere assimilation, but in the progressive development of values encompassing universal significance, including spiritual values. Considering that spiritual qualities represent the pinnacle of human values, it is rational to postulate that the formation of spiritual values transpires solely at the individual level. It is imperative to recognize that spiritual values emerge initially at the subjective level of the individual, gradually evolving and acquiring an objective universal essence (Francken et al., 2022).

### 3 Materials and Methods

The study employed a content analysis methodology to scrutinize literary publications, including scientific articles, books, and other relevant sources on the research topic. This analytical approach facilitated an assessment of the current status of research on topics associated with spiritual development, enabling the identification of issues, trends, and the formulation of a comprehensive theoretical framework for further investigation.

### 4 Results

The scrutiny of scientific literature and periodical sources on the exploration of societal cultural trends facilitated the identification of prominent catalysts influencing the progression of the humanitarian component in recent years (Figure 1).

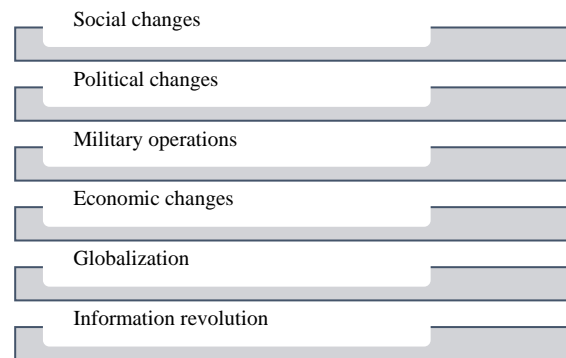


Figure 1. The main driving forces behind the development of the humanitarian component of modern society, %.

Source: compiled by the authors based on (Ginsburg & Jablonka, 2019), (Wellman, 2018).

As per scholarly discourse, the contemporary emphasis on human spiritual development is influenced significantly by socio-political changes and the information revolution.

This study identified a system of pivotal trends in spiritual development, which have witnessed escalating prominence across the majority of countries in recent times (Figure 2).

The analysis presented in Figure 2 illustrates that these trends primarily involve the establishment of an inclusive environment characterized by interaction, mutual understanding, and interethnic harmony across all ethnic constituents of society. These efforts foster the cultivation of spiritual and cultural unity among the populace and facilitate the resolution of regional demographic challenges.

Within the framework of this research endeavor, the authors have delineated areas warranting further exploration in the realm of societal spiritual development. These areas have been deemed as the most efficacious and sought-after within both the realms of scientific inquiry and practical application (Figure 3).

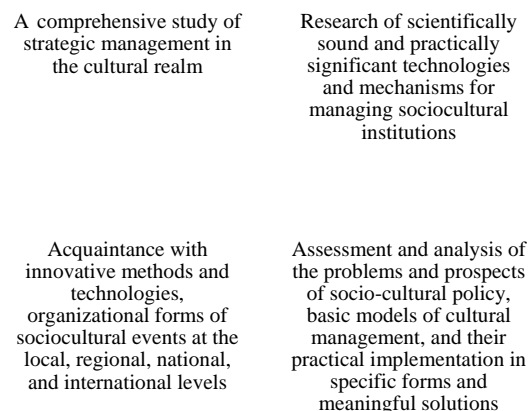


Figure 3. Directions of further research in the field of spiritual development of society, which are the most effective and in demand in scientific and practical activities, %.

Source: compiled by the authors (2023).

The comprehensive review and evaluation of current literature about spiritual development reveal several prominent areas warranting further investigation. These areas, widely recognized within the scientific community, encompass the examination of the efficacy of strategic management in the cultural domain, the exploration of technologies and mechanisms for governing sociocultural institutions, the exploration of innovative methods and technologies, the analysis of organizational structures within sociocultural events, as well as the assessment and analysis of challenges and prospects associated with sociocultural policies.

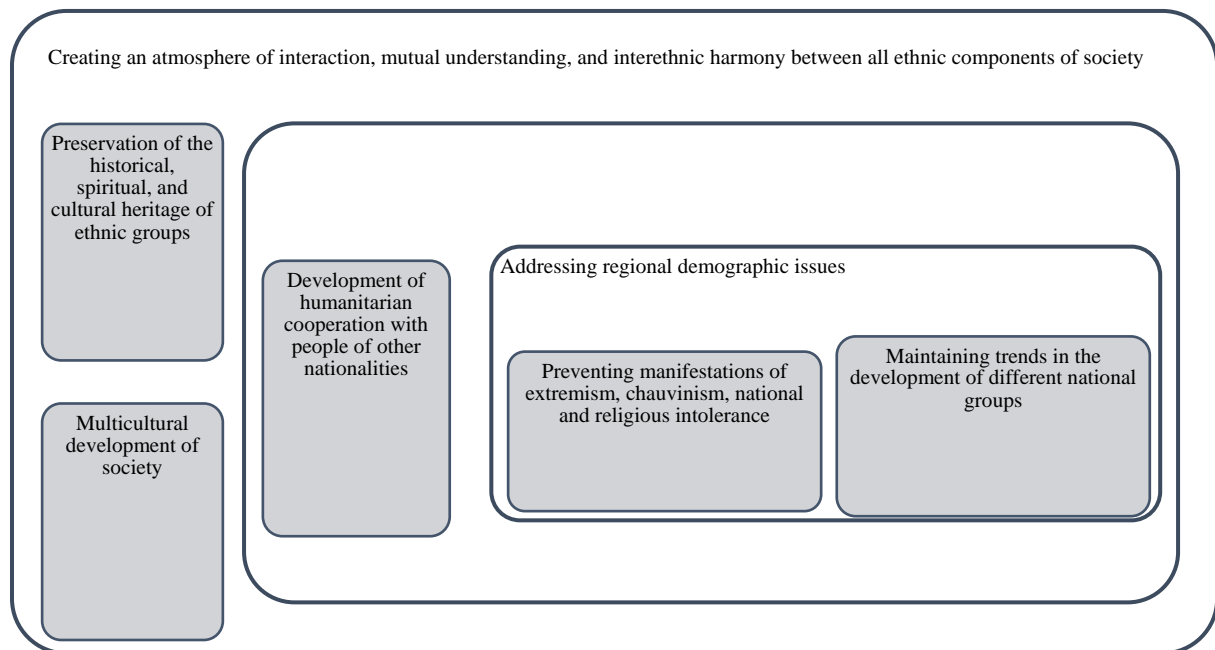


Figure 2. Key trends in spiritual development that have been intensifying recently in most countries of the world, %.  
Source: compiled by the authors based on (Hayes & Hofmann, 2023), (Belisle, Dixon & Stanley, 2018).

## 5 Discussion

In the current societal landscape, characterized by a global humanitarian crisis, the realm of spiritual knowledge is experiencing a notable elevation, accompanied by the acquisition of fresh significance. The level of individuals' spiritual consciousness, in conjunction with the state and social developmental stage, not only shapes the everyday experiences of society members but also holds implications for overall security, existential content, and the pursuit of meaning in both present and future contexts. Within the framework of humanitarian education, spiritual education assumes a crucial role in shaping the life trajectories and value orientations of modern individuals. On this subject matter, it is vital to acknowledge that spiritual education necessitates a proficient level of knowledge capable of fostering the formation of ecological consciousness, denoting an awareness of the spiritual interconnectedness of the world and a comprehension of the symbiotic relationship between humanity and nature. Analogous to any form of education, it is inconceivable without the acquisition of a requisite amount of knowledge, particularly pertaining to the fundamentals of ecological thinking (Hayes et al., 2020), (Gijsberts et al., 2020), (Houwer et al., 2022).

Environmental knowledge attains its true significance when it undergoes a transformative process, culminating in the development of spiritual beliefs through education. A society that emphasizes these concerns bears the responsibility for the environmental ramifications arising from scientific and technological advancements and endeavors to imbue this progression with a social and humanistic orientation through the dissemination of humanitarian knowledge, which is subsequently integrated into the fabric of spiritual education within the educational framework. It is important to note that humanitarian knowledge in isolation does not yield the desired outcomes; rather, it is the linkage between knowledge and education that is imperative. Knowledge imparts an understanding of the human psyche, spirituality, and their interplay, while education seeks to manifest spirituality within these interactions, ultimately aiming to fulfill humanitarian needs and foster an individual's attitude toward their soul. This holistic approach encompasses an appreciation of the ecological and moral dimensions inherent in the fabric of existence, founded upon a profound understanding of humanity as an

absolute value in life (Hayes et al., 2022), (Hayes et al., 2020), (Dabo et al., 2021).

According to numerous scholarly articles on spirituality, a prominent trend observed in global society's spiritual landscape is the resurgence and revitalization of the system of spiritual values. Concurrently, it is imperative to acknowledge the engagement of the general populace in the process of humanization, particularly given the prevalence of mass pop culture that often supplants genuine values with inferior pseudo-cultural products in the minds of the majority of individuals (Monson et al., 2022), (Graziano, 2022), (Best, Vivat & Gijsberts, 2023).

Contemporary beliefs highlight the notion that each era of revolution commences with a reevaluation of the past, encompassing its moral values and spiritual rejuvenation. However, renewal within society's cultural realm does not invariably fulfill the spiritual needs of individuals and often follows a cyclical historical pattern. Hence, it becomes crucial to safeguard and uphold values that have withstood the test of time and remain independent of the historical and cultural stage of societal development. Scholars in the field of culture have identified a distinct "cultural demand" in every historical epoch, arising as a response to the prevailing issues of the era and serving as a means to surmount them (Satin et al., 2021), (Ong et al., 2023).

## 6 Conclusion

Therefore, contemporary historians and scholars in the field of cultural studies observe that in the present era, there is a gradual revival of society's highest spiritual and moral knowledge, accompanied by a reassessment of values and a restoration within the educational sphere. These developments are inclined towards spirituality, humanization, and humanity. As a result, these trends influence the reform movement within the education sector, as the integration of spirituality in educational institutions establishes a robust foundation of spiritual values for society.

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#### Primary Paper Section: A

#### Secondary Paper Section: AA, AM

## PROBLEMATIC ASPECTS OF DIAGNOSING MENTAL DISORDERS AMONG MILITARY PERSONNEL OF THE ARMED FORCES OF UKRAINE

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**Abstract:** The conflict between Russia and Ukraine has resulted in the involvement of hundreds of thousands of Ukrainians. The combat zone is characterized by high levels of intensity, tension, and dynamism, placing military personnel under immense psychological stress. Such conditions can lead to exhaustion, which in turn can reduce the effectiveness of activities performed during armed conflict. Additionally, exposure to extreme conditions can result in short- and long-term psychological trauma and mental disorders. The response of military personnel to the stressors present in the combat environment is influenced by the unique circumstances experienced by each individual, as well as by their specific coping mechanisms. The impact of particular stressors on the mental health of servicemen, as well as the potential for the development of psychological trauma as a result of combat experiences, is influenced by a range of factors. These factors include individual psychological and personal characteristics, levels of psychological and professional training for combat missions, the nature and extent of combat motivation, and individual perceptions of the significance of combat within the broader context of their personal and historical experiences. Developing and implementing effective conceptual frameworks for understanding mental disorders and creating reliable diagnostic tools are crucial tasks in the current context. Such tools are necessary to facilitate accurate diagnosis and improve the quality of rehabilitation and socialization for soldiers returning from combat zones and their families. Moreover, effective diagnosis of mental disorders can aid friends and family members in understanding the nature of the problem, identifying the goals and motives behind specific behaviors associated with psychological trauma, and laying the foundation for improving the physical and emotional well-being of military personnel and fostering healthier interpersonal relationships. This article aims to investigate the specific challenges involved in diagnosing mental disorders among individuals serving in the Armed Forces of Ukraine. Drawing on the findings of this study, the article seeks to identify the key problem areas in the diagnosis of mental disorders among military personnel and to propose potential solutions to these challenges. Methodology. During this study, some analytical and bibliographic methods were employed to analyze the existing literature on the diagnosis of mental disorders. Additionally, the study utilized systemic and structural, comparative, logical, and linguistic methods, as well as techniques such as induction, deduction, analysis, information synthesis, abstraction, and idealization to examine, correlate, and process the collected data. Furthermore, the authors of this study conducted an online questionnaire survey to identify key issues related to the challenges associated with diagnosing mental disorders among military personnel. Results. The findings of this study revealed key theoretical aspects related to the diagnosis of mental disorders among individuals serving in the Armed Forces of Ukraine. Additionally, the study gathered input from psychologists, psychotherapists, and military personnel serving in the Armed Forces of Ukraine regarding critical issues associated with diagnosing mental disorders among military personnel.

**Keywords:** Psychological diagnostics, military psychology, psychological trauma, diagnostic methods, mental disorder, problems of diagnosis, mechanisms of psychological traumatization.

### 1 Introduction

The prevalence of mental disorders among military personnel, often accompanied by psychological trauma, manifests in various forms including acute stress reactions, post-traumatic stress disorder, physical and mental health disorders, chronic psychopathological personality changes, social maladjustment, and antisocial behavior. Given the significant socioeconomic consequences of these disorders for the country, it is imperative to implement and improve not only preventative and rehabilitative measures but also diagnostic measures for early identification and treatment.

Psychophysiological diagnosis of military personnel is a crucial aspect of medical and psychological rehabilitation at all stages. It enables the assessment of the type and severity of mental disorders, as well as the evaluation of important professional

qualities and individual adaptive reserves, which are necessary for determining the individual's fitness for duty or the need for treatment, rehabilitation, and other interventions.

The theoretical part of this study provides a comprehensive overview of the most prevalent scholarly perspectives on the intricacies of diagnosing mental disorders among military personnel.

This survey presents the outcomes of a questionnaire administered to respondents to evaluate the significance of proposed diagnostic issues, identify priority areas requiring attention, and determine patient characteristics that are diagnostically relevant as factors for assessing mental disorders. Additionally, the survey gauges the respondents' perspectives on the strategic direction for the development of the diagnostic sphere.

The research discovered that contemporary challenges in diagnosing mental disorders include insufficient attention given to the victim's physical condition, superficial assessments of patients, and inadequate consideration of all the consequences of psychological trauma.

### 2 Literature review

When diagnosing the impact of stressors on the health of military personnel, it is common practice for psychologists and medical professionals to utilize various indicators, including blood pressure, heart rate, short questionnaires to assess well-being, and compact psychological tests. However, on-site diagnostic tests have limitations in their applicability for certain methods, thus, they must meet requirements for compactness and high information content, as well as the ability to provide clear information. The ideal way to use them is through computerized methods, both on-site and later in hospitals or centers for medical and psychological rehabilitation, allowing for dynamic monitoring of changes over time (Williamson et al., 2022), (Chu et al., 2018), (Britt et al., 2020a).

Psychophysiological and psychological diagnosis of military personnel is a crucial preventive measure in medical and psychological rehabilitation. Such diagnostic measures aid in determining the fitness for further service, as well as the need for rehabilitation, treatment, and psycho-prophylaxis (Finnegan & Randles, 2022), (Campbell-Sills, Sun & Kessler, 2023), (Ibrahim et al., 2022).

Effective diagnostics enables the early identification of military personnel with reduced adaptive potential and a high likelihood of experiencing severe and early symptoms of psychological trauma and its subsequent consequences. It also enables the development of personalized tactics and preventive and recovery methods for each evaluated individual (Alonso et al., 2018), (Dabovich, Elliott & McFarlane, 2021), (Forbes et al., 2019).

The findings from the diagnosis of the mental state of military service professionals can be utilized to evaluate the prevalence and patterns of health disorders within this demographic. Additionally, these results can contribute to the examination of the quality of medical care provided to military personnel, the optimization of preventative measures for mental illnesses, and the improvement of treatment approaches for patients (Leightley et al., 2018; Wickersham et al., 2019).

Due to the elevated risks inherent in their professional responsibilities, servicemen and women are susceptible to experiencing physical and psychological ailments, primarily attributed to the development of mental health issues arising from traumatic events (Britt, 2020b).

When investigating psycho-trauma in military personnel, researchers consider not only physiological symptoms but also the dynamic nature of mental health disorders, which enables them to better predict the course of combat stress and mitigate its adverse effects. Scientists categorize military personnel with signs of psychological trauma into three groups:

- with an active tendency to overcome stress;
- with a prolonged stress reaction;
- self-destructive behavior (destructive reactions, alcohol addiction, etc.) (Fikretoglu et al., 2022), (Adler et al., 2020), (Boulos & Fikretoglu, 2018).

In the diagnostic process of mental trauma, psychotherapists pay particular attention to the long-term changes in the structure of the individual's personality, the manifestation of neurotic reactions, and neuroses that were diagnosed during the acute phase of the mental disorder. These factors are indicative of a decline in the primary indicators of the quality of life of military personnel (Britt et al., 2020b), (Rhead et al., 2020).

Given the limited possibilities for research and the absence of an effective system for psycho-diagnostics of mental disorders among military personnel, the level of study on this issue is

considered insufficient and requires a focused and meaningful investigation (Cox, Martinez & Southam-Gerow, 2019), (Hom, Bowers & Björgvinsson, 2021).

### 3 Aims

The present study aimed to investigate the perspectives of psychologists, psychotherapists, and military personnel of the Armed Forces of Ukraine regarding the diagnosis of mental disorders among serving personnel.

The research methods employed in the study were grounded in widely accepted approaches to psychological assessment, involving interviews and observations.

### 4 Methods and materials

In April 2023, a pragmatic investigation of contemporary trends regarding the diagnosis of mental disorders in military personnel was carried out. This study encompassed interviews with 192 private psychologists and psychotherapists, alongside 94 active military personnel stationed in the Sumy, Chernihiv, Cherkasy, Poltava, Rivne, Zhytomyr, and Kyiv regions of Ukraine (Table 1).

Table 1. Characteristics of the research sample

Oblast of Ukraine	Sex		Occupation of the survey participants						In total
			Psychologists		Psychotherapists		Military personnel		
			Age distribution of the research sample						
			Under 30 y.o.	After 30 y.o.	Under 30 y.o.	After 30 y.o.	Under 30 y.o.	After 30 y.o.	
Sumy oblast	M	15	4	1	5	3	1	1	44
	F	29	8	2	9	3	5	2	
Chernihiv oblast	M	16	4	1	4	2	1	4	47
	F	31	8	3	5	4	8	3	
Cherkasy oblast	M	16	4	3	1	1	5	2	58
	F	42	12	0	6	11	9	4	
Poltava oblast	M	25	8	1	2	5	1	8	57
	F	32	8	0	9	1	10	4	
Zhytomyr oblast	M	11	1	1	4	1	1	3	36
	F	25	7	1	5	1	8	3	
Kyiv oblast	M	18	3	4	6	4	1	0	44
	F	26	4	3	8	1	6	4	
<b>In total</b>		286	71	20	64	37	56	38	286

According to Table 1, the majority of the respondents were women under the age of 30, with around a third of them coming from the Cherkasy, Poltava, and Chernihiv regions of Ukraine. The online survey was administered using the Google Forms service.

### 5 Results

The study aimed to evaluate the types and priority of problems that might arise during the diagnosis of mental disorders in military personnel. To achieve this, various methods were used to diagnose the mental state of servicemen, including the Multilevel Personality Inventory (MPI) "Adaptability-200", the "Scale for Assessing the Level of Reactive (Situational) and Personal Anxiety by C. D. Spielberger - Y. L. Khanin", the Brief Anxiety, Depression, and PTSD Scale, and the Mississippi Posttraumatic Reactions Scale (military version). The survey involved assessing the views of the study participants on certain characteristics of the methods and problematic issues that arose during the study of the mental state of AFU military personnel. The respondents were presented with a list of problems that arose during the diagnosis, and they rated each of them as "Most important," "Important," or "Less Important." Additionally, the

survey sought to establish the respondents' point of view on the priority of tasks for reforming the diagnostic sphere and the degree of influence of social and individual characteristics of patients that are diagnostically important as factors in assessing mental disorders. The survey was conducted with the use of the Google Forms service. The majority of respondents were women under the age of 30, and approximately one-third of them came from the Cherkasy, Poltava, and Chernihiv regions of Ukraine.

The results obtained after the test were analyzed by counting the number of responses provided and calculating the proportion of the total number of responses from all survey participants. This allowed the researchers to determine the frequency of each response and the overall distribution of responses for each question or item in the survey.

During the survey conducted in the context of this study, participants identified primary difficulties encountered during the diagnosis of the mental state of patients. In addition to selecting the type of problematic moment, respondents evaluated the degree of its severity as "Most important," "Important," or "Less important," under the terms of the survey (Figure 1).

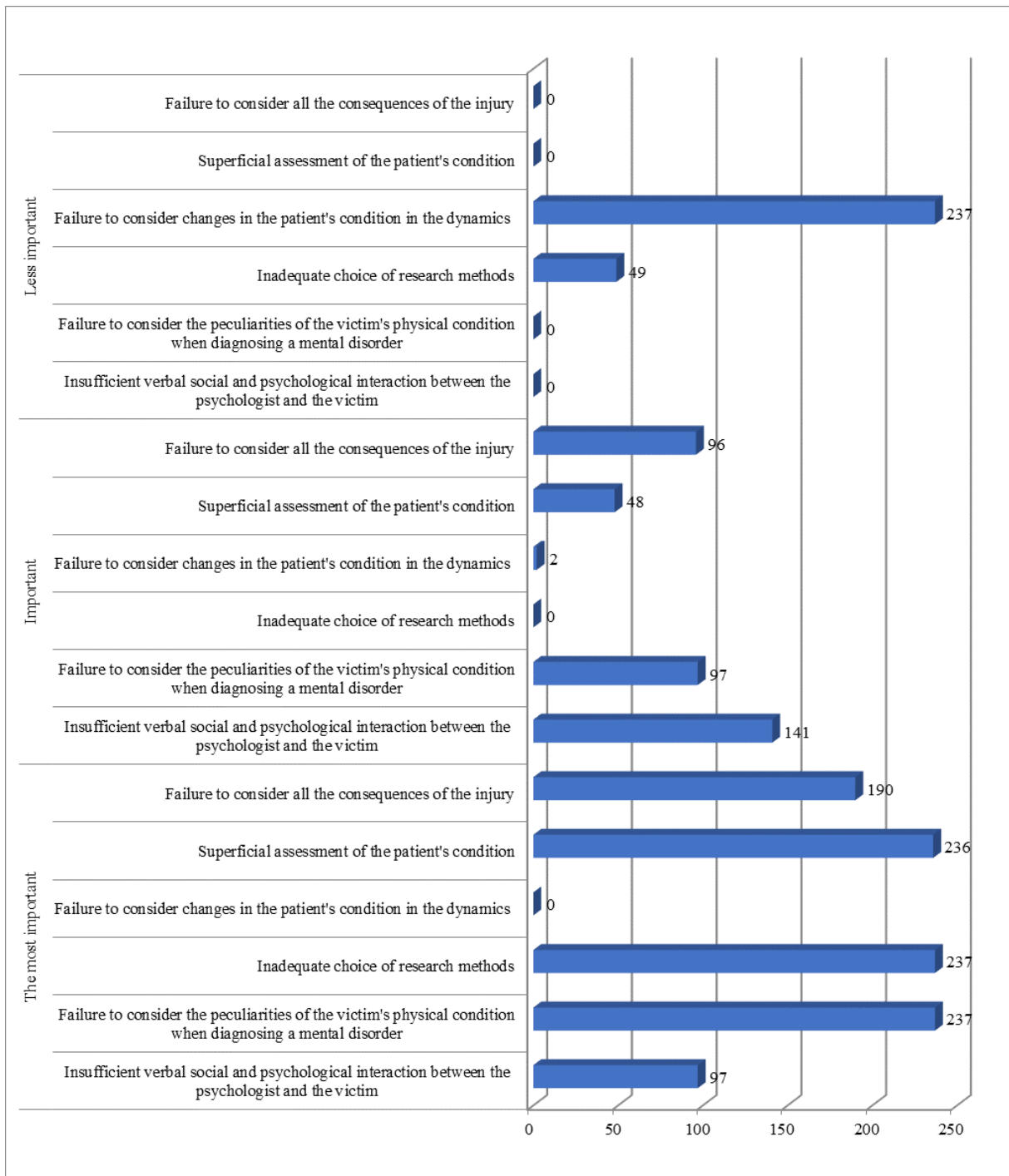


Figure 1. Problems that occurred during the diagnosis of patients' mental state, %.  
 Source: compiled by the authors based on Annex 2.

As Figure 1 indicates, the most crucial diagnostic challenges according to the respondents are the following: failure to consider the peculiarities of the victim's physical condition while diagnosing a mental disorder, superficial assessment of the patient's condition, and failure to consider all the consequences of the trauma.

Additionally, the majority of the respondents rated the issue of inadequate verbal social, and psychological interaction between the psychologist and the victim as "of medium importance".

The survey participants identified less important problematic aspects of diagnosis, such as failure to consider the victim's physical condition when diagnosing a mental disorder and inadequate selection of methods.

Furthermore, the survey allowed the participants to identify issues that require attention to optimize the diagnosis of mental disorders in the AFU. The respondents were asked to prioritize these issues as short-term, medium-term, and long-term (Figure 2).

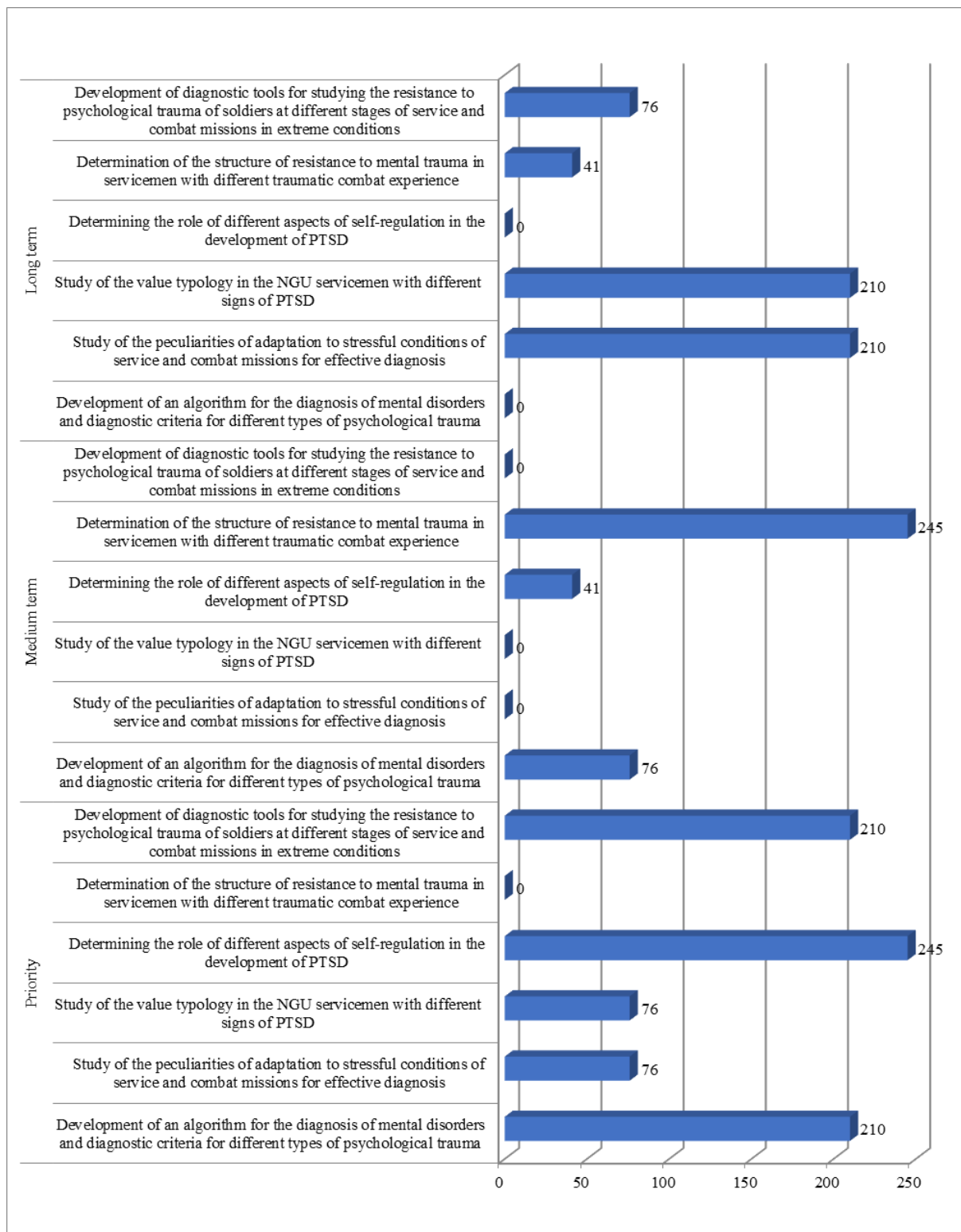


Figure 2. Issues that need to be addressed to optimize the diagnosis of mental disorders among AFU military personnel, %. Source: compiled by the authors based on Annex 2.

The participants indicated that the foremost priorities revolve around specific tasks. One of the tasks is to formulate an algorithm for diagnosing mental disorders. Another task is to establish diagnostic criteria that are specific to various types of psychological trauma. The participants also emphasized the importance of delineating the role played by distinct facets of self-regulation in the progression of post-traumatic stress disorder. Lastly, there is a need to create diagnostic instruments

capable of examining the resilience of soldiers to psychological trauma at different stages of engaging in combat missions within extreme environments.

Certain social and individual characteristics of patients are of great diagnostic importance as factors in assessing the mental disorder of the study participants (Figure 3).

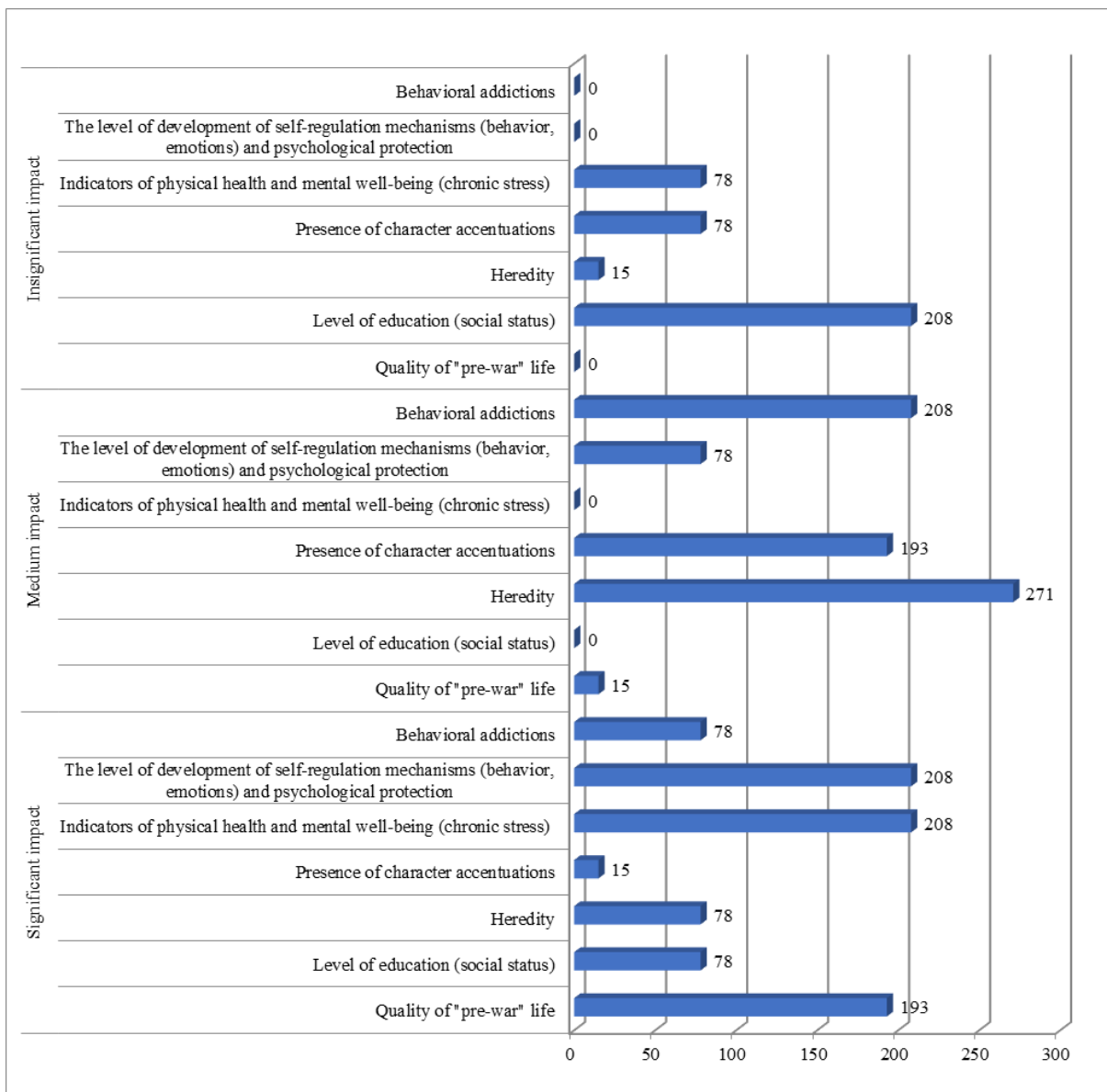


Figure 3. Social and individual characteristics of patients that are diagnostically relevant as factors in the assessment of mental disorder, %. Source: compiled by the authors based on Annex 2.

The present study revealed that individual characteristics of patients play a significant role in the assessment of mental disorders. Specifically, the quality of life before the outbreak of hostilities, the level of self-regulation, and physical health were found to have a considerable impact on the diagnosis of mental disorders. However, the level of education and social status were identified as having a minor effect on the success of diagnosis.

Furthermore, the survey identified the strategic directions that are of utmost importance for the development of the diagnostic sphere, as perceived by the respondents. These directions were deemed essential to optimize the diagnosis of mental disorders among military personnel (Figure 4).



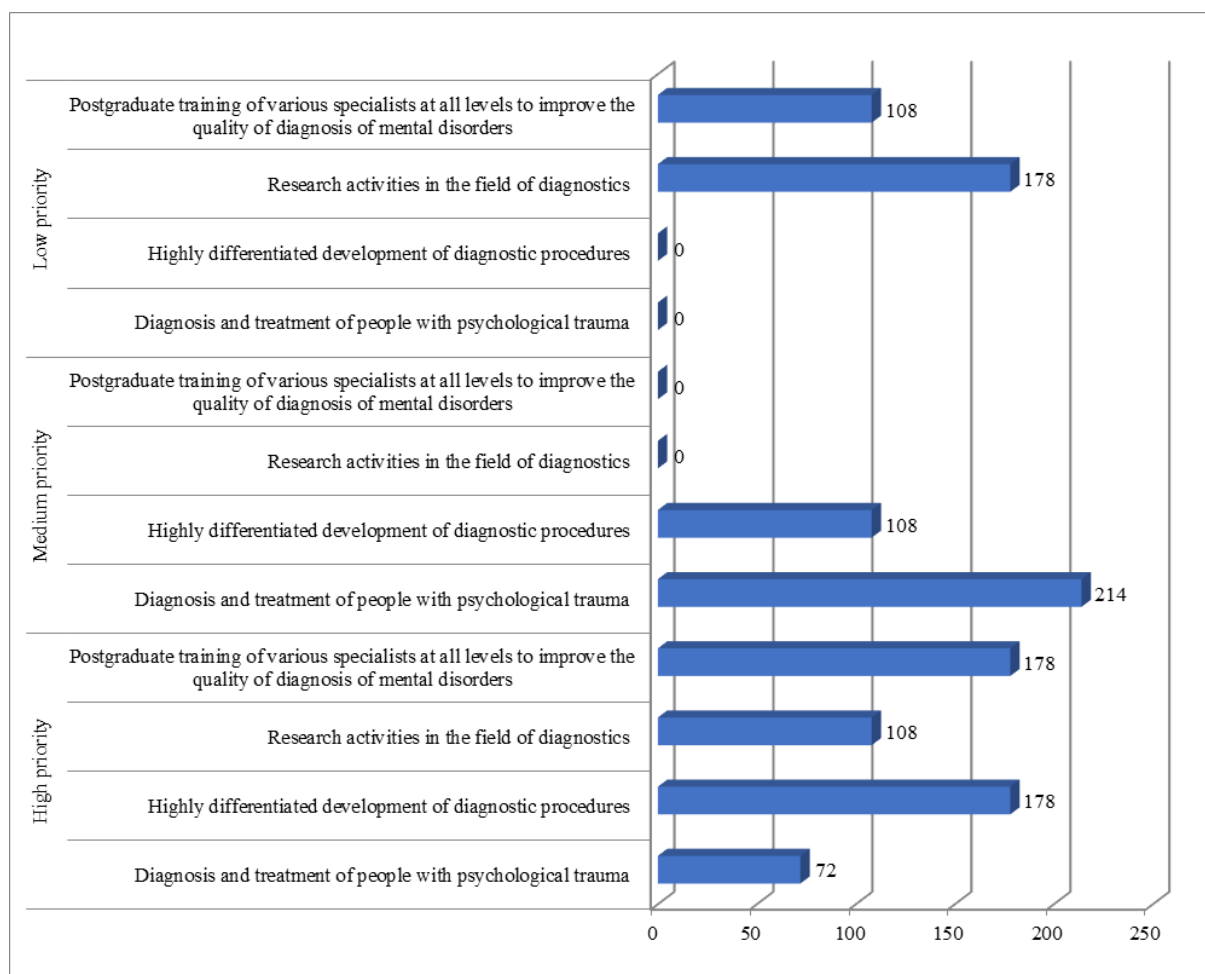


Figure 4. Prioritization of strategic directions for the development of the diagnostic sphere, which would optimize the diagnosis of mental disorders of military personnel, %.

Source: compiled by the authors based on Annex 2.

Upon examination of Figure 4, it is evident that the respondents placed a high degree of importance on two primary strategic directions for the development of the diagnostic sphere: postgraduate training of various specialists at all levels to enhance the quality of diagnosis of mental disorders, and the highly differentiated development of diagnostic procedures.

## 6 Discussion

Predicting and diagnosing mental disorders in military personnel is a challenging task for military psychologists. To preserve the mental health of military personnel, it is crucial to develop and implement modern preventive, corrective, developmental, rehabilitative, and educational measures, and to integrate them into psychological practice. This requires a systematic and comprehensive approach to psychological support for military personnel, which includes special methods, tools, and actions aimed at strengthening the psychological stability of military specialists and developing their readiness to cope with stressors in the context of military service. Psychological support is provided through group and individual forms of work by specialists designated for this purpose and is closely linked to the medical care system. It complements the medical care system by supporting the maintenance and restoration of mental functions, social activity, and physical resilience that are affected by stress (Leightley et al., 2020), (Stevellink et al., 2018).

Medical and psychological rehabilitation of military personnel is crucial for preserving their mental health. One of the essential measures of rehabilitation is the psychophysiological and psychological diagnosis, which allows for the assessment of various factors such as motivation to work in combat

contingents, professionally important characteristics, and individual adaptation reserves. The diagnosis helps to determine the fitness of the military personnel to perform assigned tasks or the need for rehabilitation, treatment, and psycho-prophylaxis at different stages of their service. This process is crucial in ensuring that military personnel receives the appropriate care and support to maintain their mental well-being (Leightley et al., 2018), (Mark et al., 2019).

The diagnostic process for potential mental disorders enables the identification of military personnel with reduced adaptive potential and a high probability of developing early and severe symptoms of psychological trauma and its long-term consequences. This early identification allows for the development of personalized tactics and methods for prevention and recovery for each individual, taking into account their psychophysiological characteristics. It is widely known that the severity of combat psychological trauma is largely influenced by individual psychophysiological characteristics (Therault et al., 2020), (Heyman et al., 2021).

Scientists have emphasized that due to the complex mechanism of psychological trauma in a combat situation, three distinct phases of extreme stress need to be considered. The first phase is the phase preceding the impact, which involves a sense of threat and fear. The second phase is the exposure phase, during which fear is the dominant emotion. The third phase is the aftereffect phase, which is characterized by the emergence of a range of mental health disorders. The duration of each stage can vary significantly depending on the specific conditions of its occurrence. Only by considering all three stages of psychological trauma development can a specialist make a correct diagnosis

and choose appropriate psycho-correctional tactics (Zuromski et al., 2019), (Boulos & Fikretoglu, 2019).

## 7 Conclusions

Thus, based on the analysis of the scientific literature and the results of the questionnaire, it is evident that psycho-diagnostic assessment of military personnel is becoming increasingly important for providing timely psychological assistance to soldiers with combat mental injuries, as well as for effective psychological rehabilitation and management of post-traumatic stress disorder. This approach results in a significant improvement in the pace and quality of personal and professional growth, optimization of the mental state, and an increased likelihood of successful professional activity for the military personnel in the future.

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**Primary Paper Section: A**

**Secondary Paper Section: AN**

## A PUBLIC ADMINISTRATION SYSTEM FOCUSING ON THE PROVISION OF PUBLIC SERVICES

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**Abstract:** The formation of an effective public administration system involves the creation of effective territorial village, town, and city communities that can provide a high level of quality services to the population, especially in the areas of education, culture, healthcare and social protection, housing and communal services, independently or through competent authorities. In this regard, the issue of implementing the provisions of the service state concept in the practical activities of the executive bodies of the councils of amalgamated territorial communities and the institutions and organizations they create is relevant. The article aims to identify the main development trends and peculiarities of the efficient provision of public services as a component of public administration and to clarify the key practical aspects of this issue. The authors used analytical and bibliographic methods to study the scientific literature on public administration. Induction, deduction, analysis, synthesis of information, systemic and structural, comparative, logical, and linguistic methods, abstraction, and idealization were also used to study and process data. Moreover, the authors of the study conducted an online questionnaire survey to clarify the most important issues related to the provision of public services by public administration bodies. The study identified the main theoretical aspects that are most important for the development of the public administration system. Furthermore, the views of scholars and heads of structural units of local self-government bodies engaged in the provision of public services on key aspects of this issue are analyzed.

**Keywords:** public administration, public service delivery, public administration models, service state, quality of public service delivery.

### 1 Introduction

The concept of effective organization of the work of public authorities implies high-quality organization of interaction between private companies, institutions, organizations that provide public services, and citizens. These relationships are primarily aimed at satisfying human needs, and the key function of public institutions is to provide quality services. The service-oriented activities of public authorities should be aimed at prioritizing the rights and legitimate interests of individuals and citizens who consume public services in a service-oriented state. Therefore, the development of the basic principles of a service state and the principles of organizing service activities and their implementation in national legislation and regulations governing local government is a pressing issue today.

The theoretical part of this study substantiates the concept, relevance, and basic theoretical provisions of the public administration system in terms of establishing the provision of public services. The practical part of the study provides an assessment of the most relevant areas of the necessary methodological developments for the study of issues related to the provision of public services in the process of public administration. It furthermore defines the key integral indicators of public administration efficiency. Moreover, this part outlines the main areas of activity of public authorities that determine the quality of public administration. The vectors of the necessary increase in the efficiency of activities in the field of public service provision and the prerequisites for an effective system of public service provision by public administration bodies are formed.

Based on the results of the study, conclusions are drawn regarding the issues raised. In particular, it is established that important areas of methodological research on issues related to the public administration system are methodological improvements in the field of social support and services,

protection of state borders, and ensuring the normal functioning of society. Meanwhile, the key integral indicators of public administration effectiveness are public trust in the executive authorities and local governments, as well as positive trends in the development of public administration. These are confirmed by the results of regular assessments of the public administration system of Ukraine according to the main indicators of SIGMA (Support for Improvement in Governance and Management). The survey showed that the main activities of public authorities that primarily determine the quality of public administration are the implementation of economic and social development programs and the provision of public services to members of society. At the same time, the areas of public administration efficiency improvement that need to be implemented in the field of public services include a broad exchange of experience in public administration with EU countries and simplification of the regulatory framework. The study found that the most important prerequisites for an effective system of public service provision by public administration bodies are the existence of a clear, structured legal framework that should normalize and establish the basic principles of building and functioning of state institutions.

The research aims to determine the position of scholars and employees of the governing structural units of local self-government bodies engaged in the provision of public services regarding the practical features of the provision of such services by public administration.

### 2 Literature review

The importance and scale of the tasks faced by the system of state bodies necessitate the study and continuous improvement of the public administration mechanism. Moreover, the adaptation of the management system to the current level of development of relations between the state, citizens, and business entities is needed, which requires thorough scientific research (Vinuesa et al., 2020), (Bannister & Connolly, 2020).

Public administration is the central link in the implementation of the legal policy of a modern democratic state. The system of public administration of socioeconomic processes has a multilevel character (regional, municipal, enterprise level) and operates on the grounds of legal acts regulating the activities of subjects and objects of public administration (Sun & Medaglia, 2019), (Peeters & Widlak, 2018).

In public administration, the type of controlling influence exercised by the subject of management on the object of management is of great importance. Thus, public administration emerges as a kind of social contract between the state and society, when powers are delegated to competent authorities and officials, while the people, i.e. the population of the country, remain the main bearer of power. Therefore, public administration has a broader profile of managerial influence. The subjects of public administration are not only state and local governments, but also public organizations, enterprises, and institutions of various forms of ownership, as they may have their own state and administrative powers exercised in the interests of the state (Eom & Lee, 2022).

Within the framework of the concept of human development, a person is not an object but a subject of society's development. Therefore, he or she should participate in the processes that shape his or her sphere of life, contribute to the adoption and implementation of decisions, and monitor their implementation. Meanwhile, to achieve sustainable development, modern society must create an effective decision-making system based on a consensus approach. Such an approach considers the historical experience and promotes pluralism in making the most important decisions in the public administration process (Wamba et al., 2021).

The processes of globalization and the development of the informatization of society characterize the main trends and directions of the development of the national public administration system. Implementation of a quality social policy requires a division of responsibilities between political and administrative spheres of activity. Equally important is the creation of a coherent and independent system of administrative courts, development, and effective financial management with clear regulation of liability for violation of financial discipline. Moreover, the quality of service delivery and the ethical component of the public administration system needs to be improved. Furthermore, it is important to ensure high professional training of officials and optimize the process of formulating personnel policy (Truby, 2020), (Taeiagh, Ramesh & Howlett, 2021).

The search for the most socially effective, socially oriented model of public administration aimed at the balanced development of the country and society requires a clear understanding of a set of organizational principles and modern forms and methods of influence. This model should be aimed at developing human capital and ensuring a high standard of living, well-being, and harmony in society.

In the context of multi-level governance, new models of public administration provide for the coordination of service activities at different levels (Kuhlmann, Stegmaier & Konrad, 2019).

When studying the process of providing public services, it is worth noting that services are provided not only by a specific competent authority, which is the rule, but also by judicial authorities, which are an exception to the general rule. For instance, in the field of intellectual property relations, the protection of rights to a well-known trademark is carried out under Article 6 of the Paris Convention for the Protection of Industrial Property through the recognition of a well-known trademark by the Appeals Chamber of the National Intellectual Property Authority or a court. Thus, the specificity of a public administration entity in the provision of public services is not only that the services are provided by a specific competent authority, which is the rule, but also that these services may be provided by judicial authorities or through other procedures, which is an exception to the general rule (Paris Convention for the Protection of Industrial Property, 1883).

Nowadays, developed countries are focusing even more on the social aspects of state tasks, including ensuring an adequate standard of living, meeting the needs for spiritual and creative development, education, and cultural services, and ensuring rights and equal opportunities for women and men, etc.

One of the prerequisites for ensuring social justice, equal and sustainable human development is the application of a gender approach. The application of a gender approach by governments at various levels creates opportunities for more efficient use of limited resources. It helps to take into account the needs, opportunities, and interests of women, men, and other social groups in the development, implementation, and monitoring of the state strategy, programs, and budgets. Moreover, it helps to create conditions for different social groups, including men and women, to benefit equally from the implementation of programs and policy measures, eliminating inequality in access to public services, resources, and decision-making processes.

The philosophy of public administration at the present stage of society's development should be based on the awareness of targeted influence on certain processes in the social system, taking into account the objective laws and trends inherent in it. These will accompany the realization of certain goals, and objective conditions for the provision of such services, given their high social significance (Torfing et al., 2020), (Wang, Medaglia & Zhen, 2018).

Public administration acquires its real social significance in the process of creating high living conditions for society. Therefore, the more public goods are created following the available

capabilities of public authorities, the more effective public administration is. In the meantime, regardless of the technology of modern public administration, it should be noted that efficiency should not be directly related to the number of costs for the system's functioning but should be related to the guaranteed capabilities of the system (Ulnicane et al., 2020), (Kankanhalli, Zuiderwijk & Tayi, 2017).

### 3 Materials and methods

A practical study of current trends in the provision of public services by public administration bodies was conducted by interviewing 310 scientists and 274 employees of heads of structural units of local self-government bodies engaged in the provision of public services in Volyn, Rivne, Khmelnytsky, and Chernihiv oblasts of Ukraine. The survey was conducted using the Survey Planet service.

### 4 Results

In the course of the survey, primarily, the opinion of the survey participants on the most important areas of methodological research of issues related to the public administration system was clarified (Figure 1).

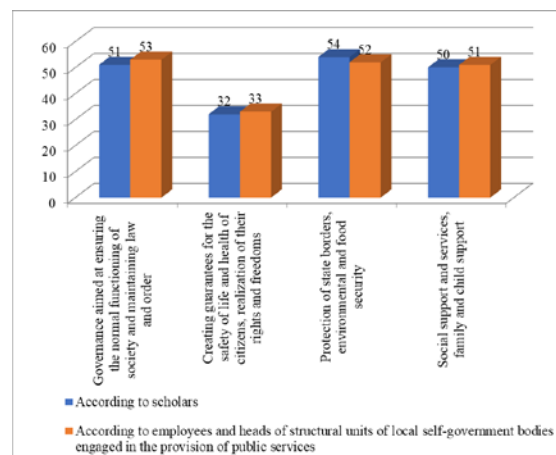


Figure 1. The most relevant areas of necessary methodological developments in the study of issues related to the provision of public services in the process of public administration, %  
Source: built by the authors.

The survey has shown that the most needed improvements today are in the areas of social support and services, protection of state borders, and ensuring the normal functioning of society. During the survey, respondents identified the following key integral indicators of public administration efficiency (Figure 2).

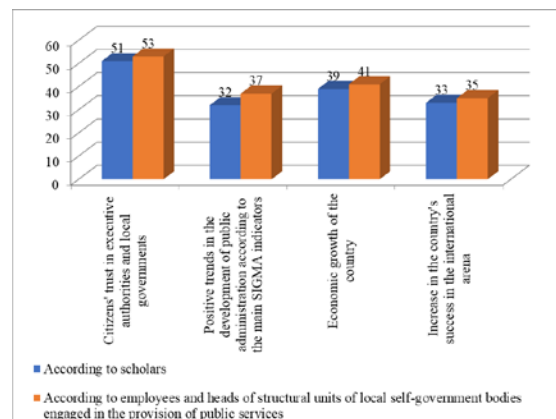


Figure 2. Key integral indicators of public administration efficiency, %  
Source: built by the authors.

According to the survey, the most important integral indicators of public administration effectiveness are the trust of citizens in the executive authorities and local self-government bodies. Moreover, they include positive trends in the development of public administration, confirmed by the results of regular assessments of the public administration system of Ukraine according to the main SIGMA (Support for Improvement in Governance and Management) indicators.

In the context of studying the topic of our research, we investigated the respondents' opinions on the main areas of activity of public authorities that primarily determine the quality of public administration (Figure 3).

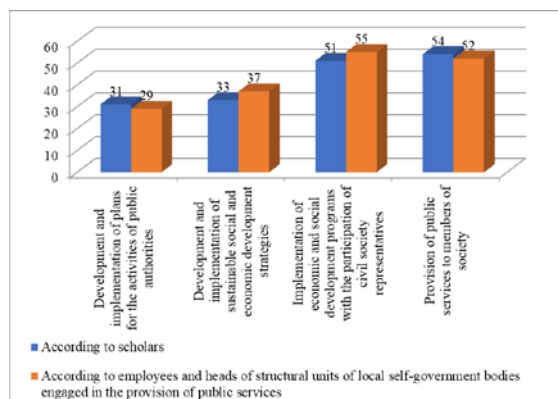


Figure 3. The main activity directions of public authorities that determine the quality of public administration, %  
Source: built by the authors.

As can be seen from Figure 3, the most important areas of work provided by the national system of public administration at the state (municipal) level and determining the quality of public administration, in general, are the implementation of economic and social development programs and the provision of public services to members of society. In the course of the study, respondents were asked to name the areas of necessary improvement of public administration efficiency in the field of public services (Figure 4).

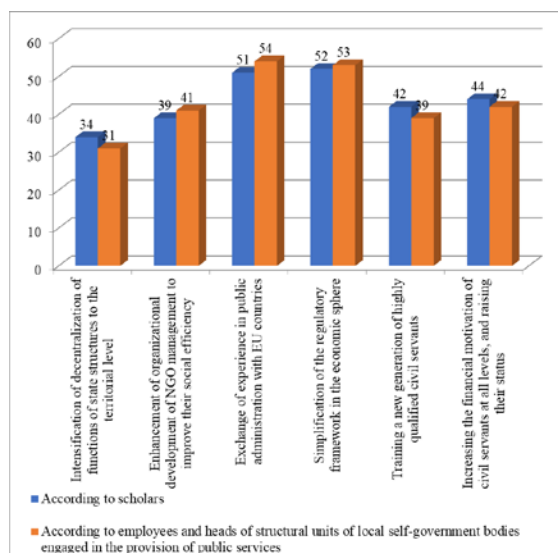


Figure 4. Directions for improving the efficiency of public administration that need to be implemented in the provision of public services, %  
Source: built by the authors.

As can be seen from Figure 4, such areas include a broad exchange of experience in public administration with EU countries through joint conferences on public administration and the involvement of public administration experts as consultants

and trainers. Moreover, simplification of the regulatory framework in the economic sphere can reduce the bureaucratic burden for entrepreneurs and eliminate corruption issues that are inevitably associated with various permits, certificates, and orders.

An important issue identified in the survey is to determine the prerequisites for an effective system of public service delivery by public administration bodies (Figure 5).

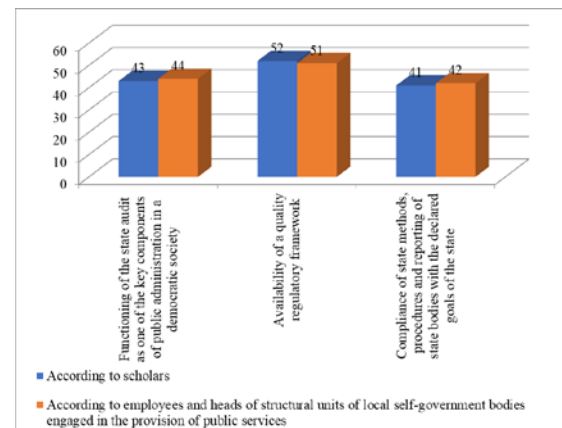


Figure 5. Prerequisites for an effective system of public service provision by public administration bodies, %  
Source: built by the authors.

According to the survey, the most important prerequisites for high efficiency of the public service delivery system by public administration bodies are the existence of a clear, structured legal and regulatory framework.

This framework should normalize and establish the basic principles of the building and functioning of public institutions.

## 5 Discussion

Public management and administration within the framework of the updated social management methodology require the development of effective implementation mechanisms.

Trends and challenges related to the need to professionalize public administration and improve the quality of the state apparatus itself based on scientific management technologies have led to the emergence of a new scientific field – public administration (McDonald et al., 2022), (Konrad & Böhle, 2019).

In the context of deepening integration processes, public administration requires a clear definition of the basic principles and directions of development. Therefore, the public administration system should be based on the principles of openness and ensure an optimal combination of principles, mechanisms, methods, and tools to build an effective multi-level integrated governance structure. However, the current system of public administration remains corrupt, contradictory, and inefficient. This is a significant obstacle to positive changes in society and the state (Scupola & Mergel, 2022), (Gutierrez, Marchant & Michael, 2021).

Insufficient transparency and openness in public administration, unclear separation of politics and management, insufficient professional level of civil servants, lack of a unified system for assessing their competence, low level of disciplinary responsibility, an imperfect political and administrative control mechanism in the public administration system - all these factors are destructive elements in the organization of effective public administration in general and social service delivery in particular. The concept of the new public administration envisages decentralization of governance by expanding the

powers and responsibilities of local governments (Allen et al., 2022), (Ciarli et al., 2021).

The main task of the authorities is to ensure that local communities can solve their problems and control the quality of public services on their own. This approach is in line with the core values of local self-government: autonomy (decentralized governance), democracy (civic participation), and efficiency (proximity of the government to the population). The state transfers public service delivery functions to non-governmental organizations (commercial and public) and retains the functions of control and development of the overall strategy. Such decentralization provides greater administrative flexibility and efficiency, and stimulates competition among service providers, increasing civic and social responsibility (Paletti & Maha, 2018), (Blomkamp, 2018).

The central task of public administration is to organize internal and external relations between the subjects of social interaction to optimize the provision of services and expand the participation of citizens, and public and private entities in the processes of making socially significant decisions. According to this concept, governance is a constant and active interaction between the public and non-governmental sectors, which ensures that governance mechanisms are adapted to the needs of society, given the complexity and dynamism of modern social relations, as well as the diversity of social problems (Casula, Leonardi & Zancanaro, 2020), (Gawłowski, 2018).

## 6 Conclusions

The analysis of the scientific literature on the research topic and the results of the questionnaire survey show that the improvement of public administration should serve the social well-being of society, solve urgent socioeconomic problems, and improve the standard of living and quality of life of the population. Effective management of socio-economic processes and ensuring their balance is possible only if an efficient public administration system is established. The definition of its strategic goals, principles, and performance criteria should be based on a fundamentally new paradigm that centers on human needs and the need to constantly enhance the quality of life. This means that the process of forming a national public administration system should begin with creating an appropriate institutional environment capable of producing high-quality public services that aim to form new value orientations both in society as a whole and each individual. In our opinion, this is the key to sustainable social development.

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**Primary Paper Section: A**

**Secondary Paper Section: AE, BC**



## LINGUISTIC AND CULTURAL PECULIARITIES OF THE CONCEPT OF "WAR" IN ENGLISH AND UKRAINIAN LANGUAGES

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**Abstract:** The aim of the article was realized by analyzing peculiarities and the role of linguistic and cultural features of the concept of "war" in English and Ukrainian languages. The examined examples allowed the formulation of the following conclusions. First, mental representations may differ due to linguistic and cultural features. In a particular language and culture, the historical experience of its speakers is concentrated, and the mental representations of these speakers may differ from those of speakers of another language and culture. Secondly, the linguistic picture of the world is the leading research object in modern linguistics. It is a complex process, the study of which is dictated by both the development of linguistics and its specific directions, including linguoculturology. It has been proven that the concept serves as the central unit of this research, defining the historical component of the linguistic picture of the world and intending to explore the English language in conjunction with the culture and consciousness of the people. It is noted that in society, the linguistic and cultural concept of war plays a vital role as it occupies one of the central positions in the life of any nation. The historical-etymological and etymological analysis of words that appeared in the English language during the XXth century during armed conflicts allows identifying additional, previously unnoticed lexical-semantic features in the content of the key lexeme of the linguistic and cultural concept of war. The conclusion is drawn that the English language is undergoing another stage of development and enrichment with new words due to current armed conflicts. As this process still needs to be completed, it will continue attracting special attention from linguists to track changes in vocabulary in real time. Thus, the conceptual characteristics of the concept of war in Ukrainian and English language consciousness are a branching multitude of features, the central part of which is reflected with a significant degree of completeness in the definitions of explanatory dictionaries. Beyond these definitions, there remain characteristics of two types - etymological characteristics of concepts, on the one hand, and the most significant emotionally evaluative representations of war for the bearers of linguistic and cultural, on the other hand. The analysis of definitions in explanatory dictionaries, thesauri, and synonym dictionaries shows that the content of the conceptual component of the concept of war largely coincides with the mass and professional consciousness of Ukrainian and English speakers. The significant civilizational similarity between them can explain it. Differences are secondary and additional in nature, established in the associative field of concepts, and mainly come down to two points: the idea of eradicating the enemy in case of war in Ukrainian language consciousness (which is determined by the concentrated collective memory of the Ukrainian people regarding wars with ethnic groups that did not take prisoners of war, but exterminated them) and the idea of competitiveness as one of the characteristics of war in English consciousness (this understanding corresponds to the medieval knightly code of conduct).

**Keywords:** concept, war, English linguistic culture, Ukrainian linguistic culture, language consciousness.

### 1 Introduction

At the present stage of humanitarian knowledge, the term "concept" is one of the most widely used and controversial in linguistics, cultural studies, philosophy, and psychology. Each of these disciplines has its own definition of this term. It is due to numerous differences in understanding the term "concept" and its primary significance in the worldview of scientific research.

The term "concept" is not new in linguistics, but in recent decades it has received a new interpretation, as it was once considered equivalent to the term "notion." In linguistics, unlike "notion," the concept has a multidimensional structure. There is a great variety of research approaches to understanding the concept in modern linguistics. The linguistic and cultural approach to concept analysis aims to highlight the peculiarities of national mentality that have been formed over centuries and are reflected in cultural concepts. Thus, the concept can be understood as a unit of collective consciousness preserved in the national memory of language speakers in an objectified form. According to a group of scholars, a concept is a multidimensional formation that distinguishes between conceptual, figurative, and evaluative aspects. The semantic part

of the concept involves its linguistic fixation, including naming, description, and definition. In other words, it is a comparative characteristic of the concept concerning different sets of concepts. The concept's figurative aspect encompasses objects' sensory characteristics, mainly represented through conceptual metaphors. Finally, the evaluative part describes this mental education's importance for the individual and the entire linguistic community.

Other scholars consider the concept as a unit of cultural semantics, where its evaluative element predominates, along with explicit (or implicit) negative (or positive) connotations. In addition, it encompasses emotions and associations related to the concept, which are sometimes not directly expressed in certain cultures but are still perceived by language users. In a narrow sense, when analyzing any linguistic culture concept, we encounter two types of information: factual and evaluative.

The worldview of the military sphere in any culture has its own meaning and set of concepts. For example, the linguistic and cultural concept of war belongs to general concepts, as it is found in all cultures and languages, and thus has a wide range of correlative concepts, i.e., correlates.

This article aims to explore the understanding of the linguistic and cultural concept of war in the historical context of armed conflicts from the beginning of the XXth century to the present day, using the example of the United States of America. Considering the scale and volume of linguistic material related to the military sphere, it is necessary to select words that already existed at that time but with altered meanings or new words that emerged during each significant armed conflict for the United States.

### 2 Literature Review

The basis for this article is the scientific works of both national and foreign researchers in the field of the theory of language picture of the world (Trosborg, 2011), (Albrecht, 2013), (Arntz, 2003), (Bowyer, 2007), (Dickson, 2003), as well as studies in the field of linguoculturology, specifically linguistic-cultural concept, etc. (Funk, 1950), (Inghilleri, 2012), (Lerer, 2007).

In this research, the authors employed the method of purposive sampling, historical-etymological and semantic analyses, as well as analysis of dictionary definitions.

The linguistic and cultural concept of war is one concept that defines our lives, regulating everyday life down to the most trivial details. Such concepts structure how we perceive the surrounding world and comprehend the acquired information. Thus, a particular conceptual system is central to defining everyday reality.

Many contemporary researchers believe that any language, even far from war, eventually succumbs to its influence, which is necessary to resist escalating violent conflicts and promote moral-immoral behavior (Bohdan, 2014), (Boiko, 2021).

Thus, the role of the English language in armed conflicts (Inghilleri, 2012) and its relationship with the linguistic and cultural concept of war is currently the subject of works by such linguists as (Bondar, 2012), (Verovkin, 2012), (Bartashuk O., Nikolaieva A., Tarasiuk M., 2020), (Ohar, 2019), (Vasianovych, 2020), etc.

While studying this issue, the authors primarily referred to the English language's historical-etymological, etymological, and military dictionaries. However, this process initially encountered specific difficulties - with each war, a set of particular words peculiar to that armed conflict emerges in the language. At the same time, according to the authors' observations, most of such

terms either change their meaning at the onset of the war or gradually fall out of use by language speakers as the war ends.

### 3 Materials and Methods

While working on this research, the authors used the following general scientific methods: comparative, correlative, analytical, and historical.

### 4 Results and Discussion

The entire history of humanity is a chronicle of armed conflicts. Unfortunately, the concept of war and its components have become commonplace in people's lives.

Any war is not only a war of people but also a war of words. No one takes pride in the consequences of war, yet they take pride in the might of the armed forces. Whenever war breaks out, words like demagoguery, duplicity, confrontation, conflict, and so on come into play.

Every language is a dictionary of words, and each war has its own vocabulary. For example, during the American Civil War (1861-1865), growing facial hair on the cheeks was named after General Ambrose Burnside, who had quite thick facial hair in that style. Later, the word order was reversed, resulting in "*sideburns*." (Burnside URL: <https://www.civilwar.org/about/contact>).

Before the Civil War, the term '*bushwhacker*' referred to a rural inhabitant living in remote wooded areas, but after the war, it came to be mentioned as *someone lying in ambush, a guerrilla fighter*.

General Thomas Jackson, also known as "Stonewall" Jackson, received this nickname during the Watergate scandal, where the verb "*stonewall*" took on the meaning of *maintaining silence* (Jackson, 1895).

The term "camouflage" first entered English in the late 1800s and gained popularity during World War I. It refers to an action or means of disguising objects or individuals to deceive the enemy (Bowyer, 2007). Interestingly, from a zoological perspective, camouflage means the coloring or masking of animals to hide from predators.

The main topographical feature of World War I was the complex system of trenches that ran along the Western Front in Belgium and France. When soldiers received the order to go "over the top," they were required to climb out of the trench and launch an attack on the enemy.

In the case of a loose-fitting coat with a belt (trench coat), the form follows function - during World War I, a special coat was created, the convenient form suitable for staying in trenches. Essentially, the name of this type of outerwear derives from the base word "trench." After the war, this practical military style became quite popular among civilians, as servicemen continued to wear it in civilian life.

Before the First World War, confidential documents were marked with the term "hush-hush," which actually meant "*strictly confidential*," "*confidential*," or "*secret*." It emerged in the English language in the 1910s, and its frequency of usage increased during the Second World War.

The term "shell shock" was first recorded in English in 1915 when soldiers began to show signs of moral breakdown on the front lines during combat operations. However, the term "post-traumatic stress disorder" (PTSD) did not appear in the English language until the 1980s, although "post-traumatic syndrome" already existed in the 1960s.

The term "cushy" (meaning easy, simple) was widely used by soldiers during World War I to describe minimal effort in exchange for a sufficient reward. This term existed before the

1910s, but during World War I, "cushy" also came to be used to describe a sufficiently severe injury that would send a soldier home but not one that would cause long-term health disorder or death. In Great Britain, such an injury was referred to as a "blighty" - a term derived from the Hindi word "bilayati," which means "*foreign*." It was the name given to British soldiers in India (Simpson, Weiner, 2006).

The verb "mock-up" (to create a full-scale model for educational purposes) entered the English language during World War I to describe actions used for studying, testing, or teaching. The origin of this verb is attributed to Winston Churchill in 1914 (BBC - iWonder - Sir Winston Churchill: The greatest Briton? URL: [www.bbc.co.uk/timelines/z363gk7](http://www.bbc.co.uk/timelines/z363gk7)). However, the etymology of the noun "mock-up" dates a few years later, in 1920.

Many new words and phrases in the English language were created during World War II: nose dive, blitz(krieg), stormtrooper, or Nazi. These words are widely used nowadays, and no one thinks about their origin. However, the most significant change occurred in 1947, when the Department of War was renamed the Department of Defense (Bowyer, 2007). Also, we should not forget about the atmosphere of the Cold War, which means the political and ideological confrontation between the two major world powers after World War II (Cold War/Causes, Facts, & Summary. URL: <https://www.britannica.com/event/Cold-War>).

The Korean War (1950-1953) introduced the English concept of "brainwashing." The only explanation at the time for the sudden health disorders experienced by soldiers in this conflict was that the Koreans possessed a secret psychological weapon that affected the minds of American military personnel at all levels of training (Korean War—Facts & Summary. URL: <http://www.history.com/topics/korean-war>).

No other war has inflicted as much damage on the United States as the Vietnam War. This war introduced several terms into the English language, such as "*friendly fire*," "*carpet bombing*," "*Domino Theory*," and many others. Unfortunately, most of the words from the time of the Vietnam War have become euphemisms due to that war's personal and vicious nature (Ten facts about the war in Vietnam. URL: <http://warspot.ru>).

Furthermore, it was found that during that period of history, the word "to kill" became particularly rich in synonyms: "to waste," "to blow away," "to smoke," and "to eliminate assets" - any attempts to reduce the anxiety of battles were employed. Terms such as "assets" and "collateral damage" are merely instruments for expanding this array of euphemisms (Simpson, Weiner, 2006). The considered facts lead to the conclusion that these terms always refer to something lifeless. In other words, no one wants to think about killing another person, even if it is supposedly necessary.

Until the Vietnam War, the names of military operations remained classified until their completion. For example, the overall title for the amphibious assault operation on the coast of Normandy on June 6, 1944, was Overlord (Operation Overlord: [www.historylearning-site.co.uk/.../operation-overlord/](http://www.historylearning-site.co.uk/.../operation-overlord/)).

Starting from the first days of the Gulf War, the names of operations Desert Shield and Desert Storm were created to advertise the hostilities (Desert Shield, Desert Storm: [www.usar.army.mil/About.../Desert-Shield-Desert-Storm/](http://www.usar.army.mil/About.../Desert-Shield-Desert-Storm/)).

Likewise, Operation Enduring Freedom and Operation Iraqi Freedom were named to support the war in Iraq. (Operation Iraqi Freedom and Operation New: <http://edition.cnn.com/2013/10/30/world/meast/operation-iraqi-freedom-and-operation-new-dawn-fast-facts>).

War in the Persian Gulf gave the English language the terms "smart bombs," "surgical strike," "precision bombing," and

"collateral damage." In modern armed conflicts, chemical and biological weapons have become "weapons of mass destruction." Thus, these terms focus more on the horrific outcomes of war rather than its content, as war only intensifies tension, perhaps because the stakes are higher.

Language, like the entire world around us, is in constant motion. How different wars and armed conflicts reshape the world also transforms the language and thinking patterns. For example, during both World Wars, the English language primarily evolved in line with the technological progress of the time, requiring the creation of new words to denote and describe new inventions.

The defining characteristic of the provided definition is the struggle, which denotes an active action against anyone or anything to overcome, defeat, or resist them. Analyzing dictionary definitions allows us to envision the conceptual component of the explored concept as comprising the following feature:

- 1) An active hostility,
- 2) Between (large) groups of people,
- 3) Arising from conflicting interests,
- 4) Involving the use of weapons,
- 5) Aimed at achieving victory over the opponent,
- 6) Up to their destruction,
- 7) Accompanied by a feeling of hostility towards the opponent.

In English explanatory dictionaries, the main name of a given concept (war) is defined as follows:

- 1) when there is fighting between two or more countries or between opposing groups within a country, involving large numbers of soldiers and weapons
- 2) fighting over a long time to bring some of the damage under control;
- 3) an issue over which a person or group combats for power, influence, or control (LDCE);
- 4) armed hostilities between esp. nations: conflict; a specific conflict or the time during which such conflict exists; suspension of international law etc. during such a conflict;
- 5) (as the War) a war in progress or preliminary ended; the most recent major war;
- 6) hostility or contention between people, groups, etc. (war of words); a sustained campaign leading to crime, disease, poverty, etc. (COD).

The idea of struggle, fighting, i.e., mutual attacks, appears as a generic feature in the given definitions. The conceptual component of the *war* concept, according to English explanatory dictionaries, can be represented as the following set of features:

- 1) an active campaign;
- 2) action between (large) groups of people;
- 3) caused by a clash of interests.

Active signs of concepts are revealed through informant surveys. In this regard, the most frequent reactions recorded in the dictionary are indicative: the world (svit) - 92 (out of 638), the worlds (svitiv) - 51, and the world (svit) - 41, the death (smert) - 28, Patriotic (Vitchyzniana) - 18, dreadful (strashna) - 17, horror (zhakh) - 14, World (svitova) - 13, cruel (zhorstoka) - 12. In the active layer of the Ukrainian linguistic consciousness, war is seen as a juxtaposition of peaceful life (the most common reaction) and something dreadful and cruel. The active layer of the concept is not fully definable, as it is not a rational understanding of a fragment of reality but primarily an emotional response to the associated experience. However, such a reaction can also be rationally interpreted.

The concept of war is highly significant to people and is therefore considered a finely segmented semantic formation.

In the ideographic dictionary of the English language by P. Roger, the concept of war is categorized under *antagonism* in the domain of "Volitional Expressions."

Understanding the concept of "war" in the professional mindset of military personnel takes place in different directions. The horrors of war take precedence for the civilian population, while for soldiers and officers, it is a matter of being executed honestly and efficiently. The peculiarities of the linguistic consciousness of professional military personnel are manifested, on the one hand, in the pursuit of utmost informativeness in expressions, and on the other hand, in the cognitive compression of existing societal perceptions. Everyday attitudes towards war in the consciousness of a professional military correlate with the concept of "battle," which encompasses goals, preparation, initiation, middle, end, and outcome. The peculiarities of combat are manifested in the following:

- 1) Inherent motivation of the idea of battle, which serves as the prototypical unit within the thematic conceptual field of "war";
- 2) Semiotics that explicates the symbolic essence of battle and war as a whole (signal rocket as the beginning of fighting, flag as a sign of victory or capitulation);
- 3) The language of battle, characterized by utmost brevity, expressiveness, and the syntactic compression of concise predicate forms of commands: action! (to the battle!), left action! (to fight from the left flank!), right action! (to fight from the right flank!), action rear! (to fight from the rear!), action front! (to fight from the front!);
- 4) Special reference to the battle, which also holds a deeply symbolic essence (blood, sword, shield);
- 5) Discreteness of battle;
- 6) Priority of the value factor, absolute spiritual values, and the actualization of ethical norms ("valor," "courage," "heroism," "sacrifice").

At the same time, for contemporary speakers of the Ukrainian language, the meanings of the word "war" the familiar and traditional will be those outlined in explanatory dictionaries (the 11-volume and 20-volume "Ukrainian Language Dictionaries" contain identical definitions):

- 1) An organized armed conflict between states, social classes, etc.
- 2) Figuratively: A state of hostility between someone; a dispute, an argument with someone, a struggle. [2, c. 669; 3].

It is quite sufficient within the basic semantics of such a definition of war. However, an undeniable fact is that war is a phenomenon associated with numerous events, their conditions, consequences, and participants, whose states and feelings are reflected in the linguistic worldview by much more units than those recorded in dictionaries. Therefore, studying the concept of "war" in its various linguistic manifestations is extremely interesting for scientists.

Most often, Ukrainian linguists study the concept of war based on fiction. Bohdan S. identifies the connections of this concept in Lesya Ukrainka's epistolary texts with the concepts of the BATTLE, ENEMY, WAR, and the opposite in meaning and assessment - a PEACE. Boiko N. investigates the specifics of the lexical and semantic field of the concept "war" in Alexander Dovzhenko's film story "Ukraine on Fire" and concludes that the structure of the war concept includes a certain number of other full-fledged concepts... [5, c. 121], and names the following among them: WEAPONS, BATTLE, DEATH, BLOODSHOT, LOSS, TEARS, SORROW, ENEMY, FEAR, SEPARATION, FAITH, VICTORY, ARMY, PAIN, BLOOD, etc. Bondar N. traces the connection between war and the archetypal concepts of WATER and FIRE in the writings of the Tiutiunyk brothers. Finally, Verovkin V., analyzing Ukrainian folk songs, connects the concept of war with the images of ENEMY, STRANGER, VALOR, KNIGHTSHIP, CAPTIVITY/SLAVERY, DEFEAT, WOUND, DISHONOR, and DEATH. Bartashuk O., Nikolaieva A., Tarasiuk M., and Ohar A. study the peculiarities of war concept representation in the texts of contemporary writers. Linguists pay attention to new connections, in addition to those

mentioned above, with the concepts of dirt, lies, money, volunteers, and veterans. As we can see, the perceptions of war recorded in texts from ancient times revealed associations with a basic set of terms such as enemy, battle, blood, pain, fear, etc., but underwent modifications depending on circumstances. Until recently, the linguistic image of war was captured in the study *Psycholinguistic Analysis Of The Associative Field War: A Fragment Of Linguistic Picture Of The World Of Ukrainian Humanities Students* by Vasianovych Ye. A. (2020). This research is of great value to us as it demonstrates the associations with the stimuli of war leading to a full-scale invasion. Thus, it allows us to compare how the perceptions of young Ukrainians about war have changed before and during active combat operations.

In April 2022, a free-associative experiment was conducted among Ukrainian youth aged 15 to 30 to achieve this goal. A total of 1049 individuals participated in the experiment, and 1009 questionnaires that met the condition of providing verbal associations rather than definitions were selected for analysis. This experiment had a comprehensive nature. Besides the stimuli of war, the questionnaire included 15 additional stimuli related to current realities, allowing for a better understanding of the peculiarities of graphic and foreign language elements used by specific respondents (accidental or intentional).

In total, 1522 associations were received in response to the stimuli of war, with the most frequent ones being death (243 - frequency of association indicated in parentheses here and below), pain (145), fear (99), blood (66), horror (53). 265 associations were singular, meaning they occurred only once. 15 respondents did not mention any associations to this stimulus, which can be explained by the complexity of emotions and the impossibility of encapsulating the entire spectrum of thoughts about war during its active phase in a single word or a few words.

In the structure of the associative field, the core, near-core zone, semi-periphery, and periphery can be clearly identified. The core is condensed and consists of reactions that embody the most typical perceptions of war: death (243), pain (145), fear (99), blood (66), and horror (53), as indicated by the aforementioned studies on the concept of war in Ukrainian literature. Meanwhile, in Vasianovych's research, the near-core associations were death (48), tears (31), pain (29), fear (24), and weapons (20). In our study, we classify the reaction of tears (35) as part of the near-core zone and weapons (5) as part of the semi-periphery. Such a movement of reactions from the core to the periphery can be attributed, firstly, to a more significant number of participants and collected responses in our experiment (100 and 565 responses, respectively, in the Vasianovych experiment) and secondly, to the dominance of emotional over visual aspects in the consciousness of young Ukrainians when they became direct participants or victims of war, rather than mere observers. The near-core zone of the associative field is formed by the following reactions: tears (35), losses (26), grief (26), russia (24), evil (22), hatred (21), suffering (19), explosions (16), genocide (16), victory (16), will end (14), destruction (14), killings (13), Bucha (11), horror (11), crime (11), devastation (11), hunger (10), peace (10), ruin (10). Most of these reactions are universal and can be associated with any conflict or war, but particular attention is drawn to russia (24) and Bucha (11).

The toponym "russia" was also an anticipated association, with particular attention drawn to its graphic representation: 11 out of 24 reactions were written in lowercase, indicating the personal attitude of the respondents towards the aggressor country. This spelling could have also emerged under the influence of the media and public figures who started using lowercase letters. For example, Avramenko O. openly suggested not capitalizing words that provoke contempt and condemnation. There was one instance of a specific variant - "roSSiya," which stands out due to synthesizing orthographic features inherent in both languages simultaneously: Russian and Ukrainian.

First, here we see the assessment of the country indicated by the lowercase initial letter. Secondly, the respondent used the

elongation of sibilant sounds, present in the Russian language - "Rossiya," intentionally emphasizing it to create an additional comedy effect. However, the graphical highlighting of the letters "SS" may also indicate drawing parallels with the Nazi paramilitary organization Schutzstaffel, which used the double sigel rune as its symbol, resembling the letters "ZZ" when inverted - the symbols of the current armed aggression.

The composition of the near-core zone attests to another distinction in the results of our experiment compared to the study by Ye. Vasianovych. In particular, the linguist notes that *the recipients hardly resorted to positive connotations in their associations. The stimulus "war" elicited only two such associations - a victory with a response frequency and dignity.*

In our experiment, respondents named the following reactions with positive connotations: victory (16), it will be over (14), peace (10), Ukraine (6), life (4), freedom (3), will (2), for independence (2), we will win (2), ours (2), our victory (2), we will win (2), courage (2), greatness (1), faith (1), I believe in our Armed Forces (ZSU) (1), heroes (1), unity (1), for freedom (1), unity (1), patriotism (1), loved ones (1), sacred (1), phoenix (1).

It should be noted that one of the questionnaires also recorded a reaction of "this is peace," which, unlike the association of peace that can act as an antonym to war and indicate the aspirations of young Ukrainians, shows a connection to George Orwell's novel 1984, as it may be part of the quote: "War is peace, freedom is slavery, ignorance is strength." Therefore, it has a negative connotation. However, the rest of the associations are entirely positive, so we can conclude that during active hostilities, specific positive associations with war are developed in the consciousness of Ukrainian youth, primarily directed toward the belief in its victorious conclusion. However, the overall share of such reactions in the associative field constitutes only 5%, which confirms the results of previous studies where the associative field of the war concept was negatively connotated. We also want to challenge the definition of associations with military attributes as neutrally connotated, mainly as Vasianovych includes reactions such as tanks, gunshots, and heavy transport. In a non-war context, such objects can be associated with neutrality: for example, a tank might be imagined as a decoration in a city square, a gunshot, or military transport as parade elements. However, in the context of war, they become symbols of death and destruction, which definitely carry negative connotations. This thesis is confirmed by the respondents' associative chains, which included the attributes of war:

- 1) blood, Bucha, tank, sorrow, fear;
- 2) blood, Chernihiv, tanks, corpses;
- 3) death, tank;
- 4) missiles, fighter jets, explosions, massacres;
- 5) missiles, blood;
- 6) death, despair, pain, airplane, explosion, missile;
- 7) explosions, blood, devastation;
- 8) explosions, fear;
- 9) horror, explosions;
- 10) Russia, death, explosions, fear, etc.

While analyzing the association is worth considering its context, as it indicates a person's attitude toward the stimulus word. The overall emotion of the mentioned chains lies in the negative spectrum. Hence attributions of war acquire negative connotations. Within the structure of the associative field of the war concept, the most represented micro field is the reactions that characterize a person's physical, psychological, and moral states, as well as their emotions: death (243), pain (145), fear (99), horror (53), tears (35), grief (26), hatred (21), suffering (19), hunger (10), frightening (8), scream (7), anger (6), despair (6), alarm (6) – although this reaction can also be counted among the attributes of war due to the phenomenon of homonymy (anxiety as a mental state and air alarm), crying (5), depression (4), desperation (4), anger (4), aggression (2), fury (2), uncertainty (2), sadness (2), hope (2), agony (1), helplessness (1), sorrow (1), loneliness (1), insult (1), disgust (1), condemnation (1).

It is quite expected that most reactions denote negative emotions and states, which are associated with experiencing pain from losses and, on the other hand, are directed towards condemnation and hatred towards the enemy.

Another quantitatively significant micro field of the war reality characterizes the civilian population's everyday life, soldiers' lives, war attributes, and military actions' peculiarities. It includes the following reactions: death (243), blood (66), losses (26), explosions (16), genocide (16), destruction (14), killings (13), devastation (11), hunger (10), ruins (10), victims (7), reality (6), anxiety (6), weapons (5), rape (5), bombs (4), tanks (4), rocket (3), shelling (3), battle (3), corpses (3), airplanes (2), basement (2), shots (2), bombing (1), bomb shelter (1), cannons (1), fighters (1), spear (1), Armed Forces of Ukraine (ZSU)(1). This micro field can be divided into several directions of association: 1) military equipment - nominations of military machinery and weapons; 2) military actions; 3) consequences of military actions. One particular association stands out - a bomb shelter (in Ukrainian - *bomboskhovyshche*), as its lexical meaning refers to a *specialty equipped protection against aerial bombs and artillery projectiles*. However, in the context of the Russian invasion, it has acquired an additional purpose - it became a second home where people can safely reside, as they began to live in bomb shelters during ground combat or missile attacks.

An important place in the structure of the associative field of the "war" concept is occupied by proper names, among which respondents mentioned the following: russia (24), Ukraine (12), Bucha (11), putin (5), Mariupol (4), Donbas (2), Syria (2), Arestovych (1), Chechnya (1), Muscovy (1), Hostomel (1), putler (name combination of Putin and Hitler) (1), rashka (derogatory name for Russia) (1), Kharkiv (1), USSR (1). Bucha, Hostomel, Donbas, Kharkiv, and Mariupol became centers of military operations and war crimes, so these place names have acquired symbolic significance since the beginning of the full-scale invasion: for Ukrainian society, they embody mass shootings, rapes, hunger, ruins, and even genocide.

The reaction "putin" is worth noting, as, similar to the association with "russia," the participants violated the spelling rules by writing the president's surname in lowercase 4 out of 5 times to demonstrate a negative assessment. The reinforcement of the negative evaluation and comparing the Russian president to Hitler was realized in the association "putler." The reaction "*rashka*" also carries negative and derogatory connotations. The respondents' toponyms, Syria and Chechnya, came to mind due to the armed conflicts involving Russia: the two Russo-Chechen wars (1994-1996, 1999-2009) and Russia's intervention in Syria (2015-present). Muscovy and USSR could have emerged as alternative names for the Russian Federation, which, on the one hand, indicate its imperial and totalitarian past, and on the other hand, challenge the right of this country to use a name with the word root *rus-/ros-*.

Low-frequency associations in the associative field are verbally complex associations: the worst in the world (3), destroyed cities and villages (2), we will win (2), the scariest in life (2), our victory (2), innocent people (2), it will soon end (2), death of the innocent (1), death of innocent people (1), deep pain (1), emotional pain (1), Pain, pain, pain, pain, pain. Trillions of times pain (1), never again (1), mass grave (1), dirty trenches (1), fear for the lives of loved ones (1), much bloodshed (1), bloodshed in vain (1), Ukraine's victory (1), the battle for existence (1), the struggle for sovereignty (1), etc. Like the song associations, they vividly illustrate and complement the verbal image of war in the minds of young Ukrainians, detailing their experiences, evaluations, aspirations, and impressions of war.

The specificity of the semantic structure of the critical lexical-semantic unit within the concept of "war" is seen in the fact that it can encompass a significant number of contextually activated components reflecting various negative aspects of war. Moreover, these components exhibit a wide range of expressions, indirectly objectifying the core concept through

intensified semantic and metaphorical (metonymic) representations of the emotional and sensory sphere of human experience.

At the same time, we want to emphasize that all units within the conceptual field can be divided into two groups, depending on whether they are directed toward the enemy or oneself. Associations related to the enemy exclusively carry negative connotations, indicating aggression and hatred towards the enemy. They employ graphical vividness, transformations, and quotations to expose and condemn its dreadful actions. Associations directed towards oneself can be classified into several groups. The largest group has a negative connotation as it documents the painful experiences, feelings, conditions, and consequences of war for Ukrainians. However, the associative experiment also revealed specific positive associations that attest to the belief in Ukraine's victory and its ability to defend its territorial integrity and sovereignty.

The following associative experiments are a promising way to track changes in the verbal image of the 'war' concept in the minds of young Ukrainians as it progresses and hopefully comes to an end.

## 5 Conclusion

The considered examples allowed the formulation of the following findings. Firstly, mental perceptions can differ due to linguistic and cultural peculiarities. For instance, in a particular language and culture, the historical experience of its speakers is concentrated, and the mental perceptions of these speakers may differ from those of speakers of another language and culture. Secondly, the linguistic worldview is a central object of research in modern linguistics and is a complex process, the study of which is driven by both the development of linguistics as a whole and its individual directions, including linguoculturology. Thirdly, the central unit of this study, defining the historical component of the linguistic worldview and intended for the study of the English language in conjunction with the culture and consciousness of the people, is the concept. Fourthly, within society, the linguistic and cultural concept of war plays a vital role as it occupies an important place in the life of any nation. Finally, historical-etymological and etymological analyses of words that emerged in the English language during the XXth century in the course of armed conflicts allow determining additional, previously unidentified lexical-semantic features in the content of the critical lexeme of the linguistic and cultural concept of war.

Currently, due to ongoing armed conflicts, the English language is undergoing another stage of development and enrichment with new words. However, since this process is incomplete, it will continue attracting special attention from linguists to trace lexical changes in real-time.

Thus, the conceptual characteristics of the war concept in Ukrainian and English languages consciousness represent a diverse set of features. Its central part is reflected with a significant degree of completeness in the definitions of explanatory dictionaries. Beyond these definitions, there remain two types of components:

Etymological characteristics of concepts;

Non-discrete, emotionally evaluative understandings of war relevant to the bearers of linguistics and culture.

The analysis of definitions in explanatory dictionaries, thesauri, and synonym dictionaries shows that the content of the conceptual component of the "war" largely coincides with the mass and professional consciousness of Ukrainian and English language bearers. Significant civilization similarities between them can explain this. Differences are of secondary and additional nature, primarily established within the associative field of concepts, and can be reduced to two points: the idea of the destruction of the enemy in case of war in Ukrainian

language consciousness (due to the concentrated collective memory of the Ukrainian people regarding battles with ethnic groups who did not take prisoners but exterminated them) and the idea of competition as one of the characteristics of war in English consciousness (which corresponds to the medieval chivalric code of conduct).

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#### Primary Paper Section: A

#### Secondary Paper Section: AI

## AUTHOR'S METAPHOR AND ITS FEATURES IN ARTISTIC DISCOURSE

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**Abstract:** The role and specificity of the author's metaphor in artistic discourse play an essential role in their translation, interpretation, and overall recognizability. This fundamental step in processing the author's metaphor is necessary for a complete understanding of the symbolic language code in artistic discourse and overall speech activity. This study aims to experimentally verify the perception and processing features of a corpus of authors' metaphors in various European languages by students. Another aim is to establish the effectiveness of metaphor translation methodology using psycholinguistic variables, consider contextual influences, and evaluate the improvement of translation competence. The research goals involve the application of a comprehensive methodology, with the main method in the project being pedagogical experimentation. Additionally, description, observation, and questionnaires were used as methods. They allowed identifying the peculiarities of the author's metaphor perception. The research hypothesis suggests that the specifics of the author's metaphor entail developing specific effective techniques for working with it, enhancing the translation competence of professionals by creating favorable pedagogical conditions. The result of project implementation is the establishment of the specificity of translating the author's metaphor as a professional translation activity. Another result is to evaluate the proposed approach to enhancing skills and knowledge in fiction writing and enabling translators to navigate the construction peculiarities of European authors' metaphors easily. In the future, the research will continue on educational projects that consider the investigation of figures of speech and thought in European literature and the algorithms of their translation. The development of teaching methodologies for translators working with fiction and journalistic texts should focus on forming translation competencies that allow becoming professional specialists.

**Keywords:** author's metaphor, artistic discourse, discursive practice, foreign language teaching, translation competence, professional communication, pragmatics, fiction writing

### 1 Introduction

In the research, an attempt is made to expand the current understanding of the characteristics of an author's metaphor and its most appropriate representation in translation. This topic is relevant to contemporary communication theory and translation theory. The author's metaphor is closely related to the emotional sphere of human experience, and if properly formed, it has a notable impact on the audience. As manifested in artistic discourse, an additional effect of the metaphor is achieved through rhyme, vivid imagery of poetry, rhythm, and other artistic and stylistic devices, etc. From a psycholinguistic perspective, the metaphor is studied as an element that embodies emotional states, abstract concepts, complex visual images, and authorial intentions (Way, 2016).

Rhetoric, communication theory, and linguistics have numerous definitions of the metaphor concept. However, when it comes to examining artistic discourse and the challenges of translating the author's metaphor, our research relies on the understanding that metaphor is a stylistic figure that functions in artistic discourse. In this aspect, metaphor (from Greek "transfer, carrying over") is a stylistic figure that conveys the essence of a class of objects by denoting a similar class of objects or an object. It is a form of comparison presented in a condensed and abbreviated form. Instead of the reality against which the "unknown" is compared, there is the naming of the reality to be compared, for example: "roses of lips" and "rosy lips." The core of an individual metaphor can be represented as a juxtaposition of initially seemingly unrelated elements; for instance: Love is a sweet poison and life – is the strict judge.

Figurative, individual-author metaphors are formants of artistic discourse, and this type of metaphor shapes not only the idiosyncrasy of a specific author but also the literary tradition of each nation. That is why working with translating the author's

metaphor in the context of European languages is both essential and challenging. Differences in theoretical positions and research concepts characterize the study of metaphor. It also involves discussions about the conditions of using individual metaphors in artistic discourse and the relevance of employing metaphors in scientific discourse (Dmytruk, 2021; Salgur, 2013). As a result of such research activity, the significant role played by metaphor in shaping the type of discourse has been recognized. It allows for the juxtaposition of entirely different realities and their figurative representations. Also, it serves as the basis for speech and thinking in discursive practices (Kiraly, 2015). An artistic discourse relies on intuitive perceptions, the sense of similarity between the image conveyed by the metaphor and the object discussed in the work. This sphere encompasses ideas, images, and emotions that sometimes lack direct reflection in everyday life. It is precisely why the metaphor presents challenges regarding non-native speakers' comprehension and translation. The scientific problem of examining the author's metaphor in artistic discourse and its translation mechanisms into other languages is highly relevant to European civilization. The value of the successful implementation of creative practices, and representation of one's own culture and individuality through creative texts, is an essential task for a poet. Besides, effective translation work helps realize this intention, expand the boundaries of a particular culture, and bring the understanding of a specific author's ideal style to a wide audience (Junining et al., 2020).

Therefore, developing and implementing teaching methodologies for the translation of fiction texts, where the author's metaphor plays a significant role as an embodiment of the author's individual style and national culture represented in artistic discourse, is a promising research direction.

This study aims to establish the peculiarities of students' perception and parameters of handling the authors' corpus of metaphors in the artistic discourse of European languages and evaluate the effectiveness of metaphor translation methodology using linguistic parameters of metaphors and considering contextual influences.

Based on the aims, the following research tasks were planned to be carried out:

- To determine the core parameters of metaphor as a linguistic unit.
- To evaluate the authors' metaphor (Spanish and Italian poetry) and its peculiarities as translation material.
- To assess the author's metaphor (French and English poetry) and its characteristics as translation material from the translator's viewpoint.

### 2 Literature review

Developing and implementing new education models in translation expertise have recently become a topic of interest for many researchers (Ashton, 2014; Kiki-Papadakis, Chaimala, 2016; Jayashree, 2017). The studies have focused on developing teaching models for translation through new linguistic discoveries and digital technologies (Del Arbol, 2018; Bergen, 2010; PACTE, 2018). The scholars indicate that students' translation education should be based on new technological capabilities and philological competence (editing, working with authors of fiction writings, and working with authentic texts).

Within the interest in a metaphor as an element of discursive practices, discussions primarily revolve around the deviation of metaphor from the norm of "literal reading" (Brøgger, 2017). The authors studied metaphors that can actualize different types of discourse:

- The metaphors in medical terminology (Dmytruk, 2021);

- The metaphors as an access index to the direct meaning by default (Bambini et al., 2013);
- The metaphors and mechanisms of its realization as sensitive to linguistic and non-linguistic information (Vienne, 1996; Ko et al., 2013);
- Theoretical aspects of the metaphor's functioning, structure, content, and typology (Saydalieva, 2019).

It is crucial to consider the features of the idiostyles' formation in terms of folk culture, an artistic method, and the time when the author created them to study the author's metaphor in artistic discourse (Bohrn et al., 2012). Also, a typology of metaphor, the features of the model and construction of the author's metaphor, and an approach to its analysis have been presented (Ledin, Machin, 2020).

The hypothesis of graded salience has been created within the framework of linguopragmatic research. It significantly opens up the algorithm for translating original tropes (Giora, 2003). This hypothesis reconciles the literal and nonliteral meanings by gradually bridging the gap between literal meaning and metaphorical language, highlighting the differences between non-obvious and basic definitions.

In experimental pragmatics, several studies have demonstrated the complexity of metaphors and analyzed the reader's effort in "decoding" them compared to literal expressions. Some additional lexical and grammatical adjustments have been identified, representing the conceptual level of language and describing other cognitive preferences (Bambini et al., 2013).

Another area of interest in studying the author's metaphor in artistic discourse is neuopragmatics. Within this linguistic direction, a metaphor undergoes processing, where bilateral patterns of its activation are represented, considering non-verbal processes in discursive practices and the linguistic instruments for their representation (Rapp A. M., 2012).

### 3 Methods

The research team implemented several project implementation stages to achieve the study's goals. A comprehensive approach was used in the research, including surveys, testing, observation methods, and quantitative and qualitative methods for data analysis. The descriptive method was used for the examination of the theoretical material. The study was conducted at the Zaporizhzhia National University, Faculty of Foreign Languages. The project involved 2 professors and 60 students of the first (bachelor's) and second (master's) levels of higher education. The educational program and curriculum included a special Spanish, Italian, French, and English course dedicated to translating fiction, focusing on the author's metaphor. Anonymity and privacy were guaranteed to all experiment participants, and the respondents signed documents to confirm their voluntary participation in the project. The training of the translation competence activation model was conducted in groups, with significant emphasis on artistic discourse and its implementation tools. Data and materials were collected and analyzed throughout the 2021-2022 academic year (1st semester) from teaching the basics of fiction text translation.

Stage 1. At the initial stage, there were created a curriculum and course materials. Also, several consultations were held with teachers and students to determine their level of motivation and readiness to participate in the experiment.

Stage 2. At this stage, testing was conducted to assess the author's metaphor in poetic texts in Spanish and Italian and the ability to recognize its features as translation material. The author's metaphor presented in poetic texts in French and English was also evaluated in terms of its features as translation material from the translator's perspective.

Additionally, the principles of translation competence formation within the course "Translation of Fiction Texts" framework were determined.

Stage 3. The final stage involves monitoring the students' evaluation of the proposed teaching model and working with the author's metaphor and texts in a literary style concerning mastering translation skills and understanding the role of the author's metaphor in shaping an idiostyle. Based on the collected data, the attractiveness and effectiveness of the researched model of fiction text translation training were determined. The educational materials will be further developed, systematized, and uploaded to university websites and electronic archives for future use. As for the difficulties faced by the research group, they include:

- The time-consuming nature of the project (an academic semester),
- The inability to determine reasons for changes in respondents' ratings and opinions,
- The limitation in conducting in-depth qualitative research.

### 4 Result

The collection and systematization of data necessary for the study, technical and methodological preparation of activities within the educational process, and the theoretical basis of translators' work with metaphor made it possible to start implementing the project. The curriculum was developed in advance, which included active work with algorithms for translating the author's metaphor. Also, the working groups were formed, and preliminary work was done with teachers and respondents.

The primary focus was on identifying the key features of authors' metaphors that should be emphasized in the process of teaching translation skills for texts in the artistic and publicistic style. This distribution was based on various approaches to the mechanisms of metaphor activation.

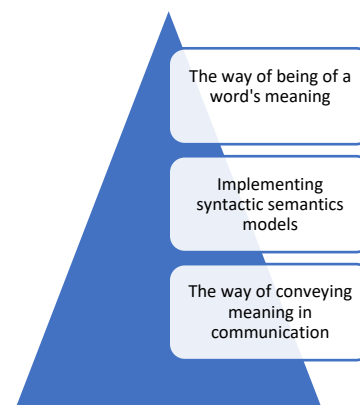


Figure 1. The key parameters of a metaphor as a linguistic unit (authors' elaboration).

At the level of considering metaphor as a means of semantic realization, that is, a linguistic phenomenon, the focus is on the meaning of words and semantic nuances that construct the figurative framework of the text. Such an approach assumes that metaphor is realized in the linguistic meaning of words. The lexical-semantic potential of language is actualized, where language is a stable system capable of autonomous functioning. At the level of attention to metaphorical meaning formed through the interaction of verbal units that collectively form a complex of phrases and sentences, metaphor is also realized at the level of syntactic collocation of words.

At the third level, as a parametric indicator of metaphor, we consider its ability to shape the content of expression, including in artistic discourse, realized in texts at the utterance level. It is an innovative perspective on the figurative comparison.

In the 2nd stage, after familiarizing ourselves with a series of translation techniques and translation theory, focusing on the author's metaphor in the artistic discourse of Italian and Spanish



poetry, a first survey was conducted to study the perception and understanding of translation technologies. Besides, the survey aimed to determine the ability to analyze and evaluate the text, the artistic method, style, and context of the text to be translated, the author's stance, etc. The survey was conducted using researcher-developed sets of tasks and questions. The

respondents were asked to determine the parameters of metaphor and assess the level of intensity of the feature in metaphors as "low," "medium," or "high." The students translated the poetic text, and the Italian and Spanish poets' poems contained sufficient amounts of the author's metaphors (poetry by G. Lorca, G. Gozzano, G. Pascoli).

Table 2. An assessment of the author's metaphor (French and English poetry) and its features as a translation source (authors' elaboration).

Feature	Parameter intensity level					
	Low		Average		High	
	1st half of the 1st semester	2d half of the 1st semester	1st half of the 1st semester	2d half of the 1st semester	1st half of the 1st semester	2d half of the 1st semester
Recognizability	21%	20%	37%	42%	42%	48%
Internal form transparency	20%	25%	29%	20%	51%	55%
Metaphor simplicity	16%	30%	44%	40%	28%	30%
Metaphor complexity	45%	48%	28%	21%	44%	51%
Comprehension	10%	3%	46%	30%	51%	60%

During the experiment, it was found that the comprehension of metaphors in French and English authors is at a high level of 51%-60%, while on average, it is 46%-30%. It also indicates an understanding of the pragmatics of using metaphor in poetic texts to create a comprehensible and necessary emotional and figurative context for the author. It has been found that the transparency of the internal form noted by the respondents does not diminish the recognition of an image's complexity presented

by poets. In a certain way, it defines the features of such a type of discourse as artistic.

At the final stage of the debriefing, students were surveyed on their assessment of the use of fiction text translation techniques as a means of mastering translation skills and understanding the role of the author's metaphor in forming idiosyncrasy in artistic discourse.

Table 2. An assessment of the author's metaphor (French and English poetry) and its features as a translation source (authors' elaboration).

Feature	Parameter intensity level					
	Low		Average		High	
	1st half of the 1st semester	2d half of the 1st semester	1st half of the 1st semester	2d half of the 1st semester	1st half of the 1st semester	2d half of the 1st semester
Recognizability	38%	30%	30%	21%	18%	24%
Internal form transparency	40%	44%	50%	45%	10%	11%
Metaphor simplicity	16%	30%	50%	30%	20%	40%
Metaphor complexity	45%	48%	20%	22%	35%	30%
Comprehension	6%	2%	80%	80%	14%	18%

The approach to perceiving translation as a practical-creative activity, where the author's metaphor is a part of professional growth, will contribute to the effective learning of a foreign language and motivate the acquisition of professional and general education skills. Also, it will help to improve the ability to communicate and evaluate a fiction text as a type of discursive practice. The statement emphasizing the importance of working with translations of fiction texts received the highest approval from respondents. It not only declares the importance of knowledge of phonetics, grammar, vocabulary, and successful communication (89% of respondents) but also emphasizes the need to understand the trends, styles, and peculiarities of literary methods (97% of respondents in total). Literary studies' stances and linguistic orientation are essential components of a translator's competence, which is necessary for learning and professional activities.

## 5 Discussion

A series of studies have determined that forming a translator's expertise is part of the pedagogical process and a creative approach to studying foreign languages and world literature. The knowledge related to the ability to translate fiction texts is an integral component of the indicator of high professionalism. Besides, the skillful use of tropes, including the author's metaphor, can demonstrate the teacher's creative potential and literary mastery (Puranik, 2020; Zhao, 2018). The scholars working on the content and conditions of forming linguistic competence in the training of future specialists urge the application of pedagogical technologies and teaching methodologies that make the educational process creative, qualitative, and effective (Bergen, 2010; Senthilkumar, Kannappa, 2017).

Our study also revealed that working with the author's metaphor from the perspectives of discourse theory, psycholinguistics, and

pragmatics is vital for future professionals (98% of respondents approve of such activity). The modern job market requires the preparation of creative and innovative specialists with a wide range of professional knowledge. The comprehensive programs incorporating new linguistic discoveries are necessary to train highly skilled professionals to meet the demand for such experts in the job market. Working with metaphor as research material is also part of modern research (Bambini et al., 2014).

The scientists analyzed 115 Italian authors' literary metaphors and 65 literary metaphors embedded in original texts. Respondents evaluated these metaphors from the perspective of psycholinguistics (frequency of phrases and lexemes, readability, meaningfulness and complexity, associativity, and specificity). The majority received average to low scores in all parameters. In our study, the survey of respondents regarding the perception and reproduction of the author's metaphor yielded average to low scores as well. The high level of metaphor comprehension in French and English authors ranges from 51% to 60%, while for Spanish and Italian authors' metaphors, it ranges from 14% to 18%. The reasons for this are European fiction and poetry perception's cultural, stylistic, and linguistic peculiarities.

In the future, it is worth planning to continue experimental research on the literary author's metaphor and the role of the context in constructing artistic discourse, where linguistic grounding correlates with aesthetic aspects of language.

## 6 Conclusion

The dominant characteristic of a metaphor is its aesthetic immersion, which defines the stylistics and rules of creating a metaphor as a product of individual creativity. The communicative and cognitive role of the author's metaphor in shaping artistic discourse also plays a significant role in conveying the author's emotional and semantic intentions to the

audience. The translator's task is to accurately convey the complexity of emotion, analogy, and content embedded by the author. The correct translation of the author's intentions embedded in the author's metaphor is vital for the multifaceted development of the poetic text. According to the research findings, the practical plane of studying the author's metaphor in artistic discourse significantly depends on the ability to identify and reproduce the discourses and contexts where metaphor is realized. It is essential to understand that translating a fiction text is not a monolithic constant technique. This resource undergoes changes based on sociocultural and socio-economic shifts in the labor market. Most students (approximately 98%) have recognized the importance of translation skills for their future professional development.

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#### Primary Paper Section: A

#### Secondary Paper Section: AJ

## STRATEGIC MANAGEMENT IN AN UNCERTAIN ENVIRONMENT: ADAPTING STRATEGIES TO A RAPIDLY CHANGING ENVIRONMENT

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**Abstract:** Economic instability necessitates enterprises to seek optimal approaches for adjusting to a swiftly evolving environment through modifications in production capacities and competitive positions. The primary objective of this article is to evaluate the adaptability of industrial enterprises to external environmental changes by employing strategies for managing production capacities and competitive positions. This study investigates the adaptive strategies of enterprises within the domain of "production capacity" while considering the examination of shifts in the competitive positioning of industrial enterprises in response to key environmental factors such as orders, demand, export expectations, and fiscal constraints. The methodology employed in this article encompasses an examination of survey outcomes from industrial enterprises within the EU-27 region, alongside correlation analysis of competitive positions in domestic and foreign markets contingent upon production-influencing factors. The survey results obtained from EU industrial enterprises both during and after the pandemic highlight a decline in production capacity attributed to fluctuations in order volumes, demand, and export expectations, thereby exacerbating the competitive position of enterprises in domestic and foreign markets. The authors identified an inverse association between competitive positions in domestic and foreign markets and variables such as employment, labor supply levels, and fiscal constraints. The practical significance of this study lies in the identification of approaches that industrial enterprises can employ to adapt to shifts in the external environment, including factors such as orders, exports, and demand, which directly influence production capacity and competitive positioning. Industrial enterprises respond to these environmental changes by proactively forecasting expectations related to alterations in orders, demand, exports, and financial resources, both within and outside the European Union. Strategies for managing production capacities and competitive positions are consequently adjusted based on the prevailing demand, order volumes, exports, and financial resources.

**Keywords:** strategic management, strategy adaptation, focus strategies, strategies of industrial enterprises, EU enterprise strategies.

### 1 Introduction

Amidst the impact of the pandemic, the ongoing conflict in Ukraine, and the escalating prices of energy and food, organizations find themselves compelled to adapt to novel environmental conditions by exploring new management strategies. In 2022, the collective GDP of Eurozone countries exhibited an overall growth rate of 3.5%, although variations were observed across different nations (e.g., Poland -2.4%, Estonia -1.6%, Finland -0.6%), while in 2021, it recorded a growth rate of 5.3%. In the fourth quarter of 2022, the Eurozone witnessed a marginal increase of 0.3% in the number of employed individuals, with certain countries experiencing a decline in employment (e.g., Portugal -0.8%, Lithuania and Latvia both -0.5%) (Eurostat, 2023a). Economic instability necessitates enterprises to seek optimal approaches for adapting to a swiftly evolving environment, encompassing shifts in production volumes, capacity utilization, and export volumes, and considering alterations in demand, prices, and fiscal constraints, among other factors. Consequently, a more comprehensive examination of strategic management within enterprises becomes imperative to address the necessity of adapting to a rapidly changing environment in a nuanced manner. The primary objective of this article is to evaluate the adaptation of enterprises to changes in the external environment through the utilization of strategies for managing production capacities and competitive positions. Within this article, the authors examine the competitive positions of industrial enterprises from EU-27 countries in both domestic and foreign markets, taking into account the contextual backdrop of the pandemic and the war in Ukraine. Specifically, the author explores the association between various factors that influence

enterprise production (such as demand, equipment, labor, and financial constraints) and market positions. Additionally, the study assesses the current state of competitive positions concerning production capacity, production duration, new orders, and export expectations.

### 2 Literature review

Strategy, derived from the Greek term "strategos" denoting the art of the general of the army, is defined as a comprehensive, unified, and integrated plan encompassing a series of actions and measures intended to address a specific problem situation and achieve targeted objectives within a predetermined timeframe. P. Drucker defines strategy as purposeful actions or goals and highlights two primary criteria for the development of a marketing strategy: concentration and competitive position in the market (Drucker, 1986, p. 77). Consequently, the competitive position within the market plays a pivotal role in shaping the strategic direction pursued by enterprises, ultimately determining their subsequent actions.

In addition to defining strategy as a plan, template, or model of actions, this concept is also regarded as a distinct position of a firm within the market environment. Under this perspective, strategy serves as an intermediary between the firm and the external environment, effectively bridging the internal and external contextual dimensions of its operations (Mintzberg, 1987, p. 15). This interpretation underscores the imperative of adapting the strategy and managing competitive actions and market position following the prevailing state of the market environment.

In his book "Competitive Strategy," M. Porter (2011) explores the notion of "competitive actions" as a form of strategy, highlighting that such actions can be either pre-planned or spontaneous. Every firm operating within a specific industry possesses a competitive strategy, whether it has been consciously formulated or emerged spontaneously. This strategy may be developed through deliberate planning or evolve organically through the activities of various functional units within the firm.

The cultural, economic, political, and social conditions prevalent within a country, along with the level of competition and product quality standards specific to that country, collectively shape the unique aspects of adapting a company's strategy to prevailing market conditions. The adaptation of enterprises to competitive conditions represents a fundamental management objective that significantly influences the formulation of a strategy for competitive behavior within the market, as well as the execution of measures aligned with the enterprise's objectives. "Adaptability" refers to the capacity of an enterprise to discern the influence of internal and external environmental factors on its operations and respond promptly through the development and implementation of efficacious management decisions utilizing existing and potential opportunities. The assessment of adaptive processes to environmental changes can be conducted by analyzing the prospective expectations of enterprises concerning aspects such as demand, employment, and financial resources. These aspects consequently influence potential production capacity, exports, and the competitive positioning of enterprises, among other factors.

In the existing literature, adaptation is explored within the framework of various dimensions including resources, behavioral changes, capabilities, and knowledge (such as technological capabilities, knowledge transfer, innovation strategies, routines, and material capabilities). It also encompasses governance and stakeholder management (including acquisitions and environmental assessment, strategic peers and stakeholders, identity-driven change, structural complexity, governance, categories, and external structure).

Furthermore, the concept of adaptation is influenced by competitive and institutional pressures. Scholars have defined adaptation as a deliberate decision-making process undertaken by organizational members, resulting in observable actions aimed at minimizing the gap between an organization and its economic and institutional environments (Sun, Liu & Ding, 2020; Sarta et al., 2021). This study examines the adaptation of enterprise strategy within the realm of "production capacity," with a specific focus on exploring changes in the competitive positioning of industrial enterprises in response to key environmental factors, namely, orders, demand, export expectations, and fiscal constraints.

Strategic management is a comprehensive approach adopted by organizations and other entities for the development of strategies. It encompasses the integration of strategy formulation and implementation, incorporating elements such as strategic planning, implementation methodologies, and ongoing strategic learning in response to external environmental changes (Bogers et al., 2019). Within the literature, seven distinct approaches to the strategic management system have been identified. These include the integrated approach to unit management, strategic issues management approach, contract approach, collaboration approach (encompassing lead organization, shared governance, and network administrative organization approaches), portfolio management approach, goal or benchmark approach, and hybrid approaches (Bryson & George, 2020). Strategic management and planning encompass a range of concepts, procedures, processes, methods, tools, practices, and, in the case of strategic management systems, structures. These elements must be employed thoughtfully, selectively, and strategically adapted to suit specific contexts (Bryson & George, 2020). The adaptation of strategy to the external environment plays a vital role in ensuring the sustainability of management, as evidenced by the concept of "Sustainable Strategic Management (GES)" (Barbosa, Castañeda-Ayarza & Ferreira, 2020), and in maintaining competitive positions (Azeem et al., 2020).

Strategic management (SM) endeavors to generate recommendations for generating additional business value and enhancing the competitive position in the market through well-defined actions and goals (Wenzel, Stanske & Lieberman, 2020; Battisti et al., 2020). The process of strategy development entails conducting specialized analyses of both the external environment and the internal potential of the enterprise, alongside evaluating potential threats and opportunities. On the other hand, the complete compilation of strategic guidelines concerning business directions and the organizational development of each enterprise encompasses the content of its strategic portfolio. The formulation of strategy empowers enterprises to establish a trajectory or direction of movement and behavior over time, thereby determining the internal management of the company to position the organization optimally within the competitive environment for achieving success. To ensure success, a company must continuously adapt to changes in the external environment (Fuentes et al., 2020). The structure of strategic management, encompassing methodologies, tools, and institutions, plays a crucial role in fostering resilience to changes, such as shifts in demand, orders, and competitive position (Klein et al., 2019).

### 3 Method

#### 3.1 Data description

The study incorporates data derived from quarterly surveys of industrial enterprises conducted by the European Commission - Directorate-General for Economic and Financial Affairs (DG ECFIN) within the EU-27 and Euro area comprising 20 countries, covering the period from the first quarter of 2021 to the second quarter of 2023 (Eurostat, 2023c).

The survey results provide an evaluation of the following data:

Table 1. Survey of industrial enterprises in the EU-27

Question code	Assessment	Question
Q1	1. Assessment of current production capacity.	Considering your current order books and the expected change in demand over the coming months, how do you assess your current production capacity? The current production capacity is....: + more than sufficient, = sufficient, not sufficient
Q2	2. Duration of production assured by current order books, months	How many months of production are assured by your current overall order books? Our production is assured for **.* months
Q3	3. New orders in recent months	How have your orders developed over the past 3 months? They have... + increased = remained unchanged - decreased
Q4	4. Export expectations for the months ahead	How do you expect your export orders to develop over the next 3 months? They will...: + - increase, = - remain unchanged, - - decrease
Q5	5. Current level of capacity utilization (%)	At what capacity is your company currently operating (as a percentage of full capacity)? The company is currently operating at *.* % of full capacity.
Q6	6. Competitive position over the past 3 months: on the domestic market	How has your competitive position in the domestic market developed over the past 3 months? It has...: + improved, = remained unchanged, - deteriorated
Q7	7. Competitive position on foreign markets inside the EU over the past three months.	How has your competitive position in foreign markets inside the EU developed over the past 3 months? It has...: + improved, = remained unchanged, deteriorated
Q8	8. Competitive position on foreign markets inside the EU over the past three months	How has your competitive position in foreign markets outside the EU developed over the past 3 months? It has...: + improved, = remained unchanged, - deteriorated
Q9.1, Q9.2, Q9.3, Q9.4	9. Factors limiting the production - Insufficient demand, Labour, Equipment, Financial constraints.	What main factors are currently limiting your production? none · insufficient demand · shortage of labor force · shortage of material and/or equipment financial constraints · other factors

Source: compiled by the author based on data from European Commission - Directorate-General for Economic and Financial Affairs (2023).

#### 3.2 Statistical concepts and definitions

The outcomes of the industrial survey primarily consist of qualitative data, as the questions aim to gauge the anticipated production trends, existing order book and inventory levels, perceived economic uncertainty, expected sales prices, and employment status among EU enterprises. The quarterly survey

data also furnish quantitative information regarding the capacity utilization of EU industrial enterprises and the duration of production, utilizing data extracted from the current order books.

Following the analysis of industrial enterprises' assessments, a correlation analysis was conducted to examine the connection between competitive positions in the domestic and foreign

markets and enterprise expectations, as well as the factors that influence production. This correlation analysis enables the assessment of the relationship between strategic management of production volumes, orders, inventories, and employment concerning the perceived level of economic uncertainty. The interdependence between these indicators was evaluated using the Pearson correlation coefficient with a significance level of 5%. Panel data encompassing the EU-27 countries for the period spanning from the first quarter of 2021 to the second quarter of 2023 were employed to estimate Pearson's  $r$ .

### 3.3 Statistical unit and Statistical population

The statistical unit employed in this study is the firm or enterprise, encompassing all enterprises within a specific sector and resident households. The industry survey covers approximately 38,000 units across all EU countries.

### 3.4 Unit of measure

The data are presented in balances, which denote the disparities between positive and negative responses, expressed as a percentage of the total responses. The published data are unadjusted and referred to as not seasonally adjusted (NSA).

## 4 Result and discussion

Current trends in strategy implementation encompass various aspects such as ensuring product quality, targeting specific consumer groups, and enhancing products and services. In EU countries, businesses employ distinct strategies, including 1) emphasizing high quality, which is employed by 52.3% of EU companies; 2) focusing on satisfying established consumer groups, adopted by 50.3% of companies. This emphasizes the alignment between the strategies chosen and the mindset or perspective of entrepreneurs within these markets, supporting the theoretical notion that strategy reflects the beliefs and perspectives of stakeholders and business owners. Additionally,

3) prioritizing the improvement of existing products and services, a strategy employed by an average of 41.5% of companies. The adoption of strategies targeting new customer groups is observed in 37.7% of EU firms, while 36.7% of organizations focus on delivering customer-specific solutions (Eurostat, 2023d). Less prevalent strategies include the introduction of completely new products or services (24.3%), a wide range of product and service offerings (20.5%), standardized products or services (18.8%), low-price strategies (17.1%), and focusing on key products or services (16.9%) (Eurostat, 2023d). Consequently, it is common practice in the EU for companies to employ a combination of business strategies, enabling them to gain multiple competitive advantages simultaneously. The majority of EU companies utilize two or more strategies concurrently, with a particular emphasis on innovation in products, services, and business processes. Notably, the strategy of cost minimization is not extensively adopted.

The analysis of current production capacities of industrial enterprises in the EU-27 for the period of 2021-Q1 to 2023-Q2 reveals their insufficiency during the period affected by the pandemic and its aftermath, from the third quarter of 2021 to the first quarter of 2022. However, a recovery in production capacities is observed starting from the second quarter of 2022, with a particularly active period beginning in the third quarter of 2022, driven by the rebound in demand and order volumes. Consequently, the production strategy adapts to the fluctuations in customer demand and order levels. Meanwhile, the security of production provided by existing orders remains relatively stable, experiencing only a slight increase in the first quarter of 2022. However, the assessment of new orders in recent months has significantly declined since the beginning of the fourth quarter of 2021. In both the fourth quarter of 2022 and the first quarter of 2023, negative assessments prevail, indicating a predominance of negative evaluations regarding the number of orders received.

Table 2. Estimates of production capacities and, utilization, production duration, new orders, export expectations, and competitive position of EU-27 industrial enterprises for 2021-Q1 to 2023-Q2

	2021-Q1	2021-Q2	2021-Q3	2021-Q4	2022-Q1	2022-Q2	2022-Q3	2022-Q4	2023-Q1	2023-Q2
Assessment of current production capacity										
European Union - 27 countries (from 2020)	17,3	8,8	0,7	1,2	0,4	1,6	5,8	9,3	7,1	10,4
Euro area – 20 countries (from 2023)	19,6	10,2	2,1	1,9	1,4	2,3	7,2	10,5	6,7	10,5
Duration of production assured by current order books, months										
European Union - 27 countries (from 2020)	4,6	4,9	4,9	4,9	5,2	5,2	5,1	5,2	5,2	5,1
Euro area – 20 countries (from 2023)	4,2	4,6	4,6	4,6	5,0	5,0	4,9	5,0	5,1	5,0
New orders in recent months										
European Union - 27 countries (from 2020)	5,1	24,2	26,0	15,7	13,8	12,2	0,5	-7,1	-6,3	2,5
Euro area – 20 countries (from 2023)	6,3	27,0	27,8	17,2	15,4	12,6	-0,2	-6,5	-4,7	4,3
Export expectations for the months ahead										
European Union - 27 countries (from 2020)	3,3	15,3	14,3	10,7	15,4	6,1	2,9	-4,0	4,4	6,3
Euro area – 20 countries (from 2023)	3,3	16,6	15,5	12,7	17,5	6,2	3,5	-2,8	6,1	7,4
The current level of capacity utilization (%)										
European Union - 27 countries (from 2020)	79,2	80,6	82,9	82,2	82,1	82,3	82,0	81,2	80,8	80,9
Euro area – 20 countries (from 2023)	79,1	80,7	83,0	82,7	82,4	82,5	82,3	81,4	81,0	81,2
Competitive position over the past 3 months: on the domestic market										
European Union - 27 countries (from 2020)	4,7	6,8	9,5	6,4	5,8	5,3	0,5	-1,3	-0,6	-0,4

Euro area – 20 countries (from 2023)	5,8	7,8	10,8	7,3	6,6	6,1	1,1	-0,3	0,1	0,3
Competitive position on foreign markets inside the EU over the past three months										
European Union - 27 countries (from 2020)	1,6	3,3	5,2	2,2	1,9	2,6	-2,6	-6,0	-3,5	-3,2
Euro area – 20 countries (from 2023)	2,3	3,5	6,0	3,0	2,6	2,9	-2,5	-6,1	-3,1	-3,4
Competitive position on foreign markets inside the EU over the past three months										
European Union - 27 countries (from 2020)	-1,5	3,6	3,6	0,6	-1,6	-0,9	-4,8	-9,1	-7,8	-6,4
Euro area – 20 countries (from 2023)	-1,1	4,3	4,1	1,1	-1,7	-1,0	-5,0	-9,6	-8,1	-7,0

Source: compiled by the author based on data from Eurostat (2023b).

During the study period, industrial enterprises in the EU-27 experienced predominantly negative expectations regarding export orders, particularly in the second quarter of 2021 and the first quarter of 2022. This indicates a shift in focus towards the domestic market due to the impact of the pandemic. The level of capacity utilization remained relatively stable throughout the study period, indicating that industrial companies continued to operate their production facilities. However, the assessment of the competitive position of EU-27 enterprises in the domestic market has significantly declined in the past three months. From the second quarter of 2022 to the second quarter of 2023, there has been a trend of shifting from a more positive to a negative assessment of the competitive position. Similarly, the assessment of the competitive position of industrial enterprises in foreign markets, both within and outside the EU, has also shifted from more positive to more negative in the past three months.

As a result of the deteriorating external competitive position of industrial enterprises in the EU-27, numerous small and medium-sized enterprises encountered challenges such as declining sales, disruptions in the supply chain, and an increase in payment delays. To address these issues, management strategies within industrial enterprises involved seeking additional sources of financing to mitigate cash flow problems. For instance, Romanian enterprises experienced a significant reduction in turnover and sales during the pandemic crisis, which necessitated the mobilization of minimal capital and immediate

responsiveness to changes in the external environment (Bordeianu, Grigoras-Ichim & Morosan-Danila, 2021).

In response to the crisis and the risks faced by industrial enterprises during the pandemic, the European Commission has revised the SME strategy to align it with the Industrial Strategy, the European Data Strategy, and the European Green Deal. The updated strategy encompasses various support measures, including facilitating market access for businesses outside the EU and implementing pilot initiatives and projects to assist businesses in adopting digital solutions, particularly in transitioning to digital business models during crises (European Parliament, 2021).

According to EU-27 industrial enterprises, the main factors contributing to the decline in production were equipment, particularly during the third quarter of 2021 to the third quarter of 2022, due to export and import restrictions. Labor-related issues, such as rising unemployment and insufficient demand during the pandemic recovery, also had a significant impact. On the other hand, financial constraints did not play a significant role in limiting production from the second quarter of 2021 to the third quarter of 2022 (Table 3). However, there was an increase in the difference (balance) between positive assessments of the impact of financial constraints on production capacity and negative assessments during the fourth quarter of 2022 and the second quarter of 2023.

Table 3. Assessment of factors limiting the production of industrial enterprises in the EU-27 for 2021-Q1 to 2023-Q2

	2021-Q1	2021-Q2	2021-Q3	2021-Q4	2022-Q1	2022-Q2	2022-Q3	2022-Q4	2023-Q1	2023-Q2
Factors limiting the production - Insufficient demand										
European Union - 27 countries (from 2020)	34,2	27,6	21,6	19,2	19,1	17,1	20,3	25,2	27,3	28,5
Euro area – 20 countries (from 2023)	33,3	26,5	20,8	18,0	17,7	16,3	19,5	24,0	26,3	27,0
Factors limiting the production - Labour										
European Union - 27 countries (from 2020)	12,1	14,3	22,9	25,3	26,6	27,6	30,2	28,7	26,3	25,0
Euro area – 20 countries (from 2023)	8,9	11,5	20,7	23,5	24,6	26,2	28,7	27,8	25,2	23,7
Factors limiting the production - Equipment										
European Union - 27 countries (from 2020)	13,1	28,8	41,5	48,8	46,1	52,8	47,1	40,0	33,3	27,7
Euro area – 20 countries (from 2023)	13,4	30,9	44,3	51,3	48,4	54,9	48,5	41,7	34,9	28,7
Factors limiting the production - Financial constraints										
European Union - 27 countries (from 2020)	4,6	3,5	3,4	3,5	4,0	4,3	4,4	6,1	6,1	5,5
Euro area – 20 countries (from 2023)	4,5	3,1	3,3	3,2	3,5	4,0	3,9	5,7	5,8	5,1

Source: compiled by the author based on data from Eurostat (2023b).

The correlation analysis reveals a strong positive correlation between competitive positions in the EU internal market and external markets, both within and outside the EU (Table 4). A weak negative correlation was observed between competitive

positions in domestic and foreign markets and current production capacity: as capacity decreases due to declining orders and demand, competitive positions are expected to deteriorate in subsequent periods. Conversely, a strong positive correlation

was found between competitive positions in domestic and foreign markets and changes in order volumes, including expectations of potential export deliveries. Current capacity has a slightly positive impact on the competitive position of industrial enterprises (0.345).

The competitive position of industrial enterprises is adversely affected by the state of employment and labor supply, as

Table 4. Correlation matrix of the link between the competitive positions of industrial enterprises and their expectations of changes in production capacities, orders, and exports

	Q6	Q7	Q8	Q1	Q2	Q3	Q4	Q5
Q6	1,0000							
Q7	0,9824	1,0000						
Q8	0,9650	0,9663	1,0000					
Q1	-0,4358	-0,3917	-0,3427	1,0000				
Q2	-0,4983	-0,5052	-0,5514	-0,4642	1,0000			
Q3	0,9455	0,9330	0,9700	-0,4558	-0,4006	1,0000		
Q4	0,7979	0,8040	0,8088	-0,5146	-0,1999	0,8778	1,0000	
Q5	0,3450	0,2891	0,2660	-0,9430	0,4554	0,3867	0,3536	1,0000

Source: calculated by the authors.

Furthermore, a strong positive correlation was observed among the factors influencing production capacities themselves, such as labor and equipment. A moderate correlation was found between demand and fiscal constraints, as well as between labor and

indicated by the negative average correlation coefficient (Table 5). A strong negative correlation was found between competitive positions in domestic and foreign markets and fiscal constraints (correlation -0.911, -0.902, -0.943).

fiscal constraints. Chrobocińska (2021) highlights that the decline in the competitive potential and positions of enterprises or regions may be attributed to a shortage of qualified personnel.

Table 5. Correlation matrix of the link between the competitive positions of industrial enterprises and the factors influencing production

	Q6	Q7	Q8	Q9.1	Q9.2	Q9.3	Q9.4
Q6	1,000						
Q7	0,982	1,000					
Q8	0,965	0,966	1,000				
Q9.1	-0,291	-0,256	-0,217	1,000			
Q9.2	-0,444	-0,480	-0,524	-0,692	1,000		
Q9.3	0,145	0,098	0,073	-0,982	0,782	1,000	
Q9.4	-0,911	-0,902	-0,943	0,412	0,322	-0,269	1,000

Source: calculated by the authors.

## 5 Conclusion

The study identifies the prevalent business strategies adopted by EU enterprises, including 1) a focus on high quality, 2) targeting established consumer groups, and 3) improving existing products and services. Additionally, it is a common practice among companies to combine multiple business strategies, which yields several competitive advantages and fosters innovation in terms of products, services, and business processes. The survey results of EU industrial enterprises conducted during and post-pandemic highlight a shortage of production capacity during the peak spread of the pandemic, particularly in the third quarter of 2021 to the first quarter of 2022. This shortage can be attributed to fluctuations in order volumes and changes in demand. The aforementioned factors play a crucial role in determining the competitive position of industrial enterprises in both domestic and foreign markets, with their negative impact leading to a deterioration of this position in subsequent periods. Enterprises adapt their production strategies in response to changes in orders and demand. Notably, negative expectations regarding exports are prevalent during the pandemic. Correlation analysis supports a positive relationship between expectations of orders and exports and the competitive position of industrial enterprises within the EU-27. The study reveals a significant inverse association between the competitive positions of industrial enterprises in domestic and foreign markets and fiscal constraints. This indicates that industrial enterprises adapt their strategies in response to changes in the external environment by forecasting shifts in orders, demand, exports, and financial resources both within and outside the EU. Management strategies for production capacity are adjusted based on the fluctuations in demand, order volumes, and expectations of financial resources, all of which play a crucial role in determining the competitive position of industrial enterprises.

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**Primary Paper Section: A**

**Secondary Paper Section: AE, BC**



## INFORMATION HYGIENE IN THE MEDIA SPACE AS A FACTOR OF ENVIRONMENTAL CONSCIOUSNESS OF SOCIETY

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**Abstract:** The article presents a model aimed at managing society's information hygiene by addressing risk factors through targeted interventions from social institutions and management entities. The increase in the risk zone is attributed to the prevailing influence of economic values and objectives over non-economic considerations. Both subjective and objective risk factors are identified, with the former manifesting in the dynamic evolution of information and communication technologies on a global scale, and the latter arising from the behavioral motivations of subjects engaging in risky behavior. The authors delineate the parameters for modifying information risks.

**Keywords:** : adherence to information hygiene, modern society, environmental consciousness, social system, information circulation, information risks, information processes, communications.

### 1 Introduction

The current era, marked by "tectonic shifts," presents humanity with a global transformation in civilizational foundations, accompanied by unprecedented dangers and threats. Paradoxically, progress in information and communication technologies, along with the intensification of information influence, has led to fractures and burdens on the social system, causing divisions in social action and within different elements of society. Information, with its multifaceted definitions, undergoes radical changes in form and delivery channels, no longer merely serving as indicative data but rather becoming a potential source of violence against individuals. In opposition to security, violence emerges as its antonym, and the loss of security manifests as the realization of violence. The prevalence of information violence contributes to the reality of information hygiene and the degradation of society's environmental consciousness. The recognition of the problem of information hygiene, reflected in its formalization through legislative and strategic formulations, has delineated the importance of information filtering and highlighted the key areas of protection, such as the health and progress of society.

The proclaimed strategic objectives concerning human information hygiene necessitate prompt resolution and the implementation of effective integrated management mechanisms that can address the challenges posed by the information age. Several tragic events in recent years, attributed by experts to the adverse effects of information on individuals, underscore the social significance of information hygiene in contemporary society. The synthetic approach adopted in scientific inquiries allows for the identification of paradigmatic principles governing the management of society's information hygiene. Efforts to develop applied models that safeguard society and enhance its environmental awareness align with global trends in humanitarian research on global information technologies. Addressing these challenges is crucial to ensure the protection and growth of society's environmental consciousness.

### 2 Literature Review

The contemporary domain of scientific research focusing on information hygiene encompasses investigations into the influence of information processes on human psychological well-being, health, and development. As such, numerous studies (Blanchett, 2021; Ellison, Blackwell, Lampe, Trieu, 2016;

Herrera, López, & Williamson, 2017) have been conducted to assess the adverse effects of information space on individuals. A comprehensive account of the methodological underpinnings of information security and personal hygiene can be found in the works of (McNair, 2007; Slusky, & Parviz-Navin, 2012). These works model information hygiene as an open dynamic system of activities encompassing individuals, groups, and society. The scientific field examines the impact of information and communication technologies, as well as the Internet, on human behavior and classifies threats arising from information (Broersma, & Graham, 2018; Chan, et. al. 2020). Furthermore, it investigates the effects of information and the virtualization of reality on human mental states.

The second segment encompasses the regulatory and legal aspects of research, which address the regulation of information circulation and the media industry. These issues are reflected in various studies by (Brady, et. al. 2017; DePaula, Dincelli, & Harrison, 2018; Goñi, et. al. 2020), emphasizing the importance of securing human rights to a favorable information environment and the exercise of information freedoms. Scholars are investigating various dimensions related to information censorship (Colligan, 2015; Galan, Jordan, Parker, and Taylor, 2019), the balance between guaranteeing and restricting information freedoms, and the criminalization of information exchange phenomena (Figenschou, and Ihlebæk, 2019; Jones-Jang, Mortensen, and Liu, 2021). Furthermore, they explore the significance of information hygiene concerning national security and information policy (Jordan and Weller, 2018; Olsen, Solvoll, and Futsæter, 2022) and examine the legal frameworks supporting self-regulation within the media industry (Kilimnik, I. 2023; Shelukhin, et. al. 2021). Of particular interest are comparative legal studies that delve into foreign experiences concerning information protection (Whitman & Mattord, 2012; Zhao, Xue & Whinston, 2013).

Information ecology is founded on the premise that there exist constraints on an individual's capacity to perceive and process information signals. These limitations give rise to challenges such as information overload, forced communication, unutilized information, and a novel form of pollution. Addressing these concerns necessitates the implementation of hygienic regulatory measures aligned with physiological principles and psychophysiological stress mechanisms. These matters have been subject to an active investigation by a group of authors, including Koval (2017) and Taherdoost (2022).

### 3 Aims

The primary objective of this article is to investigate the social phenomenon of information hygiene within the media space. This study aims to develop methodological and practical recommendations for enhancing society's protection against information overload and excessive exposure. Additionally, the article seeks to establish a comprehensive model for fostering environmental awareness within society.

The study was designed to accomplish the following tasks:

- 1) Analyze the theoretical, methodological, and doctrinal underpinnings of human information hygiene research.
- 2) Investigate the properties and trends of information risks that pose harm to human health and development, specifically considering the implementation of network principles in the information and communication space.
- 3) Examine the practices of both formal and informal control governing the circulation of information in the context of environmental awareness policies.
- 4) Identify the factors contributing to the effectiveness of expert evaluations of information products to enhance the level of information hygiene within society.

#### 4 Research methodology

1. Methods employed to address information hygiene issues can be classified into two categories: quantitative and qualitative. Quantitative assessment of information involves estimating the overall volume of information received, processed, assimilated, and generated by an individual. On the other hand, qualitative assessment of information encompasses various aspects, such as the intrinsic characteristics of the information (varying in levels of novelty, decision-making responsibility, importance, urgency of processing, and potential conflicts), as well as evaluations of its impact on individual biorhythmic activity, typology of higher nervous activity, and human perception of information.
2. Sociological Approach. In contemporary sociological science, well-established approaches exist for comprehending security, such as viewing it as how a social system functions, ensuring the preservation of its integrity, stability, and viability during the interactions among its structural components and subsystems, both internally and with the external environment throughout society's existence and development. Security is considered a qualitative attribute of a social system and a fundamental condition for societal well-being. The essence of security is formalized through the criterion of "absence" – that is, the absence of danger – in the depiction of an object's security status. Indeed, information hygiene is comparably approached in the humanities, but within the context of the distinct aspects of information threats and the dynamics of the transformation within the information space and media domain.
3. General Philosophical Approach. The foundation of information hygiene, akin to hygiene in general, is rooted in dialectical materialism as a comprehensive method of comprehending the world. Within information hygiene, as well as in hygiene as a whole, the following principles are applicable: fundamental general philosophical laws, including the law of transition from quantitative changes to qualitative ones, the law of unity and struggle of opposites, and the law of the negation of the negation. Additionally, general philosophical categories such as causes and effects, necessity and chance, essence and phenomenon, content and form, individual, special, general, part and whole, and possibility and reality, hold relevance in the context of information hygiene. Furthermore, general philosophical methods and techniques of cognition, namely analysis and synthesis, induction and deduction, historical and logical modeling, as well as the systemic and structural approach, find utility in understanding and approaching the complexities of information hygiene.

The law of the transition from quantitative changes to qualitative ones finds frequent application in hygiene. Various environmental factors, including information, can exert either positive or negative effects on the human body only when a specific quantitative level, known as the threshold of action, is attained. Should the actual levels of a factor surpass these thresholds, pathological changes may occur in individuals. Similarly, the law of unity and the struggle of opposites is relevant to information hygiene. Undoubtedly, there exist upper and lower permissible levels of information impact on human health. Both an insufficiency and an excess of information can be detrimental to individuals' well-being.

#### 5 Results

The paradox of the contemporary world order lies in the dual nature of information proliferation: it is an indispensable requirement for the functioning of social systems, while simultaneously posing risks to the social order. Mitigating the hazards arising from individuals' information environment necessitates the active engagement of the majority in diverse forms of interaction with information, media signals, and creative texts. Moreover, information technologies and the media industry themselves have evolved into a source of newfound

power, reliant on the expansion of human attention. The intensification of information processes triggers the acceleration of all social interactions, thereby engendering an ultra-fast reality where everything transpires at a rapid pace (Toepfl, 2020).

Information hygiene, within the context of the contemporary development of the world community, encompasses a synthesis of at least three key areas of sociological thought: a) the theory of socialization, b) the sociology of mass communications, and c) the sociology of security. Consequently, the definition of information hygiene can be expressed as follows: the science of information hygiene in society explores the influence of environmental factors within the information environment on human health, performance, and life expectancy. It formulates standards, requirements, and sanitary measures aimed at enhancing the information quality of communities, living conditions, and human activities (Eryomin, 2020).

Upon intersecting the two identified criteria - the number of individuals reached by a particular communication medium and the periodicity property - the following categorization emerges. We encounter an inadequately developed terminology that only describes three scenarios. First, we have mass periodic communication, known as "mass media," which utilizes specific means for dissemination. Secondly, we encounter mass communication in its entirety, encompassing both periodic and aperiodic segments, referred to as "mass communication media" (MCM) or simply "mass media" (Figueras-Maz, Grandío-Pérez, Mateus, 2021). Thirdly, we encounter general forms of media communication for any number of recipients, periodic or aperiodic, termed "communication media" (CM) or "media" (Rasi, Vuojärvi, Rivinen, 2021). Table 1 provides an illustrative depiction of these distinctions.

Table 1. Types of communication, based on the number of people involved (Johansson & Johansson, 2022; Mengyao, Jingyu, & Chuan, 2022)

Types of communication, based on the number of people involved	Periodic communication	Non-periodic communication	General case
Media - communication means (CM):			
Auto communication	No special term	No special term	No special term
Interpersonal communication	No special term	No special term	No special term
Personal-group and intergroup communication	No special term	No special term	No special term
Mass communication	Mass media (media)	No special term	Mass communication media or mass media

Another challenging aspect that warrants attention at this juncture in the trajectory toward a novel media education concept is the modern interpretation of mass criteria. Phenomena related to mass communication, extensively studied over the past century, are gradually giving way to more expansive communication modalities, often characterized by a non-mass nature. This transition is accompanied by an increasing prominence of media as technical communication tools, prompting qualitative changes in the media landscape. For the effective practice of media education, this implies that, in addition to the theory of mass communication, the curriculum of media teacher training should encompass theoretical modules exploring non-mass forms of mediated communication. These include automedia communication and interpersonal media communication, as well as personal-group and intergroup communication formats.

The emergence of the hyper-information society, coupled with the increasing variety of information signal carrier technologies, including those employed to address epidemiological threats, underscores the necessity of developing dosimetry and hygienic regulations on information exposure in individuals. Additionally, it becomes imperative to manage the speed and concentration of information flow. The exponential growth in communication channels and the corresponding technical means engenders alterations in the information behavior of social groups and serves as a pivotal driver of civilizational transformations and

the evolution of societal consciousness towards ecologization (Anttila Jussila, 2021).

One of the means to promote information hygiene is through media education, recognized for fostering media literacy. Media literacy entails the acquisition of skills to perceive, interpret, evaluate, and generate media texts appropriately. Three distinct approaches to understanding media education can be highlighted:

1. "Injected" or "protective" approach: This approach aims to mitigate the detrimental effects of media on the audience, considering media as an "agent of cultural degradation."
2. Productive approach: Emphasizing the function of media in creating media products, this approach encourages active media production by individuals.
3. Dialogic approach: This approach involves the interaction between media and the audience, focusing on the interpretation of media texts through a process of dialogue and engagement (Berglez, 2016). The "protectionist" approach is deemed most suitable for achieving information hygiene objectives. Nonetheless, this approach faces active criticism from adherents of the other two approaches, who consider it discriminatory and claim that it hinders individuals from expressing their media preferences. Critics also argue that this approach contradicts the "progressive trend" that aligns with principles of equality and freedom.

The approach of conceiving media reality as a hypernetwork integrates both semantic and format elements of risk dynamics. Drawing from the theory of the hypernetwork model of the brain, the object of our study, media reality, can be likened to a cognitive hypernetwork structure. In this analogy, the cogs represent content, which could be information or codes – akin to "mental quanta," while the commas denote the connections that arise from interpreting content through a system of channels. The media reality hypersystem transcends being a mere summation of content and channel characteristics; rather, it represents a fundamentally novel phenomenon. This approach substantiates the broader significance of information hygiene in comparison to conventional information hygiene. This is because threats stemming from media reality encompass risks related to the consumption of information products.

The portrayal of media space as a hypernetwork aligns with the theory of the network society and its distinctive functional logic. The infrastructure of the media hypernetwork is manifest as a "metanetwork, a conglomeration of highways and routes" that interconnects all network actors and establishes network nodes. Empowered by advanced media technologies, individual experiences are amalgamated into collective experiences and vice versa, leading to the transformation of sociality into a novel model.

The structure of media reality is determined by its granularity, comprising signals that can be encoded by human consciousness. This interactive environment involves the interplay between individual consciousness and group consciousness. In this context, individual signals, upon combination, give rise to nodes representing the shared experiences of multiple individuals. These individual signals result from the reception and interpretation of information signals by each individual. This scheme can be depicted as a pyramid, where the node at the apex is formed from comparable interpretations of the signal by different individuals, and the base consists of individual signal reception by each subject. In turn, nodes within the media hypernetwork can coalesce based on common themes, giving rise to groups of nodes. The collective activity of these node groups governs the dynamics of the entire hypernetwork. The compaction or concentration of nodes occurs through the emergence of links, driven by the principle of mutual attraction, analogous to the attraction of molecules that govern matter and communication that underpins society. As connections are formed and attracted to one another, communication within the media hypernetwork becomes increasingly compacted. However,

this simplification has its limits, similar to how the attraction between molecules has boundaries, and it ends when the distance between cogs (individual interpretations of a signal) becomes equivalent to the size of the cog. At this point, just as molecules begin to repel each other, the process of compaction reaches its limits within the media hypernetwork.

The inception of an individual response to a signal necessitates an external formalization process. This entails transforming a thought or idea into content and manifesting it within a network. The velocity of signal reception, i.e., its interpretation, and the subsequent speed of representation corresponds to the rapidity of media hypernetwork node formation. This rate aligns with the promptness of content formulation, which involves translating meaning into a signal or code and subsequently making it visible within the network. For instance, this could take the form of a post on social media, comments, news dissemination, and other similar modes of expression. In essence, the speed can be comprehended through four consecutive orders: firstly, in formulating the meaning of an idea or event (presentation on the network); secondly, in its assimilation by another individual (reception); thirdly, in the construction of an interpretation for a signal (representation); and fourthly, in developing an interpretation for the representation itself (representation of representation). The convergence of the speed of idea formulation (content birth) and its dissemination is facilitated by modern technologies (Fig. 1).

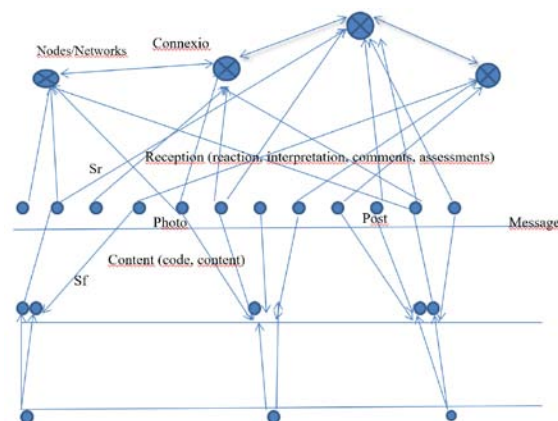


Figure 1. Hypernetwork model of media communications within the framework of information hygiene (developed by the authors)

Let  $S_f$  represent the speed of content formulation, referring to the rapidity of its appearance in the network, such as photos and videos taken at the scene of an event. On the other hand,  $S_r$  denotes the speed of reception, encompassing the pace of reaction to content (representation), exemplified by comments and assessments. Specifically,  $S_r$  comprises directions (lines) that emanate from the content, signifying individual reactions. When these directions are interconnected, they form network nodes, which are essential elements of the media network.

Nodes can interconnect with one another, leading to a continual increase in the number of connections. This growth in connections is facilitated by the accelerated rate of reception ( $S_r$ ) in comparison to the rate of content formulation ( $S_f$ ). Reducing the path from content to reaction, known as reaction time, involves minimizing the period between the content's appearance on the network and its perception by the first recipient. Certain forms of content are immediately perceived without the recipient's explicit authorization (e.g., audio advertising, audio products). Thus, the speed of the  $S_r$  reaction is influenced by the content's format. Consequently, regulating access to content translates into controlling the growth rate of the  $S_r$  reaction. Additionally, the speed of content formulation ( $S_f$ ), encompassing the journey from idea to actual content, is mediated by technology. Technological advancements enhance the swiftness of idea dissemination into the media network,

thereby directing regulatory efforts toward establishing control over technology.

The hyperset model of media space reveals a notable trend where the moment of an idea's (or event's) inception and its appearance in the public media space coincides with its subsequent interpretation and implementation within the same space. Consequently, the concept of the global information space as a media hypernetwork emphasizes the significance of social control over the traffic of media signals and the properties of their accessibility. This control also extends to accessibility technologies and the flow rate of media signals.

The exploration of the intricate concept of human information hygiene through modeling facilitates the construction of a comprehensive theoretical and methodological framework. This approach aids in identifying the various aspects, interrelationships, and dependencies, ultimately leading to the development of a practical-oriented concept. The proposed resource-vector model of human information hygiene management emphasizes a risk-based approach to comprehending security. Within this model, human information hygiene management is defined as the collective efforts of social management entities to minimize the risks of harm to individuals during their interactions with information.

The model's fundamental principles, vectoriality, and resourcefulness precisely reflect the core dynamics of the subject-object structure in human information hygiene management. Vectoriality entails coordinating the movement of the management object - the risk zone, with the direction of influence from the subject - the management entity. On the other hand, resourcefulness characterizes the intensity of the directed action employed by the management entity. Drawing an analogy between human information hygiene management and the technical sciences, specifically the vector control of an induction motor, provides a relevant and illustrative comparison. This analogy highlights the managerial influence's function, which harmonizes the dynamics of risk zones with the dynamics of management, effectively synchronizing their respective moments. In this context, moments refer to the risks and motives of management subjects. The ultimate goal of the management model is to establish the alignment of these moments (Makedon, et. al., 2019). Within the model, the risk area corresponds to the stator, while the management system, represented by a hierarchical structure of security actors, serves as the rotor.

The observed trends within the risk zone, particularly the management risk zone, reveal the existence of a significant issue concerning the inconsistency and divergence of management impacts and risks. Additionally, the allocation of resources and the nature of the threat to human health and development exhibit inadequacies. These aspects are evident through the emergence of management risks, which originate from general challenges inherent in the management process as a distinct form of social interaction. These risks can be reduced to patterns that manifest in each trend within the management risk zone (Kovach, and Rosenstiel, 2021). The divergence of stator and rotor torques can be attributed to several factors, including limited state legal regulation and the boundaries imposed on the legalization of information exchange relations. The vulnerability of formal control, characterized by a morphological (algorithmic) difference between the object and subject of management, also contributes to this divergence. Furthermore, the merging of status positions and the homogenization of motives among risk subjects and management subjects play a role. The failure of the obligation and responsibility mechanism, mistakes in interpreting the publicity (sociality) of risks, and the latent nature of new threats, rendering them "invisible" for official assessment, add to the complexities. Additionally, there is a noticeable inertia in the formal control response to threats, as well as the aging status of the forms of democratic freedoms in the realm of information exchange. These factors collectively contribute to the divergence observed in the stator and rotor torques within the context of information hygiene management.

The resource-vector model of human information hygiene management aims to address the challenge of devising effective methods for managing the risks of harm to individuals caused by information. This approach involves considering factors such as the sources, nature, and consequences of risks and threats (Grimes, 2020). From the perspective of our study, the primary objective of vector control is to align the dynamics of threats arising from the information space with the dynamics of the system designed to counteract these threats. To achieve this alignment, the model takes into account the rule of the rotor (control system), which interacts with the magnetic field of the stator (risk zone). This coordination encompasses both directions and speeds within the system.

The realization of the resource-vector model of human information hygiene management encompasses not only a hierarchical arrangement of management entities, akin to the system-dynamic concept but also involves aligning the resourcefulness – referring to the extent of powers and competencies – of each management entity with its level of institutionalization. This alignment dictates the level of discretion in the entity's actions, the localization and alteration of control measures, and the variability in its behavior (freedom of action).

Following the accepted approach to comprehending security as a systemic phenomenon encompassing various levels of subject and supra-subject activity, the levels of subjects involved in human information hygiene management within the resource-vector model can be hierarchized based on their available resources and status concerning behavior when interacting with the information space. However, constructing such a hierarchy is challenging due to the ambiguity of a subject's resourcefulness, which might not necessarily align with their administrative power. Additionally, status roles may diffuse, resulting in a management subject becoming a risk subject if incorrect decisions are made, leading to the creation of what is known as "management risk" (Hassan & Hussain, Basit, 2022). As a result, the proposed hierarchical structure remains conditional and flexible, allowing for adaptability (see Fig. 2).

The depicted arrows within the diagram signify the nature of influence and mutual interaction among the subjects during the implementation of activities aimed at ensuring human information hygiene. Each actor is represented to the fullest extent, encompassing various components. For instance, the "state" category comprises legislative, executive, and judicial authorities, as well as controlling, supervisory, and law enforcement agencies. It also includes social protection and crime prevention agencies, along with affiliated organizations like educational institutions. On the other hand, "civil society" encompasses social movements and associations that carry out monitoring functions within the information space (Davidson & Johnson, 2021).

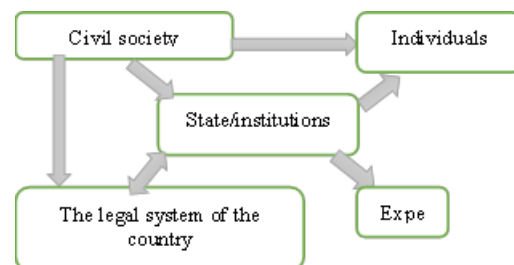


Figure. 2. Interaction of subjects of information hygiene management in the media space (developed by the authors)

As observed, the state, being the most highly institutionalized and possessing administrative power, establishes the regulatory framework for the activities of all other actors, except civil society, and, to some extent, transfers a portion of its institutionalization. In a broader context, all arrows should be bidirectional, as interactions occur to varying degrees. However,

for the sake of simplicity in the diagram, the unidirectionality of the arrows is determined by the dominant influence (Scheerder, Van Deursen, Van Dijk, 2019). For instance, the regulatory control of expert activities holds greater prominence compared to the legal consequences of expertise, such as the activation of state coercion and the establishment of obligations and liability for non-compliance with these obligations.

The activities of management entities in managing human information hygiene can be categorized into two main aspects: risk management about the behavior of risk subjects involved in the production and dissemination of information, which is influenced by their motives; and risk management arising from the accessibility of information products, contingent upon the type of information product and its perception, enabling the potential for restriction and localization of its impact (Fink, 2019).

As previously mentioned, the resourcefulness of management entities encompasses their powers, available response tools (coercive power, financial resources, organizational interconnectedness - accumulative capabilities), and competencies (awareness, qualifications, knowledge, experience, technical equipment) (Johnson, et. al., 2020). Resourcefulness is a critical factor influencing the behavior of the entity's manager, thereby influencing the potential risk to human health and development, making it an essential consideration for managerial risk assessment.

Management measures are categorized based on the behavior of risk actors concerning the dissemination of information products and/or control over access to them. These entities encompass all actors whose actions or inactions contribute to the expansion of the audience consuming information products and/or managing access to them (Swart, 2021). The resource intensity required for a specific management entity to influence the behavior of a particular risk subject is contingent upon the interplay of their legal statuses (subjectivity) and the alignment or opposition of motives between risk subjects and the management entity. For instance, state legal measures against distributors are formulated and implemented through legal regulations, obligations, and coercion, which may include restrictions on the circulation of information products, the establishment of requirements, and the organization of access to them.

The nature of risky behavior, particularly the actions or inaction of risk subjects, and, correspondingly, management influence, are contingent on the characteristics of information products, which collectively contribute to the factors of risk resource intensity, thereby affecting the complexity of management and increasing or decreasing the requirements for management measures. These factors include:

1. The degree of localization of information products in space and time. For instance, products that have spatial boundaries, expressed in the form of a material object, encompass printed materials and entertainment events, as well as information products whose demonstration is limited in space and time (e.g., within specific venues). Managing the risks associated with localized products involves influencing their spatial accessibility to individuals by restricting territorial boundaries for the audience, prohibiting entry, or seizing the products (Myllylahti, 2020). These are considered low-resource risks. On the other hand, other types of information products not confined to specific spaces require more complex response measures, including assessing compliance with broadcast requirements and extensive monitoring of the public information spatio-temporal dimension, as well as auditing government response practices. These types of risks necessitate more extensive resources.
2. Possibilities to automate the management of risks associated with the consumption of information products. Products that can be automatically filtered for malicious content significantly reduce the requirements for

management measures and the resource intensity of the risk. These refer to any products available in digital format. On the other hand, products that do not allow for automated content filtering require the personal involvement of content evaluators and their competencies. For certain management entities, these competencies may not be readily available, thus necessitating the involvement of experts in the process.

3. Possibilities of personalizing the responsibility of subjects of risky behavior concerning information products. Risks arising from the consumption of information products, where the distribution and administration of access can be easily identifiable and personalized, involve relatively simple prevention measures, such as verifying the responsible individuals involved. On the other hand, the challenge of identifying the exact source of the risk and the subjects engaging in risky behavior creates difficulties in personalizing responsibility, especially as a condition for legal liability. This situation is more common in cases of information products that utilize third-party platforms for content dissemination, where there may not be a direct economic connection between the content distributor and the platform owner within the public information space.
4. Speed of media signal delivery, and speed of the delivery channel. Various types of information products possess different speed potentials for delivering content to the organs of perception. The most "fast" types of information products significantly reduce the time required for management response, necessitating higher resource capacities of management entities to cope effectively (Pacheco, Yoong, Lips, 2020). The rate of audience growth among content consumers emphasizes the importance of identifying risks at an early stage, precisely at the first content phenomenon.
5. Replication of information. The extent of information "omnipresence" is contingent on the type of information product and influences the feasibility of managing the risks associated with its consumption. The content delivery channel is characterized not only by speed but also by volume, i.e., its capability to reach the audience (Andersen, Adam, and Dennis, 2021). The presence of multiple versions and diverse formats of the product complicates risk response and prevention efforts, as it requires identifying and addressing all product variations, each potentially with varying degrees of spatial localization. For instance, restricting the circulation of printed materials with harmful content that has been digitally or otherwise reproduced requires searching for versions of them. The resource intensity of the risk of harm from the consumption of information products, the circulation of which is not associated with the expenditure of resources of risk subjects, whether temporary, financial, reputational (anonymity), is higher than from other products and imposes particularly high requirements on management measures and the resource capacity of management subjects.

The effectiveness of human information hygiene management, therefore, centers on devising and implementing risk management measures for delocalized, highly replicated information products. These products entail content (including context and connotations) that necessitates thorough evaluation and filtering, extending beyond automatic processes. Additionally, their circulation lacks personalization, and they exhibit an exceedingly high speed of delivery to the organs of perception (Anttila, 2022). Consequently, the resourcefulness of management entities should encompass the availability and breadth of expert evaluation, technical measures to decelerate speed and circulation, as well as the capacity to formalize and articulate the necessity for these measures. Furthermore, establishing a connection (user verification) between the content author and the platform for its distribution (platform owner) is pivotal in this regard.

The aforementioned characteristics of information products, with risks necessitating significant management resources, highlight

the Internet as the primary source of riskogenic potential for human health and development. This potential enables the localization, circulation, anonymization of content creation and instantaneous delivery of information. As a principal technological advancement of recent decades, the Internet revolves around the majority of societal issues during the transition to a new era, including challenges concerning socio-cultural interactions between individuals and the advancement of environmental awareness within society.

## 6 Discussion

The intensification of information flows, the ubiquity of media signals, and the escalation of hypernetwork logic have introduced a new perspective for understanding information risks and human information hygiene, particularly the risks of eroding traditional mechanisms of socialization and, potentially, social order in the future. Hence, it becomes crucial to formalize the prioritization of society and, consequently, the protection of individuals over the interests of economic institutions, recognizing information hygiene as a vital component of civilizational security. The previous scientific conceptualization of the issue of human information hygiene failed to encompass its essence through the lens of technological expansion and media domestication, the establishment of a pervasive pattern of media consumption and the inundation of living spaces with noise, leading to affective responses instead of rational and critical ones, ultimately resulting in the primitivization of consciousness and mass narration. The issue of quantitative aspects of media consumption and its potentially coercive and violent features has not been extensively discussed in public discourse. The current study aims to fill this gap by analyzing the fundamental nature of risks stemming from information as an object of management, focusing on subjects of social control with varying degrees of institutionalization. A level-by-level approach is proposed to comprehend the system of managing these risks, and the synergistic principle of management is described and justified based on the acknowledgment of limited resources within management structures and the potential for resource redistribution.

## 7 Conclusion

The study provides a theoretical and logical justification for considering the Internet as a public domain accessible to humans. It identifies and refutes mainstream criticisms of the theoretical underpinnings of the concept of human information hygiene. These criticisms include disapproval of classical approaches to socialization and psychophysiological universals within the pedagogical paradigm. Furthermore, it rejects the substitution of media education for security within the media network, the distortion of the original meaning of media ecology, and the postulation of media autonomy as an environment that needs adaptation rather than management. The study also addresses the assertion of the "inalienability" and "naturalness" of the "right" to the Internet while condemning any state intervention in this right. The claim that this right should be included as one of the fundamental principles in the international legal framework for regulating the information sphere is also examined and argued against.

The study elucidates the position of human information hygiene within the framework of scientific knowledge and sociological thought. It demonstrates the approach to addressing this field as a means of enhancing the "quality of society." This enhancement is achieved through technological means that secure the social well-being of individuals, utilizing both established methods and innovative mechanisms that encompass both official and unofficial control. These mechanisms are tailored to suit the characteristics of the hyper-networked reality of the media space. The management of human information hygiene pertains to ensuring the resilience of the social order in response to the weakening of previous social structures and the aging of administrative instruments. This endeavor seeks to safeguard individuals in an ever-changing media landscape and sustain societal stability amid evolving challenges and opportunities.

The authors put forth a model of information hygiene management, which not only enhances the regulatory and conceptual framework of information policy but also encompasses the modernization of the examination process for information products and advertising. This model optimizes law enforcement efforts concerning offenses related to safeguarding individuals from harmful information. Furthermore, it advocates for the reform of social protection systems and neglect prevention, focusing on ensuring the human right to a favorable information environment. The comprehensive understanding of media noise as a unique form of disturbance necessitates interdisciplinary research and the utilization of existing diagnostic and evaluation methods. This study highlights media noise as the second component of harm from information in a child's living space, encouraging further developments that integrate tools from various fields of scientific knowledge. The exploration of this topic is crucial for a comprehensive approach to human information hygiene management and its implications for societal well-being.

The comprehensive exploration of the hyper-networked nature of media space underscores the necessity of implementing relevant research findings and conclusions into the practice of information management and the principles of information and social policy. Achieving these objectives requires conducting research that comprehensively examines the possibilities of safeguarding individuals from both existing and emerging threats. Such research fulfills a crucial role in providing scientific substantiation for managerial and political decisions related to information security and societal well-being.

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**Primary Paper Section: A**

**Secondary Paper Section: AE, AJ**

## THE IMPACT OF SPORTS AND RECREATION ACTIVITIES ON THE PHYSICAL DEVELOPMENT AND HEALTH OF SCHOOLCHILDREN AND STUDENTS

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**Abstract:** The article explores the scientific viewpoints on the contribution and benefits of sports and recreation activities in educational institutions for every schoolchild or student. At the time of the coronavirus and digitalization, any form of physical activity is helpful for people of all ages, including schoolchildren and students. As this study demonstrates, every form of physical activity helps to strengthen the body and improve academic performance. Furthermore, the authors have shown that sports and recreation activities in educational institutions at the school and university stages contribute to the improvement of students' health, as well as their physical and psychological development.

**Keywords:** sports and recreation activities, schoolchildren's health, students' health, educational institutions, academic performance, influence factors

### 1 Introduction

Physical activity throughout life is a part of modern human's adequate healthy behavior. It applies to the level of physical activity that contributes to strengthening health at all stages of life. Educational institutions can influence students' physical activity levels through sports and recreation activities. Moreover, this influence should be effective not only during the attendance of respective institutions but also positively impact the formation of habits related to physical activity throughout life. Given the increasing prevalence of overweight and related health issues due to a sedentary lifestyle, forming a habit of physical activity throughout life has become a crucial societal problem that should be addressed from a very young age.

The significance of the effects of sports and recreation activities on health is a central theme in sports pedagogy (Horn & Basic, 2017; Neuber, 2011). It is quite surprising that educational institutions, as educational environments, and physical education subjects, as particular sports organizations, have received little attention so far. Therefore, the authors consider the study of the importance of sports and recreation activities for health and, consequently, academic success to have great potential for analyzing socially relevant issues in the field of education.

As a pedagogical activity, sport, in general, creates many different opportunities for learning, education, and development. They can have a positive impact on both interdisciplinary skill development and personal development (Krueger & Neuber, 2011). Especially in childhood and adolescence, a large part of academic success is attributed to sports (Cornelissen & Pfeiffer, 2016; Pfeiffer & Cornelissen, 2010). In addition to numerous theoretical proposals that describe and discuss sports and recreation activities in their true pedagogical qualities, numerous empirical studies indicate that physical activity in children, adolescents, and adults fundamentally positively affects development processes (Conzelmann & Schmidt, 2020; Gogoll, 2014). Particularly in the school environment, sports events also contribute to fulfilling interdisciplinary learning requirements (Heim & Brettschneider, 2002).

If we look at the scientific discourse on the relationship between sports and health activities in the educational process and health, it becomes evident that, to date, the main topics were the school

as an institution and school sports as a pedagogical field (for a review, see Fischer, Meier, Poweleit & Ruin, 2017). However, approaches that empirically investigate sports activities beyond the curriculum regarding their positive influence on physical health are increasingly emerging (Brandl-Bredenbeck, 2010; Overwien, 2010). It includes informal sports events and clubs (e.g., Hansen, 2016; Mueller, 2017).

Nevertheless, it is unlikely that there has been a systematic and theoretical investigation of the functions of sports and recreation activities in an educational institution such as a university. It is even more surprising since university sports play a central role in organizing sports programs and, sometimes, due to legitimacy reasons, bear increasing responsibility for providing medical services to students (Goering, 2018). Furthermore, there are relatively few empirical studies regarding student sports' direct and indirect educational effects. It mainly applies to the connection between sports, academic achievements, and health.

### 2 Aims

1. To identify the importance of sports and recreational activities, physical activity, academic success, and health.
2. To determine the impact of sports and recreation activities on schoolchildren and students' physical development and health.

### 3 Literature Review

The authors will develop a conceptual framework for a systematic and multidimensional analysis of the key issue of the connection between sports and recreation activities, academic success, and student's health. The health of the education seeker as a research subject does not require additional definitions. Instead, the approaches to defining academic performance among scientists are marked by high volatility. Notably, after introducing the so-called Bologna Process in the mid-2000s, research interest in determinants and predictors of academic success has increased. Although academic performance studies may draw on extensive empirical knowledge, a systematic approach to academic success can sometimes be challenging. It is primarily due to different approaches to the question of the aims and functions of degrees and the associated issue of operational success. Consequently, it is unsurprising that there is still no singular and precise definition of academic success (Heinze, 2018; Heller, 2012; Konegen-Grenier, 2002).

Mainly, empirically-oriented research on academic performance, not devoid of preconditions but associated, especially in Germany, with relatively straightforward theoretical assumptions about the university as an educational institution and its function in higher education (Altbach, 2016; Huether & Kruecken, 2016; Teichler, 2016). The search for decisive predictors of academic success, its model-theoretical integration, and health status appear to be moving in tandem with the need for education policy formation in models of control linked to academic success (Berthold & Leichsenring, 2007; Bogumil & Heinze, 2009). In particular, heightened attention to comparative degrees during the Bologna Process has made academic success a formal indicator of educational system quality. The designation of academic success as an essential benchmark value in education policy has also shifted research perspectives towards a more efficiency-oriented determination of concepts of academic success. Thus, the overall discourse on the development of empirical university research as an educational science focused on the efficiency and performance of specific educational institutions is also inherent in academic success research (Bornkessel, 2018).

Against this background, Stebler (2000) divides the discourse into various prospective views on education, which is considered a crucial phase of both education and life. Research success is



built as a dependent target variable, including institutional market and individual-subjective perspectives. This differentiation indicates that academic success can be interpreted differently depending on the respective viewpoints. While more institutionally formed research approaches focus on the efficiency of the education system and question predictors of formal learning success, market-oriented research is based on variants of further education in the job market (Bornkessel, 2018). From the perspective of institutional-market research, academic success and attrition (indirectly) are understood as complementary phenomena. In this regard, academic success is typically operationalized through indicators such as final grades, dropout rates, or duration of study (van Buer, 2011).

On the other hand, individual-subjective views on academic success pay attention to personal attributes, the value, and the quality of the experience of the respective studies becoming the subject of research. This research approach mainly gives more significance to the subjective definition of the situation under investigation. For instance, the relevant criteria and parameters here include:

- acquisition and expansion of professional and interdisciplinary skills;
- student satisfaction;
- achievement of individual learning goals;
- individual problem-solving;
- personal development (Koenig & Richter, 2019).

The topic of academic performance is gaining increasing attention. Despite the complexity of the term and numerous subsequent proposals that offer subjective access to the subject (Blomeke, 2009; Rindermann & Oubaid, 1999), the following works dominate among a range of studies. Mainly, the statistical characteristics of grades have been the focus of many studies as a criterion for academic success (Giese, Otte & Stoetzer, 2013). Only recently, other promising views on academic success have been proposed, starting with the year of study, thus primarily considering the quality of the learning process (Koenig & Richter, 2019). It is particularly evident in a series of works considering different research phases (Biermann et al., 2017). Based on theoretical assumptions (Esser, 2002), the research advocates for broader inclusion of subjective views on learning success within comprehensive concepts of educational success research (Krempkow, 2008; Schultes & Schroeder, 2013). These assumptions seemingly provide objective boundary conditions of social situations, such as if academic achievements are to be classified and appropriately evaluated in the context of experience and actions.

Previous conceptual models for explaining educational success are typically based on the culmination of numerous empirical findings. They usually perceive academic success as an event associated with multiple causes, primarily moderated by learning behavior (Ruffing, 2016). The predictors identified and discussed concerning academic success are highly diverse and can be attributed to various spheres. If following Bluethmann's (2012, 2014) model of academic success, educational behavior (e.g., learning experience and learning behavior) will depend on educational conditions (e.g., teaching quality or module design), life conditions (e.g., family status or financial resources), and admission requirements (e.g., motivation to learn, grades for admission qualifications to educational institutions).

Kuh, Kinzie, Buckley, Bridges, and Hayek (2006) assert something similar: the model combines both process and structural variables and focuses on the learning experience (prior level). They are considered highly relevant for institutional-market and subjective-individual educational success indicators. In addition to admission requirements ("pre-entry experience"), educational conditions ("institutional conditions") and specific life conditions of students are also considered central structural conditions (Kuh et al., 2006; Kuh, Kinzie, Schuh, & Whitt, 2011).

Conversely, Tinto (1993), who significantly shapes the international discourse on academic success and student satisfaction, prefers an approach that asks about the conditions of students' integration in education and, therefore, is more process-oriented. In this model, the program's success depends mainly on proper integration at the initial stage. Consequently, this approach considers structural framework conditions at the beginning of the year particularly important.

Against this backdrop, the theoretical-conceptual deficit becomes evident when considering the discourse on sports and recreation activities, academic achievements, and health status. There is a lack of integrative models that would link the findings with each other and general conceptual frameworks that would enable systematic and theoretical empirical research in the subject area. In the context of the following conceptual considerations regarding sports and recreation activities, academic success, and health status, the authors will explore the potential of sports-scientific discussion for the discourse on academic success, health status and outline central research perspectives.

#### 4 Theoretical Background

Considering the diversity of models and findings related to academic achievement, numerous further propositions can be made for analyzing (potential) relationships between sports and recreation activities, academic success, and health. A differentiated study of the multidimensional constructs of academic success, sports, recreational activities, and health is fundamental to the following conceptual discussions.

Beginning with the concept of academic achievement, two main perspectives for investigating connections can be derived:

- the possible impact of sports and recreation activities on formal successful completion of degrees (e.g., final grades);
- the courses which align with expectations (e.g., adhering to standard study periods, low quit rates, high student satisfaction).

This concept includes both institutional-market and individual-subjective dimensions.

Forrester (2015) demonstrates, for instance, that the impact of sports and recreational activities on the tendency to quit college before graduation and without a diploma has an inverse relationship. Henchy (2011) also describes participation in university sports as a satisfaction factor during studies. Thereby, sports are an indirect predictor of successful degree attainment. Huesmann, Brown, Lee, Kellogg, and Radcliffe (2007, 2009) also show a compensatory relationship between engaging in sports and recreational activities related to health and average academic performance. It was corroborated in the works by Keating, Castelli & Ayers (2013). Moreover, Cornelissen & Pfeiffer (2010, 2016) indicate the connection between participation in sports and recreation activities, health, and career success. They illustrate that acquired sports skills correlate with later health status and earned income.

Secondly, the potential relevance of sports and physical exercises can be established from the following perspectives:

- individual acquisition of specialized knowledge;
- interdisciplinary skills;
- personal development (e.g., health skills, self-efficacy, social skills).

If academic performance is conceptualized not only as the final course outcome, then, thirdly, the dimensions of academic performance can also be observed in terms of successfully overcoming challenges at course stages (such as enrollment or graduation).

The systematic review of the relationship between sports and recreation activities, academic performance, and health also

requires consideration of the multidimensional concept of sports and recreation activities. These connections can only be accurately determined if the phenomenon of "sport" becomes available for a differentiated observation. For the context of educational institutions and organizational units, it is appropriate to make a fundamental distinction between physical (everyday) activity and sports activities. Regarding physical activity, there is also an issue of theoretically plausible differentiation of physical activity forms.

In the university context, it can sometimes be assumed that competition-related activities in team sports may have a different effect than, for example, individual fitness training in the gym, group fitness-oriented workouts, or participation in adventure-oriented outdoor sports competitions. Moreover, many possible "influence models" can be presumed (Schneider & Diehl, 2014). Consequently, it is necessary to differentiate to what extent the attributed effects are isolated physical, psychological, or social effects or whether they constitute more complex biopsychosocial mechanisms.

Regarding research success, it can be hypothesized against this background that sports activities can have both functional and dysfunctional effects on research success or remain relatively inconsequential.

## 5 Results

Based on the above considerations, the following three main arguments can be made to explain the potential link between sports and recreation, academic success, and health:

1. A physically active lifestyle as a means of prevention and health reinforcement facilitates successful academic completion. The health status of students can positively or negatively impact their cognitive abilities, learning behavior, and exam performance. Poor health and prolonged periods of absence due to illness are also associated with a higher likelihood of dropout or non-promotion to the next grade (Huber & Kellner, 2002). As physical exercises, whether in the form of everyday physical activity, fitness training, or sports competitions, have a wide range of health impacts (Jekauc, Reiner & Woll, 2014), an indirect effect on academic achievement can be presumed.
2. From a pathogenetic perspective, the lack of exercise is considered a central risk factor for many clinical patterns. Meanwhile, the preventive functions of a physically active lifestyle and fitness are well-documented (Hillmann & Schott, 2013). Adequate sports activity and physical exercises are regarded as essential preventive measures for mental disorders, particularly among students (Moellenbeck & Goering, 2014). Physical fitness also represents a significant therapeutic intervention for existing health problems, thus aiding better coping with illnesses or injuries (Jetzke, 2019).
3. From a salutogenetic point of view, sports and physically active lifestyles can, for example, be associated with developing or maintaining physical-constitutional, personal, and social-interpersonal or sociocultural resources (Brehm et al., 2013). Overall, engaging in sports and recreation activities impacts health by improving stress-coping abilities and stress regulation. Moreover, the self-realization of health-related activities also depends on the availability of the following psychosocial resources:
  - knowledge;
  - social support;
  - access to healthcare services, etc. (Faltermaier, 2017).

In this context, physical resources that can be managed through sporting activity (improved body awareness or greater physical resilience) can play a central role in coping with stress during the study process or dealing with high-stress episodes before exams. Additionally, depending on the nature of sports activities, there is the potential to expand social support networks or enhance actions and knowledge related to sports and physical exercises.

In addition, sports can also take on a meaningful function and possibly contribute to more significant mental resilience.

The first analysis by Stock (2017) conducted regarding the impact of students' health on their academic success concluded that active and healthy behavior, including physical activity, plays a significant role in formal institutional academic achievement. El Ansari & Stock (2014) came to a similar conclusion, showing that students who adhere to WHO recommendations for physical activity also achieve better academic performance than their peers and are in better physical shape.

In addition to these functionally positive effects of physical activity on health, it is also possible to formulate dysfunctional assumptions about the investigated impact. Participation in sports and recreational activities may also be associated with the following very specific health risks:

- physical overexertion and improper strain;
- typical patterns of sports injuries;
- increased susceptibility to infections.

However, intensive sports training may also contribute to the development of clinical conditions, namely:

- eating disorders and body image issues (Giel et al., 2016);
- exhaustion in students (Granz, Schnell, Mayer, & Thiel, 2019);
- health risks (Mayer & Thiel, 2018).

These potential side effects of intense physical activity also need to be considered in a differentiated health-oriented study of factors relevant to research success.

The increase in cognitive abilities has been discussed as a psychological side effect of sports and recreation activities (Walk, 2011). Accordingly, participation in sports and recreational activities can also be understood as a means to directly improve students' performance, assuming that concentration, memory, or motivation for learning can be enhanced through appropriate exercises. The extent to which, for example, active breaks, fitness training, or sports activities can have a positive impact on academic performance has been researched to a limited extent (Mess, Theune & Schueler, 2015; Schueler, Hildebrand, Barthel & Woll, 2015). The extent to which other expected effects (better mood and biopsychosocial well-being) also affect academic performance still needs to be analyzed more closely.

Co-curricular sporting activities within university sports can promote integration from a social perspective at the beginning of the term. It can lead to a higher level of engagement with the university and contribute to overall student satisfaction through the possible development of social networks. The findings by Goering, Jetzke, and Rudolph (2017) show a positive correlation between physical activity and satisfaction with academic success among German students. Based on Tinto's (1993) research on academic achievement, the integrative potential of playing sports together during learning may be a crucial factor for academic success. In his empirical analysis, Jetzke (2019) provides additional information about the relevance of sports activities for successful social-academic integration and their impact on academic success and health.

However, it should be noted that sports and recreational activities that turn into intense sports activities can also contribute to, for example, less time available to fulfill relevant academic requirements, such as preparing for exams. It can lead to a decrease in the importance of studying or becoming a secondary concern. A special group comprises competitive athletes who move in two performance-oriented social settings as part of a dual career. This group of students needs to meet the expectations of the elite sports world as well as the demands of the academic world through effective time management and resource utilization. It raises questions about the conditions

under which academic and sports achievements are possible and to what extent acquired skills can be transferred between different environments to maintain adequate health levels.

The sports and recreation activities can also be explicitly utilized as educational content to develop skills and contribute indirectly to interdisciplinary skill development. Health-related competence associated with physical activities (Sudeck & Pfeifer, 2016) can be effectively enhanced through well-designed health sports programs. For instance, students' social skills can be addressed through school-oriented team activities, and sports engagement as a central element of a healthy lifestyle could be integrated into studies focusing on key skills. The opportunities to foster both "health literacy" (Nutbeam, 2008) and "physical literacy" (Whitehead, 2001) among schoolchildren and students through sports and health activities are diverse. The extent to which physical activity can contribute to students' self-efficacy, improve self-organizational skills, and influence academic motivation raises questions that require more thorough analysis in the future.

The research on the multidimensional and relational functions of sports activities should be explored. For example, Potuto & O'Hanlon (2006) demonstrated that students' participation in local sports competitions might be associated with lower overall grades on the one hand. On the other hand, it could also have a positive impact on personality development. In addition, it is reasonable to consider the cyclical effects and potential interactions between physical activity, academic success, and health.

## 6 Discussion

Based on the above assumptions about the relationship between physical activity, academic performance, and health, there are further proposals for a differentiated explanation of the main influence factors and generative mechanisms for a holistic analysis of biopsychosocial constellations. These constellations cause specific patterns of sports activity in schoolchildren and students and, therefore, can also affect academic performance through the outlined cause-and-effect relationships, the basic distinction between the personal and social levels.

At the personal level, it is necessary to consider the individual requirements of students who may need various forms of sports activities, namely:

- personal wellbeing;
- body constitution;
- gender-related aspects related to sports;
- motivational structures;
- individual training histories;
- socio-economic backgrounds.

At the social level, apart from general living conditions in educational institutions, it is crucial to focus on the structural peculiarities of schools and universities related to sports and physical exercises. For instance, it can be assumed that the structure of the school or university sports program may influence the students' level of physical activity. The potential impact of these educational structures that promote physical activity on health, cognitive performance, and even academic achievement needs more detailed investigation.

Additionally, it is essential to determine under what conditions sports and recreation activities are suitable as interdisciplinary educational content in educational institutions for promoting health, social, and self-competence and which groups of students will benefit the most from this. Moreover, it is necessary to systematically examine to what extent the curriculum or formal course requirements (e.g., attendance time, examination periods, exam requirements, etc.) may facilitate or hinder students' physical activity.

Furthermore, research is needed on how sports and physical exercise-related infrastructure in educational institutions (e.g.,

availability of walking paths, bicycle lanes, equipped sports facilities, etc.) impact the physical activity of different groups of students. Accordingly, an integrative approach to promoting a certain level of health through physical activity may be located at the three indicated levels:

1. Personal skills and behavior of students.
2. Learning conditions in educational institutions.
3. Living conditions at the place of study.

Furthermore, these initial conceptual considerations on the relationship between sport, exercise, academic success, and health should be extended into an integrative framework model. This framework should allow for a systematic investigation of the relevance of sports activities to different aspects of academic success. It should also address the relevant research on success promotion and learning-related conditions at the personal and social levels.

## 7 Conclusion

Although the relationship between sports and recreational activities and various aspects of academic success and health of schoolchildren and students is reflected in only a small number of research projects to date, the outlined research program on the impact of sports and recreational activities on the physical condition and health of schoolchildren and students looks quite promising. A closer connection with empirical research expands not only the perspective of "sports science" on the importance of sports and exercises but also creates knowledge about the relevance of sports in educational institutions. The importance of sports activities for academic success in universities opens up an attractive research perspective. It can also provide the necessary background knowledge for the legitimacy of sports and recreation activities during a fundamental educational transformation in the educational sphere.

The authors have shown that dealing with the highly complex relationship between sports and recreation, academic achievement, and health is not a problem. However, the research aimed at studying only academic achievements should consider the declared expectations of the educational institution concerning the learning process as a stage of education. Therefore, the analysis can become a driving force for educational policy change and thus influence the institution's development. The fact that the paradigm shift from input control to output control in education in recent years has led to greater attention to the economic aspects of academic performance and health outcomes is largely accepted as a fact in higher education research (Buelow Schramm, 2013; Sagirli, 2014). The increasing number of assessment studies on the effectiveness of learning structures and conditions on physical fitness and health should be seen as a consequence of this development. Although such a research logic seems understandable and plausible, it also supports the tendency of general educational research to define educational processes and their influencing parameters as measurable variables. Thus, it promotes performance-oriented educational optimization (Wolter, 2015).

Suppose the physical condition and health of education learners are no longer based on the level and quality of personal development (i.e., will increasingly be based on performance criteria that are easy to collect and compare). In that case, a sports science research agenda (focusing on academic success and physical health) also becomes a framework that supports this economization of education. The research activity that follows this understanding of academic success will primarily look at the effects and mechanisms of sports activities that aim to support and optimize overall learning ability. In this way, general educational opportunities in sports (based on subjective studies of motor problems and alternative motor self-realization) will be marginalized.

Also, the factors of sports and recreation activities' impact on the health of schoolchildren and students (summarized by the authors of this study) are consistent with the theses by Reinders

(2016). According to them, this research orientation is subject to the optimization requirements of modern educational policy. Therefore, it should also be discussed in sports science expertise of learning outcomes. Moreover, for sports and recreation activities as an institutional factor, the study of their impact on health can have both positive and negative consequences. For the further orientation and the development of sports and recreation activities in educational institutions, a differentiated study of the topic "sports and academic performance and its impact on health" is of central importance. There is an intrinsic value in sports and recreation activities, expressed beyond economic expectations in social debates about movement problems. It finds a place in university sports science research only when traditional humanistic educational ideals and social expectations of young people regarding their health match (Reinders, 2016).

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**Primary Paper Section: A**

**Secondary Paper Section: AK, AM**

## CONTENT MARKETING AS AN EFFECTIVE COMPONENT OF BUSINESS PROMOTION

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**Abstract:** The concept of a customer-centric business and the integration of digitalization strategies into company operations necessitate the creation of content that fulfills the objectives of both consumers and business owners. Moreover, stakeholders aim to reduce costs and enhance competitiveness. The primary objective of this article is to examine the significance of content marketing in business promotion. This will be achieved through an analysis of content marketing strategies employed by systemically important banks in Ukraine, encompassing various aspects such as strategies, approaches, techniques, and communication tools. Additionally, the effectiveness of these strategies will be quantitatively assessed. **Methodology.** The study employs a comprehensive systematic approach to analyze the content marketing strategies implemented by systemically important banks in Ukraine. This analysis is based on various methods for assessing the nature of content platforms, strategies, and approaches to content. Additionally, it considers elements related to content formation and development, internal components, the communication element, and the outcomes resulting from the implementation of these strategies. To quantitatively evaluate the effectiveness of content marketing in promoting businesses, this article utilizes SimilarWeb analytics tools. Specifically, Website Performance, Engagement, Channel overview, and Social traffic metrics are employed for this purpose. The findings reveal the integration of content marketing strategies employed by systemically important banks in Ukraine, aligning with business digitalization strategies that encompass the advancement of digital service models. The principal objectives of these bank strategies encompass the following aspects: 1. Automation of service processes and enhancement of customer self-service capabilities. 2. Reduction of operational costs associated with service provision. 3. Augmentation of product/brand/service awareness. 4. Decrease in the reliance on staff for service delivery. 5. Enhancement of operational efficiency. 6. Expansion of the customer base, fostering loyalty, satisfaction, and engagement. These goals represent key areas targeted by the banks' strategies, emphasizing the importance of content marketing in achieving them. The primary approaches employed for content development within the context of this study encompass structural and functional dimensions. Structural approaches involve organizing content based on customer segments and products, while functional approaches focus on categorizing content according to the functions of services, websites, and products. These approaches aim to create clear and transparent content that effectively conveys information about banking services. The production of content is aligned with the specific needs of target groups and segments of banking service consumers, taking into consideration their digital service requirements, particularly in light of the ongoing pandemic. Content marketing serves as a pivotal component of the overall digital marketing strategy for facilitating online communication by banks. It plays a crucial role in ensuring Website Performance and Customer Engagement, with particular emphasis on leveraging content from social networks to generate and maintain website traffic.

**Keywords:** content marketing, brand promotion, content marketing strategies, digital models, digital marketing, digitalization.

### 1 Introduction

The concept of a customer-centric business and the integration of digitalization strategies into companies' operations necessitate the creation of content that aligns with the objectives of consumers, business owners, and stakeholders seeking cost reduction and enhanced competitiveness. Companies consider the expectations and needs of customers by providing comprehensive information about their products and services, expanding their presence in the media space, and establishing enduring business relationships founded on principles of openness, transparency, and trust. To fulfill customer expectations, companies develop and implement marketing strategies known as content marketing (Lou & Xie, 2021). Content marketing transcends being merely a collection of activities, tools, and techniques aimed at generating high-quality content to engage with the target audience. The objectives of content publication encompass fostering brand loyalty, customer retention, sales growth, and online promotion of the company. The concept of content marketing extends beyond the provision of information to consumers and progressively influences consumer behavior and decision-making processes. It serves as a communication tool to connect with the audience and represents a vital component of long-term business digitalization strategies.

Content marketing entails the art of effectively communicating with potential customers, wherein a company assists them in making informed choices based on their preferences. Rather than employing aggressive sales tactics, content marketing involves the creation of valuable materials. It is an ongoing process that serves as a fundamental element within a brand's overarching marketing strategy. It represents an approach to product promotion consciously chosen by the company, and it extends beyond a mere collection of specific tools. Considering the aforementioned conceptual notions, the objective of this article is to investigate the role of content marketing in business promotion. This exploration will encompass an examination of content marketing strategies, approaches, techniques, communication tools, and related aspects that contribute to the overall promotion of businesses.

### 2 Literature Review

Content marketing has emerged as a crucial brand promotion strategy aimed at reaching, persuading, and converting customers through the dissemination of published content (Dolezal, 2019). Implementing a marketing strategy that incorporates strategic content marketing has been shown to augment the rate of customer interest in the services and products offered by enterprises (Fawzee Sembiring, Rini & Yuliaty, 2022). Content marketing itself is a strategic approach encompassing the planning, creation, and distribution of content that effectively engages the target audience, ultimately motivating them to transition into customers and buyers (Fawzee Sembiring, Rini & Yuliaty, 2022). Crucial components of content marketing comprise content sourcing, stakeholder needs assessment, demographic communications, and the utilization of employees as internal ambassadors (Swart, du Plessis & Greeff, 2021). According to Vinerean (2017), digital inbound marketing promotes a customer-centric perspective, emphasizing the importance for organizations to prioritize customer assistance and involvement in the value delivery process. Content marketing emerges as a significant constituent of digital inbound marketing, facilitating value creation and consumer engagement (Vinerean, 2017).

The proliferation of platforms and social networks has sparked an upsurge in companies leveraging various opportunities for interaction and collaboration with stakeholders. Within a content marketing strategy, it is crucial to establish the purpose, coherence, and integration of content in alignment with the company's activities (Du Plessis, 2017, 2015b). Content development and integration should be conducted within the broader context of the company's overall brand strategy (Pulizzi, 2012). The success of strategic content is evaluated based on the level of interaction and communication with the target audience during the dissemination of diverse information (Du Plessis, 2015a, 2015c). An additional element of content marketing involves conveying the characteristics of the brand, its goals, and values to the target audience through compelling narratives. Employing such strategies contributes to perceiving the brand as more human, thereby increasing its value (Lopes & Casais, 2022). Müller and Christandl (2019) assert that different types of content evoke distinct user beliefs regarding a brand.

Content should seamlessly integrate into consumers' casual online conversations, being unobtrusive and transparent, while piquing the audience's interest in the product, service, or company. Through social media channels, companies have the opportunity to disseminate authentic messages that establish a distinct "brand voice," thereby fostering brand awareness and consumer recognition (Lopes & Casais, 2022). Users should be encouraged to actively participate in conversations based on their interests. The communication element of content marketing encompasses the strategies employed by businesses to promote the brand and effectively convey information to the target audience (Seyyedamiri & Tajrobehkar, 2021). Effective communication within content marketing should serve an

educational, entertaining, informative, useful, and high-quality purpose. Brand narratives should prioritize meeting the information needs of consumers engagingly (Payne et al., 2009; Pulizzi, 2012). Furthermore, brand stories should be memorable, eliciting positive emotions and associations, while emphasizing the significance of customers to the business. Given the abundance of data and information available on the Internet, content must be relevant to captivate the attention of customers. The outcomes of a content marketing strategy encompass potential opportunities for customers to engage with the content. This may involve sharing content, creating new content, and transforming their perspectives and behaviors toward the brand. These consequences underline the interactive nature and potential impact of content marketing on customer engagement and brand perception (Du Plessis, 2015).

Ho et al. (2020) introduced a comprehensive strategic content marketing framework designed to offer guidance to companies. The framework provides marketers with insights into proposed strategic content marketing elements, growth paths, and vertical content marketing implementation paths. The model encompasses key elements of a content marketing strategy, which are contingent upon the maturity level of the company, categorized as "emerging, developing, or maturing" based on various factors. These factors include the type of content produced by companies, the number of social media platforms utilized, content marketing expenditure, the extent to which they have transitioned away from a sales-centric approach, the presence of educational content within their existing strategy, and the documentation of their content strategy. According to the authors' findings, companies demonstrated a progression in their understanding and implementation of content marketing practices. This advancement was characterized by an expanded repertoire of content types, shifting the emphasis from sales-oriented content to educational content. Concurrently, companies allocated increased financial resources towards content marketing as a means to promote their business, while documenting their content strategy as a testament to its importance. Consequently, the model presented offers a roadmap for companies to navigate, optimize, and expedite the development of their content marketing strategies. In a study conducted by Ho, Pang, and Choy (2020), the authors emphasize the significance of aligning content with brand values to generate value and socialize engaging content that positively influences the target audience. The creation of content tailored for specific audiences and endorsed by brands has the potential to generate value when consumed and shared by the audience.

Content marketing is assuming a progressively significant role in the marketing mix of organizations on a global scale. Despite its growing prominence, there appears to be limited scholarly attention devoted to investigating the effectiveness and outcomes of content marketing implementation (Koob, 2021). Additionally, empirical studies that examine the role of content marketing within digital strategies and business models, as well as its potential impact on consumer behavior, are relatively scarce in scientific discussions.

### 3 Methodology

The present study adopts a comprehensive systematic approach to examine content marketing strategies as a crucial component for promoting banking services offered by systemically important banks in Ukraine. The selection of banks for analysis was based on their share of net assets among systemically important banks as of January 1, 2022. The banks included in the analysis are PrivatBank, Oschadbank, Kredobank, and Monobank (Universal Bank).

The article utilizes a methodology for evaluating content marketing strategies, drawing upon components outlined by Du Plessis (2015c, 2017, 2022). These components include:

1. Nature of the content platform: Examination of the characteristics and features of the content platform employed by the banks.

2. Strategy and strategic approach to content development: Analysis of the overarching strategy and approach used in developing and managing content.
3. Element of content creation and development: Focus on the creation and development of content that contributes to building a brand image.
4. Internal elements: Investigation of how content is presented, including the naturalness and authenticity of content delivery, such as through consumer conversations about the company, products, or brand.
5. Communication element: Exploration of the techniques employed for presenting and distributing content to the target audience.
6. Consequences of the strategy: Assessment of the anticipated outcomes resulting from the distribution and implementation of content marketing strategies.

To quantitatively assess the effectiveness of content marketing in promoting companies, this study utilizes analytics tools provided by SimilarWeb, a website that offers web analytics services for businesses. Specifically, the following metrics were employed to evaluate the effectiveness of websites:

1. Website Performance: This metric includes the Global Rank Worldwide, Country Rank (Ukraine), Traffic & Engagement (Total Visits, Device Distribution: Desktop/Mobile).
2. Website Performance: Engagement: This metric encompasses Monthly Visits, Monthly Unique Visitors, Visits per Unique Visitor, Visit Duration, Pages per Visit, Bounce Rate\*, and Page Views.
3. Channels Overview: This metric provides insights into a) the distribution or share of each channel that attracts visitors to the site as a percentage; b) the distribution of channels based on the number of visitors they attract; and c) Traffic from the Direct channel.
4. Social Traffic: This metric focuses on the share of traffic generated from social networks.

### 4 Results and Discussion

Content marketing, as an integral component of Internet marketing or digital marketing, is extensively employed to promote brands, products, and services, with the objectives of attracting customers, engaging in consumer communication, and conveying the value and benefits of the offerings. Depending on the specific business domain and the chosen communication channels, companies adopt diverse goals, strategies, and approaches in implementing content marketing. According to the SEMRush annual report for 2022 (Semrush, 2023), companies actively employ content marketing strategies to achieve the following objectives:

1. Increasing user awareness and knowledge of the brand (45%).
2. Ensuring growth in organic traffic to the website (37%).
3. Attracting customers and potential customers (36%).
4. Achieving growth in sales and revenue (26%).
5. Increasing customer and consumer loyalty and interest in the company (23%).
6. Building a subscriber base for email marketing purposes (14%).
7. Promoting existing or new products and services offered by the company (11%).

According to the results of a 2022 survey conducted by Semrush, content marketing strategies have demonstrated notable success (Semrush, 2023). An overwhelming 97% of respondents reported achieving success through content marketing. Among the companies experiencing the greatest success, 70% evaluate the return on investment in their content marketing efforts. Additionally, 77% of these highly successful companies have plans to increase their content marketing budgets in 2023. The utilization of video content has proven to be particularly advantageous, surpassing text-based content in terms of success. Articles featuring at least one video exhibit a 70% higher level of traffic compared to articles without video.

Furthermore, visualization and the inclusion of images hold significance within content marketing. Blog posts incorporating seven or more images have been found to garner 55% more backlinks in comparison to posts lacking images. Conducting content audits constitutes an important element in the implementation of content marketing strategies. Notably, 61% of companies achieving the highest level of success in content marketing engage in content audits at least twice a year.

The content marketing strategies employed by systemically important banks in Ukraine are integrated and aligned with their broader business digitalization strategies. These digitalization strategies encompass the development of digital service models, aiming to automate service processes and enhance the level of self-service. Furthermore, these strategies seek to reduce operating costs associated with servicing, increase awareness of products, brands, and services, minimize the volume of services provided by staff, improve operational efficiency, and enhance customer acquisition, loyalty, satisfaction, and engagement (see Table 1). By providing valuable content to consumers and users of banking services, banks intend to alleviate the workload on their staff, subsequently reducing operational expenses. These findings align with the conclusions of Ho, Pang, and Choy (2020), which suggest that content consumption plays a crucial role in creating brand and business value.

Content marketing, as a component of banking business promotion, serves the purpose of fostering customer awareness regarding products and services offered. Consequently, the primary approaches to content development encompass

structural methods, such as organizing content based on customer segments and products, and functional approaches, which involve aligning content with the functions of services, websites, and products to ensure clarity and transparency in conveying information about banking services. Through content strategies, banks cultivate their brand image by providing valuable information and positioning themselves within the market. This aligns with the viewpoint presented by Koob (2021), which suggests that content production is conducted following the content needs of target groups. Banks consider the requirements of diverse target audiences and segments when disseminating information about products, ways to obtain them, and the utilization of online services. Sawhney and Ahuja (2022) highlight that the banking sector is undergoing digital transformation, necessitating banks to reassess their digitalization processes in response to evolving consumer behaviors and purchasing patterns. Through the implementation of digital content marketing and social media platforms, banks can not only attract specific potential customers but also facilitate their business operations. Thus, it is evident that content marketing holds a pivotal role as a key component within banks' comprehensive digital marketing strategies for online communication (Sawhney & Ahuja, 2022). According to Du Plessis (2022), content marketing is recognized as a digital marketing strategy adopted by companies, demonstrating causal relationships with consumer behavior. Specifically, this article aims to demonstrate the consistent growth of website visits to banks over three consecutive months, highlighting the utilization of content as a means to attract banking users and encourage them to engage with online banking services.

Table 1. Content marketing strategies of systemically important banks in Ukraine, 2022

A Component of the Content Marketing Strategy	Monobank.Com.Ua	Oschadbank.Ua	Privatbank.Ua	Kredobank.Com.Ua
1. The Nature of the Platform for the Content.	The Website with Links to Social Media	The Website with Links to Social Media	The Website with Links to Social Media	The Website with Links to Social Media
2. Strategy and Strategic Approach to Content and Content Development.	Structural Approach by Main Products/Services	The Structural Approach to Content Placement: Information is Presented by Key Business Segments, Products, Services	Clear Transparent Approach, Structural Approach by Key Customer Segments, Products/Services, Functional Approach (Content on Customer Self-Service Functions)	A Structured Approach to Content Development and Presentation of Information According To Customer Segments And Products
3. Element of Content Creation and Development: Building a Brand Image Through Content.	The Strategy is Aimed at Developing Mobile Banking and Informing About Products/Services/Services	The Content Marketing Strategy is Aimed at The Digitalization of Services, the Introduction of Digital Products Provided Through Digital Channels	Building Privatbank's Image as a Leader in the Retail Banking Segment with a High Level of Digital Self-Service. Customer Information Strategy Aimed at Ensuring Greater Customer Autonomy	The Strategy is Aimed at Developing Online Services, Raising Awareness of Products/Services, Functionality, etc.
4. Internal Elements: How the Content is Presented, the Naturalness of the Content Presentation, for Instance, Through Consumer Conversations about the Company/Products/Brand.	Informing about Services/Products/New Products/Online Services	The Presentation of Information is Clear and Structured by Segments/Business Units. Clear Information About the Bank's Products and Services	Presentation of Information about Products, Services, Financial Statements, Business Strategies, and Service Functions	Information about Services/Products/New Products/Online Services
5. Communication Element: Techniques Used to Present and Distribute Content.	Text, Graphics, and Video Content on Social Networks	Text, Graphics, and Video Content on Social Networks	Text, Graphics, Images, and Videos on Social Networks	Text, Graphics, and Video Content on Social Networks
6. Consequences of the Strategy: the Expected Consequences of the Content Distribution.	Increased Awareness of Services, Digitalization of Services	Automated Service Processes, Reduced Operating Costs, Increased Product/Brand Awareness	Increase in Self-Service; Reduction of Services Provided by Staff; Transition to a Digital Service Model	Improved Operational Efficiency, Increased Number of Customers, Loyalty, Satisfaction, and Engagement

Source: compiled by the author based on the data from the Official site of PrivatBank (2023), Official site of Oschadbank (2023), Official site of Kredobank (2023), Official site of Monobank (2023).

Monobank is a neobank in Ukraine that boasts a customer base of over 6 million individuals. It holds the third position in Google Play and the fourth position in the App Store among the most popular financial applications in the country. Unlike traditional banks, Monobank operates as a branchless mobile bank and is owned by Universal Bank JSC. The primary focus of Monobank is to provide high-quality digital banking services

and foster the economic growth of Ukraine by offering digital lending solutions to its customers. The objective is to enhance the purchasing power of citizens and support the development of small and medium-sized businesses within the country. Utilizing an advanced personal banking tool, the Monobank project aims to provide beneficial and competitive credit services to customers in the market. The dedicated mobile application



designed specifically for Monobank offers a comprehensive range of banking services. These include free money transfers, convenient utility bill payments, opportunities to participate in bank promotions and earn cashback, as well as easy access to financial transaction management. Additionally, Monobank ensures prompt customer support through various messaging platforms (Viber, Facebook Messenger, Telegram) and phone assistance (Official site of Monobank b, 2023).

PrivatBank's strategic focus revolves around cultivating enduring customer relationships founded on principles such as transparency, openness, technological advancements, and the provision of reliable information about services. The bank is dedicated to upholding the highest standards of customer service and safeguarding their interests. PrivatBank proactively develops new operations, products, and business lines while maintaining a reasonably conservative approach. In terms of positioning, PrivatBank aspires to be recognized as the foremost bank in Ukraine for retail clients and SMEs, already having established itself as a leader in the retail segment and specialized product offerings. The positioning of Privatbank encompasses several key elements:

1. Largest player in the retail segment: PrivatBank holds a prominent position as the largest participant in the retail banking sector in Ukraine.
2. Multichannel availability: The bank demonstrates exceptional strength in terms of its multichannel availability, ensuring convenient access to its services through various channels.
3. Leader in the cards and payments market: PrivatBank establishes itself as a leader in the market for cards and payments, offering innovative solutions and maintaining a strong presence in this domain.
4. Strong presence in the small and medium-sized business (SME) sector: PrivatBank possesses significant market influence and enjoys robust positions within the small and medium-sized business segment.
5. Overall smart cost base: The bank maintains an intelligent and efficient cost structure, allowing for effective financial management and resource allocation (Official site of PrivatBank, 2023).

The retail business strategy of PrivatBank revolves around providing a comprehensive range of retail offerings, encompassing classic lending, daily transactions, overdraft/credit cards, investments, and non-banking services. The primary elements of PrivatBank's retail offer, as outlined on their official website (PrivatBank, 2023), are as follows:

1. Products: PrivatBank aims to expand its lending portfolio by offering consumer loans, car loans, and selective mortgage products. Additionally, the bank seeks to broaden its customer base and extend lending to legal entities. Deposit products are also offered in both hryvnia and foreign currency.
2. Customer Focus: The bank adopts a segmented approach to its customer base, tailoring targeted offers based on specific customer needs. This includes specialized offerings for clients involved in payroll projects and other subsegments. PrivatBank strives to provide easy and convenient access to its services.
3. Pricing: PrivatBank implements a pricing strategy that aligns with market rates or slightly exceeds them. This is balanced by the availability of various service channels and the provision of fast and convenient processes.
4. Distribution: The bank emphasizes an efficient and effective omnichannel distribution concept. It aims to expand its range of offerings through mobile and digital channels while gradually reducing its reliance on physical branch networks.
5. Sales and Service Model: PrivatBank's sales and service model emphasizes product promotion and cross-selling within its existing customer base. The bank adopts a clear approach to building relationships with larger business customers. Moreover, there is a strategic shift towards a more digitalized service model, incorporating self-service

functionalities and reducing the reliance on bank employees for direct service provision.

The strategic components of PrivatBank's universal retail offer demonstrate the bank's adoption of a clear content marketing strategy to foster customer relationships, coupled with a functional approach. In line with this strategy, PrivatBank disseminates information regarding various self-service functions to facilitate the development of a digital service model. Furthermore, the bank is actively optimizing processes and transitioning towards digital sales and service channels to maximize efficiency and minimize service time. To promote self-service capabilities, PrivatBank is reducing the reliance on in-person interactions with customers in branches and call centers, favoring digital channels instead. The bank proactively informs customers to encourage greater independence and advises them to seek support only in exceptional circumstances.

Oschadbank has outlined its strategy for the period 2021-2024, aiming to establish itself as a universal bank with strong market positions in retail banking, micro, small, and medium-sized enterprises (MSMEs), as well as the corporate segment. The bank intends to expand its business volumes and market shares specifically in the retail and MSME sectors. Within the corporate business, the focus will shift from the public sector to the private sector. To enhance operational efficiency, Oschadbank will continue optimizing its network and further digitalizing its services. The Cabinet of Ministers of Ukraine has set forth the primary directions for Oschadbank's activities, which include the following strategic goals: developing a comprehensive range of digital products, including industry-specific offerings delivered through digital channels and automated processes; reducing operating costs and evaluating capital expenditures by streamlining the network, centralizing functions and operations, and other initiatives (Official website of OschadBank, 2023).

Towards the conclusion of 2020, the Supervisory Board of JSC "KredoBank" endorsed a new strategy encompassing the timeframe until the end of 2023. In line with this strategy, KredoBank reaffirms its position as a universal bank committed to delivering high-quality services to retail customers, small and medium-sized enterprises (SMEs), and corporate clients characterized by transparent business practices and robust creditworthiness. The new strategy of KredoBank encompasses several key objectives. These include building value through the cultivation of enduring relationships with satisfied customers and engaged employees. Additionally, the bank aims to achieve balanced growth by expanding its business scale dynamically while maintaining prudent practices. KredoBank is committed to undertaking a comprehensive digital transformation across all aspects of its operations. It seeks to enhance its operating model and multi-channel distribution system. Leveraging the synergies arising from its affiliation with the PKO Bank Polski group, KredoBank aims to establish a financial services "ecosystem" that caters to the needs of Polish-Ukrainian businesses. The bank places great emphasis on diversification of activities, ensuring discipline in risk management, cybersecurity, and fostering resilience in the face of market shocks. The primary strategic objectives of KredoBank encompass attaining a high level of return on capital and enhancing operational efficiency. Concurrently, the bank aims to augment its customer base, ensuring heightened satisfaction and engagement among its clientele (Official site of KredoBank, 2023).

The integration of content marketing strategies within the digital strategies and business models of Ukrainian banks is occurring amidst a backdrop of evolving consumer behavior. Notably, a Mastercard study (Mastercard Digitalization Trust Survey 2019), which surveyed online bank account holders, highlights a growing inclination among Ukrainians towards digital devices and services for payments. An overwhelming 87% of respondents expressed a preference for using smartphones as their chosen payment method. Furthermore, the study revealed the top five most prevalent purposes for utilizing digital services among respondents, which included internet search (91%), accessing social networks (89%), email usage (84%), checking

the weather forecast (83%), and engaging in online shopping activities (79%). Since 2016, there has been a noteworthy increase in the usage of mobile devices for various activities among Ukrainian consumers. Specifically, there has been a significant rise in the use of mobile devices for navigation, with 73% of respondents reporting its usage (+7%). Similarly, the adoption of mobile devices for photo and video sharing has increased to 66% (+8%), while their usage for travel and public transportation stands at 55% (+9%). Mobile devices are also increasingly utilized for sports-related activities, with a usage rate of 21% (+5%).

Regarding online shopping payment methods, the study found that the most preferred options among respondents include online bank card payments (72%), payments by payment card during delivery (48%), and payments made through mobile wallets (32%). Notably, one of the primary concerns for users when making digital payments is ensuring maximum payment security. More than half of the respondents (58%) reported using payment apps, which is one of the highest rates among the European countries surveyed. Only Austria surpassed this figure with a usage rate of 67%, while Poland (57%) and Serbia (52%) also reported relatively high adoption rates of payment apps. These findings underscore the growing reliance on mobile devices and digital payment methods among Ukrainian consumers, highlighting the importance of ensuring secure and user-friendly payment solutions in the digital landscape (Mastercard, 2019).

Consumer behaviors have witnessed a notable transformation amid the ongoing pandemic, with businesses increasingly transitioning to digital channels. For banks that had not undergone a gradual digital transformation, this shift posed a significant risk, necessitating the immediate transformation of

their products and services. The task of digitalization proved to be more manageable for those banks that had already integrated digital banking solutions into their operations well in advance. However, it is noteworthy that before the pandemic, less than half of the 74 active banks in Ukraine had implemented digital banking services. In response to the quarantine restrictions, several banking institutions, including Credit Agricole, Alfa-Bank (Ukraine), Kredobank, Pravex Bank, Pivdenny Bank, and Ukrgasbank, among others, swiftly launched their online banking platforms or undertook comprehensive rebranding efforts for their existing applications. When it comes to digital banking services offered by Ukrainian banks, Privat24 by PrivatBank leads the way with an impressive user base of 12 million. Following closely is Oschad24/7 by Oschadbank, serving 4 million users, and the Monobank project by Universal Bank JSC. Privat24 Internet banking has maintained its reputation as the most successful and highly regarded digital banking platform in Ukraine for over five years. It has been recognized with esteemed accolades such as the FinAwards, PSM Awards, and the Ukrainian People's Award in categories including "Best Internet Bank of Ukraine" and "Internet Bank of the Year" (Zaverbnyi & Sokulskyi, 2021).

In 2023, Privatbank's website secured the top position in both global and national rankings, receiving a total of 41.36 million website visits. The traffic was divided between desktop (52.9%) and mobile devices (47.1%) (Table 2). Following closely, Oschadbank claimed the second spot in the global and national website rankings, attracting 9.039 million visits. Similar to PrivatBank, the distribution of visits for Oschadbank was split between desktop (48.2%) and mobile (51.8%) devices. The variation in website visit distribution between PrivatBank, Oschadbank, Monobank, and Kredobank can be attributed to the age demographics of their respective banking service clientele.

Table 2. Website Performance: Apr 2023 – June 2023

Bank	Global rank Worldwide	Country rank Ukraine	Traffic & Engagement	
			Total visits	Device distribution: desktop/mobile
Monobank.com.ua	#84,806	#1,140	1.922 million	26.0% / 74.0%
Oschadbank.ua	#14,579	#157	9.039 million	48.2%/51.8%
Privatbank.ua	#3,842	#51	41.36 million	52.9%/47.1%
Kredobank.com.ua	#180,347	#2,542	713.397 thousand	33.4%/66.6%

Source: author's research using the analytics tool Official site of SimilarWeb. (2023).

Table 3 highlights the significance of the content published on banks' websites in terms of generating traffic and attracting target customer groups. In this regard, PrivatBank recorded a monthly total of 13.78 million website visits, including 3.250 million unique visits. Oschadbank, on the other hand, received

3.013 million monthly website visits, with 900.609 thousand unique visits. Notably, PrivatBank boasted the longest average visit duration, with users spending an average of 7 minutes and 40 seconds on their website.

Table 3. Website Performance: Engagement. Apr 2023 – June 2023

Metric	Monobank.com.ua	Oschadbank.ua	Privatbank.ua	Kredobank.com.ua
Monthly visits	640,893	3.013M	13.78M	237,799
Monthly unique visitors	290,152	900,609	3.250M	124,858
Visits / Unique visitors	2.21	3.35	4.24	1.90
Visit Duration	00:01:39	00:06:45	00:07:40	00:02:28
Pages per visit	2.36	7.09	5.19	4.05
Bounce rate*	49.08%	29.45%	34.49%	48.36%
Page Views	1.515M	21.34M	71.60M	962,837

Source: author's research using the analytics tool Official site of SimilarWeb. (2023).

Figure 1 illustrates the efficacy of banks' websites during the period of April-June 2023. Privatbank witnessed an average of 11.25 million global users, while Monobank recorded 527.8 thousand users. Oschadbank attracted 2.461 million users, and Kredobank saw an average of 189.519 thousand users per month.

Figure 2 presents the traffic composition of banks' websites, providing insights into the predominant channels of user

acquisition. The data highlights the significance of direct channels, emphasizing the direct interaction between users and the websites. Organic search also plays a substantial role in driving traffic, indicating the importance of search engine optimization strategies. Referral links contribute significantly to website traffic, showcasing the impact of external sources in directing users to the banks' websites. Conversely, social media platforms appear to have a relatively minimal role in generating website traffic.

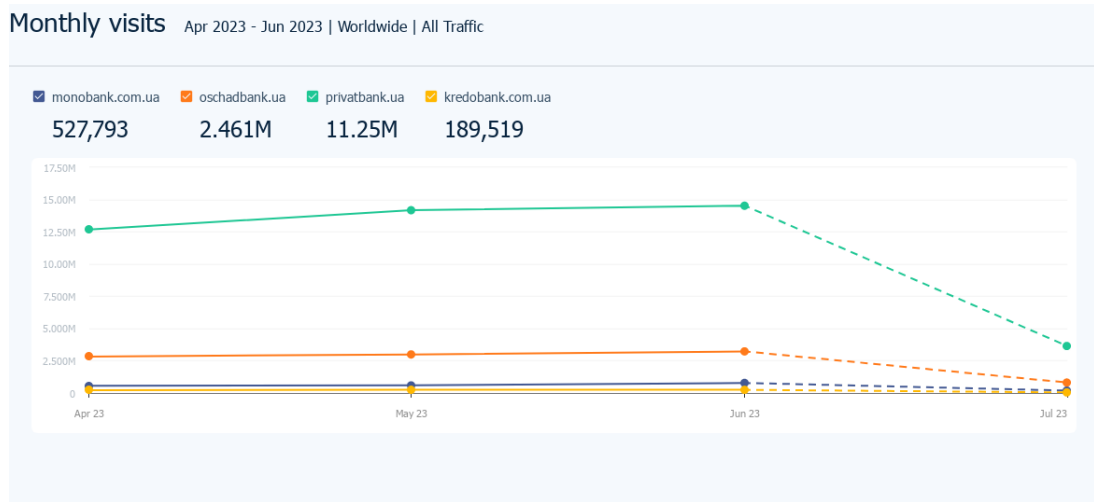
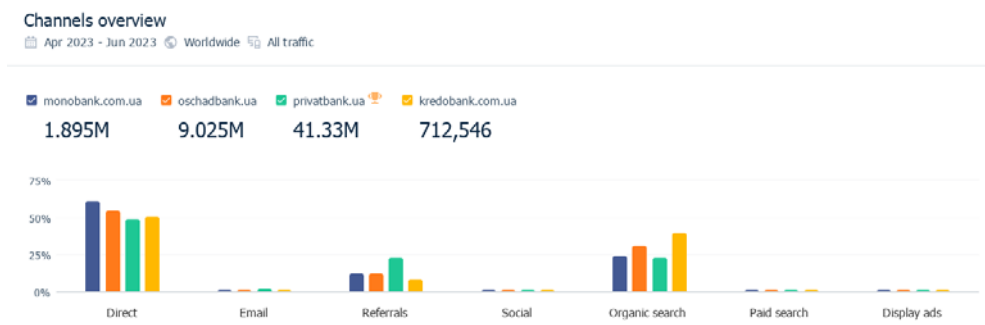


Figure 1. Website Performance: Engagement. Apr 2023 – June 2023  
a) %



b) Number



c) Traffic from the direct channel

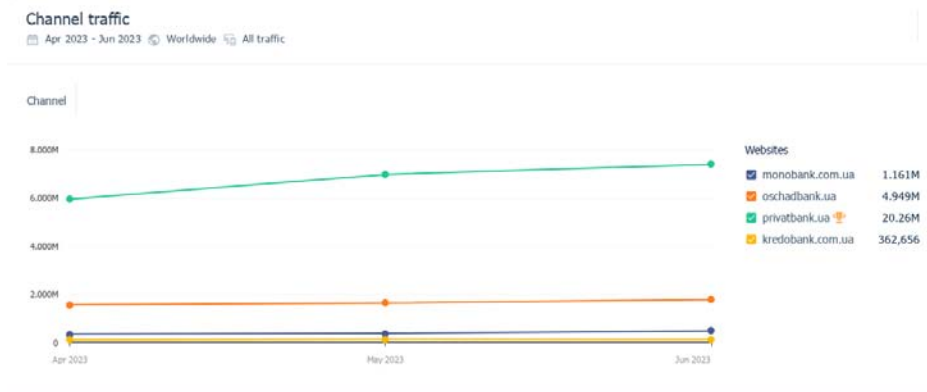


Figure 2. Channels overview: a) %; b) number; c) Traffic from direct channel  
Source: author's research using the analytics tool Official site of SimilarWeb. (2023).

Figure 3 depicts the effectiveness of content marketing strategies employed by banks during the three months. The data reveals that Privatbank's content marketing strategy proved to be the most successful in generating website traffic from social media

platforms. In contrast, the other banks observed considerably lower levels of user acquisition through their social media content and posts.



Figure 3. Social traffic over time

Source: author's research using the analytics tool Official site of SimilarWeb. (2023).

The data presented in Table 4 provides empirical evidence supporting the high effectiveness of integrating Privatbank's content across various social networks. The findings demonstrate

that PrivatBank's content integration has successfully generated website traffic, particularly from platforms such as Youtube, Telegram Web App, and Facebook.

Table 4. Social networks Traffic Share

Networks	Monobank.com.ua	Oschadbank.ua	Privatbank.ua	Kredobank.com.ua
Youtube	76.05%	68.00%	63.84%	100%
Telegram Webapp	5.77%	17.05%	11.66%	0%
Facebook	10.05%	10.90%	11.45%	0%
Instagram	8.12%	0%	5.03%	0%
Twitter	0%	0%	3.44%	0%
WhatsApp Webapp	0%	0%	1.75%	0%
Others	0%	4.05%	2.83%	0%

Source: author's research using the analytics tool Official site of SimilarWeb. (2023).

## 5 Conclusion

The study uncovers the dynamic digital transformation occurring within systemically important banks in Ukraine, driven by the increasing adoption of remote banking services by users. Furthermore, the findings highlight the proactive integration of content marketing strategies aligned with the banks' digitalization initiatives, emphasizing the development of digital service models. The primary objectives of the banks' strategies encompass several key aspects, including the automation of service processes and the enhancement of self-service capabilities for customers, the reduction of operating expenses associated with service provision, the elevation of product/brand/service awareness, the optimization of service volumes delivered by staff, the improvement of operational efficiency, and the augmentation of customer base, loyalty, satisfaction, and engagement. These objectives guide the banks' content development approaches, which primarily adopt structural perspectives (targeting specific customer segments and products) and functional considerations (incorporating service functions, website features, products, and services). The content development practices employed by the banks prioritize clarity and transparency to effectively convey information on banking services. Content production is aligned with the requirements and preferences of specific target groups and segments within the banking customer base, with particular consideration given to their increasing demand for digital services, especially in light of the pandemic. Content marketing serves as a crucial element within the comprehensive digital marketing strategy of banks, enabling effective online communication. This approach facilitates website performance optimization and enhances

customer engagement, notably through the dissemination of content via social media platforms. By leveraging content marketing, banks can generate and sustain website traffic, fostering meaningful interactions with their customer base.

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**Primary Paper Section: A**

**Secondary Paper Section: AH**

## COGNITIVE LINGUISTICS: THE STUDY OF COGNITIVE PROCESSES IN PERCEIVING LANGUAGES

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**Abstract:** A characteristic feature of modern linguistics is the study of language as a means of communication and expression of mental activity, which provides access to human consciousness. Cognitive linguistics postulates that all cognitive processes, including the perception of the surrounding world, are reflected and captured in linguistic forms. This research is conducted within the framework of cognitive linguistics, based on a unified cognitive methodology for studying linguistic structures. The authors of this study defined the concept of perception as a cognitive process. It is noted that different types of perception (sight, hearing, touch, smell, and taste) are indicated by verbs of sensory perception found in English idiomatic expressions and the names of corresponding sense organs. The imprint of such perceptual properties as integrity, objectivity, meaningfulness, and dependence on the perceiver's personality is described in English phraseological units. In particular, the analysis of phraseological units formed through metaphorical and/or metonymic transfers confirms the associative nature of human thinking. It is demonstrated that human experience serves as an essential link between perception and phraseological meaning. The conducted research allows for a more comprehensive understanding of the nature of the relationship between cognition and the idiomatic system of language. It can be a prerequisite for developing a separate branch in language science – a cognitive idiom integrating the achievements of cognitive science and phraseology. The presented linguistic material can be used in the practice of teaching English. Besides, it can be included in theoretical and practical courses on the English language's general linguistics, cognitive linguistics, lexicology, and phraseology. The English idioms represent such perception features as varying degrees of expressiveness, clarity, purposefulness, duration, focus, integrity, objectivity, consciousness, and dependence on the perceiver. The perception through the prism of English phraseology appears as an active cognitive process inextricably linked to comprehending information from the outside world, considering previous experience. The perceived sensory experience is reinterpreted during further cognitive processing and becomes a source of understanding other, more abstract situations.

**Keywords:** cognition, perception process, human experience, metaphor, metonymy, phraseological units in the English language, phraseological meaning.

### 1 Introduction

The relevance of this topic is determined not only by the world's diversity but also by the uniqueness of each specific language with its unique inventory of units, their connections, and ways of organizing into a single unit. With its origin in the associative nature of human thinking, phraseological meaning illustrates an attempt to understand one entity in terms of another or use one entity to refer to another related one. Accordingly, phraseological units formed by metaphorical and metonymic transfers were identified during this research. A metonymy more often affects a single word in a fixed combination, while metaphor characterizes the reinterpretation of the entire expression. The study revealed that human experience, as a combination of practically acquired knowledge, skills, and abilities, serves as an essential link between perceiving the surrounding world and phraseological meaning. English phraseological units present a reinterpretation of a wide range of human experiences, starting from spatial aspects and ending with life wisdom or professional expertise. Forming phraseological meaning is based on real-world knowledge, including cultural insights, folk beliefs, ethical norms, and religious beliefs.

It should be noted that the examined fixed expressions present not so much a scientific as a naive worldview. The very specificity of idiomatic composition explains it as the most expressive and colorful sphere in the language system. The conducted research allows justifying the term "cognitive

phraseology" in linguistics. The accumulation of systematized facts in the theories of phraseology and cognitive science has created prerequisites for creating a discipline that integrates the achievements of both fields. Further studies of phraseological units concerning how they reflect a specific vision and cognition of the world by a person can be very promising. Cognitive phraseology aims to contribute to explaining the mysteries of the human mind.

### 2 Literature review

Since its emergence in the XX century, cognitive linguistics has become a promising paradigm of scientific knowledge. In modern national linguistics, it includes a wide range of studies related to the following issues:

- conceptualization and categorization (Tatsenko, 2017), (Prokopenko, 2020), (Perebyinis, 2013), (Maksymenko, 2010);
- cognitive modeling (Zhyhir, 2010), (Vorobyova, 2004), (Baddeley, 2000), (Chmiel, 2016), (Dam, 2004), (Dubsloff F., Martinsen B., 2007);
- the study of text and discourse (Gavioli, 2014), (Gile, 2009), (Hale, 2011), (Korpil, 2016);
- professional communication and terminology, language and culture interaction, and so on (Kövecses, 2003-2014), (Lakoff, 1980, 2004), (Schmidt, 2012), (Seeber, 2011, 2013), (Tiselius, 2013), (Timarová, 2012), (Tebble, 2012).

The cognitive paradigm of linguistic knowledge is based on the interdisciplinary research principle. This principle allows us to consider language closely connected with all cognitive processes. An essential part of cognition is the human perception of the world around us.

The conducted research aimed to identify the peculiarities of perception within the idiomatic system of the English language, where the associative character of human thinking underlies secondary nomination, and phraseological meaning is characterized by varying degrees of reinterpretation. The research tasks included:

- studying perception as a cognitive process;
- analyzing English idiomatic expressions in terms of the representation of perception properties;
- identifying cognitive components that serve as a necessary link between the process of perception and phraseological meaning.

### 3 Method

The research employed general and specific methods of cognition, such as the inductive-deductive method, quantitative counting and classification method, structural-semantic analysis method of phraseological units, and conceptual analysis method. The comprehensive application of these methods allowed for a theoretical exploration of phraseology from the perspective of the cognitive paradigm of knowledge.

### 4 Result

Perception is the reflection in a person's consciousness of objects or phenomena through their direct influence on the sensory organs. Accordingly, visual, auditory, tactile, olfactory, and gustatory perception are distinguished depending on which analyzer plays a predominant role in the perception.

The semantic associations were found to be related to visual perception in 57% of the investigated phraseological units, auditory perception in 15%, tactile perception in 11%, olfactory perception in 9%, and taste perception in 8%. These data are

quite indicative and correspond to the role of different types of perception in understanding the world.

The existence of different perception types is indicated by the verbs of sensory perception contained in English idioms, such as see, look, hear, listen, feel, touch, smell, taste, etc.:

- "see land" (literally "to see land") - to be near the goal.
- "look on the wine when it is red" - to get drunk, to be extra (an expression from the Book of Proverbs: "Look not thou upon the wine when it is red, When it giveth his colour in the cup, When it moveth itself aright. At the last it biteth like a serpent, And stingeth like an adder").
- "won't hear a word said against somebody" - refuse to believe anything bad about somebody.
- "listen to reason" - to heed the voice of reason.
- "feel somebody's pulse" - to discover someone's intentions and plans.
- "touch a string" - to touch someone's weak spot.
- "smell powder" - to smell gunpowder, to gain combat experience.
- "taste blood" - to taste something, to get a taste for something."

An idiom may include words denoting the senses. In these cases, metonymy is observed, which is the transfer based on contiguity between the "sense organ" and the "corresponding type of perception." Examples of such idioms include:

- "Have a thick skin" - to be thick-skinned, insensitive.
- "Have a (good) nose for something" - to have a good sense of something.
- "Be all ears" - to listen attentively.
- "Be all eyes" - to look intently (a Shakespearean expression).

The last two expressions also involve a specific type of metonymy called synecdoche, which is the transfer from a part to the whole.

Even though taste receptors primarily perceive the taste, no idiomatic expressions with the word "tongue" in the sense of "taste" were found during the research. This word is encountered in English expressions related to the process of speaking (have a long tongue - to be talkative; lose one's tongue - to become silent, to lose the gift of speech; one's tongue runs before one's wit - a person speaks before thinking). It emphasizes the leading function of language as the organ of speech. However, it is known that taste perception is associated not only with language but also with the receptors in the mouth, which is reflected in the English idiomatic expression "to melt in one's mouth."

Idioms can indicate some characteristics of perception and contain relevant concepts in their semantics. These are the presence of perception (and varying degrees of its vividness) or the absence of perception:

- "to have eyes like a hawk" - to have sharp eyesight, to be very observant (this idiom is based on the well-known fact about the keen vision of birds of prey).
- "to hear the grass grow" - to have exceptional perceptiveness, to be able to discern subtle details (it is believed that if a person focuses on nature, the perception becomes more nuanced and sensitive: it is possible to hear the sound of a young grass growing through the soil and last year's leaves).
- "to see far into the millstone" - to have extraordinary insightfulness.
- "to see no further than one's nose" - to have minimal vision, to be short-sighted.
- "to be (as) blind as a bat" - 1) to be partially blind; 2) to be ignorant, unaware, not noticing or understanding what is happening.
- "to be (as) deaf as an adder" - to be completely deaf, do not listen to anyone.

It is worth noting that different fields of knowledge are activated in Ukrainian and English to conceptualize the same phenomenon. In Ukraine, a person who is deaf or oblivious to their surroundings is compared to a teterya (an adder) that loses hearing during mating and becomes easy prey for hunters. In English-speaking culture, to describe someone who can't hear anything, they resort to the biblical image of "an adder that stops its ears and does not heed the voice of the charmer, no matter how skillful the enchanter may be." In fact, the Psalm refers to wicked people who, like a deaf ear that does not hear or listen to anything, are incapable of perceiving anything good and righteous.

Let us consider the characteristic of clarity or vagueness of perception:

- "to see one's way clear" means to have a clear understanding of how to act or proceed.
- "to see through a glass darkly" refers to having difficulty or unclear perception (this expression comes from the writings of the Apostle Paul (The New Testament). He explains that we do not now see clearly, but at the end of time, we will do so - "For now we see through a glass, darkly; but then face to face: now I know in part; but then shall I know even as also I am known.").
- this characteristic often depends on whether there is an obstacle in the perception process, as reflected in English idiomatic expressions such as "be unable to see the forest for the trees" and "to be unable to see somebody for dust" is a colloquial expression meaning to run so fast that one leaves others behind. The absence of an obstacle to perception is often associated with the reliability of what is perceived, and vice versa: "to hear something straight from the horse's mouth" - to hear something from a reliable source, from the primary source. The origin of this idiom is associated with horse racing: people closely related to horses, such as grooms, sought to obtain information about the horses, their condition, and the likelihood of winning. The most reliable information would come directly from the horse itself. The expression "to hear something through the grapevine" originated during the American Civil War and was used the meaning "to use rumors, gossip, and fabrications." According to one version, the telegraph system at its early stages was nicknamed "the grapevine telegraph" because the wires often tangled and resembled entwined grapevines. During the war, true and false information about the state of affairs was transmitted through the telegraph, making the "grapevine telegraph" an unreliable source of information.

There are the following examples of intentionality and attentiveness or involuntariness and inattention in the process of perception:

- "to have (keep) an eye out for somebody/something" - to be vigilant, attentively observe anyone/anything;
- "to keep one's ears open" - to be alert, prepared, keep one's ears sharp; to spot someone/something in an instant;
- "to go in one ear and out the other" - to pass by unnoticed.
- The duration or shortness of perception (which is related to attention or lack thereof) examples:
- "not to take one's eyes off someone/something" - to keep watching someone/something without looking away;
- "to run one's eye over something" - to glance over, quickly skim through with one's eyes.

There are also many examples of the directionality of perception:

- "to look somebody in the face" - to look directly, honestly in someone's eyes, to look at a person;
- "to look over one's shoulder" - to look around, be afraid, be cautious;
- "to look at someone or something differently" - to ignore certain faults or virtues you know are trying to influence your judgment.

This characteristic is typical of phraseological units related to visual perception. In most cases, the concept of direction is determined by the occasion.

**Perception Integrity:** The expression "a taste of one's own medicine" describes a situation where a person who has prepared a "medicine" for someone else is now forced to experience it themselves. People recognize the medicine, not its particular ingredients, during the perception process. The stable combination of images in the background (for example, childish or idle, pastime) also indicates the integrity of perception. The fire reflections in the fireplace merge in the observer's mind into changing visual images.

**Objectivity and Consciousness of Perception:** The phraseological unit "to wake up and smell the coffee" is based on a real-life situation where a person who has woken up inhales (and perhaps enjoys) the aroma of coffee. It involves correlating the sensory perception of information with the objective world. The consciousness of the process is manifested in relating the object to a specific category (in this case, beverages) and generalizing it in the word itself. Additionally, it activates the previously acquired experience regarding the invigorating properties of coffee. Furthermore, in one's consciousness, waking up from sleep is compared to awakening from an inadequate understanding of what is happening around, a state of ignorance or forgetfulness.

Objects in the surrounding world can be involved in static and dynamic relationships during human activities. For instance, the concept of motion is present in the expression "to see the wheels go round" - to see, know how things are going, and become familiar with the work progress. The ongoing process, which is not stationary, is compared to the dynamic visual perception of rotating wheels. On the other hand, the fixed expression "you could hear a pin drop" - it was so quiet that you could hear a fly pass by - also depicts a dynamic image, thus, resulting from auditory perception rather than visual perception. It is interesting to note that English-speaking and Ukrainian-speaking cultures utilize different life experiences to describe the same situation: "quiet enough to hear a pin drop" - quiet enough that you can hear something as small as a pin drop - denotes extreme silence, while "quiet enough to hear a fly pass by" emphasizes a similar level of calmness and quietness, but with the addition of auditory perception.

Depending on perception, an individual perceives the image of the perceived object, which is formed under the influence of a person's past experiences, and therefore, it has a personal tint. Consequently, the same thing can be perceived differently by different people. Moreover, a person's perspective can change throughout life, affecting their world perception. For example, "to look with another eye upon something" means to view something from a different perspective, while "to see somebody/something in a different/new light" implies seeing someone or something in another or new way.

An individual's attitude towards reality influences perception. For instance, "to see everything in a gloomy light" means to see everything negatively, emphasizing the negative aspects and being pessimistic. On the contrary, "to look on the bright side" suggests seeing the positive aspects and looking at things optimistically. Another expression is "to see through blue glasses," which implies looking at things in a gloomy and pessimistic manner, while "to see through rose-colored glasses" means viewing something with an overly optimistic or idealized perspective.

On the other hand, perception can be accompanied by positive or negative emotions. For example, "to rub somebody the wrong way" means to irritate or annoy someone, while "to rub somebody the right way" means to please or appease someone.

As mentioned above, perception is based on an individual's prior experience. However, it should be noted that the perceived information undergoes further cognitive processing, becoming

part of human experience and knowledge. Proverbs eloquently testify to this experience, such as "Misfortunes tell us what fortune is" (the Ukrainian version - "You won't know the taste of sweet without tasting bitter first").

During the process of perception, considering prior experience, a holistic and meaningful image of the object is formed in a person's consciousness. What role does it play in the formation of phraseological units? Being connected to a specific situation, it is a prototype of a stable expression. Human thinking transfers the clear sensory image to a broader abstract situation. Unlike homonymous variable word combinations, the meaning of phraseological units is based on the associativity of human thinking, on the comparison of different objects based on their similarity (metaphor) or contiguity (metonymy).

Let us consider several fixed expressions formed with metaphorical transfers.

The meaning of the idiom "to gift horse in the mouth" - to criticize or feel doubt about something good that has been offered to you - is associated with reevaluation. On the one hand, it draws upon the life experience and knowledge that the condition of its teeth can judge a horse's health. On the other hand, it reflects an ethical norm in society (both in English and Ukrainian): "Don't look into the mouth of a given horse." The specific image describes a broader range of similar cases through metaphorical transfer. This transfer can also be rooted in a person's spatial experience. For example, the idiom "to look down your nose at somebody" - to look down upon someone with disdain - creates an image of a taller person looking down at a shorter person from above. The metaphor allows for applying the spatially informed image to describe social relations.

The expression "to see rocks ahead" - to foresee or perceive danger ahead - most likely originates from the professional activities of sailors because the cliffs directly ahead can cause a shipwreck. This professional experience is rethought, and this idiom refers to any dangerous life situation.

The "handwriting on the wall" idiom also represents an ominous danger. However, this expression has biblical origins: the proud Babylonian king Belshazzar, who did not give glory to the true God and committed blasphemy, saw mysterious words written on the wall during a banquet. The prophet Daniel was able to interpret them: "Mene, Mene, Tekel, Upharsin," which meant, "God has numbered the days of your kingdom and brought it to an end; you have been weighed on the scales and found wanting; your kingdom is divided and given to the Medes and Persians." That very night, Belshazzar was killed, and the Persians captured Babylon. This expression denotes any alarming sign or indication through the metaphorical reinterpretation of the biblical story.

Now let us address the phraseological units whose meanings have been formed considering a metonymic transfer.

The idiom "the smell of the lamp" refers to a style that is dry and bookish and mainly refers to work that takes a lot of effort at night and is related to professional experience in writing. The semantic content of this phraseological unit is determined by an associative chain that includes several concepts: "dark time of the day" - "light and smell of the lamp" - "prolonged and exhausting work."

The meaning of the phraseological unit "to touch one's hat to somebody" - to greet someone by raising one's hat - is quite understandable, as it is associated with a commonly accepted behavior, particularly with a polite greeting. This expression illustrates metonymic transfer from the act to its socially conditioned manifestation.

To understand the meaning of "to see the lions" - to see the sights - a person needs to have specific cultural knowledge. The lions housed in the Tower of London were one of its notable



attractions (the Royal Menagerie existed in the Tower for almost 600 years, from the XIII century until 1835, when the animals were moved to the London Zoo). Thus, a prerequisite for the metonymic transfer is a background understanding of the specific knowledge.

The reinterpretation may be based on either real-world knowledge or popular beliefs which are believed to be accurate. For example, the idiom "to see a wolf" - to lose the ability to speak - harks back to ancient superstitions that when a person sees a wolf, they lose the ability to speak.

According to one version, the idiom "to touch the wood" - to knock on wood and spit over one's shoulder - is explained by an ancient pagan tradition of tapping on wood to seek help or protection from a "good spirit" believed to reside within it. Perhaps this pagan ritual found its reflection in a children's game, where the one who touched something wooden and said "touch the wood" is considered safe or exempt from being chased. Another version asserts that this phrase is connected to the Christian tradition of touching a wooden crucifix (or rosary) as a sign of reverence and protection against evil spirits.

Many idiomatic expressions covered by metaphorical and metonymic transfer were recorded during this research.

The idiom "to be glad to see the back of somebody" - means to be glad to get rid of somebody, to see this person for the last time. It represents a situation where we see the person's back. The semantics of this phrase helps to determine both prior experience and knowledge, as well as the restoration of certain cause-and-effect relationships. Simple logical reasoning reveals an association by contiguity: "back" - "departure," "seeing the back of a person" - "seeing a person leaving." If an unpleasant person is leaving, we are "getting rid" of their presence. Through the metaphorical reinterpretation of the relevant experience regarding the mutual positioning of objects concerning each other, the analyzed expression acquires a broader meaning of "getting rid of anyone."

In the idiom "to look to your laurels," the word "laurels" first undergoes metonymy. From ancient history, it is known that laurel wreaths were awarded to victors; thus, laurels are associated with victory. Literally, the idiom "to look to your laurels" urges a person to "take care" of their laurels, to look after them. The metaphorical reinterpretation of the entire expression allows it to be used in the sense of "striving to preserve one's superiority."

## 5 Conclusion

English phraseology is rich in idiomatic expressions that reflect the peculiarities of perception and the cognitive process in general. The verbs found in sensory perception idioms and the names of sensory organs indicate the existence of various types of perception: sight, hearing, touch, smell, and taste.

English phraseological units represent perception properties such as different levels of expressiveness, clarity, purposiveness, duration, directionality, integrity, concreteness, consciousness, and dependence on the perceiver. Perception, viewed through the prism of English phraseology, emerges as an active cognitive process inseparably linked to comprehending information received from the external world, considering previous experiences. The perceived sensory experience is reinterpreted during further cognitive processing and becomes a source of understanding abstract situations. With its origin in the associative nature of human thinking, phraseological meaning illustrates an attempt to understand one entity in terms of another or use one entity to refer to another related one. Consequently, phraseological units formed through metaphorical and metonymic transfers were identified during the study. Metonymy often affects a single word in a fixed combination, while metaphor characterizes the reinterpretation of the entire expression.

This study revealed that human experience, as a collection of practically assimilated knowledge, skills, and abilities, is an essential link between the perception of the surrounding world and the phraseological meaning. English phraseology reflects the reinterpretation of a broad spectrum of human experience, ranging from spatial perception to life wisdom or professional experience. Phraseological meaning is shaped based on actual knowledge of the world, including cultural understanding, folk beliefs, superstitions, ethical norms, and religious convictions. It should be noted that the investigated fixed expressions present not so much a scientific as a naive worldview, explained by the nature of phraseological composition as the most expressive and colorful sphere within the language system.

This research justifies using the term "cognitive phraseology" in linguistics. The accumulation of systematized facts in phraseology theory and cognitive science has created prerequisites for establishing a discipline that integrates the achievements of these fields. Further studies of phraseological units concerning how they reflect a specific vision and cognition of the world by a person can be very promising. Cognitive phraseology aims to contribute to explaining the mysteries of the human mind.

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**Primary Paper Section: A**

**Secondary Paper Section: AI**

## PRAGMATICS AND LINGUISTIC COMMUNICATION: THE STUDY OF LANGUAGE USE IN REAL COMMUNICATIVE SITUATIONS, INCLUDING LINGUISTIC POLITENESS, CONVERGENCE, AND MUTUAL UNDERSTANDING

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**Abstract:** This research paper focuses on the study of pragmatics and linguistic communication in real communicative situations, with a particular emphasis on law faculties. The paper explores how language is used in legal contexts, including the role of pragmatics in legal communication, the use of language in legal discourse, and the importance of effective communication skills for law students. The paper also examines the challenges and strategies for enhancing pragmatic competence in legal settings. Therefore, the aim of the paper is to study the peculiarities of communicative competence, linguistic politeness, and mutual understanding of law undergraduate students during their study at higher education institutions in Ukraine. Instruments of data collection used were analysis of scientific sources, questionnaires, interviews, and focused group discussion. Searching the problem provide the opportunities to determine the most using typical mistakes that law students make during professional communication, and describe the ways of overcoming them. The results of research made it possible to rate key components of communication skills of law students at higher education establishments that aimed at increasing the level of pragmatic competence of Ukrainian higher education law students.

**Keywords:** linguistic competence, speaking competence, communicative competence, effective communication, undergraduate students of legal major, typical mistakes, the ways to overcome.

### 1 Introduction

Language communication is a complex process that involves the transfer of information between interlocutors. Effective communication is essential in the legal profession, as it involves conveying complex legal concepts and information accurately and clearly. Pragmatics, as a subfield of linguistics, studies how language is used in context and how people use language to achieve communicative purposes. We will focus on the study of pragmatics in real communicative situations, taking into account the aspects of linguistic politeness, convergence, and mutual understanding. This paper delves into the study of pragmatics in real communicative situations within law faculties, focusing on the various pragmatic aspects that impact legal communication.

The modernization of law educational process at a university involves increasing the requirements for the communication of intending lawyers' professional level. So, it is necessary to train competent lawyers of the new generation, who are able to act productively and purposefully in modern conditions, to be active participants in international communication, to have the necessary communicative experience in the spheres of professional and situational communication. Considering this, the problem of developing pragmatic and communicative competence of pre-service lawyers while studying at higher education institutions is relevant. It will contribute to increasing their competitiveness.

Most of higher education institutions in Ukraine today work in a mixed or distance format. At the same time, the requirements for graduate students' competencies are only growing due to the need to find a job and compete in the labor market. Therefore, higher education institutions students should work additionally individually to improve their own level of communicative competence.

### 2 Literature Review

In the research R. Kempson (2003) shows pragmatics as the application of conversational principles according to sentence meanings, describes the process of reasoning to choose the right interpretation and the interaction between linguistic processing and general processing.

G. Kasper and S. Rose (2013) claim that interlanguage pragmatics examines how nonnative speakers comprehend and produce actions in a target language, and how foreign language learners develop the ability to understand and perform actions in a target language. More recently, K. Bardovi-Harlig (2013) underlines that pragmatics and pragmatic acquisition in interlanguage pragmatics encompasses both form and use. She writes: "[pragmatics] bridges the gap between the system side of language and the use side, and relates both of them at the same time. Interlanguage pragmatics brings the study of acquisition to this mix of structure and use".

Situating interlanguage pragmatics in a broader scope of intercultural studies is timely, because in today's multilingual society, the goal of language learning is not to become a native speaker, but to become an intercultural speaker who is linguistically and intercultural competent – a person who is sensitive to other cultures and aware of his/her own cultural position to mediate across linguistic and cultural boundaries (Byram 2012; Wilkinson 2012). Pragmatic competence can serve as a source that assists in this process of mediation. Reconceptualizing pragmatic competence to reflect this notion of the intercultural speaker will elevate the practice to the area of global citizenship. At the same time, pragmatic insights into intercultural interaction will help move beyond the current practice of description of intercultural competence to the analysis of acquisition of that competence.

M. Blömer (2012) overviews structural features of legal language as a special language. It differs from everyday language in many ways. Although the overall language with which lawyers operate is standard, not every term of legal language would be tolerated in general. Therefore, legal language cannot be called a special kind of official language.

Some scientists draw their attention to problem of mutual understanding and disagreeing between speakers. In particular Jo. Angouri (2012) maintains managing disagreement in problem solving meeting talk; C. Maíz-Arévalo (2014) outlines the ways of expressing disagreement in English and the pragmatic rules; M. Marra (2012) describes the ways of disagreeing and negotiating workplace communities without being disagreeable. M. Sifianou (2012) studies the means of politeness and mutual understanding.

H. Netz and A. Lefstein (2016) make a cross-cultural analysis of disagreements in classroom discourse on the example of studies from England, the United States, and Israel. He claims cultural and institutional factors interact in shaping preference structures. The author explores the influence of cultural communicative norms on the one hand and pedagogical goals and norms on the other. The study highlights culture-specific discursive patterns that emerge as the teacher and students manage a delicate balance between often clashing cultural and educational motives.

C. Bryan and co-workers (2016) analyzing the discourse of personalization in online sermons, investigates the discourse of an American evangelical church. The study is based on the transcripts of a five-year period of online preaching. The goal was to apply the framework of critical discourse analysis to digital sermons, particularly focusing on examining the elements of personalization in this relatively new form of "net" evangelism.

By categorizing speech act expressions across languages using a single coding framework, the researchers were able to reveal culturally specific features of speech acts by investigating contrastively how many types of expressions exist in a language, which expressions are considered direct or indirect and how they vary in different situations. The coding framework and DCT instrument facilitated many replication studies, which provided empirical descriptions of speech acts across cultures. This trend continues today (Netz and Lefstein, 2016)

The author from Switzerland S. Assimakopoulos (2017) investigate the notion of context from a relevance-theoretic perspective. Endorsing the idea that, in cognitive terms, contexts for utterance interpretation are best viewed as sets of assumptions that are brought to bear during the processing of an utterance. The researcher proposals that contexts are actually selected during utterance comprehension rather than determined in advance of it. The author addresses the question of how considerations of relevance, in the technical sense facilitate the admittedly effortless selection of contexts by the hearer and, to a certain extent, the speaker too.

N. Taguchi (2017) analyzes interlanguage pragmatics, examines second language learners' knowledge, use, and development in performing sociocultural functions. The way of speaking is determined by context – to whom we are talking and under what circumstances, so learners need to know which forms are appropriate to use in what situations. Hence, linguistic knowledge and sociocultural knowledge of social conventions, customs, and norms of interaction are two layers of pragmatic competence. The scientist considers the process of learning these knowledge bases, individual variation between learners in the process, and factors affecting the process are the focal objects of inquiry.

Mamyh M. and others (2021) offer an analysis of professional discourse as a thought-communicative activity. The validity of the problem for modern theoretical and practical linguistics is noted, which resulted from the significant expansion of the spheres of functioning of the Ukrainian professional language, its interaction with special purpose languages of other national cultures, in particular English. The research reflects the issues of history of the professional language study, theoretical aspects of the separation of special purpose language as a separate discourse of social practice, presents current perspectives on the practical study of professional language practice. The selected segment is studied as a modern literary language in its written and oral varieties.

The role of pragmatics in legal communication, the use of language in legal discourse were also studied in scientific sources. Thus, P. Chiassoni (2019) has isolated the disadvantage and called it the 'container-retrieval' theory. According to his theory legislative language is filled up with content by linguistic conventions as to the application of the words in which it is expressed. The task of applying legislation is the task of identifying those cases to which its words conventionally apply.

Enoch (2014) reviews the communication model can explain controversy over the law. He questions how a law maker can do 'normative magic', making mere words into law. M. Greenberg (2011) has argued that trying to understand legislation on the model of communication is misguided because legislation and legislative systems have purposes that have no parallel in the case of communication and that may be better served if a statute's contribution to the content of the law is not constituted by what is communicated by the legislature.

A number of attempts have been made in order to study philosophical and jurisprudential issues of vagueness (Geert Keil and Ralf Poscher, 2017); to demonstrate some cases of a realistic enquiry of interpretation without truth (Chiassoni, Pierluigi, 2019); to analyze strategic indeterminacy in the law (Lanius, David, 2019; to outline the nature and value of vagueness in the law (Asgeirsson, Hrafn, 2020) etc.

### 3 Aims

The analysis of above-mentioned works shows that different aspects of the searched issue have been studied quite thoroughly. However, pragmatics and linguistic communication in real situations, with a particular emphasis on law communicative competence may need further research. Therefore, the aim of this paper is to research the peculiarities of communicative competence, linguistic politeness, and mutual understanding of law undergraduate students during their study at higher education institutions in Ukraine.

To achieve the aim, we should implement some tasks, the solution of which will ensure the step-by-step realization of the result. The tasks are: 1) to rate key components of communication skills of law students at higher education establishments that aimed at increasing the level of pragmatic competence of Ukrainian higher education law students; 2) to determine the most using typical mistakes that law students make during professional communication, and describe the ways of overcoming them; 3) to study the main challenges and strategies for enhancing pragmatic competence of law faculty students.

### 4 Methods

To achieve the aim of the research, a lot of instruments of data collection were used: theoretical: analysis of linguistic and psychological scientific sources; empirical: observation of the educational process, questionnaires, interviews and focused group discussion; statistical; graphic. The methodology of expert assessment was implemented in order to find out communicative skills as the main means of developing pragmatic and communicative competence.

To achieve the objectives, the study used a questionnaire to address the study questions and objectives. 180 law students participated in the questionnaire. The study found that the undergraduate students have positive views toward the using of the language as communicative means in various, functions, contexts, and professional situations to enhance the student's fluency in using the target language as well as the take care about the language forms to avoid imperfect using of the language.

### 5 Results

Pragmatics is the branch of linguistics which studies how utterances communicate meaning in context. It is a medium where we examine how people convey different kinds of meanings with the use of language or how people express a variety of meaning with variety of people.

Pragmatics is generally considered to be the study of the ability of speakers to communicate more than that which is explicitly stated. As J. Mey (2004) writes: "Pragmatics is essentially about the users of language in a real-life situation, and about the conditions that enable those users to employ linguistic techniques and materials effectively and appropriately".

Pragmatics is the study of the aspects of meaning and language use that are dependent on the speaker, the addressee, and other features of the context of utterance. It is the study of meaning arising from language in context, in other words, the meaning intended by the speaker or text sender and understood by the listener or text receiver. When the communication act is successful, these meanings coincide, and when it is not, they diverge to a greater or lesser degree. As such, pragmatics focuses on the effect of context on communicative behavior as well as on how inferences are made by the receiver in order to arrive at the final interpretation of an utterance.

According to the professor of linguistics at the University of Wales D. Crystal (2020) pragmatics is the study of language from the point of view of users, especially of the choices they make, the constraints they encounter in using language in social

interaction and the effects their use of language has on other participants in the act of communication.

Researchers of various aspects of language always turn to pragmatics, the issues of which are diverse and multidimensional. The ambiguous understanding of the term "pragmatics" in modern linguistics is connected with the history of its origin and use. Here are some interpretations of this term: a branch of semiotics that studies the sign-person relationship; a branch of linguistics that studies the linguistic aspect of the relationship between a linguistic sign and a person; the category of the text, that is, the property of the text in one way or another, to correlate with the addresser and the addressee, to realize the communicative intention of the first to influence the second; pragmatic content / pragmatic information of a language unit, a fragment of speech, a whole speech work.

Ch. Pierce laid the foundations of pragmatics as part of semiotics, a complex science that studies all kinds of sign systems. Later, science developed and different scientists viewed this term in different ways. Pragmatic linguistics is understood as a science: about the use of the language (Leech, 2014), about aspects of meaning that are not covered by semantic theory (Levinson S.C.), about the interpretation of speech acts (Searle J.R., Austin J.L., Grice H.R.), about the language in the context (Parret N.), about the linguistic form, meaning and activity (Dijk, 2008, 2014).

In studying the use of language, the role of speaker and hearer, the role of the context, the amount of relative quality of language that is used and the relative distance between the speaker and the hearer is important.

In pragmatics, we focus only on a spoken language, conversation or how people speak or express their desire when they communicate with others. People express their feelings, desires, point of views and variety of things about their culture, society and so on. But sometimes they have many desires which they do not express or unable to express and there can be variety of reasons for that, for example, fear, inferiority, insult, etc. Pragmatics tries to study human beings at their characterization, feelings, needs, attitudes, volition or volatile personality and many other things through language. Therefore, pragmatics is the study of language used by real people in the real context. (Karthik, 2013).

Analysis of the text, its semantics and structure, as well as the semantics and structure of the units that make it up, should set the task not only to identify what determines the formation of the meaning of the text, but also how the ultimate goal of communication is achieved - the impact on partners in the process of speech activity. The way to achieve a specific result for the communicants determines the pragmatic orientation of the text. T. Dijk (2014) notes that the pragmatics of the text correlates the text itself and the structure of communication with each other, which obviously contributes to a deeper and more comprehensive understanding of the text as a whole.

Specialized language pragmatics is directly related to the situations in which this type of communication occurs, and to the ways that the text sender and receiver potentially and effectively deal with them. Such communicative situations are the focus of the external or sociocultural view of pragmatics, whereas the online construction of text and word meaning by sender and receiver refers to the internal or cognition-oriented view of pragmatics.

Cognition-oriented pragmatics explores how the text, which is the result of the communication act, is molded by the situation itself as well as the previous knowledge, intentions, expectations, and beliefs of the text sender. It also targets how the text is finally understood by the receivers, both at the micro and macrocontextual level. The structure, content, and terminology of the specialized text are constrained by all of these factors, and can be analyzed in terms of frame, context, and construal or speaker perspective. (Faber)

P. Garcia (2004) presents the concepts of pragmatic ability and pragmatic comprehension. The former is the ability to use language appropriately according to the communicative situation and the latter refers to the comprehension of oral language in terms of pragmatic meaning. Therefore, students need to be able to comprehend meaning pragmatically in order to: understand a speaker's intention; interpret a speaker's feelings and attitudes; differentiate speech act meaning such as the difference between a directive and a commissive; evaluate the intensity of a speaker's meaning, such as the difference between a suggestion and a warning; recognize sarcasm, joking, and other facetious behavior; be able to respond appropriately.

As we know, pragmatics is the way we convey meaning through communication (Ahmed, 2022), so the study aims at student's opinions on the use of language as a means of communication, and to show the significance of language function, context, and professional situations to develop pragmatic competence in law university learners.

Communication skills are a set of abilities that enable individuals to effectively exchange information, ideas, thoughts, and feelings with others. These skills play a crucial role in personal and professional interactions, allowing individuals to express themselves clearly, listen actively, and understand and interpret the messages of others. Effective communication skills are essential in various aspects of life, including relationships, teamwork, leadership, and career success.

In order to investigate main components of pragmatic and communicative competence of undergraduate students of legal major (specialty "International Law", "Public Administration"), the in the research process, the methodology of expert assessment was implemented with the determination of significant coefficients of communication skills, the provision of which contributes to the development of undergraduate students' pragmatic and communicative competence. This required the formation of an expert group, which included 7 specialists in the field of higher education. The survey involved the ranking by experts of communication skills that are important for the development of intending lawyers' professional competence. The ranking of the expert evaluation made it possible to identify nine dominant communication skills. Next, we will consider the key components of communication skills.

**Verbal Communication:** the ability to articulate thoughts and ideas using words. This includes speaking clearly, using appropriate language, and being able to convey messages concisely.

**Nonverbal Communication:** nonverbal cues such as facial expressions, body language, gestures, and eye contact can significantly impact communication. Understanding and using nonverbal cues effectively can enhance the message being conveyed.

**Active Listening:** being fully present and engaged while someone else is speaking, giving them undivided attention, and showing empathy and understanding. Active listening involves not only hearing the words but also grasping the underlying emotions and intentions.

**Empathy:** the ability to understand and share the feelings, emotions, and perspectives of others. Empathy helps build trust and connection in communication.

**Clarity and Conciseness:** expressing ideas in a straightforward manner, avoiding ambiguity or confusion in communication.

**Flexibility:** being able to adapt communication style and approach based on the context, audience, and purpose of the interaction.

**Assertiveness:** the ability to express thoughts, needs, and opinions confidently and respectfully, without being aggressive or passive.

Conflict Resolution: skillfully managing disagreements and conflicts by actively listening, finding common ground, and seeking mutually beneficial solutions.

Feedback: providing constructive feedback and receiving feedback gracefully to facilitate personal and professional growth.

The next step of the research was conducting a survey of students in order to determine the rating of each of the communication skills (Figure 1).

Strong communication skills not only foster better relationships and understanding but also contribute to professional success by improving teamwork, leadership, and the ability to influence and persuade others.

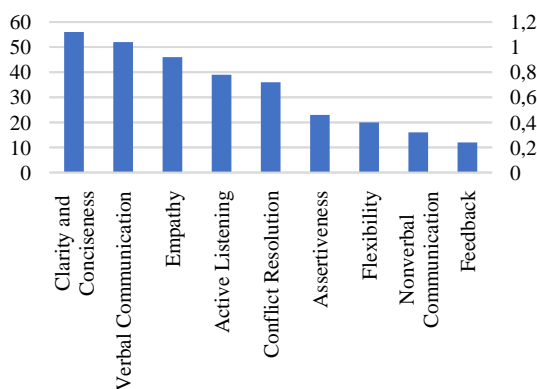


Figure 1. Rating the key components of communication skills according to law students' survey results

The language used in legal discourse can be highly specialized and distinct from everyday language. In the research we examine the unique features of legal language, including technical terminology, jargon, and formulaic expressions, the challenges of comprehending legal texts for law students and provides strategies for developing the necessary linguistic skills to navigate legal language proficiently.

Thus, law students need to develop effective communication skills to succeed in their legal careers. During the study we explore the specific communication skills required in the legal profession, such as legal writing, oral advocacy, negotiation, and client counseling, discuss the role of pragmatics in honing these skills and the significance of context and audience awareness in legal communication.

The study showed that communication errors may occur in law students due to the specifics of their future profession. The survey made it possible to identify the main typical mistakes that future lawyers make in communication. In order to improve students' speech, we offer ways to overcome these mistakes (table 1).

Table 1. The main typical mistakes that intending lawyers make in communication and the ways of their overcoming

Mistakes	Manifestation	The ways to overcome
Use of excessively complex legal terms	Law students, especially at the initial stages of their studies, can use a large number of complex legal terms, which can confuse the interlocutor if he does not have such knowledge	The way to overcome this error is to explain terms in more understandable language, avoid using overly complex terms where necessary, and ensure clarity and comprehensibility of speech
Insufficient ability to communicate	Legal education is often focused on academic skills such as analysing texts	To overcome this error, students can be encouraged to actively participate in

	and writing documents, which can sometimes lead to underdeveloped communication skills	discussions, seminars, and group projects where they can practice their communication skills. Reading and researching the literature on communicative competence can also be recommended
Insufficient ability to adapt to the audience	When communicating with unqualified or non-professional interlocutors, law students may use complex legal language that makes their message unclear or unacceptable	The way to overcome this error is the ability to adapt your language to the level of understanding of the interlocutor. It is worth using simpler language, explaining complex concepts, using examples and illustrations for better understanding
Insufficient attention to non-verbal communication	In communication, law students may overemphasize the verbal aspect of communication and not pay due attention to non-verbal elements such as gestures, facial expressions, tone of voice, etc	To overcome this mistake, it is worth studying non-verbal communication, observing your own non-verbal signals and taking into account their interaction with others
Insufficient preparation for communication	Often, law students can make the mistake of not preparing enough for a conversation by not researching the topic or situation before starting the conversation	The way to overcome this mistake is to thoroughly prepare for communication, study the relevant information, analyze the situation and think of possible questions or discussion points

In general, to overcome mistakes in communication, law students should actively practice their communication skills, learn the principles of effective communication, and develop their communication competence. Only through practice and conscious improvement can success be achieved in communication as a professional skill.

Legal professionals encounter various challenges related to pragmatic competence, such as cross-cultural communication, dealing with emotions, and navigating power dynamics in legal interactions.

In the course of the study, the main challenges and strategies for enhancing pragmatic competence of law faculty students were determined by means of questionnaires and surveys of law university teachers and students (table 2).

Table 2. Challenges for Enhancing Pragmatic Competence of Law Faculty Students

Challenges	Manifestation
Legal Jargon and Terminology	Law students often encounter complex legal jargon and terminology that may not be familiar to the general population. Understanding and appropriately using these specialized terms in different legal contexts can be challenging
Context-Specific Communication	Legal communication often takes place in various settings, such as courtrooms, law firms, and client meetings. Law students need to adapt their communication style based on the specific context, audience, and purpose of the interaction
Cross-Cultural Communication	In a globalized legal world, law students may interact with individuals from diverse cultural backgrounds. Understanding cultural nuances in communication and being sensitive to cultural differences is essential for effective communication
Dealing with Emotional Situations	Legal cases can involve emotionally charged situations, such as disputes,

	personal injury cases, or family matters. Law students must develop the ability to handle emotional communication with empathy and professionalism
Legal Writing	Crafting legal documents, briefs, and contracts requires precise language, clarity, and attention to detail. Law students must overcome challenges related to legal writing to ensure accuracy and clarity in their written communication

Strategies for Enhancing Pragmatic Competence of Law Faculty Students:

**Specialized Training and Workshops:** Law faculties can offer specialized training and workshops on legal communication, including understanding legal language and jargon, using appropriate legal terms, and adapting communication for different legal settings.

**Role-Playing Exercises:** Engaging law students in role-playing scenarios can help them practice legal communication in simulated situations. This approach allows them to receive feedback and improve their pragmatic competence.

**Mock Trials and Moot Courts:** Participating in mock trials and moot court competitions can help students practice legal advocacy, oral argumentation, and presentation skills in a real-life setting.

**Mentorship Programs:** Establishing mentorship programs where law students can work closely with legal professionals can provide valuable guidance on effective communication techniques in the legal field.

**Legal Writing Clinics:** Offering legal writing clinics where students can receive feedback and guidance on their written communication skills can help improve their ability to draft clear and concise legal documents.

**Cross-Cultural Awareness Training:** Law faculties can incorporate cross-cultural awareness training to help students navigate communication with individuals from diverse cultural backgrounds.

**Communication Courses:** Integrating communication courses into the law curriculum can provide students with a comprehensive understanding of effective communication techniques, both verbal and non-verbal.

**Reflective Practices:** Encouraging law students to engage in reflective practices, such as journaling or self-assessment, can help them identify their communication strengths and areas for improvement.

**Encourage Active Listening:** Faculty can emphasize the importance of active listening in legal settings and encourage students to practice this skill during discussions and debates.

By addressing these challenges and implementing strategies to enhance pragmatic competence, law faculties can better equip their students with the necessary communication skills to succeed in the legal profession. Effective communication is crucial for building trust with clients, presenting persuasive arguments, and resolving legal issues efficiently and professionally

## 6 Discussion

It is important to conduct user testing and gather feedback from law university teachers and students for improving the development process and ensure the app meets their needs and preferences. Considering all the advantages, it is clear that using proposed strategies is a highly topical and beneficial approach. However, it's important to note that while they can be an excellent supplementary means for developing pragmatic competence, they should be complemented with other forms of practice. Distance learning cannot replace full communication and interaction with live people. To our mind, only real life

communication learning methods can be useful, such as conversation clubs, classes with a teacher, engaging in language exchanges, real-life communication with native speakers.

## 7 Conclusion

Improving communication skills involves continuous practice and self-awareness. Law students can enhance their communication abilities by seeking feedback, taking communication-related courses, reading books on effective communication, and actively engaging in social interactions.

The study of pragmatics and linguistic communication in law faculties is of utmost importance for law students and professionals. Understanding how language is used in legal contexts and developing effective communication skills are essential for successful legal practice. By recognizing the role of pragmatics in legal communication and addressing the challenges in enhancing pragmatic competence, law faculties can better prepare their students for the complexities of the legal profession.

Our work has led us to conclude about the importance of developing undergraduates' skills of effective communication. According to the purpose of the study, we implemented some tasks:

1. The key components of communication skills of law university students that aimed at increasing their level of pragmatic competence were rated.
2. The most using typical mistakes that law students make during professional communication, and the ways of overcoming them were determined.
3. The main challenges and strategies for enhancing pragmatic competence of law faculty students were outlined in the paper.

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**Primary Paper Section: A**

**Secondary Paper Section: AI**



## THE PRECEDENT PHENOMENON AS A MARKER OF ACCESSIBLE PERCEPTION IN CONTEMPORARY MUSIC

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**Abstract:** The perception and comprehension of contemporary academic music remain a prominent concern within the realm of artistic culture in society. Several key factors contribute to this phenomenon, which we consider to be pivotal. Establishing a culture of attentive listening necessitates purposeful training of listeners to engage with both historical and contemporary samples of academic music. Moreover, the exploration of mechanisms employed by composers and performers to overcome these idiosyncrasies in the process of perception and comprehension is an area that has received minimal attention and demands thorough investigation. Such endeavours are also crucial for allied artistic disciplines in terms of paramusical and cross-cultural perspectives. This article aims to address several pertinent aspects related to this comprehensive understanding.

**Keywords:** precedent phenomena, accessibility markers, style of the era, stylistic mimicry, allusive effect, blues notes, aberration of values, paramusical means.

### 1 Introduction

Despite the significant potential for exploring the issues addressed in this article, the field of musicology lacks substantial representation in this particular area. Notably, the works of B. Siuta provide valuable contributions to the development of the precedence theory in music and the interconnected theory of speech genres in musical communication (Siuta, 2015). The works of B. Siuta have made notable contributions to the understanding of precedent phenomena in music. Specifically, Siuta (2019) has explored the variability of interpretation of precedent texts in music, considering speech genre as a significant factor. Additionally, Siuta's research (2021) delves into the examination of precedent phenomena in music interpretations, highlighting their significance and impact. Moreover, Siuta (2023) investigates the variability of precedent contents in artistic works within the context of simultaneous communication, shedding light on their dynamic nature. The works of O. Malenko and H. Siuta offer valuable insights into the issues of precedent and text recognizability. Malenko's (2014) publications explore intermediality as an aestheticization of artistic discourse, emphasizing the interaction between artists, readers, and the aesthetic dimension. Furthermore, Malenko (2017) investigates the political resource of the modern Ukrainian language, focusing on periphrasis and its implications. Additionally, Malenko's collaborative work with V. Soprykina delves into the linguistic interpretation of the pseudonymicon within the Ukrainian cultural and artistic sphere of the early 21st century (Malenko, 2021). H. Siuta's publications provide a comprehensive understanding of the citational thesaurus in the Ukrainian poetic language of the twentieth century (Siuta, 2017). Additionally, Siuta explores the concept of the text as an object of knowledge, elucidating its role in receptive aesthetics and poetics. Furthermore, H. Siuta (2020) investigates the typology and pragmatics of precedent statements within Ukrainian advertising texts. In recent years, scholars have devoted attention to various aspects concerning the operation of precedent phenomena in art. These include investigating the utilization of intermedial and paramusical techniques in literary and musical compositions, as well as the incorporation of covert allusions to precedent phenomena within textual works. Additionally, scholars have explored how meanings and expressive elements drawn from mass culture serve as indicators of accessibility during the process of deciphering the content of these works. These research endeavours reflect a growing interest in comprehending the multifaceted dimensions of precedent phenomena in the realm of art.

### 2 Material presentation

Numerous contemporary performers have been actively addressing the challenge of enhancing the accessibility of their music to a broader audience. Among these performers is the renowned British a cappella group, The King's Singers, which was established in 1968. Naturally, the group's lineup has changed over the past five decades, with an average individual tenure of approximately 12 years. Nevertheless, these personnel changes have had minimal impact on the ensemble's repertoire policy, as well as their objectives and methodologies for crafting concert programs. The musicians maintain a fundamental proposition: that listeners can and should be educated in their appreciation of music, while simultaneously being entertained. Additionally, they embrace the notion that aesthetic value extends beyond the realm of classical music. Consequently, their concert programs feature a diverse selection that combines high-quality pop, rock, and jazz music, constituting over 20% of the ensemble's repertoire. Notably, these selections encompass works by prominent artists such as The Beatles, Billy Joel, Queen, George Gershwin, Harold Arlen, and Irving Berlin. Significant portions of the concert program also encompass specially commissioned arrangements of folk songs, as well as works by contemporary composers specifically composed for the ensemble. Although these contemporary compositions account for a smaller percentage of the overall performance duration, they align perfectly with the creative philosophy of the sextet. It is worth noting that the creative principles guiding The King's Singers effectively encompass the full spectrum of the ensemble's repertoire, facilitating a multifaceted and engaging musical experience for their audiences.

The ensemble's repertoire draws from comprehensive historical investigations and explorations within the realms of religious and liturgical music, as well as vocal ensemble performance practices spanning from the early Renaissance to the present era. It is noteworthy that nearly all of the ensemble's creative endeavours have effectively exemplified their chosen strategic approach. Consequently, The King's Singers have garnered recognition as one of the foremost European classical music ensembles, consistently ranking among the top ten in contemporary times.

Let us commence with an examination of the ensemble's initial and notably extensive creative endeavour known as the "Madrigal History Tour". This project holds a significant place within The King's Singers' body of work. It is worth noting that the evocative nature of this title captures the attention of both prospective and existing listeners, evoking associations with the well-known English-language phrase "Magical Mystery Tour", which has a strikingly similar phonetic resonance. However, it is crucial to recognize that these two titles represent distinct cultural and musical phenomena, despite their close linguistic proximity. The musicians adeptly employ these culturally resonant titles as precedent names, which, when heard, captivate the audience through subtle wordplay. The "Madrigal History Tour" comprises a six-part cycle of presentations, discussions, and performances delivered by the vocal sextet. This project was first realized in 1983-1984 as a documentary series broadcasted on the BBC, attracting a vast audience that extended beyond the confines of music enthusiasts. Accompanying the television program was the eponymous album, "Madrigal History Tour". This period undoubtedly marked the pinnacle of the ensemble's artistic ascent, further affirming the soundness of their chosen creative trajectory.

Let us begin by elucidating the meaning behind the enigmatic term Mystery Tours. In the 1960s, "Mystery Tours" gained considerable popularity as adventurous excursions in Britain. These thematic tours were designed to provide participants with informative experiences, often taking them to familiar destinations to uncover something new or prompt a re-evaluation of their existing knowledge. Organizers frequently employed the

"Know Before You Go" principle, relying on participants' prior knowledge to enhance the tour experience. This approach facilitated the expansion of the cognitive space through the acquisition of information during the tour, diversifying the experience based on the degree and extent of activated background knowledge (Siuta, 2023, pp. 260-262).

However, over half a century has elapsed since the renowned albums of The Beatles were recorded in 1967 (with slight variations between the British and American releases), as well as the release of the iconic musical film "Magical Mystery Tour", featuring the Liverpool quartet and showcasing their psychedelic works. Consequently, much of the aforementioned information has transitioned into a state of passive storage within the minds of listeners, or in some cases, has been entirely forgotten. Nonetheless, it is crucial to regard the knowledge of The Beatles, their album's title, and the underlying concept of a "mysterious journey" that consistently reveals novel elements to the participant based on pre-existing information (which is reactivated throughout the journey) as an active component deserving consideration. This active engagement involves precedent names, texts, statements, and situational elements (Siuta, 2021, p. 212).

Through the deliberate utilization of a provocative pair of phonetically similar titles, namely "Madrigal History Tour" by The King's Singers and "Magical Mystery Tour" by The Beatles, the ensemble successfully attained several anticipated outcomes. To comprehensively elucidate this chain of information and associative markers, let us delve into its reconstruction.

The name "History Tour" evokes associative similarities in the listener's imagination with the distinctly English phenomenon of "Mystery Tour". The inclusion of "Magical" in the title serves to unveil any ambiguity for those unfamiliar with the concept of a "mysterious journey". The Beatles' body of work holds a level of familiarity among fans of music classics, encompassing rock and pop genres. Moreover, the eponymous film associated with The Beatles further visualizes the enigmatic aspects of "Mystery Tours", presenting not only a journey shrouded in mystery but also one imbued with a sense of magic. Additionally, those who have experienced the famous four-hour bus tour in Liverpool, designed in resemblance to the iconic bus featured in the 1967 film, known as the "Magical Mystery Tour", are aware of its renowned allure. Individuals who have experienced such excursions can attest to the realization that their initial understanding of the subject of interest merely scratches the surface, leaving the vast majority concealed beneath the metaphorical iceberg. The enigmatic and enchanting journey undertaken bears semblance to the enigmatic and magical journey alongside The Beatles. Phonologically, the names of these journeys are perceived as close paronyms, evoking a subconscious sense of semantic proximity. It is now time to transition to the auditorium, where one can embark on a captivating and enchanting voyage through the realm of madrigals.

The aforementioned communicative chain operates cohesively, engendering a comprehensive array of meanings by incorporating several precedent names that introduce an extensive range of associated precedents into the process of perception, including names, texts, and situational elements. While not explicitly generating additional meanings derived from the domain of madrigal art history, these elements contribute, to varying degrees, to shaping the meanings attributed to the anticipated music and its subsequent perception and understanding. This phenomenon can be understood as an intermediate utilization of advertising discourse, facilitated by a well-crafted advertising slogan. The actualization of this slogan directly influences the ultimate semantic outcome of music perception. Remarkably, the slogan's remarkable success led to its uninterrupted use throughout the preparation and execution of all six concert evenings of the project. Moreover, this highly effective slogan, serving as the project's title, was also adopted for the CD release, "Madrigal History Tour", by The King's

Singers, which coincided with the television production (1983; MMG 1159).

Now, let us examine the mechanisms of employing markers of accessibility through the specific example of a contemporary musical composition composed exclusively for The King's Singers by the modern British composer Paul Drayton. This exemplary piece of contemporary vocal ensemble music is titled "Masterpiece" (Burn, Drayton, 1987). In 2005, a recorded rendition of this composition was released on DVD under the symbolic title "From Byrd to the Beatles", akin to the aforementioned case.

The decision to record this particular work on a DVD was intentional, as the composer envisioned incorporating visual elements and aspects of stage theatricalization during its performance. The concept behind the composition is notably unique: to encapsulate the primary stylistic trends in the evolution of European music for nearly four centuries within a concise timeframe of just over ten minutes. Due to the constraints of this format, the composer had to carefully select a limited number of past composers for inclusion in this distinctive anthology. Notably, the chosen works of these composers had to fulfil two fundamental criteria: they needed to possess sufficient recognizability to represent the stylistic characteristics of their respective eras, and they had to be suitably engaging and amenable to stylistic mimicry. It is worth noting that "Masterpiece" exemplifies the composer's exceptional skill and wit, effectively utilizing captivating theatrical and allusive effects, stylistic mimicry, and visually evocative representations.

The world of music presented in "Masterpiece" encompasses a range of composers from J.S. Bach to J. Cage, C. Stockhausen, and O. Messiaen. The composition commences with a brief solo by the tenor, who, through the performance of a baroque polyphonic theme, announces the significant precedent name of Johann Sebastian Bach. This introduction instantly transports the listener into the realm of the rich and accomplished High Baroque era of European culture, showcasing the remarkable body of work associated with the illustrious Bach family (with a certain touch of humour, the singers playfully enumerate the names of Johann Sebastian's sons, accentuating the father's pre-eminence). The realization of the precedent name effectively fulfils the listener's expectations, as the initial theme evolves into a complex imitative fugue, ultimately confirming the validity of their anticipations.

The subsequent composers featured in "Masterpiece" include G. F. Handel, W. A. Mozart, L. Beethoven, F. L. J. Mendelssohn-Bartholdy, J. Strauss, C. A. Debussy, and Franz Liszt. Following Liszt, a condensed list is introduced, encompassing composers such as S. Franck, J. Busse, G. de Blanc, M. Bruch, C. Ives, Franz Liszt, G. Holst, A. Bax, B. Britten, A. Bruckner, B. W. Ya. Bartók, G. Bizet, F. P. Schubert, J. Massenet, G. Verdi, F. Chopin, R. Schumann, F. Haydn, G. Mahler, and F. Poulenc. This list is interrupted twice by the tenor, who, assuming a theatrical stance, dramatically announces the name of Wagner. The second proclamation of R. Wagner is delivered in a slightly comical manner by the composer, which prompts the listener to pause and contemplate the significance of highlighting this particular name amidst the presented compositions. The procession continues, and we delve further into the exploration of the list: L. Beethoven, G. Berlioz, A. Borodin, J. Benedict. Subsequently, we encounter F. Mendelssohn, J. Massenet, O. Messiaen, J. Meyerbeer, D. Shostakovich, K. Szymanowski, G. Sammartini, G. Frescobaldi, G. Pergolesi, G. Palestrina, N. Paganini, F. Cavalli, M. F. V. Clementi, A. Corelli, J. Sibelius, J. Scarlatti, V. Bellini, G. Viotti. Each subsequent voice proceeds to enunciate the names of the following composers: A. L. Vivaldi, N. Piccinni, M. Mussorgsky, G. Menotti, G. Rossini, O. Respighi, and G. Puccini.

Subsequently, we encounter a clever juxtaposition of William Byrd, whose surname "Byrd" shares complete homophony with the word "Bird" and is perceived accordingly. The singers' rendition of the text in the style of W. Byrd, with their hands prayerfully folded, is abruptly interrupted by an unexpected

exclamation: "Cage," accompanied by a corresponding change in facial expression. Only moments later does the listener begin to discern the connection between the homophonic "bird" and the metaphorical "cage." Following this, a section of the composition is dedicated to K. Stockhausen, specifically his "Hymns," characterized by theatrical mimicry of the manual tuning of radio receivers, accompanied by the words "This is the BBC." Subsequently, the music transitions into a captivating play on blues notes, reminiscent of the style exemplified in the works of G. Gershwin.

To conclude the composition, the composer returns us once again to J. Bach (Bach, yet again...), seamlessly transitioning into a section reminiscent of the musical style of the 1960s.

This remarkable composition offers entertainment value, not solely due to its theatrical elements but also its utilization of language and meanings (Siuta, 2023, pp. 260-262). It employs an unconventional technique of constructing the text through aberrations of meaning. In the opening segment, featuring the exposition of a brilliant double fugue centred around the words "Johann Sebastian Bach," one of the performers unexpectedly emits a restrained, baroque-style laughter "in the right key" - "Ha-ha-ha-ha-ha...". The other performers react with surprise, yet continue with their challenging vocalizations. Alongside Bach's name, which serves as the focal point for constructing the meaning of the precedent phenomenon, the verbal component solely comprises Italian-language definitions of tempos and performance indications traditionally used by the esteemed polyphonist. It is worth mentioning that this particular technique is employed consistently throughout the entirety of "Masterpiece." Following the aforementioned incident, a series of slightly theatrical "proposals" ensue, replacing the mention of Bach the father with the names of his sons. Each proposal is met with a resounding objection chanted by the ensemble: "No! Johann Sebastian Bach!" The culmination of Bach's section is executed brilliantly, incorporating elements reminiscent of the cadenzas found in Bach's cantatas, culminating in the introduction of a polyphonic tonic chord featuring a Picardy third. However, even in this moment of seriousness, the impression is promptly tempered by the exaggerated phonetic pronunciation of the final "x" in the style of South German speech. As they articulate this phoneme, all members of the ensemble bow with a pronounced sense of politeness, reminiscent of the customs prevalent in the mid-eighteenth century.

The subsequent composer to be introduced is G. F. Handel, a contemporary of Johann Sebastian Bach. The utterance of Handel's name serves as a realization that the framework of the composers' names becomes the core element driving the dramatic narrative of the composition. These names, in essence, act as markers of accessibility within the anthology of the evolution of musical styles offered by P. Drayton. Handel's name is pronounced in a solemn chordal style, evoking a "courtly" atmosphere in English. This choice subtly implies that Handel, despite his German origins, spent the majority of his creative life residing and working in London, even acquiring English citizenship. This segment presents significant technical challenges for the performers of "Masterpiece." Similar to the preceding section, the composer's style is brilliantly emulated, capturing a sense of grandeur and solemnity, adorned with intricate ornamentation and virtuosic flourishes. The concluding cadenza evokes associations with a vocal ensemble adaptation of a trio sonata by G. F. Handel.

The musical portrayal of W. A. Mozart is characterized by an elegant and refined lyrical aria (...molto grazioso...). Within the verbal component of the composition, a new form of precedent name emerges - the title of Mozart's work, specifically the opera "Cosi fan tutte." An astute and attentive listener, particularly one familiar with the concept of "Know Before You Go," will promptly recognize the provocative connotation inherent in the selection of the initial title of this specific Mozart opera: "This is what everyone does." Following this, the composition progresses with titles such as "Le Nozze di Figaro," "Don Giovanni,"

"Idomeneo," and "The Magic Flute" (performed in an expressive and highly emotive Andante). Only thereafter, against the backdrop of music reminiscent of a lyrical aria, does the title "The Abduction from the Seraglio" make its appearance. Certain titles are concluded with the somewhat uninformative clarification "by Mozart" (the singers, hopeful for comprehension, express a subtle shrug accompanied by appropriate facial expressions). The section culminates with a subdued, harmonized chord resonating on the word "Mozart."

The segment titled "L. Beethoven's Music" skillfully emulates the introductory section of the Piano Sonata in C minor, Op. 13, commonly known as the "Pathétique" Sonata (No. 8), itself influenced by the style of a French overture. This emulation is accentuated by the deliberate exaggeration of intonational and metrical figures to their utmost extent. Beethoven's trademark pauses are employed, providing an opportunity for the performers to assume a questioning facial expression as if seeking validation: "Well? Is it acceptable?". The verbal text, consisting of terms such as *sforzando*, *subito piano*, *agitato*, and *appassionato*, is accompanied by expressive hand gestures. As the texture divides into two vocal lines, a melodic line emerges, with the composer's name sung with the native Dutch prefix "van." Some singers may opt to emphasize a more Germanic pronunciation by enunciating "von." Dissenting opinions arise, leading to a confrontation surrounding the strategic use of pauses, which, in a different context, would be perceived as a powerful tool for "Beethovenian" drama. This establishes an environment of playful tension, juxtaposing the inherent nature of the music and creating a humorous effect. Ultimately, consensus is achieved through the harmonious vocalization of a cadenza, expressed through the collective singing of the name "Beethoven." The intermittent inclusion of the name, repeated three times, accompanied by softly whistled phrases (do-re-mi-fa-sol: met with disapproval through facial expressions, and sol-sol-mi-f flat: met with approval!) serves to conclude the "Beethoven" section. Additionally, this transition, coupled with a sudden shift to a piano dynamic, facilitates a modulation in sound, transitioning seamlessly to the following section dedicated to F. Mendelssohn.

The style of F. Mendelssohn is portrayed within the realm of "songs without words," a genre that he is known for. The progression unfolds with an air of seriousness, yet a moment of unexpected sentimentality arises during the mention of "con molto sentimento" (with strong feeling). At this point, one of the singers retrieves a luxurious red silk handkerchief from their pocket and proceeds to demonstratively wipe away tears, adding a touch of theatricality to the performance. The conclusion of the "Mendelssohn" segment is equally intriguing: following another repetition of the phrase "con molto sentimento," the last syllable lingers in the air, while the penultimate syllable "-men-" smoothly transitions from a solo group chant into the continuation of the surname "-delssohn." This final sound marks the culmination of the segment, while the soft resonance of the piano and fading accompaniment pulsations create a seamless transition, connecting this segment to the upcoming section dedicated to Johann Strauss.

The Johann Strauss section commences intriguingly: following the rendition of an introductory phrase reminiscent of the opening to the waltz "Spring Voices," the ensemble transitions into voicing the three-part texture of the waltz accompaniment, accompanied by a subtle dance-like quality, expressed through the German counting *Eins-zwei-drei*. The waltz chant adheres to a harmonic progression of tonic-subdominant-dominant-tonic, highlighting the names and surnames of the Strauss family members: Josef Strauss, Eduard Strauss, Johann Strauss, and even a surprising inclusion, Levi (!) Strauss. Following the enumeration of the waltz compositions, attention shifts to titles such as "Lilac Fairy," "The Gypsy Baron," "The Imperial Waltz," and "The Blue Danube Waltz". Among the Italian terms, only "tempo di valse" remains. Subsequently, the sequence transitions from "Morning Leaves" to the inclusion of "Wiener Blut" featuring the "Wiener Philharmoniker" (Viennese Blood with the Viennese Philharmonic Orchestra), denoted by the

official name of the renowned Vienna ensemble. Subsequently, a sequence of phrases guides us on a thoroughly entertaining descent into significance. The phrases "Viennese blood" and "Viennese schnitzel" alongside the mention of "Liebfraumilch," a popular light wine, are humorously articulated within the context of a Biergarten, playfully alluding to the homophonic pairing with "Tiergarten" (animal garden). The subsequent stage involves the vocalization of the names of conductors renowned for their interpretations of J. Strauss's works with Viennese orchestras. Willi Boskovsky's name is accompanied by the term "esitando" (hesitating), while Herbert von Karajan's name is met with "accelerando" (accelerating), emphasizing the tempo of the performance. The mention of "waltzes and polkas, operettas" signals the onset of the coda. In this final section, the voices divide into two lines, accompanied by prestissimo and dance jazz rhythms. The piece concludes at the swiftest tempo, with the proclamation "Amen to the waltzes of Johann Strauss!"

The final word, gradually losing its pitch clarity, transitions phonically into "a-a-a-a" as it segues into the next section: Claude Debussy. The musical foundation, characterized by parallel consonances, features a compilation of French titles from the composer's renowned works. However, during the climax of the composition, following the mention of the symphonic poem "The Sea," a lengthy list of names from other composers emerges, beginning with the name "Mr. Debussy" and continuing with the introduction of another notable French musician, César Franck.

Wagner's name is recurrent throughout the text. The second episode serves as a focal point, featuring a solo performance that includes an imprecise quotation from "The Ride of the Valkyries" by the low tenor, who steps forward. The soloist's colleagues express a certain apprehension (conveyed through paramusical gestures such as covering their eyes with their hands, looking away with sorrow, and shaking their heads) regarding the extended presentation of this renowned name, which in itself acts as a precedent-setting element.

Following the late romantic section dedicated to "Liszt," the work progresses with the continued vocalization of names of other contemporary composers, as previously mentioned. Subsequently, a brief pause occurs, and the focus shifts to William Byrd, portrayed with prayerfully folded hands, juxtaposed with the concise and unyielding Cage. This is followed by an acknowledgment of K. Stockhausen and subsequent references "from everyone up to Gershwin." The final return to Bach's music is presented in the style of Swing Singers arrangements. This marks the conclusion of the "Masterpiece."

### 3 Conclusions

The presented work exemplifies a unique approach to content construction, primarily relying on the utilization of precedent names. Other expressive elements serve as auxiliary or corrective tools within this framework. The principle of Know Before You Go remains effective, contributing to the formation of a rich range of meanings. Overall, the composition demonstrates exceptional coherence facilitated by the inclusion of "accessibility markers." Even for a listener lacking knowledge in the field of music, unfamiliar with the employed precedent names (composers or work titles), the "Masterpiece" can be adequately perceived. Although such a scenario is practically implausible, these markers, encompassing averaged artistic and stylistic formulas (topics), fundamental intonations, and allusions, complemented by paramusical means such as theatrical gestures, mimetic expressions, and sound imitations of well-known artistic genres, as well as the incorporation of names from artistic or everyday realities, ensure a comprehensive understanding.

By employing this compositional strategy, the author effectively governs the process of meaning formation at various levels, aligning it with their intended artistic outcome. The work establishes a multi-tiered network of precedents, specifically precedent names, which are utilized either collectively or

selectively, yet consistently guide the listener toward the composer's programmed interpretation of meaning. The content can range from profound and extensive to specific aspects of the encompassed meanings. Some individuals possess a general knowledge of the high Baroque style, while others can distinguish between the nuances of Italian, German, and English Baroque music. Certain individuals may be well-versed in the stylistic characteristics of specific baroque composers such as Vivaldi, Bach, and Handel. Regardless, all interpretations remain congruent within the broader field of "musical styles of the Baroque era." The coexistence and juxtaposition of these variants contribute to a harmonious whole, wherein the meanings complement one another without contradiction.

Based on this analysis, it can be argued that music encompasses certain images or structures with predictable behavioural algorithms and evaluation algorithms. These patterns are commonly known among members of a specific cultural community and hold cognitive relevance in terms of both cognitive and emotional aspects. They serve as markers of cultural and artistic identity, to which individuals continuously appeal. The effectiveness of these markers increases as the reproducible meanings become more accessible. Furthermore, these structures are repeatable and often carry specific labels. They are not created anew but rather reproduced, and they consistently evoke a particular invariant perception. By constructing a network of such precedent structures-markers that envelop the entire musical work, the composer exercises maximal control over the process of perception and the formation of meanings following the dramaturgical intent.

This compositional strategy has gained particular relevance in the late twentieth century within the context of extensive globalization and the exponential growth of information. Markers of the precedent type, serving to facilitate the perception of music, have become a prevalent and effective component of composers' creative repertoire.

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**Primary Paper Section: A**

**Secondary Paper Section: AJ, AL**

## PECULIARITIES OF THE FUNCTIONING OF VERBS IN MODERN ARTISTIC DISCOURSE (ON THE MATERIAL OF TEXTS OF UKRAINIAN AND ENGLISH LITERATURE)

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**Abstract:** The objective of this research is to examine the peculiarities of the functioning of verbs in modern artistic discourse, focusing on texts from Ukrainian and English literature. This study aims to establish the manner in which verb forms and their grammatical and stylistic meanings serve as markers of a text's affiliation with the artistic style. The research methodology is complex. The descriptive method, analysis, and synthesis have served to analyze the theoretical material. Moreover, semi-component, structural analysis, and discourse analysis guidelines have been applied. The study hypothesizes that verbs and their forms perform different types of stylistic functions and participate in the formation of the artistic discourse of modern Ukrainian literature.

**Keywords:** artistic discourse; stylistics; semantics; verbs; nonfinite verbs; linguistic and cultural concepts; postmodern literature; postmodern literary texts.

### 1 Introduction

Creating a fiction text in the metamodern world consists of assuming a certain social role and declaring a full ideological position. This can be realized through the pragmatics of the text, and the choice of appropriate stylistic markers, which allows the formation of pictures and images of fiction within the discursive practices (KOPYSTYANSKA, 2003). Such stylistic determinism is based on many characteristics, identity is focused on external characteristics, and their internal correspondence and leads to the creation of a recognizable image (ORTIZ-WALTERS, 2010; FILONENKO, 2011). Morphological units of language are not equally functional in terms of stylistic connotations. The stylistic potential of verbs is determined by categorical meanings, and ways of organization in texts according to their genre-stylistic determination. Verbs name actions through semantic and stylistic nominations. Some works note that the verb is one of the richest stylistic part-of-speech categories. This primarily depends on a large amount of lexical semantics (process, state, movement, action, displacement), as well as the richness and different types of morphological categories, forms, and meanings inherent in the verb (personal forms, infinitive, special forms (adjective, adverb), impersonal words, verb modes, etc.) The stylistic potential of verb forms can also be enriched by the transitivity/intransitivity of the semantic content of verbs. The verb can also expand its stylistic possibilities due to the transformation of syntactic structures, and correlative possibilities (the use of present tense forms to denote the past (future), plural forms in the sense of singular, etc.) In modern linguistics, there is a postulate about the possibilities of expressing a wide range of grammatical and stylistic meanings of type, mode, tense, person, and number, which contributes to the formation of a wide field of functional styles (HREBENYUK, 2022). Such grammatical and stylistic markers make it possible to implement multi-level stylizations and genre contamination within the artistic discourse.

The stability and relative openness of the partitive verb category should also be taken into account. The richness of the variant forms of the verb is based on the stability and normativity of the creation of forms in the system. However, it is also dynamic, active in its development, and tends to constantly evolve under the influence of different styles of speech. Several studies use the term "nonfinite verb" to denote the stylistic possibilities of the verb, and the ability to create vivid lexical and grammatical

meanings. Shades of meanings and narrative dynamics are formed with the use of non-predicative forms, which are actively used in the language of fiction in modern Ukraine.

The specificity of the functioning of verb forms and their grammatical and stylistic meanings, the pragmatics of the stylistic potential of verbs in literary discourse involves some research objectives:

- to determine the main theoretical guidelines on the ways of formation of the literary tradition in the late twentieth and early twenty-first centuries;
- to establish the main positions of verbs functioning in literary discourse;
- to outline the system of thematic classes that use the verb paradigm in the modern artistic discourse of Ukraine.

### 1.1 Literature review

The problem of the role of parts of speech in literary discourse and the formation of stylistic markers of speech has been considered extremely active in recent years. The verb is a part-of-speech category that is multidimensional. Therefore, research in this area covers a wide range of discussed problems. These problems include the measurement of intercultural contexts in the space of other cultures (FRITZ, 2002; ČUHLOVÁ, 2019). Other problems include the forms of representation of historical events and national mental peculiarities in Ukrainian prose of the independence era (HREBENYUK, 2022). Additionally, there is consideration of the peculiarities of Ukrainian prose of the twentieth century in the aspect of analyzing the productivity of secondary verbs in literary discourse (ZAIETS, 2018). Lastly, there is the analysis of grammatical and morphological categories as stylistic components of different types of discourses (CLAIRE, 2021; DODONOVA, 2019).

Modern researches in English philology focus on analyzing morphological and syntactic means of forming the literary text of contemporary English literature (AARTS, MEYER, 2006). Modern researches in English philology focus on analyzing morphological and syntactic means of forming the literary text of contemporary English literature (AARTS, MEYER, 2006). The main purpose of these studies is to illustrate the importance of understanding the meanings of fiction texts correctly and adequately. Therefore, it is essential to study contemporary English literature in terms of theory (terminological problems of verb classification and verb phrases). In addition, it is also important to learn the defining characteristics of verbs, word formation, semantics, and pragmatics of verbs and the combinations they form.

Within the other research field, thanks to the possibilities of modern digital technologies, verb corpora are being created that make it possible to study the evolution of specific verb languages in English and to detail the patterns of verb use in different varieties and genres of English. In addition, modern computing technologies also make it possible to trace the emergence and transformation of various types of verb formation and verb combinations in modern English literature (AARTS, MEYER, 2006).

Furthermore, modern research in English philology also explores the stylistic aspects of the literary text and how verbs contribute to the overall aesthetic effect. Scholars analyze the use of verbs in terms of their register, tone, and narrative style, as well as their impact on the reader's experience and interpretation of the text (SCHNEIDER AND ZIPP, 2013). Another area of focus in contemporary research is the study of verb collocations and idiomatic expressions. Researchers investigate the combinations of verbs with specific nouns, adjectives, or prepositions, examining their semantic and pragmatic properties (COOK AND STEVENSON, 2006). This analysis helps uncover the

underlying conceptual frameworks and cultural associations embedded in verb usage.

The application of corpus linguistics and computational methods has revolutionized the field of English philology. Researchers now utilize large-scale collections of written and spoken texts, known as corpora, to examine the frequency, distribution, and variation of verb forms and constructions (RABADI, 2014). These corpora enable researchers to identify linguistic patterns, track language change over time, and explore language variation across different contexts and genres. Interdisciplinary approaches have gained prominence in modern research. Scholars collaborate with experts from other fields, such as cognitive linguistics, psycholinguistics, and sociolinguistics, to gain insights into the cognitive processes underlying verb comprehension and production, the psychological effects of verb choice, and the sociolinguistic implications of verb usage in different speech communities (GRIES, 2017).

Overall, contemporary research in English philology seeks to deepen our understanding of the morphological, syntactic, semantic, and pragmatic aspects of verbs in contemporary English literature (BARANOVA, 2021). Through theoretical analysis, corpus-based investigations, stylistic examinations, and interdisciplinary collaborations, scholars aim to unravel the intricate workings of verbs and their role in shaping literary texts (JABLONKAI, 2010).

Nowadays, Ukrainian writers and critics are attracting more and more attention. Ukrainian artists, who create new traditions, new narratives, new genres, and stylistic norms, actually participate in the cultural and historical development of Ukraine. The need for a rich and systematic arsenal of the language system is precisely based on the problem of showing modern ideas, moods, desires, and problems as vividly and clearly as possible.

Modern Ukrainian literature as a kind of culture also forms new content and worldview components, which are the subject of some studies (KUSHLYK, 2014; SMEIJERS et al., 2020). Studies of post-socialist realist literature, their ideological and thematic guidelines, and stylistic features are studied by some scholars who consider the correlation between the image of the reader and the author (AHEYEVA, 2003; ANDRUKHOVYCH, 2003); analyze the formation of models in Ukrainian women's prose of the XXI century (BYELOLIPTSEVA, 2021). The role of linguistic means in the formation of intertextuality is being studied separately (DENG et al., 2021; WANG, 2019).

The problematic and thematic range of Ukrainian contemporary literature determines the pragmatics of using the potential of the verb in literary discourse. The available means and stylistic possibilities of different parts of speech construct literary texts, forming their thematic diversity. It is worth paying special attention to the dominant and marginal means of forming the artistic and stylistic image in the text.

Fiction in modern Ukraine is actively functioning, developing, and experimenting with pragmatics, semantics, and grammar of the Ukrainian language, rethinking the ideological and thematic cores of creativity, and creating new ethical and philosophical meanings. In this context, it is worth intensifying the study of the influence of intertextuality and multiculturalism on the formation of artistic discourse. It is worth continuing research work in this direction.

## 2 Methods

Several methodological developments and theoretical studies have been applied to understand the complexity of the results and to answer the questions posed in the research. The study of the principles of functioning of verbs within literary discourse should be based on a comprehensive approach that could take into account the multidimensional nature of fiction from the standpoint of emotional, axiological, national, and normative principles.

In modern studies, the descriptive method is used to consider the existence of stylistic meanings in literary discourse, which concerns the consideration of theoretical positions and the analysis of the corpus of expressive means in a synchronous cut. The main attention in the study will be paid to the linguistic and aesthetic aspects of the verb used in a literary text.

The study presents a structural method for describing a literary work as an integrated functional unit, where artistic and stylistic means correlate, participating in the creation of compositional and ideological unity.

To work with theoretical material, a systematic approach (analysis and synthesis), and deductive and inductive methods of analysis have also been used.

The study of the regularities of functioning of the role of the verb in a literary text requires the use of semantic-component, structural analysis, and stylistic methods. This applies in particular to the principles of functioning of verbs in works of fiction, the ability to express semantic shades by stylistic means.

Also in the work, the method of interdisciplinary research is applied. It was chosen to determine the specifics of the verb functioning, which is manifested at different levels of artistic discourse (history of literature, theory of genres and stylistics, grammar). The possibilities of the interpretative method, which was used for the analysis of artistic images as the text-forming potential of the verb, are also taken into account.

The material of this study is the corpus of literary texts in the XX-XXI centuries of all types and genres in which the stylistic potential of verbs is used: "Recreations" (1992) and poetry by Y. Andrukhoivych, "The Museum of Abandoned Secrets" (2009) by O. Zabuzhko, "Moskalytsya" (2019) by M. Matios, poetry by S. Zhadan (2014–2020), A. Carter (1960–1970), S. Rushdie (1960–1970) and others.

## 3 Results

The verb is active in all styles of language, there are always sentences in use where the verb is in the predicative center. The fictional style uses a variety of verb forms. However, keeping the narrative in focus, the fictional style resorts to the use of past tense forms of verbs. The dynamics of the fictional work, various movements of the plot, and metamorphosis should be presented through the semantics of verb forms. For instance: Unable to stand it, I turned away first, and then I saw something I had never noticed before, as if the lighting had changed: the cathedral was alive, it was inhabited by people - on all the aisles and vaults the same faded, blurred with age women and men were silent, and each had the same alien eyes, swollen with ecclesiastical sadness of omniscience - all those eyes saw me, I stood as if in full view of the crowd, only that that crowd was not a stranger (ZABUZHKO, 2020).

The study of discursive practices in the realization of meanings in contemporary fiction has been investigated by several specialists, who noted that discourse analysis depends on context, as it involves situational knowledge. In an English literary text, meaning cannot be extrapolated simply through knowledge of words and phrases, as communication involves many semantic factors. Therefore, the study of literature and literary discourse should include the analysis of context, additional information, and knowledge that the author is trying to provide (Bloor and Bloor, 2013).

Given the acuteness of the problems posed in the works of modern Ukrainian literature, the need to invent a convincing way of narration, and storytelling through the creation of original, clear, and precise artistic images. Let us define a number of the largest thematic classes that represent artistic discourse with the help of verbs:

The semantic and pragmatic potential of the verb in postmodern literary texts is capable of reflecting the content and internal structure of a linguistic and cultural concept. Moreover, the

relative openness of verb semantics to changes and shifts in semantic contexts makes it possible to reflect the realities of the present in the structure of a literary text. Therefore, it is so important to record such semantic shifts that will determine not only the linguistic and cultural constants of Ukrainian poetry, but will also allow us to build a new space of cultural and artistic perception of reality in Ukraine. For instance, it is worth noting the dynamism of deep emotional shifts in S. Zhadan's recent poems about the war: That it turns out that you don't want to leave her for a long time/that you want to cling to her with your teeth/that this old train station/and the summer empty panorama are enough for love. (ZHADAN, 2020) Tautology and antithesis, which includes the verbs "turns out" and "want/doesn't want," create the effect of a deep and unexpected, but constant discovery of love for the earthly and exile. These are new "old" cultural constants for Ukraine, which get a new sound by filling the verbal plane of the concept in Ukrainian postmodern literature.

1. Extremely productive in terms of provoking the reader's attitude to the characters is focusing on the fate of the characters, and their experience. This effect is achieved through the use of the entire semantic palette of the verb with several archives: procedural (woke up, staggered, blossomed, soak, peek, say); perception of visual phenomena that have occurred or will occur (spit out, blew, die, swallow, shout, look back, examine, glimpse, flash) action, movement (slowly; can't take away, cross); one-time, instantaneous actions, situational (blinked; close your eyes, ask); movement (turn over, moved, moved over, shifted); states (fully concentrate, you know, wanted). For instance: For I will never tear you out, I will never take you away, for all your freedom consists of limits, for you have no burden, for you never listen, for you know what I will say (ZHADAN, 2020).

2. Structuring of characters, and lyrical images of modern Ukrainian literature, which implement the communicative activity in the work, adequacy, and realism of perception of emotions and experience.

Among such formants are verbs that mark an action repeated with a certain frequency, such as echoed, talked, corrected, and changed. A characteristic feature of the works of fiction by Ukrainian authors is the presence of participial verbs, among which the group of inchoative verbs is quite significant (they have the semantics of "to acquire a feature inherent in the derivative adjective, or to become such as determined by the derivative base, to stand out by a certain feature"), for example, paled, faded, dried up, increased, fainted, grew gray, darkened, brightened, raged. For example: In the red dandelions of the street lights / two lonely fragile souls - hand in hand - curled up (ANDRUKHOVYCH, 2020).

These verbs mark qualitative subject-object changes that can be in the audiovisual zone, perceived by touch, or are part of the palette of sensations in the work. Note that a group of perfectives is distinguished in the corpus of such verbs as dries, turn yellow, faded, touched, and fainted. For instance: The blossom on the chestnuts will fade (ANDRUKHOVYCH, 2020)

3. A widespread technique in the analyzed works is to show the very process of character formation and a portrait of the character, external features, and inner world, expressing the desired and undesirable changes that continue in the time-space of artistic discourse. For example: But when he looks suddenly from under the thick black eyebrows - as if he will scratch with a sharp sickle. And just as suddenly clamps the razor of his gaze under his eyelashes, as if that sickle will drive into the ground (MATIOS, 2019).

In the analyzed texts there are also models of verbs of the essive case ("to show a feature named by a derivative adjective"). For example: to soften, towered, flaunted, shrunk, fell ill, gloomed, brightened, blushed, frantic. As the surveyed corpus of verbs in the essive case shows, it is intended to name the unfolding of an unlimited in-time action. The verbs convey qualitative changes in the subject (person) that were carried out under the influence,

or under the action of someone/something. For example: froze, lit, fell in love, to decorate.

The peculiarity of the works of modern literature is the active use of negative verbs with the semantics "to act (to move), to denote a process or to be in a state, the content of which is determined by associative and metaphorical correlation with the reality called the motivational basis": broke, waved, searched, pushed, overtook. These means represent the position of the characters and create a characterization through actions and feelings. For example,- they took poor Severina as a nurse, and finally reassured them that before death they will have someone to work with. (MATIOS, 2019).

A separate group is represented by such verb forms as adjectives, and adverbs that serve to characterize the mental and physical state of the characters of the works and add additional shades of meaning to the semantic component expressed by the verb. For example,- only the eyes, imperturbably dark, swollen with omniscience, gravitated on him, as if not fitting, and it seemed that he was about to turn them on me again (ZABUZHKO, 2020)

4. A significant feature of modern Ukrainian literature, reflecting the process of formation of national consciousness and mental unconscious, is the active use of phraseology, dialectic units, neologisms, and jargonisms, and the formation of idiosyncrasies on this basis. This determines the national and cultural dominance of modern Ukrainian prose. For example,- God knows why; the misfortune befell him; the slag would hit you; she could keep her mouth shut (MATIOS, 2019).

The verb array of the analyzed novels is distinguished by a group of secondary echoic verbs, such as trembling, mumbled, rumbled, tinkles, jingle, rang, gurgled, clapped, hissed, rattled, grunted, and rustled. From the array of derivatives produced, a group of bestial verbs stands out, marking the actions of exclusively representatives of the animal world: shout, hum, rustle, whistle. As we can see, these verbs are derived from interjections.

Language creation is also typical for contemporary British writers. The feminist novels by A. Carter, who worked in the style of magical realism, deserve to be mentioned. The so-called "Martian poetry" by S. Rushdie also became exciting and innovative in the 70s of XX century, as it required active work with language, word forms, and grammatical categories due to the need to convey through the Martian narrator: his perception of people, their morals, behavior, passions, and beliefs.

5. Sometimes the use of several homogeneous verbs, tropes, the core of which is the verb, in the analyzed works becomes a means of creating intrigue and performs a plot-creative function, increasing the dynamics of the work. In addition, such means help to mark additional associations in the reader and activate intertextuality and multicultural element of contemporary artistic discourse. For example: Well, well, destroy letters, erase numbers, burn bridges, just erase, just smash, we had enough this winter (ZHADAN, 2020). Severina gently folded them on her arm, like sleepy children, brought them into the house, laid them on her bed on the stove, roughly covered with hard whips of fresh herbs, and slipped a bowl of milk diluted with valerian porridge (MATIOS, 2019).

The models with the semantics "to do what the form basis is expressed by" are marked by high productivity: to discuss, to forgive, to curse, to demand, to create, and to be surprised.

Contemporary British literature is characterized by feminist literature, dystopia, and fantasy, so the thematic proximity to Ukrainian literature is evident. In addition, the stylistic techniques found in M. Mathias's writings sometimes resonate with novels by V. Woolf, J. Joyce, and D. Richardson.

Modern artistic discourse is part of the Ukrainian worldview, where sensitivity to changes in language and the possibilities of each level of language is felt. The functioning of verbs as



formants of semantics and stylistic meanings in the fictional text of modern Ukrainian literature carries modernity, political, cultural, social, and general worldview messages to society.

The richness and diversity of the verb (synchronic and diachronic aspects) as a category functioning in artistic discourse defines another feature in Ukrainian contemporary literature. Verbs, all their forms, and dimensions are relevant for all levels of artistic discourse, they are represented in all forms and genres of modern Ukrainian literature: in the reflections and monologues of the protagonist; in the dialogues of the characters; in the events and plot lines of the novel.

#### 4 Discussion

The study of linguistic dimensions of artistic discourse has been conducted in many different directions. One of the most promising for Eastern European countries is, in our opinion, active work with artistic style. In contemporary Ukrainian literature, there is a harmonious combination of established forms from the past that are creatively experimented with at all levels of expression using language. We fully agree with the opinion of T. Kots' that the artistic style in the second half of the last century demonstrates the linguistic norms that were formed in the work of authors of the late nineteenth - first half of the twentieth century in Ukrainian literature (KOTS, 2010). That is why it is worth continuing linguistic research, focused mainly on linguistic and aesthetic, linguistic and stylistic paradigms of creativity.

Ukrainian linguistics considers the role of the verb in the formation of different types of discourses. In Ukrainian studies, verb word formation, lexico-grammatical and structural features of this part of speech have been studied (Zaiets, 2018). The productivity of verbs in literary discourse, signs of semantic and structural organization of verbs were revealed, and classification by word-forming potential and stylistic possibilities has been performed. The stylistic aspects of verb categories have been the subject of consideration in some studies (AHEYEVA, 2015), analyzing the stylistic potential of the verb, and secondary models of the verb in different periods of Ukrainian literature. There is a need to record changes in the genre-stylistic palette of fiction, where changes in the use of verb forms, types, and classes can be a marker of changes in literary discourse.

In the study of the implementation of discursive practices by lexical and grammatical means, the types of discourse (advertising and informational) and the features of their implementation by linguistic means are classified (IŠIK, 2023; BAXTER, 2021). The paper indicates that the analysis of the corpus of texts showed the blurring of stylistic norms and genre restrictions in modern rhetorical creativity. The influence of intertextuality and changes in the system of communicative functions lead to changes in the structure of discourse. The level of language is not an exception. The author also gives several recommendations for future authors of texts of different types to take into account the changing possibilities of language units in the construction of texts of different types of discursive practices. In our opinion, these issues are relevant to the literary creativity of Ukraine, since the correct determination of discursive practice and the ability to use the entire arsenal of linguistic units will make it possible to maintain high standards of modern Ukrainian literature. Changes in the formation of stylistic and ideological and thematic figurative priorities are noticeable.

In the studies of post-neoclassical culture and changes in the genre-stylistic palette, the presence of template expressions, texts, and plot decisions that occurred in academic, legal, and artistic types of discourse was considered (ETTEOKON, BENJAMIN, 2022). Wordy expressions and short phrase units were analyzed and it was found that both types of texts correlate and contribute to the formation of features of academic discourse. The study concludes that it is necessary to thoroughly study the heritage; texts created by masters and based on this create our elaborations. In our opinion, the role of language in the imitation and formation of literary traditions is significant, it

is a type of cultural mediation of fiction and ideological and problematic levels of society.

#### 5 Conclusion

In conclusion, both modern Ukrainian and English literature demonstrate a constant reevaluation and adaptation to new ideological and thematic frameworks. The functionality of verbs in fictional texts plays a vital role in constructing the textual landscape and conveying meaning to the readers. The study of verbs in literature encompasses their various forms, structural variations, and semantic potentials, shedding light on their contribution to character portrayal, plot development, and overall narrative dynamics. In modern Ukrainian literature, verbs are utilized to depict characters' experiences, shape their identities, and evoke emotional responses from the readers. The active use of subjunctive verbs, along with adjectival and adverbial verb forms, contributes to character characterization, the formation of national consciousness, and the utilization of dialectical units and phraseology. Homogeneous verbs and tropes centered around verbs serve as tools to create intrigue and enhance the plot, adding dynamism to the narrative. Similarly, in contemporary English literature, verbs play a crucial role in conveying actions, processes, and states. The active usage of subjunctive verbs, along with their metaphorical associations with primary motivating nouns, contributes to character development and adds depth to their actions and emotions. Verbs functioning as adjectives and adverbs aid in describing mental and physical states, while also influencing the formation of national consciousness and exploring the unconscious mind. Furthermore, verb paradigms are studied across different genres and functional styles of the English language, with a focus on understanding the influence of intertextuality on artistic discourse. The analysis of verb usage in both Ukrainian and English literature provides valuable insights into linguistic choices, narrative dynamics, and the thematic and ideological underpinnings of literary works.

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**Primary Paper Section: A****Secondary Paper Section: AI**

## THE DEVELOPMENT OF CRITICAL THINKING AND FACT-CHECKING AS A BASIS FOR SHAPING THE MEDIA CULTURE AND PSYCHOLOGICAL HEALTH OF MODERN YOUTH

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**Abstract:** The second decade of the XXI century is characterized by new approaches in human communication and society's interaction with mass media. Starting from adolescence and childhood, modern people spend a significant part of their time on social networks. These networks have evolved from simple communication and dating services to full-fledged information platforms. In complex social systems, where collective action is a vital life structure, the most crucial foundational principle is coordinating managerial actions and organizational measures with the laws of social self-organization. Creating something significant without understanding how social processes are organized and regulated is impossible. The task of creating a system of media culture in the country's educational system is, first and foremost, about meeting the needs of the learners, the specifics of the situation, and changing trends.

**Keywords:** information space, media culture, media literacy, propaganda, facts, fact-checking.

### 1 Introduction

Information and communication technologies (ICT) have become an integral part of children's and young people's lives. Today, pupils and students quickly navigate the virtual world. They discover their own opportunities to use the latest information and communication technologies, determine their preferences and develop their new needs. As society has evolved into an information one, much of the activity and communication has moved to the virtual space. For this reason, media literacy is becoming essential.

The theoretical part of this study outlines the concept, substantiates its relevance, and identifies the components of the students' media culture formation. The practical part of the study includes an assessment of educational process areas that involve fact-checking and acquiring media competence skills.

The authors have drawn conclusions regarding the issues raised based on the study results. In particular, it has been established that effective integration of media literacy into the educational process contributes to increasing students' ability to resist the manipulative influence of media resources.

#### 1.1 Literature review

Modern information resources, especially the Internet, have a strong and controversial influence on the education of the younger generation. They often become a leading factor in their socialization, spontaneous informing, a means of distance learning, and a source of non-formal education. At the same time, it is necessary to bear in mind the aspect of the vulnerability of children and young people to media content that can harm their well-being and development. The absence of effective self-regulation mechanisms in the information market cannot prevent the influence of low-quality media products, low moral ideals and values, and other socially harmful manifestations of information influence (Aimeur, Amri & Brassard, 2023), (Dwivedi, 2022), (Thornhill-Miller, 2023).

Media literacy is a part of media education that enables information consumers to analyze media messages critically and recognize propaganda, censorship, and one-sidedness. It also

allows them to consciously perceive and critically interpret information data and separate reality from its virtual simulation. This type of literacy will enable them to navigate in the sphere of power relations (among different types of information), to understand the means of controlling public opinion that are used, the reasons for such attempts at control, as well as to understand the aspects that affect the purpose of presenting information (media ownership, their funding model, political preferences of the information resource owners, etc.) (Li et al., 2022), (Chen & Xiao, 2022), (Mourato & Patrício, 2019).

Teachers play an essential role in guiding self-learning and helping young people develop media literacy and critical thinking skills by using resources, tools, and platforms to adapt the format of each lesson to the learning process. Nowadays, media education and media competence training are prevalent. Many organizations and institutions help to implement them so that youth can adequately perceive modern reality and successfully resist possible negative influences (Gasevic, Tsai & Drachler, 2021), (Kleimola & Leppisaari, 2022), (Coman et al., 2020).

The media education system should align with the leading modern trends in education modernization and work to strengthen progressive educational changes synergistically. The principles of organizing media education for children and adolescents are generally divided into the following:

- Socio-psychological principles related to the interaction of subjects and their relationships.
- Psychological and pedagogical principles, which are necessary to substantiate pedagogical influences in the current educational system.

The area of media pedagogical practice is between these two levels of media pedagogical organization. The latter aims to prepare a person for healthy and mutually beneficial interaction with the media space, focused on the student's development. It is based on a personalized and stylistic approach to the person while enriching their worldview and contributing to the efficiency of their life (Babu & Sridevi, 2018), (Sadeghi, 2019), (Cacheiro-Gonzalez et al., 2019), (Odit-Dookhan, 2018).

#### 1.2 Aims

The practical aim of this research is to study and summarize the experience of a methodology for teaching media literacy and developing critical thinking in students. This paper has the following tasks:

- to define the concept of "critical thinking";
- to consider the principles of critical thinking as a key concept of state standards in secondary and higher education;
- to generalize the means and technologies of media culture education as a prerequisite for the mental health of the younger generation.

### 2 Materials and methods

A practical study of the current trends in the formation of fact-checking skills and the basics of the media culture of a person was conducted by assessing the following materials:

- practical recommendations of higher and secondary education institutions for the formation of media literacy;
- textbooks;
- scientific literature on the research topic.

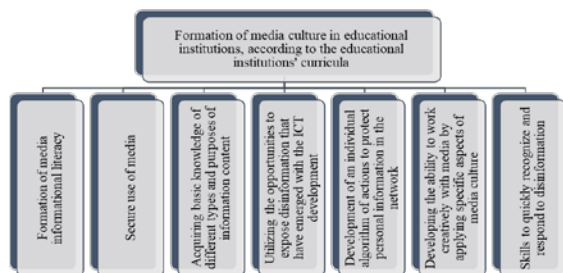
Also, the authors evaluated the curricula of educational institutions and educational NGOs. These include the use of various tools for the formation and development of media

culture of young people as an age group that especially needs critical processing of media space information.

### 3 Results

The peculiarities of shaping young people's media culture can be clarified by highlighting the main provisions of media education implemented in general and higher education institutions (Figure 1).

Figure 1. The directions of media culture formation implemented in secondary and higher education institutions



Source: compiled by the authors based on data from (Zaporozhchenko, 2022)

As Figure 1 shows, media education is provided through the development of media and information literacy, safe media use skills, basic knowledge about different types and purposes of content, and the application of an algorithm of actions to protect personal information online.

Current socio-political and economic global events determine the social need to form a creative personality capable of thinking independently. This person should be able to develop original ideas and make non-standard decisions. At the same time, the experience shows that school and university graduates today do not always know how to solve problems on their own. They lack initiative, creative imagination, and ingenuity. Therefore, the development of critical thinking becomes most relevant in times of intense social change, when it is impossible to act without constant adaptation to the new.

Modern curricula of general education institutions provide for the development of students' critical thinking. It involves the acquisition of certain skills that allow them to interact effectively in the information environment (Figure 2).

Figure 2. The components of pupils' critical thinking that are envisaged by the curricula of secondary educational institutions



Source: compiled by the authors based on data from (Zaporozhchenko, 2022)

The development of critical thinking is currently an essential task in school education. Students' formal acceptance of ready-made material does not allow them to acquire critical thinking skills and, therefore, quality knowledge in adulthood.

Critical thinking implies a comprehensive scientific evaluation of the positive and negative properties of phenomena in reality. Some scholars define critical thinking as scientific thinking, the essence of which lies in making well-thought-out and weighed decisions regarding the reliability of statements: whether we should accept it, reject it, or postpone it, as well as the level of trust with which we do it. Such thinking is characterized by controllability, reasonableness, and purposefulness. In other words, critical thinking is used to solve problems, draw conclusions, and make estimates and decisions.

The development of critical thinking is one of the value orientations proclaimed by state standards of secondary education. Critical thinking is an interdisciplinary skill that is developed during the study of subjects such as language and literature, mathematics and computer science, and others. Critical thinking is a key competency in education, and its development is the foundation of the educational process.

Media education is a highly relevant component of the educational process. There is an urgent social need for media literacy among young people in today's information society. An integral part of teachers' professional competence includes:

- the formation of teachers' awareness of the psychological and pedagogical peculiarities of youth socialization in the modern complex media space;
- the development of personal media culture of children of different ages,
- the cultivation of fact-checking skills.

Media education is a demand of the modern world. It opens up wide opportunities for the development of young people, their intellectual and creative potential, and their independent thinking skills. Media pedagogy develops the ability to navigate modern information flows, increases the media competence of pupils and students, and changes their position in perceiving various media texts - from passive perception to critical analysis of obtained information.

Some important competencies of a modern teacher include:

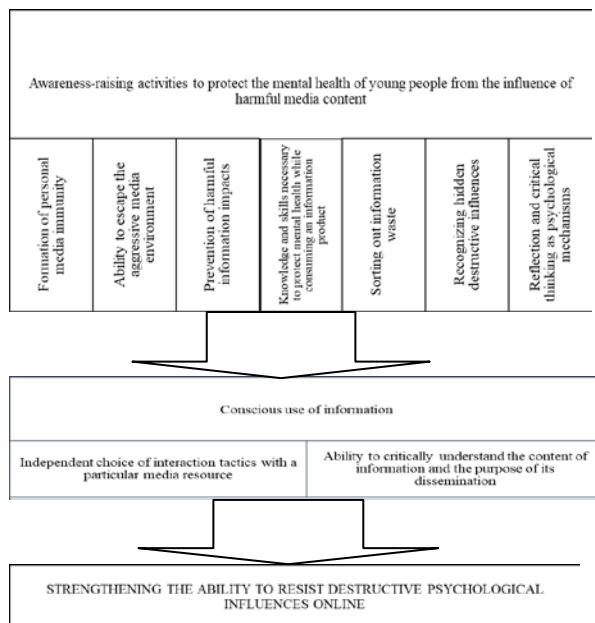
- the ability to teach media immunity skills;
- to promote the effective acquisition by students of the ability to abstract from the aggressive media environment and harmful information influences;
- to develop the necessary knowledge to protect mental health when consuming an information product;
- to filter information flows;
- to recognize hidden destructive influences in the school and university environment.

At the same time, the following skills are crucial:

- to analyze information sources and pay attention to the experts' opinions;
- to distinguish between the informational essence of content, falsifications, and information aggression in the media and social networks;
- to see the danger not only in distorted information but also in a diffused panic.

In the context of this research, it is worth highlighting the work areas of educational institutions and NGOs that have been conducting awareness-raising activities among young people over the past 10 years to protect their mental health from the effects of harmful media content (Figure 3).

Figure 3. A system of directions for awareness-raising activities of educational institutions and NGOs to protect the mental health of young people from the influence of harmful media content



Source: compiled by the authors based on data from (Fletcher, Cornia, Graves & Nielsen, 2018)

As Figure 3 shows, developing the ability to resist destructive influences online requires a set of awareness-raising activities aimed at the conscious use of information by young people. At the same time, it is essential to independently choose the tactics of interaction with a particular media resource and to acquire the skills of critical understanding of information content and the purpose of its dissemination. As a result, young people develop the ability to resist destructive online influences.

During the educational process, education seekers are introduced to the basic rules of digital security. They develop the ability to maintain the confidentiality of their personal data, behave safely online, develop basic academic integrity skills, and train in digital (especially Info-media), psychological, and ethical competencies.

Today, the Internet plays a vital role in spreading knowledge. It provides both scientific and false literature, as well as twisted information called "fake news." The reasons for focusing attention on them lie in the design of online content, which is based on the desire for quick recognition.

Fakes are often spread by people who do not know that the information is of poor quality. At the same time, fakes are created to manipulate society and consciously spread disinformation.

Nowadays, it is extremely important to educate young people as critical thinkers in the information society. For this reason, educational institutions should be properly equipped with modern computer hardware necessary for ICT development, which is the key to preparing young people for the future.

#### 4 Discussion

The evolutionary progress of humanity towards digitalization and virtualization of life, accelerated by various causes of forced isolation (pandemics, disasters, and wars), requires the study of virtual group interaction as one of the modern media education vectors. At the same time, the media space, with its multi-vector purpose and means of interpersonal communication, creates new opportunities for abuses by information providers (Burac et al., 2019), (Suresh, Priya & Gayathri, 2018), (Tran & Kuula, 2023).

Those who can think critically have their own opinions and can reason them out. They recognize the possibility of different views on a problem, relate the issue under discussion to their own practical experience, can listen to the other's opinion, and

remain discreet and correct in disagreements. Thus, a person capable of critical thinking is a full-fledged member of society. Such a person will not only survive in the modern social environment but will also be tolerant of others. Moreover, this person will ensure the progressive development of humanity, recognizing one's rights and opportunities (Beerkens, 2018), (Cano, Murray & Kourouklis, 2022), (Yanqing, Guangming & Edwards, 2020).

Information and Communication Technologies (ICT) play an essential role in developing the critical thinking skills of education seekers. They provide opportunities to develop students' and learners' thinking in the media environment. The media space helps to create well-informed citizens and critically-thinking readers who can transform information into knowledge. The high level of students' media culture plays a significant role in this, as it increases the number of information sources and prevents them from trusting only groundless facts. The media culture also helps students to compare different interpretations of facts, critically evaluate them, and avoid being manipulated (Cui, French & O'Leary, 2021), (Germain-Alamartine et al., 2021), (Hazen et al., 2018).

According to the scientific literature analysis on this topic, significant consumption of media content for professional and personal development makes it necessary to learn how to adequately and critically perceive information using media products. The curricula of educational institutions and many public educational projects study the content, components, and mechanisms of media culture, the phenomenon of media competence, and the psychological basis for its development. The practical significance of mastering media competence skills contributes to the successful orientation of young people in the modern information space and the development of their qualities as active competitive professionals (Hou et al., 2022), (Moscardini, Strachan & Vlasova, 2022).

Teachers' organization of tasks to develop critical thinking and fact-checking skills, as well as students' quality performance, will ensure the development of abilities related to critical information analysis. This will be a step towards the development of better critical thinking in the future. In high school, the work with information sources and the acquisition of critical analysis experience becomes more complicated. Therefore, the knowledge of tools and technologies for critical thinking formation as a category of pedagogy and a cognitive method is mandatory at any stage of the educational process (Senoner, Netland & Feuerriegel, 2022), (Wright & Wernecke, 2020).

#### 5 Conclusions

One of the main competencies of the educational process subjects is the ability to "think critically and systematically". This is reflected in the definition of the specific features of phenomena, events, ideas, and their interrelationships and the following abilities:

- to analyze and evaluate evidence and the weight of arguments in judgments,
- to consider opposing opinions and counterarguments,
- to distinguish between facts and their interpretation,
- to identify attempts to manipulate data,
- to use various resources and methods to assess the quality of evidence, sources, and information reliability.

The study analyzed the formation of students' critical thinking. The authors found that critical thinking is an essential skill that needs to be developed in secondary and university education.

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**Primary Paper Section: A**

**Secondary Paper Section: AM, AN, AJ**

## THE ROLE OF INTERNET DISCOURSE IN THE DEVELOPMENT OF MODERN LINGUISTICS AND ITS INFLUENCE ON SCIENTIFIC RESEARCH

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**Abstract:** The article focuses on reviewing and analyzing existing research that explores the influence of Internet discourse on contemporary linguistics, as well as examining the primary directions and potential advancements in this field. The article aims to ascertain how Internet discourse and online resources contribute to the formulation of new linguistic theories, the practices of linguistic studies, and their significance in the context of university teaching. The research methodology employed is comprehensive, incorporating descriptive, analytical, and synthetic approaches, alongside survey and observation techniques. The study's hypothesis posits that the Internet exerts a substantial impact on modern society, leading to notable changes in linguistic theories both conceptually and theoretically, as well as affecting research and analysis methodologies. The outcomes of the study establish the principal trajectories of linguistic development in the theory and practice of Internet discourse research, while also highlighting the influence of Internet discourses on linguistics and language resources within their linguistic manifestations. In future investigations, it would be valuable to continue examining the progress of Internet linguistics in contemporary science, both from practical perspectives concerning teaching methodologies and from the standpoint of observing changes in language, culture, and traditions influenced by the virtual reality of the Internet.

**Keywords:** digitalization, electronic communication, electronic discourse, Internet linguistics.

### 1 Introduction

In contemporary linguistics, attitudes toward the effects of Internet discourse can be broadly categorized into two main positions. The first position revolves around the interest and concern regarding the (positive/negative) impact of Internet discourse on language, speech, and communication processes. Scholars and researchers within this perspective focus on understanding how Internet discourse influences these linguistic aspects. The second position involves analyzing and closely observing the changes that take place in language and speech due to the influence of Internet discourse. Scholars adopting this viewpoint pay particular attention to the linguistic transformations resulting from the pervasive use of the Internet and its associated discourses.

The advent of technological advancements has precipitated significant changes, giving rise to the reality of Internet discourse characterized by communicative forces and the vast social potential of the Internet. In the current state of research on discursive practices, linguistics is intrinsically intertwined with other scientific disciplines. It notably draws upon the insights of sociology, political science, economics, and philosophy, leveraging their tools and methodologies. Moreover, linguistics encompasses inquiries into manipulation, learning, privacy, and security issues, which further contribute to its multifaceted approach. In the domain of modern linguistics, scientific investigations are propelled by specific questions that address the complex interplay between language and the Internet's diverse aspects. An emerging subfield within linguistics, as identified by AbuSa'aleek (2015), delves into the languages that have experienced the most significant influence from the Internet, leading to the formation of extensive corpora of Internet-related vocabulary.

It is well-established that language undergoes changes stemming not only from natural evolution but also due to technological, political, and social shifts. As a dynamic system, the advent of

the Internet and the rapid progress of electronic communication engender diverse alterations in language. The emergence of novel discursive practices necessitates fresh linguistic expressions to accommodate these developments. In studies conducted by Kitade (2000), it is asserted that new technologies create opportunities for linguistic and pedagogical exploration. Netspeak, in particular, stands out as a promising subject for scientific investigation, presenting new prospects for expanding the system of linguistic units due to the introduction of novel means of communication (Aronin, L., Singleton, D., 2018; Lin, D., Hsieh, C., 2001). In this manner, one of the pioneering investigations into Internet language emerged, introducing the term "Internet linguistics" to designate this new domain of linguistic research. The exploration of Internet linguistics encompasses a comparative analysis of discursive practices within electronic discourse. It involves examining the variations in electronic resources' existence and the means through which the lexical and grammatical layers of language expand. Overall, this field of study explores the broadening of linguistic possibilities and the transformative impact on electronic communications.

Within the realm of Internet linguistics, a distinct area of research involves examining the patterns underlying the emergence and evolution of new speech varieties. This encompasses the study of novel forms of communication that have arisen due to the influence of the Internet, along with the creation of innovative verbal means for expression (Sokol, M., 2018). Furthermore, a notable focus of investigation lies in the development of a specialized functional style specifically associated with the utilization of e-mail as a communication medium.

Internet linguistics examines electronic communication as a novel form of interaction utilizing linguistic units tailored for effective functioning within the domain of Internet discourse. From a linguistic perspective, electronic communication plays a crucial role as a significant means of expression. In the contemporary world, the Internet permeates all aspects of human life, encompassing education, study, and various spheres of functioning. The acquisition of languages conducive to engaging in Internet discourse has become an integral aspect of modern reality, as verbal languages are essential in this context. Notably, English has emerged as one of the most prevalent natural languages for communication in research and practice. Its widespread usage can be attributed to its active adoption by innovative globalized media, businesses, and international trade (Bruin, A. et al., 2014).

The emergence and evolution of Internet discourse have played a significant role in elevating the significance of English as a language of international communication. Consequently, this has led to changes in the types and forms of language utilization. Such transformative processes necessitate examination from various linguistic perspectives, encompassing sociolinguistics, Internet linguistics, pragmatics, communication theory, and related fields. In light of these developments, further research is essential to explore the transformation of the novel language of Internet communication, particularly the burgeoning topic of e-discourse.

### 2 Aims

The primary objective of this study is to investigate the impact of Internet discourse on contemporary linguistics, with a particular focus on examining how Internet resources contribute to the development and substance of novel linguistic theories and practices in the field of linguistic studies. Additionally, the study aims to assess the significance and practical implications of the achievements within Internet linguistics, particularly in the context of university teaching practices.



The research presented in this study encompasses the resolution of several key tasks:

- Identifying the principal areas of research within Internet linguistics.
- Defining the parameters that dictate the nature and orientation of studying linguistic units within Internet discourse.
- Assessing respondents' perceptions regarding the relevance, prospects, and scientific and practical significance of Internet linguistics.

### 3 Materials and Methods

The experimental group for this study consisted of 89 students and 4 teachers from H.S. Skovoroda Kharkiv National Pedagogical University. All participants belonged to the Faculty of Foreign Philology, specializing in 035 Philology with a focus on English, German, or French Language and Literature. Specifically, the participants were 2nd-year students at the first (bachelor's) level of higher education, and the teachers involved in the course voluntarily consented to partake in the experiment. Data collection for the study occurred over the period from September 2022 to December 2023, corresponding to the 1st semester of the academic year.

All participants in the experiment were classified into two distinct groups, denoted as the experimental groups (EG1, EG2). All students enrolled in linguistics courses and related courses covering foreign language teaching methods underwent orientation in both theoretical and practical aspects of utilizing linguistic tools within online discourse. Throughout the experiment, both groups were subjected to regular surveys and assessments at various stages of the study.

The presented study adopts a comprehensive approach, employing various statistical methods alongside descriptive techniques, analysis, and synthesis. The descriptive method is primarily utilized to present the theoretical foundation of the research.

To gather data, the principal tools employed in this study are questionnaires, surveys, and observations. These methods are instrumental in addressing the research questions and acquiring relevant insights.

#### *The study encompassed three distinct stages.*

During the first stage, organizational tasks were undertaken. This involved arranging and preparing training and methodological materials, as well as developing a comprehensive questionnaire. Consultations were conducted with the institution's staff to ensure a coherent survey process, including the selection of student groups willing to participate in the pilot study. Both the respondents and the institution's administration voluntarily agreed to take part in the research experiment. The research team ensured the confidentiality of the participants and committed to maintaining the information obtained solely within the confines of the data collected during the study.

Additionally, at stage 1, the primary theoretical directions and principles characterizing Internet discourse in linguistics were identified.

During the second stage of the study, a comprehensive survey was conducted among students to evaluate their engagement with Internet linguistics topics and related concerns. Furthermore, thematic priorities were discussed in collaboration with both teachers and students, with a focus on their practical utilization and applicability in research. This stage of the study involved the application of observation and survey methods to gather data.

Subsequently, in the third and final stage, a conclusive assessment of the participants' priorities regarding the study of

Internet linguistics was carried out. During this stage, the collected data were meticulously processed to derive meaningful insights applicable to address the research questions at hand.

The research encountered certain challenges and potential risks that merit consideration. Firstly, the experiment's limited time frame presented an obstacle to conducting an extensive qualitative investigation. Given more time, a more in-depth exploration of the subject matter could have been achieved. Secondly, an additional challenge arose from the inability to ascertain the specific reasons behind the respondents' assessments, which may have restricted a comprehensive understanding of their perspectives.

### 4 Literature review

The theory and practice of contemporary linguistic knowledge are intrinsically intertwined with research in the domain of Internet discourse. This realm encompasses a repertoire of tools and methodologies that facilitate the dynamic development of students' communicative competence. In this context, researchers explore innovative approaches to foreign language education, leveraging the vast potential offered by Internet discourse as a means to enhance language learning (Kiki-Papadakis, K. & Chaimala, F., 2016; Sim, M., Pop, A., 2014).

The studies conducted by Soria (2016) and Fernández-Alonso (2022) highlight electronic communication as a crucial medium for verbal interaction, spanning all aspects of human life, education, and professional endeavors. Within this context, a substantial body of research examines the role of English as a Lingua Franca (Ho, Ya-Yu, 2020), exploring how the globalization of the English language is influenced by its active "digitalization" within the realm of the Internet and computer technology (Leong, L., Ahmadi, S., 2016). These researchers posit the emergence of a novel form of language, functioning within a distinct type of discourse termed "e-discourse." In recent years, there has been a notable surge in interest among students and practicing teachers regarding the linguistic aspects of Internet discourse, alongside an examination of the distinctive language patterns among young individuals in the context of electronic communication (Jonge & Kemp, 2010; Lyddy et al., 2014). These research interests have been intertwined with the challenges associated with integrating Internet reality into modern life and its impact on foreign language teaching methods. In particular, these challenges pertain to the need for enhancing the quality of foreign language (English) instruction at the university level to foster effective communication skills among students (Galloway, Numajiri, 2020; Erazo et al., 2019). Furthermore, there remains a prevailing issue regarding the improvement and advancement of technological proficiency in university education for teaching and learning purposes (Fujita et al., 2017; Bayram-Jacobs, 2015).

A research investigation was undertaken to classify linguistic features observed in online discourse, utilizing texts derived from various digital platforms, including chats, web discussions, e-mails, and SMS. The study was centered around the premise that electronic discourse is inherently grounded in linguistic dimensions (Sun, Hong-mei, 2010). The researcher deduces that proficiency in navigating the rules of communication on the Internet empowers users to efficiently utilize resources, effectively communicate their intentions, and achieve desired outcomes.

A study investigating discourse structures in SMS communication among American college students substantiated the researcher's hypothesis, demonstrating that users of SMS communication and popular media perceive online platforms as opportunities to emulate informal verbal communication (Leotta & Dolidze, 2022). The research paper also highlights that SMS messages authored by women for women exhibit a stylistic resemblance to traditional written language.

The participants' perspectives concerning the communicative methodology of teaching English using information technologies

were extensively examined (Lin, Hsieh, 2001; Synorub, Medynska, 2019). During this examination, both the strengths and weaknesses of this approach were identified, leading to the determination of potential avenues for further development.

Given the aforementioned investigations, it becomes evident that Internet discourse constitutes a broad and fertile domain for modern linguistics. The continuous coverage and analysis of the swift changes and transformative junctures that natural languages undergo due to the influence of e-discourse are ongoing and of paramount importance in this field of research.

## 5 Results

During the research (stage I), the research team successfully identified the primary research issues concerning the examination of Internet discourse as a subject of contemporary linguistic investigation (Figure 1). The field of modern linguistics encompasses several principal directions of study.

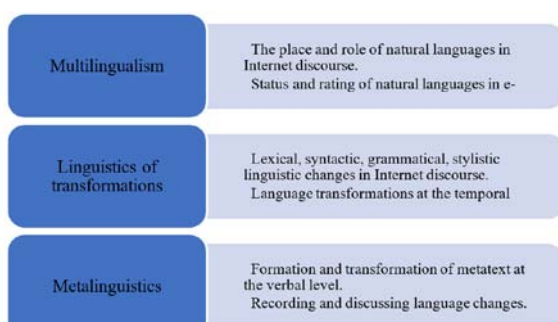


Figure 1. The primary directions of research in Internet linguistics

Source: Authors

In addition to the mainstream areas of Internet linguistics, several newly emerging and promising positions have surfaced, that bear relevance to linguistics itself and necessitate the utilization of its research apparatus and methodologies. A notable example of such a position is the study of conversation discourse, where particular emphasis is placed on scrutinizing alterations in patterns of social inclusion/exclusion and the diverse modalities of implementing communicative practices within Internet discourses.

Several crucial parameters play a significant role in determining the nature and direction of studying linguistic units within Internet discourse. These parameters include:

1. Format and type of communication channel.
2. Temporal context (synchronicity/asynchronicity in approaches).
3. Characteristics of speakers and audiences (gender, age, social status, nationality).
4. Type of discursive practice and thematic engagement (e.g., medicine, art, literature, business).
5. The duration and nature of interactions among participants within Internet discourse (long-term, short-term,

Table 1: The use of the main parameters of research in the domain of Internet linguistics, % (developed by the authors).

Main parameters	Educators	EG1	EG2
Format and type of communication channel	50	30	30
Temporal context (synchronicity/asynchronicity in approaches)			
Parameters of speakers and audiences (gender, age, social status, nationality)	80	67	52
Type of discursive practice, thematic engagement (medicine, art, literature, business, etc.)	81	50	56
Duration and type of interaction between participants of the Internet discourse (long-term, short-term, interpersonal, business communication, communication in a subculture)	72	30	34
The nature of the communicants' attitude to communication in the Internet discourse (pessimists, optimists, critics, creatives, etc.)	49	61	68

The analysis reveals that teachers' responses exhibit a notably higher degree of attention towards Internet linguistics as a contemporary linguistic field, with a total of 66.4% positive

interpersonal, business communication, communication within a subculture).

6. The communicants' attitudes towards communication within Internet discourse, encompass varying perspectives such as pessimists, optimists, critics, creatives, etc.

The perpetual evolution of Internet discourse is substantiated through the examination of various contextual factors, corpora, records, and surveys. The ongoing transformation of Internet discourse introduces novel horizons within the linguistic scientific paradigm. As a dynamic and ever-changing system, language continuously evolves. Linguistic units within online discourse undergo substantial influence and adaptation to accommodate the communication needs of users. Consequently, there exists a discernible trend towards adapting natural languages to embrace advanced technological developments, which manifest across all spheres of human life.

During the 2nd stage, a survey was administered to students to evaluate their perceptions regarding the practical application of Internet linguistics topics and issues, as well as the significance of theoretical knowledge in this domain.

Building upon the classification and established developmental directions of Internet linguistics (Figure 2) from stage 1, a questionnaire was developed for students and teachers specializing in linguistic disciplines. These questionnaires underwent testing by a control group, leading to necessary adjustments and corrections.

The main directions of Internet linguistics

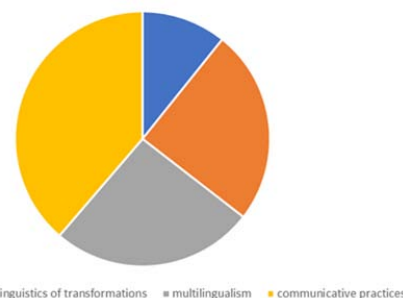


Figure 2. The main directions of Internet linguistics.

Source: Authors

Consequently, among the students of linguistics, the investigation into communicative principles adopted in Internet discourse garnered the highest level of interest (36 students), whereas the domain of metalinguistics was deemed less popular (10 individuals).

During this stage, a survey was also carried out to assess the degree of familiarity and relevance of various types and areas of language unit study within Internet discourse. All respondents were prompted to identify the most pertinent topics and aspects they apply in their studies, research, and practical endeavors. The ensuing results are presented as percentages (Table 1).

ratings. Such outcomes are reasonably anticipated, given that academic staff are expected to continually enhance their expertise and methodological competencies as educators.

Moreover, students' interest in exploring and employing Internet linguistics resources is also relatively substantial, with 47.6% in the EG1 and 48% in the EG2.

During the final stage, data collection and analysis were conducted. Based on the findings, a series of recommendations were formulated concerning the incorporation of theoretical and practical topics in Internet linguistics within linguistics courses and language teaching methodologies. These recommendations were subsequently disseminated, published, and made available in the university's repository for wider accessibility.

The language system, akin to a dynamic living organism, continuously undergoes change, evolution, and adaptation to meet the communication needs of speakers. Natural languages demonstrate the ability to keep pace with the latest technological advancements, and one of their fundamental functions is to facilitate effective communication in both personal and professional realms. The emergence of new communication transformations is intrinsically linked to the globalization of space, wherein artificial languages have seamlessly integrated with natural languages, culminating in the creation of Internet discourse. The concept of globalization strives to enhance the quality of life and foster the continuous exchange of novel discoveries, skills, and knowledge. Within the domain of Internet discourse, a vital function is operational cooperation, allowing for efficient collaboration among individuals.

## 6 Discussion

The significance of incorporating the advancements of modern linguistics into the study and engagement with Internet discourse has been emphasized by several researchers (Gilakjani, 2016; Ampatuan & San Jose, 2016). In practice, embracing active learning activities in language education that involve high technologies and acquainting learners with the fundamental principles of contemporary linguistics significantly contributes to the successful professional development of philologists.

The present article delves into the investigation of the principles governing the nomination of categories within English electronic discourse (AbuSa'aleek, A., 2015). The study primarily highlights the tendency towards concise communication through electronic means and the universal nature of such communication. An in-depth analysis of diverse forms of communication in electronic discourse reveals that 25% of the overall corpus of research material constitutes specific units of Internet discourse practices. Each documented practice within the study is comprehensible, avoiding the use of mere abbreviated "codes". The most significant reductions observed accounted for merely 16.21% (193 instances) of the total collection of 1190 texts. The investigation and analysis of language units in Internet discourse represent a pertinent, dynamic, and highly informative research process, unveiling the dynamics of transformations and the nature of change. The results of our study demonstrate promising prospects for research of this nature, with 66.4% of teachers identifying the research positions of Internet linguistics as relevant, boasting practical significance and theoretical significance.

Internet discourse has been acknowledged as a catalyst for change and evolution in natural languages, prompting investigations into language adaptation patterns and discourse practices of a novel type [20]. Researchers have observed numerous lexical changes within Internet discourse, encompassing abbreviations, tautologies, novel meanings attributed to existing words, emerging linguistic structures, and trending topics. Furthermore, amidst the ongoing COVID-19 pandemic, there has been an evident surge in health-related discussions. These dynamic changes and their global reach, representing an ongoing process, serve as indicators of the functionality of language units in Internet discourse. The significance of further exploration in the realms of stylistics and metalinguistics is emphasized. Our study revealed that respondents exhibited the greatest research and practical interest

in communicative approaches within Internet linguistics (39% of respondents) and multilingualism (26% of respondents).

## 7 Conclusion

The research team garnered several results during the experiment, indicating that respondents, students, and teachers evaluated Internet linguistics as a promising field within modern linguistics, deserving attention in both theoretical significance and practical value.

The primary areas of linguistic research pertaining to Internet discourse encompass metalinguistics, communication practices, linguistics of transformations, and multilingualism.

During the study, it was determined that 66.4% of teachers and 47.5% of students held a positive disposition towards engaging with contemporary linguistic theories related to the functioning of Internet discourse, further endorsing their practical application.

It is imperative to emphasize the necessity of consistently acquainting students with the latest developments in modern linguistics, while continuously raising their awareness of various categories and types of discourse.

In the future, it would be worthwhile to investigate the transformations that natural language systems undergo under the influence of online discourse and persistently address the gaps in research concerning discursive practices of this nature. Moreover, research endeavors on the application of Internet discourse in education can be further extended by broadening the pool of participating students and fostering collaboration between multiple universities.

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**Primary Paper Section: A**

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## ACCOUNTING AS A BASIS FOR INFORMATION SUPPORT OF ENTERPRISE TAXATION

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**Abstract:** The experience of modern business theory and practice proves that an effective organization of accounting at an enterprise nowadays is impossible without applying information technologies and their effective use, which is becoming increasingly important in the process of optimizing companies' taxation. The purpose of the academic paper is to highlight modern tendencies in the development of accounting as an important informational component of business entities' taxation. **Methodology.** In the course of the research, analytical and bibliographic methods were used to study the scientific literature on developing accounting in terms of its purpose for the taxation of business entities. At the same time, induction, deduction, analysis, synthesis of information, system-structural, comparative, logical-linguistic methods, abstraction, and idealization were applied to study and process data. By the way, the research authors also conducted a questionnaire in online mode to practically clarify the most significant issues related to accounting and tax accounting at the enterprise. **Results.** Based on the research results, the main and most important theoretical aspects of issues related to accounting were established from the perspective of its role in the information provision of tax accounting at the enterprise. Along with this, the standpoints of scientists and accountants of companies regarding the key aspects of this issue were also investigated.

**Keywords:** accounting, tax accounting, tax information, indicators of financial and economic activity, information technologies, preparation of analytical reports.

### 1 Introduction

Currently, thanks to the effective use of information technology and computerization in business activities, enterprises are able to use electronic accounting and document management, as well as effectively organize the process of purchasing materials and raw materials. They can get access to certain banking services, transfer money, submit tax and statistical reports, analyze certain economic indicators of the company's activities, if necessary, in order to develop a forecast for the next periods of activity and maintain tax records.

The theoretical part of the present research substantiates the major theoretical aspects of accounting in terms of information support of the taxation process.

The practical part of the research includes an analysis of the types of information technologies requiring the most attention in the process of modernizing the accounting system and the identification of sources of information support for enterprise taxation which contain the most shortcomings and require the latest methodological developments for their optimization. By the way, it also identifies the list of key opportunities for automation of accounting processes that can positively affect the information support of tax accounting, as well as the most important factors determining the type of classification of IT accounting at the enterprise.

Based on the research results, the conclusions were made on the issues related to the research topic. It is obvious that business automation systems, management information technologies, and information bases for generating and processing highly specialized information are the types of information technologies that should receive the greatest attention in the process of modernizing the accounting system nowadays. At the same time, documentation and calculation are the sources of information assistance for enterprise taxes that have the most shortcomings and require the most recent methodological advancements for their optimization. The survey revealed that the most important opportunities for automating accounting processes that can positively affect the information support of tax accounting are

obtaining operational economic information, managing production and business processes, and preparing analytical reports. Based on the research results, it was found that the factors determining the type of classification and the quality of IT accounting at an enterprise are the degree of coverage of accounting and administrative tasks, the class of implemented technological operations, and the type of user interface.

### 2 Literature Review

Information support of the company's activities should be considered as organized data on economic phenomena and processes occurring at the enterprise, a set of specific indicators and knowledge about them.

Currently, accounting is the most important source of information about the economic activities of an enterprise. At the same time, an enterprise's accounting system, in turn, cannot exist without proper information support (Kroon, Do Céu Alves, Martins, 2021), (Akcigit et al., 2022).

In the accounting process, the object of study is primary or intermediate information that is subject to processing into practically relevant information. The feature of the accounting process, including the tax and accounting process, is that the objects of its work are formed in the technological process itself as primary documents, and information carriers. Thus, the accounting process cannot exist without information. Consequently, information support can be viewed as a set of input data, a database system, their processing and obtaining the necessary information for accounting (Juga, Juntunen, Paananen, 2018), (Balima, Kilama, Tapsoba, 2020).

Hence, it can be concluded that proper information support of an enterprise is possible only if the accounting system has formed truthful and sufficient fields of information that can be used to assess the enterprise's financial results. It is possible to create these data fields only if the company's accounting is properly organized (Gechert, Heimberger, 2022), (Shevlin, Shivakumar, Urcan, 2019).

The purpose of organizing accounting is to improve and rationalize the processing of information, the distribution of work between employees of the accounting department and the scientific organization of labor (He et al., 2020).

In practical terms, organizing accounting is a set of measures taken by the owner of the enterprise or an authorized body aimed at ensuring the registration of business facts and their generalization in order to obtain the information necessary for reporting, taxation and management decision-making (Steinmüller, Thuncke, Wamser, 2019), (Zigraiova et al., 2020).

In addition, organizing accounting can be considered as a scientifically based set of conditions under which the most economical and rational is collecting, processing and storage of accounting information in order to promptly control the intended use of the company's property and provide users with reliable financial statements (Andrews, Kasy, 2019), (Fabian, Milionis, 2019).

In a broad sense, tax accounting refers to almost any accounting that is maintained for the purpose of taxation. The importance of tax accounting lies in its extension to the processes of determining the composition of the taxpayer's property, business transactions and their results. At the same time, the ultimate goal of this process is to determine the indicators necessary to calculate the amount of tax payable to the budget (Heimberger, 2020), (Wen, Yu, Chen, 2020).

### 3 Aims

The purpose of the research is to determine the standpoints of scientists and accountants of companies regarding the features of

accounting as an important informational component of the taxation of business entities.

#### 4 Materials and Methods

A practical study of modern tendencies in using accounting information for information support of tax accounting at an enterprise was conducted by interviewing 319 scientists and 268 accountants in Sumy, Rivne, Zhytomyr, Khmelnytsky and Kyiv regions of Ukraine. The research was conducted using the Survio service.

#### 5 Results

According to the survey participants' standpoints, currently, in the context of the increased need for efficient accounting as an important condition for the effective operation of an enterprise, particular types of information technologies at enterprises

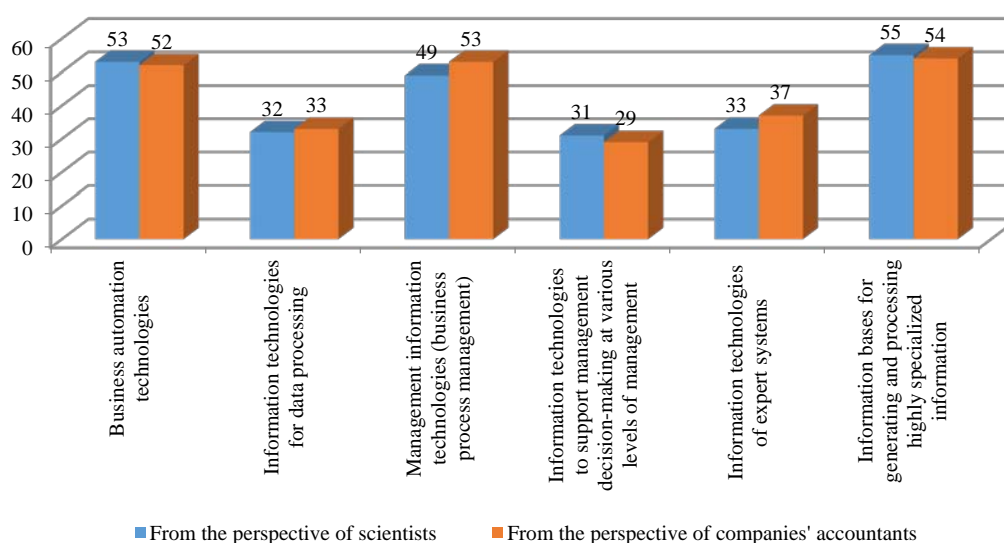
require the greatest attention in the process of modernizing the accounting system (Figure 1).

As shown in Figure 1, business automation technologies, management information technologies and information bases for generating and processing highly specialized information require the most attention nowadays in the process of optimizing the company's accounting.

In the course of the survey, the respondents identified the sources of information support for enterprise taxation containing the most shortcomings and requiring the latest methodological developments to optimize them (Figure 2):

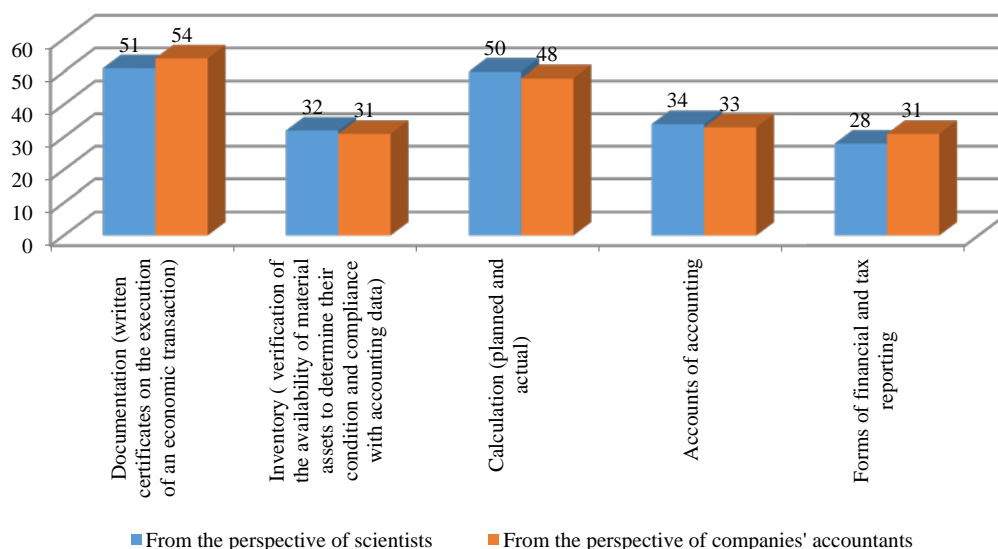
- documentation (written certificates of business transactions);
- calculation (planned and actual).

Figure 1: Types of information technologies that require the greatest attention in the process of modernizing the accounting system, %



Source: compiled by the authors

Figure 2: The sources of information support for enterprise taxation containing the most shortcomings and requiring the latest methodological developments to optimize them, %



Source: compiled by the authors

In the framework of the research, it was established that the most important opportunities for automation of accounting processes, which can positively affect the information support of tax accounting, are as follows (Figure 3):

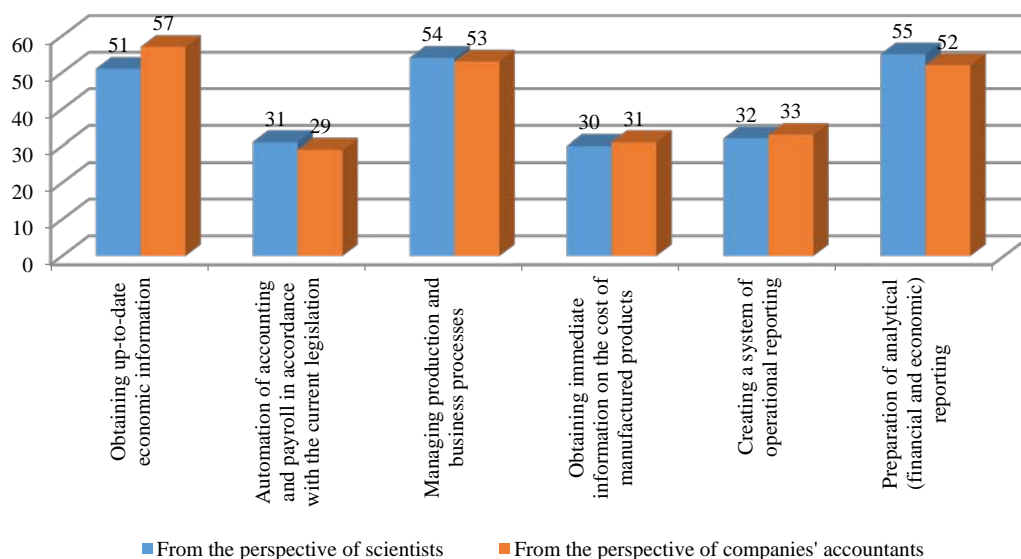
- obtaining up-to-date economic information;
- managing production and business processes;
- preparation of analytical (financial and economic) reporting.

At the same time, during the research, it was proved that the use of information technologies and resources in the accounting and management system is influenced by factors determining the

type of classification and the quality of IT accounting at the enterprise (Figure 4).

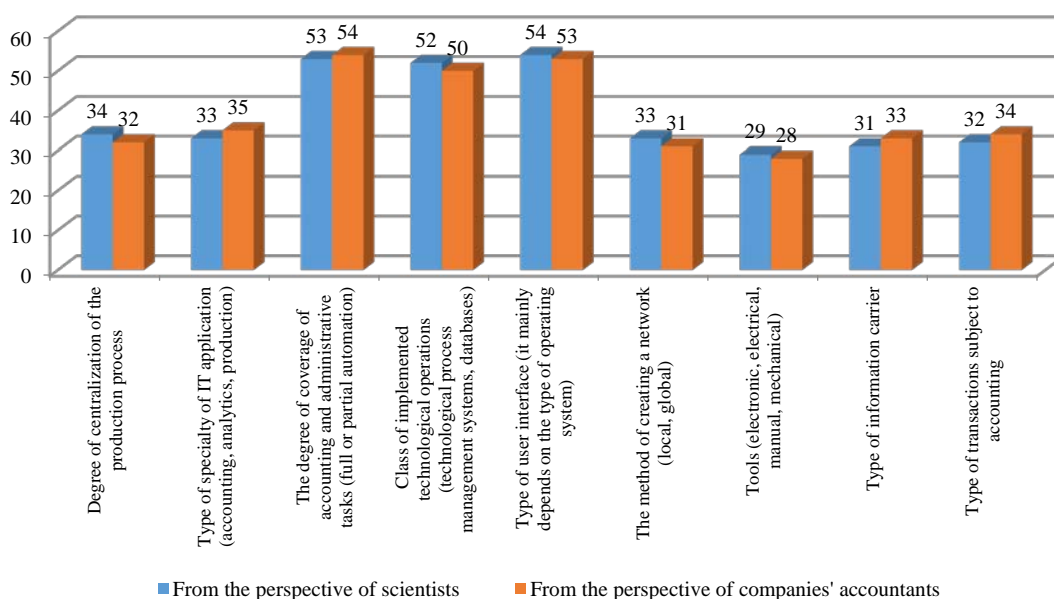
Thus, as can be seen from Figure 4, in the course of the research, the respondents identified the degree of coverage of accounting and administrative tasks (full or partial automation), the class of implemented technological operations (process control systems, databases), the type of user interface as factors that determine the type of classification and quality of IT accounting at the enterprise.

Figure 3: Key opportunities for automation of accounting processes that can have a positive impact on the information support of tax accounting, %



Source: compiled by the authors

Figure 4: Factors that determine the type of classification of IT accounting at the enterprise, %



Source: compiled by the authors

## 6 Discussion

Accounting information about business entities, sources of their creation and business processes is the main subject of the accounting process. The result of using such information is the preparation of the business entity's reporting. Information provided in financial statements should be useful and understandable to users if they have sufficient knowledge and are interested in perceiving this information. Financial statements should contain only relevant information that influences the decision-making of users, provides a timely assessment of past, present and future events, and also confirms and adjusts their assessments. Financial statements must be reliable. Information provided in financial statements is reliable if it does not contain errors and biases that may affect the decisions of users of financial statements (Ferraro, Ghazi, Peretto, 2020), (Suzuki, 2022).

In the process of making management decisions, managers require accounting information that is characterized not only by relevance, but also by a number of other characteristics (Bom, Rachinger, 2019), (Neisser, 2021).

The literature distinguishes two models of the relationship between accounting and taxation systems. According to the first model, the accounting system is determined by the content and features of the tax system. However, this relationship cannot be established once and for all – it is constantly changing and can vary from complete to insignificant. However, in our opinion, the primary factor affecting how transactions are treated in accounting is taxation. In this regard, it is expedient to talk about the content of the “continental accounting system”, which determines the almost complete coincidence of accounting and tax accounting, focus on the tasks of tax and accounting, used in Germany, Sweden, Spain, Italy, etc.

The second model of accounting is based on the parallel and independent existence of accounting and tax accounting. It is called “Anglo-Saxon” in the literature, because it is mainly used in the United States, England, Austria and Canada. In this system, the tax and accounting tasks are diverse – both in terms of content and tasks and in terms of implementation methods.

Currently, accounting systems in most countries have theoretical, methodological and regulatory limitations. They do not allow for effective current accounting based on an enterprise's cross-functional communication strategy, which makes it impossible to obtain the information necessary for high-quality strategic management. This suggests that reforming accounting on the basis of international standards, as well as using modern automated and computerized systems in accounting and management, is the basis for providing users with information for making balanced management decisions and effective taxation (Gechert, Rannenberg, 2018), (Havráněk et al., 2020).

In order to determine the value of accounting information in the process of making management decisions, the accounting staff preparing it and the managers applying for the data should know what kind of information is required, according to certain characteristics, and in terms of the presentation format, it is necessary to choose the most acceptable one from a number of possible alternatives (Gechert, 2022), (Hope, Limberg, 2022).

## 7 Conclusions

Therefore, the analysis of the scientific literature on the research topic and the results of the questionnaire survey showed that the basis for making any management decision in a company is the availability of reliable, timely, accurate, complete, and adequate tax information, in the formation of which the main role is assigned to accounting at the enterprise. The introduction of modern information technologies in organizing accounting significantly increases the efficiency of the taxation system and stimulates the further development of the enterprise in a market economy.

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**Primary Paper Section: A**

**Secondary Paper Section: AH**

## UKRAINIAN CHORAL ART IN THE CONTEXT OF CULTURE-MAKING PROCESSES OF THE CONTEMPORARY FESTIVAL MOVEMENT

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**Abstract:** For centuries, choral art has been the foundation of the development of the musical culture of the Ukrainian people and is one of the most refined and accessible forms of musical art. Choral singing, as the most accessible form of music-making, aims to reproduce and preserve the traditions of folk song culture, contribute to its development, elevate the level of musical culture in people, and directly influence people's feelings, emotions, and their will. Choral art is a unique way of understanding the world and carries spiritual values. It also plays a significant cultural, educational, and ideological societal role. The aesthetic influence of choral singing in the process of education and personality formation, as well as in shaping the artistic taste of the listener, cannot be overstated. Therefore, the popularization of this art form through festival projects holds exceptional importance for the development of both the artistic sphere of Ukraine and the global cultural heritage.

**Keywords:** culture-making process, cultural tradition, choral art, music festivals of the Union of Composers of Ukraine, choral style, choral creative work by Yuri Ishchenko, creative interpretation, art project.

### 1 Introduction

Music art, as an integral part of culture, can reflect all socio-political and spiritual processes inherent to society at various stages of its development. As a significant phenomenon in the history of national and global musical culture, choral culture in Ukraine has been shaped over centuries through the best examples of folk song heritage and church music. It is stylistically marked in the works of renowned composers and conductors.

Choral art is an essential tool for shaping personality, developing intellectual and emotional aspects, moral and aesthetic orientations, and progressive cultural thinking, regardless of gender or social role. As Bermes I. rightfully noted, only the period of Ukraine's independent statehood created conditions for the advancement of performing art forms, whose origins are a "fusion" of ancient folk traditions, embodying the brightest manifestations of Ukrainian life. Among these phenomena is choral art, capable of visualizing societal and spiritual progress dynamics, consolidating it, culturally and intellectually uplifting people, and ultimately contributing to strengthening Ukrainian statehood.

Despite the complex socio-political situation caused by the military actions initiated by the Russian Federation on the territory of Ukraine, financial and economic challenges, and the absence of regional and state cultural development programs, the state of contemporary choral art reflects changes associated with the revival of musical-concert life, the establishment of professional and amateur ensembles, and the development of their performance skills (Bermes, Polyuha 2017).

The theoretical part of this study provides a general assessment of the current stage of Ukrainian choral art in the context of the festival movement. The practical part of the research includes the systematic collection of data regarding the types and purposes of festivals held in Ukraine. Based on the research findings, conclusions are drawn about the addressed issues, mainly outlining trends in the festival movement as a platform for popularizing and developing choral art.

### 2 Literature review

In recent decades, the emergence of new choral festivals and the continuation of previously established ones have been typical features and important elements of the music industry both in Ukraine and abroad. In addition to classical music festivals, there have emerged festivals and competitions in popular music and events promoting jazz and contemporary music. Concurrently, in the cultural and artistic realm, festivals of folk art and folklore are gaining significant development, playing a special role in the modern means of preserving traditional folk culture (Ihnatyeva 2020), (Filar-Mierzwa, Dlugosz, Marchewka, Dabrowski, Poznanska 2017), (Liu, Song, Zhai, Shi, Zhou 2019).

With its intensive rhythm, maximal informational concentration, and dynamic evolution, modernity contributes to a substantial renewal of what seems to be an eternal tradition of our people, such as choral culture. At the same time, even the most radical civilization changes cannot completely alter the foundation on which the mentioned tradition has grown. At the intersection of the "old and new," rather interesting artistic discoveries arise, requiring their own theoretical and methodological interpretation (Garry, Tighe, MacFarlane, Phelan 2020), (Jiao 2022), (Vasylevska-Skupa, Dudnichenko 2022).

Ukrainian choral performance has undergone significant stylistic changes in recent decades. There is a structuring of musical consciousness caused by the country's internal social restructuring and a change in the artistic and creative orientation of aesthetic awareness. It inspires artists to search for innovative and creative approaches and find a new stylistic space (Sadovenko 2022), (Gintere 2020).

The proliferation of amateur music centers in all regions of Ukraine marks the early XX century. At this time, the groups became more active in professionalizing folk singing, and the number of amateur choirs in rural areas and large cities increased. It is important to note that amateur groups are improving their performance techniques, expanding their repertoire, organizing public performances, intensifying their touring activities, and establishing links with world music centers (Sorochyk 2023), (Dingle, Clift, Finn, Gilbert, Groarke, Irons 2019).

Ukrainian festivals and artistic projects have always been a subject of interest to cultural critics. The specifics of Ukrainian choral festivals are described in the studies by O. Rozhenko, M. Cherkashyna-Gubarenko, O. Dyachkova, O. Marach, Yu. Chekan, O. Kavunnyk, and other researchers of the Ukrainian music sphere (Antonenko, Antonenko 2021), (Sorochyk 2023).

Ukrainian art historians and cultural critics actively study the phenomenon of the festival in the contemporary cultural space. The key trends in the development of Ukrainian art today are the processes of regionalization and decentralization. At the same time, on the one hand, given the circumstances of the country's economic and political life, the content of the concert and festival sphere is radically changing. On the other hand, the cultural sphere is currently experiencing an unprecedented explosion of the festival movement that has spread throughout Ukraine (Sinenko 2020), (Choi, Lee 2019), (Samikova 2020).

Since independence, there have been increasing decentralization processes in the national music culture. In addition to Kyiv, the largest cultural centers of Ukraine have emerged in Lemberg, Odesa, and Kharkiv. Festival organizers invite the world's leading composers and performers, as well as represent national art schools (Havrylenko, Hrytsun, Kondratenko, Sukhova 2022), (Fahey, Phela, Clift, Moss 2022).

International music festivals play a significant role in Ukrainian culture and contribute to the revitalization of the country's musical life. They are the most critical factors in the emergence of Ukraine

as a country with a highly developed musical culture in the world (Nerubasska, Palshkov, Maksymchuk 2020), (Zubai 2022).

### 3 Aims

The article aims to systematize the data on the specifics of the choral art development as an essential component of the Ukrainian cultural process. The target areas of the study are to characterize music festivals held in Ukraine and abroad as an important form of artistic projects and key areas for preserving the cultural tradition of the Ukrainian people.

### 4 Materials and methods

A practical study of the modern trends in the choral art development at music festivals was conducted based on the analysis of scientific periodicals, conference materials, and official reports on the results of festivals held in Ukraine and other countries. While working with the data on the participation of choral groups in music festivals and other art projects, the authors used the following methods:

- systematic;
- structural;
- bibliographic;
- analytical information processing methods.

The theoretical background of this paper is based on studies in philosophy, history, cultural studies, art history, and musicology.

### 5 Results

The modern cultural space of Ukraine today cannot be imagined without a significant number of large-scale projects, festivals, and competitions. Since the 1990s, the festival movement has been rapidly developing, encompassing more and more cities and villages. Unlike individual concerts or exhibitions, a festival offers the opportunity to gather a broad audience in one place, allowing them to engage, perceive, and evaluate art and sometimes even participate in the creative process.

One of the vibrant and unique choral traditions of many regions in Ukraine is the abundance of various festivals of choral music and choral performance, which require in-depth research and coverage in various publications. Art becomes closer and more accessible to the general public. Festivals foster creative communication, where new ideas are expressed and new projects are born.

Choral festivals serve as living examples of amateur choral art. Among the most well-known are "Pisenni vizerunky," the festival named after H. Veryovka, as mentioned by V. Polevik and others.

A separate element of the country's basic music and choral education is the choral ensembles of general schools and lyceums, which operate within extracurricular or group activities. Such groups' activities aim to shape students' aesthetic taste, develop and improve musical skills, and expand the possibilities of professional music education. These groups actively engage in concert activities, regularly participate in city and all-Ukrainian competitions and festivals, and perform alongside professional ensembles.

The world's challenging economic and political situation has led to many socioeconomic, demographic, and security problems, greatly complicating organizing and holding festival events. However, thanks to a professional approach and the use of the experience of European countries, festivals have turned into a kind of creative center that opens up new opportunities for creative development. By combining different creative directions, such institutions make it possible to create inclusive projects in line with modern cultural trends.

It is worth highlighting the interest of composers in religious themes at the turn of the XX-XXI century. This interest was aimed at addressing the eternal questions of existence. This trend, often defined as a "new religious movement," is

characterized by complexity and ambiguity and is considered by musicologists as a spiritual renaissance of musical art.

Ukrainian music of the early 2000s witnessed the expansion of concert practice with spiritual choral compositions. At this time, several festivals dedicated to choral music and competitions of performing choirs gained momentum. Their main condition is, in particular, the presentation of spiritual music. The fact that a number of spiritual choral compositions by Y. Ishchenko, V. Silvestrov, L. Dychko, V. Zubytzky, and E. Stankovych appeared is indicative.

A bright representative of the religious and spiritual principles expressed in music is Yurii Ishchenko's compositions. The composer's creative work is considered in the context of the aesthetics and stylistics of modern times, which is entirely focused on Christian themes. The composer's heritage is represented by traditional vocal and choral music, as well as instrumental works, such as symphonic and chamber music.

Among the author's most significant works are "Our Father" for mixed a cappella choir, "Blessed is the Man Who Endured Temptation," a choral concert based on canonical text, Psalm No. 136 "O Give Thanks unto the Lord, for He is Good" for mixed a cappella choir, Psalm No. 143 "Hear My Prayer, O Lord" for mixed a cappella choir, Psalm No. 104 "Bless the Lord, O My Soul" for women's a cappella choir, Psalm No. 51 "Have Mercy on Me, O God" for men's a cappella choir and others. The composer interprets the works of spiritual music in his unique writing style, reflecting his artistic vision and expressing humanity's natural inclination towards the most profound meanings of human life and the higher truth of existence.

The following types of festivals have been identified by their orientation, given the competitions and festivals analyzed, their participants, their ideological load, and their professional significance for the country's culture (Table 1).

Table 1: The thematic focus of the festival movement in Ukraine

Type of festivals	Purpose of the events	Festival names
Cultural and historical	Revival of traditions that arose in certain historical periods, patriotic education of society	Baturyn Festival "Sablia" (Baturyn), Open Festival of Traditional Slavic Culture and Martial Arts "Kyivan Rus" (Lyubech), All-Ukrainian Festival "Cossack Rodoslav" (Konotop), Days of Ukrainian Cossacks (Shostka), Cossack Glory Festival "Kalnysheva Rada" (Romankivskyyi district, Sumy region), Festival of Historical Reconstruction "Vyrskyyi Hrad" (Bilopil'ia, Sumy region), and others)
Folklore holidays	Revival and preservation of folk song traditions and local rituals	"Konotop Witch Invites," the festival "Revival of the Ukrainian Village, Its Spirituality and Culture" (Pisky village), the "Vertep" festival, the open folk art festival "Prydesnyanski Zori" (Arapovychi village, Chernihiv region), the folk art festival "Dyvohrai" (Pustoviytivka village, Romny district), the folklore festival "Folk Treasures of Kulykivshchyna" (Versynova Muraviyka village, Kulykivskyyi district)
Musical and performing arts	Popularization of modern Ukrainian culture	"Kyiv Music Fest 2022" music festival, XX International Contemporary Music Festival "KONTRASTY" (Lviv)

		All-Ukrainian Children's and Youth Festival of Musical Art "Kobzarsky Maidan," "Doroga do Zirok," "Zvuchni Surmy" (Konotop), All-Ukrainian Competition Festival "Vesnianyi Zorepad," Country Art Fest, Regional Festival-Contest of Young Artists named after A. K. Rozumovsky, Competition Festival "Zoryani Mosty," Festival "Farbotony" (Kaniv)
Festival events for choirs only		Festival of Children's Creative Arts "Sorechko" in Irzhavets, Choral Festival "Sviato Khoru", Choral Assembly in the memory of Liubomyr Bodnaruk, Creative Project "Maistry khorovoho spivu Chernihivshchyny"
Spiritual direction		"Voskreslyi Khrystos radue ditei," the City Festival of Jewish Culture named after Sholem Aleichem, the "Chernihivska Osin" festival of Jewish song, and the concert program "Jews in Cultural Life," Christmas Charity Festival "Khrystos Narodyvsia – Slavimo Yoho" and others
Festives aimed at celebrating anniversaries without permanent operation		(Regional competition of Ukrainian pop songs and modern pop music "Radoslav" (Sumy), Street Music Day (Konotop)
Competitions and ratings of creative teams	Popularization of modern Ukrainian culture, as well as an educational function	Interregional Open Festival-Contest of Children and Youth Creativity "Zirkovyi shans," International Children's Music Festival "Kvitka myru" within the fourth phase of the project "Zbroini Syly Ukrainy," "Armiia-ditiam"
Festivals dedicated to personalities and well-known artists		A creative project, "Muzichna Ukraina," dedicated to the 85th anniversary of the birth of composer and People's Artist of Ukraine Oleksandr Bilash and the Hryhoriy Verevka Ukrainian Song and Dance Festival

Source: compiled by the authors based on the data (Havrylenko, Hrytsun, Kondratenko, Sukhova 2022), (Sheiko 2019), (Sadovenko 2022).

Since the festival movement is prevalent as an integral part of the national cultural and artistic space, it is possible to identify typical features of Ukrainian festivals. The unique significance of festivals as concert venues that attract large audiences to traditional choral performances makes this type of event an essential educational and uplifting function.

As part of the nationwide process of cultural revival in Ukraine, local folklore festivals are gaining popularity, renewing local regional traditions. The results of ethnographic expeditions, transcription of folk songs, reconstruction of rituals, presentation of elements of daily life, and costumes are an integral part of

such projects. According to the latest trends in contemporary choral performance, musical and theatrical performances have become popular forms that fully immerse people in the ancient layer of local culture.

Professional musicological and cultural studies approaches to the study of regional traditions are evidenced by the holding of various scientific and practical conferences within the framework of folklore festivals. The more general festivals related to the type of music performance are the most common today, both in Ukraine and worldwide.

By bringing together a large number of artists, mostly young people, representing singing, choral, performing, choreographic, and theatrical styles, such festivals continue to exist even under quarantine restrictions and enter the international arena. The absence of specific topics, age restrictions, and a special artistic focus make such events unique creative projects where listeners and viewers can get acquainted with a wide repertoire of groups.

A more professional organizational approach is characteristic of festivals and competitions of a musical-performing nature with a professional musical orientation. The modern musical and educational space contributes to the full functioning of such festivals. It demands specific professional achievements from teachers and choir conductors, confirmed by diplomas and certificates.

An unbiased professional perspective on performance is particularly important for amateur folk ensembles. Typically it does not have competition in its field and does not always follow contemporary trends. Festivals of exclusive choral conducting play a crucial role in shaping and revitalizing choral traditions, exerting significant influence on the musical-choral education of the region and the functioning of artistic centers. Participants in choir festivals usually include children's choirs from music and art schools in the city, students from general and higher educational institutions, and professional choirs of academic and folk orientations. This composition of participants promotes the fullest reflection of the state of choral culture, exchange of experiences, and development strategy formation.

In light of the practical implementation of the benefits of globalization processes, the festival movement helps expand the geographical, repertoire, and stylistic boundaries of choral creativity. Furthermore, the education and experience gained through participation in festivals of various directions broaden composers' horizons. The involvement of Ukrainian composers in international festivals and the creation of music for contemporary art festivals have ensured a new quality of creative achievements. It includes the renewal of the genre base of compositions and the emergence of synthetic forms of creativity using cutting-edge technologies.

## 6 Discussion

Musical-performing art in the socio-cultural space of Ukraine at the end of the XX – early XXI century underwent significant changes: from expanding the range of styles and genres to the growing role of new technologies in musical creativity. The trends in the cultural processes of the early XXI century include:

- the modernization of art education;
- the intensive development of the festival and competition movement;
- its integration into the world music process.

All these led to an increased scholarly interest in the study of national choral art from the perspective of contemporary cultural thinking. It aims to develop new methodological foundations and assess the creative potential of Ukrainian performance (Havrylenko, Hrytsun, Kondratenko, Sukhova 2022).

The Ukrainian cultural and artistic development demonstrates a wide range of research on issues of musical-performing art. However, despite the considerable volume of scientific research, Ukrainian musical-performing art needs reevaluation in a broad

cultural context as a complex systemic phenomenon. Its functioning is determined by the interplay of components such as musical performance, musical-creative activity, performance skills, and artistic communication (Bermes, Polyuha 2017), (Gilstrap, Teggart, Cabodi Hills, Price 2021).

Conducting festivals and their scholarly evaluation allows for comprehensive research into Ukraine's musical-performing art within the framework of analyzing cultural and artistic trends. It reveals the specificity of the performance process, explores the characteristics of the functioning and development of performance schools as cultural traditions and organizing musical-concert practices in the context of modern socio-cultural reality (Rosenko 2021), (Havrylenko, Hrytsun, Kondratenko, Sukhova 2022).

A demonstrative characteristic of the development of musical-choral art is the fact of the intensive spread of Ukrainian music festivals and competitions at the end of the XX – beginning of the XXI century. It demonstrates prevailing positive tendencies, namely:

- the dynamics of concert activity, life, and movement of festivals and competitions;
- the development of the musical-performing school, and support for the music education system;
- a high professional level of Ukrainian artists, their competitiveness in the international artistic space is confirmed by their victories in international competitions.

On the other hand, negative characteristics of the contemporary festival movement include the following:

- narrowing the audience,
- increasing contradictions in musical education for young people,
- commercialization of artistic projects,
- inadequacy of professional musical criticism, as well as the migration of musicians and performers abroad (Bermes, Polyuha 2017), (Xu 2021), (Sheppard, Broughton 2020).

An assessment of the reviews of musical events and studies in music history, cultural studies, art history, and musicology has revealed how the Ukrainian music and choral art and festival movement entered a new stage of development in the context of national and world cultures in the late XX – early XXI century, revealing their prospects and artistic potential. The representation of the best achievements of Ukrainian musical culture abroad (the organization and participation in festivals) contribute to the spread of Ukraine's image as a European country with strong artistic traditions and a high level of modern professional music performance (Dovzhynets, Govorukhina, Kopeliuk, Ovchar 2022).

## 7 Conclusions

The results of the study show that the festival movement as a means of popularizing and developing choral art has always been present in the life of the Ukrainian people. Ukrainian choirs represent choral art both inside and outside of Ukraine. The defining trends in the development of choral performance in independent Ukraine have been as follows:

- the expansion of the repertoire policy to include sacred music;
- the use of new opportunities for foreign touring;
- the emergence of a significant number of festivals, art projects, and choral competitions.

Further dissemination, development, and improvement of existing traditions is facilitated by the functioning of creative platforms – festivals, competitions, and concerts. They operate under the aegis of the respective state institutions and receive an international support.

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**Primary Paper Section: A**

**Secondary Paper Section: AL**

## ANALYSIS OF KEY PERFORMANCE INDICATORS OF UKRAINIAN AND GLOBAL PRINTING COMPANIES

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**Abstract:** The activities of Ukrainian and global printing companies have many common features. However, in the context of geopolitical challenges and economic turmoil, appropriate strategic development and management efficiency are essential to ensure favorable prospects for the printing industry. An important area of research is to assess the peculiarities of digital technologies' impact on printing enterprises' activities, as well as to ensure their competitive advantages. The article analyzes the main indicators of printing enterprises' development, as well as the aspects that affect the efficiency of their activities. In addition, the author considers several geographical factors, integration into relevant commodity markets, and the possibility of using diversified supply chains. The peculiarities of the printing enterprises' formation in Ukraine and globally are related to the crisis period. It was caused by the spread of the coronavirus pandemic and the war in Ukraine, which triggered crisis processes in the economy and business sector. The issue of ensuring effective information technologies and creating prospects for the development of printing enterprises is a crucial task. Therefore, it is based on the analysis of their performance indicators in recent years. The paper outlines the key principles of the functioning of a printing enterprise, the specifics of digitalization and integration into the international market. Also, it defines the essential functions to be used in a dynamic market in a crisis. The research findings indicate the current practice of improving the quality of corporate strategy by diversifying it, improving the quality of digital technologies, and creating special concerns and industrial associations of the printing industry to ensure its livelihood. This study can be helpful for restoring the printing industry in Ukraine and for further analytical research on the peculiarities of global printing enterprises' operations.

**Keywords:** printing, printing enterprises, publishing, corporate strategy, digital technologies, commodity markets, book products.

### 1 Introduction

The current development of the printing industry is driven by the proliferation of companies specializing in the diversity of services and service capabilities, thanks to the intensity of digitalization and the use of innovative services. In recent years, printing companies have been paying more and more attention to the specifics of managing their operations' internal structure and the quality of integration into newly developed markets. The use of such technologies has become most relevant since 2019 due to the escalation of the global coronavirus pandemic. However, even in the context of the gradual digitalization of printing companies, the use of specialized tools can improve the level of presence in the commodity market. The Ukrainian printing industry is in a rather difficult situation due to its primary focus on the industrial sector, which manufactures goods and is the most crucial revenue group for Ukrainian enterprises. Due to the war, almost half of Ukraine's economy has been shrinking, leading to the liquidation of most printing houses and enterprises, as well as general chaos in the market. Due to the geographical fragmentation of the industrial sector, maintaining a printing enterprise is not commercially viable. Therefore, there is a need to analyze possible means of integration into new commodity markets.

The experience of global printing companies and their use of digital technologies provide a key example for national enterprises that can enter new commodity markets and gain competitive positions. The use of such practices can also help enterprises find the most appropriate and rational mechanisms of interaction between the distribution of traditional manufacturing, its maintenance and transportation of products, and digital, which is constantly evolving and dynamic in the market.

The importance of conducting this study can improve the quality of the internal situation in the Ukrainian market and outline the basic principles of printing companies' activities in the global market. For this reason, the analysis of the key principles of activity and the analysis of market capitalization and general market trends are prerequisites for further assessment and forecasting of the development of the printing market and its business entities.

### 2 Literature review

The development of printing and printing enterprises is essential for ensuring the efficiency of medium and large businesses worldwide. The research focuses on the peculiarities of commercial, organizational, and strategic activities of Ukrainian printing enterprises and global ones, which can provide helpful experience for further development. Special attention should be paid to the use of digital technologies and opportunities for the development of the printing industry following global market needs. According to Cao (Cao 2022), the use of digital technologies in the printing industry can stimulate some competitive advantages, as well as strengthen the quality of the company's positioning in the global market. Răcheru (Răcheru 2021) believes that the printing market will grow. Still, the approach to manufacturing products may change, as in the nearest future, the use of digital products that can be implemented worldwide will be more relevant. According to Lysenko-Ryba (Lysenko-Ryba 2021), the modern world is constantly moving towards improving the quality of business conduct and management. Therefore, given the global geopolitical challenges, the printing industry has to transform to achieve high commercial results and ensure its viability in the market. Chen (Chen 2020) points out that the printing industry was in a difficult situation during the spread of the coronavirus pandemic and was able to return to efficient operation only after two years of effective stimulation of digital technology development. In such circumstances, regardless of the location of the printing company, it is most important to follow up on the next steps:

- to create automated processes;
- to use high-quality tools to disseminate information about the company's activities;
- to carry out advertising;
- to provide helpful business services.

According to Güleş (Güleş 2020), it is necessary to build international commodity markets and look for effective mechanisms for their functioning in the context of modern geopolitical challenges. They can affect not only the regional economy but also be important for the global one. Analytical studies by Gomaa (Gomaa 2022) indicate that printing enterprises, as a rule, use several types of activities related to the traditional manufacturing of products. Also, there is increasing integration of these products into digital ones with their subsequent maintenance. Łukaszewicz (Łukaszewicz 2021) determined that any printing company should improve its services and use modernized technologies to increase its capacity. According to Fernandez (Fernandez 2022), the only way to support the economy can be as follows:

- to support national commodity markets;
- to stimulate business development;
- to build social policy;
- to develop a national legal system focused on ensuring the efficiency of business and commercial organizations.

According to Eidukynas (Eidukynas 2022), the partial growth of the printing industry and the restoration of printing enterprises is possible under such conditions. Moreover, the use of digital technologies will bring it closer to world-class enterprises. Thus, modern scholars believe that global printing enterprises use many digital tools to improve their operations. Therefore, Ukrainian printing companies should pay attention to the possibility of mastering commodity markets. Even with the conducted research, the analysis of the peculiarities of the Ukrainian and global printing enterprises' activities remains relevant and vital for further studies aimed at their further development and improvement.

### 3 Aims

This study aims to analyze the activities of Ukrainian and global printing enterprises to assess the effectiveness of their development and to highlight the specifics of management activities and strategic direction. An essential area of the study is to assess the current state of the global and Ukrainian printing industries. Also, it is crucial to outline the impact of digital technologies on their development and the possibility of gaining competitive advantages for business entities. The achievement of this goal provides many opportunities for domestic enterprises to formulate an effective corporate policy and integrate into the global market to ensure their own survival and gradual recovery of the country's economic situation. The main tasks are as follows:

- to analyze the functioning of the Ukrainian and global printing industry;
- to identify the role of printing enterprises in such development;
- to find possible ways of growth.

Special attention is paid to the use of digital marketing tools, automated systems, etc., which are the main tools for gaining competitive advantages in the printing industry. The analysis of the last five years of Ukrainian and global enterprises' activities allows the author to highlight the main stages of their functioning and opportunities for further development.

### 4 Materials and methods

The analysis was conducted using scientific research methods, which helped to determine the principles of activity of printing enterprises in Ukraine and the world. In particular, based on the search method, the leading international printing companies were described and characterized by their regional distribution, as well as their commercial and strategic activities. This method was also used to analyze information on the prospects for further development of the printing market and possible challenges and threats to its stable functioning. An analytical method was employed to conduct a comprehensive analysis of the state of the Ukrainian printing market. This methodology was used to process and systematize materials on the geographical location of printing enterprises, the number of people per enterprise, potential prospects, and threats to their operation. In addition, based on the use of open statistical sources of Ukraine, the current state of the printing industry in Ukraine was presented. The use of analytical research methods will make it possible to assess the peculiarities of the use of digital technologies. It will also offer a basis for the further development of the printing market, companies, and prospects of the Ukrainian market. The dynamics of changes and features of transformation were determined by using the method of comparative analysis. With the help of statistical reports, the author formed a deductive analysis of the further development of the printing industry. The issue of digital technologies is studied from the perspective of actualization of this issue on state resources, mass media, and calculation of the efficiency of printing market share growth. Therefore, the use of the deductive method made it possible to determine the prospects for the development of the printing market until 2030. The applied methods can be implemented in comprehensive studies of the functioning of the Ukrainian printing market before the war, as well as the current global market and the place of printing companies in it. The developed approach enables the following research findings to be presented regarding the peculiarities of the Ukrainian and global printing companies' functioning.

### 5 Results

In recent years, Ukraine's printing industry has been undergoing a transformation. It has been driven by the emergence of innovative technologies and a gradual market reorientation. Despite this trend, the need to use traditional printing means remains relevant for both the national and global markets. A significant segment of the Ukrainian market has been expanded

due to the sales policy in the food industry. The latter requires additional resources for packaging, loading, and production of printing materials such as labels, wrappers, and many other means of product identification. In addition, the demand for traditional materials for the media remained high, allowing the domestic market to undergo a gradual transformation.

The global printing market is primarily characterized by the amount of growth and introduction of innovative technologies aimed at improving the technological process, advertising, and the use and utilization of a number of specialized products that can be integrated into digital markets. In addition, printing companies in the global market are geographically diversified. Moreover, there is a growing practice of using branches aimed at developing, creating, and processing digital technologies such as 3D printing, increasing capacity through optimization measures, etc.

In Ukraine, this process is only gradually developing. Still, it should be borne in mind that only in 2019, when Covid-19 was spreading, the majority of enterprises needed digitalization and automation of the majority of processes. This encouraged them to partially develop and reduce the staff working directly at such enterprises. Until 2022, the Ukrainian printing market had positive qualities, but due to the war, a significant part of the economy was destroyed, and infrastructure was damaged. It is currently known that about half of all Ukrainian enterprises were liquidated in 2022 for various reasons. In addition, it is worth noting the peculiarities of the geographical location of enterprises and the overall decline in the Ukrainian printing market, as the main customers were mass media, state institutions, and manufacturers. The general geographical location of Ukrainian printing companies is shown in Table 1.

Table 1: Regional allocation of Ukrainian printing enterprises

Region	Area, thousand square km	Population, thousands of people	Population density, persons per 1 km <sup>2</sup>	Number of enterprises	Number of residents per enterprise, thousands of people	Area covered by the company, thousands of m <sup>2</sup>
Central	36,4	2112,1	52,1	107	11,0	0,41
Metropolitan	50,7	7508,8	77,1	1055	7,5	0,05
Prychornomorskyi	121,1	7011,7	71,0	155	25,7	0,41
Prydniprovskyi	55,2	5255,5	87,5	175	25,7	0,24
Podilskyi	70,5	3051,1	78,1	251	17,8	0,18
North-Eastern	81,0	5177,8	74,1	111	27,0	0,16
North-Western	10,1	1287,1	51,1	75	15,1	0,58
Carpathian	57,7	6073,6	126,1	292	29,5	0,27
Donetsky	51,1	6811,1	118,1	269	16,5	0,11
Ukraine	603,5	46143,7	76,5	2921	15,8	0,21

Source: compiled based on (Sarı, Güles, Yiğitöl 2020)

Based on the data in Table 1, it can be argued that the main regions of allocation of printing enterprises are Central and mainly South-Eastern Ukraine. Given this geographical allocation, the operations of the majority of printing enterprises have become problematic due to the ongoing hostilities in Ukraine. As a result, the production capacity of enterprises was reduced during 2014-2022. Since 2022, the number of enterprises has dropped significantly by more than 50%. This situation in the printing industry is caused by the spread of international market orientation, as the national market has ceased to function fully. Therefore, the search for innovative means and opportunities to penetrate new markets has become a key principle for improving the quality of functioning of printing enterprises.

The overall situation in the Ukrainian printing market is focused on manufacturing specialized products used for trade turnover



and serving the interests of medium and large businesses. The share of public administration services and the use of printing to meet the needs of the media are not priority segments of this market. However, after 2022, they remained the most relevant, which caused a massive market decline. The issue of medium and large businesses leaving the Eastern region of Ukraine has become a challenge. Only about 17.5% of pre-war enterprises are currently operating, while most operate under temporary administration. The overall dynamics of the number of operating businesses in the printing industry are shown in Table 2.

Table 2: The number of operating business entities by the type of "Printing" economic activity, 2018-2022

Types of economic activities	CTE A-2010 Code	2018	2019	2020	2021	2022*
Printing activities and related services	18.01	4874	5005	4767	4468	2143
- newspaper printing	18.11	221	224	230	218	98
- printing other products	18.12	3157	3300	3164	2945	1433
- manufacturing of printing plates and other printing services	18.13	1197	1184	1083	1034	424
- bindery activities and provision of related services	18.14	299	297	290	271	105

Source: compiled based on (Turek, Budzik, Oleksy, Bulanda 2020)

The statistics in Table 2 show that Ukraine experienced a gradual development of printing enterprises during 2018-2021, which allowed for a positive growth trend of about 1.5% per year. However, in 2022, due to hostilities in several crucial regions where printing companies are located, the possibility of further operation was threatened. It was the beginning of the enterprises' reorientation to foreign markets of the European Union. In particular, about 30% of the current printing enterprises in Ukraine function only because they focus on the markets of Poland, Lithuania, and Germany. It is a common practice to use digital technologies that give Ukrainian enterprises advantages in a competitive environment. Another global practice is to expand and improve printing companies' operations by expanding their management structure. The use of additional branches and the creation of subsidiaries aimed at producing and servicing digital services has become a key tool for most modern Ukrainian enterprises in 2022 and will remain promising in 2023 and 2024.

The global printing market is developing rapidly. Companies are introducing innovative technologies, as well as modern management systems, and increasing competition among themselves. The key challenge for the global printing industry was the spread of the coronavirus pandemic in 2019, which shook the market by 10%, and the total capitalization level fell by USD 1.9 billion. Nevertheless, it is worth considering a number of transformational processes in the market. The companies that comprise the bulk of the market are in America, China, and Europe. These geographical regions make up about 85% of the global printing market. After 2019, the ability to use digital technologies has become a key advantage, as they allow for resource savings in production and qualitative optimization of manufactured products.

In the geopolitical dimension, competition between America and China for European and global markets in the printing industry is present. It aims to improve the quality of services, the efficiency of their implementation and servicing. The use of transport systems, order acceptance automation, and other tasks facing medium and

large businesses are becoming increasingly important. The largest printing companies with the highest capitalization tend to use several key areas that can strengthen their development and position. These areas include:

- improving marketing services;
- implementing digital logistics and automated systems;
- using modernized printing manufacturing facilities;
- using Big Data systems, etc.

According to the estimates of reputable analytical publications and the World Bank, the global printing market could reach USD 574 billion by 2030 and grow by 5-10% in the coming years. This pace is driven by improvements in the quality of technology and the ability to integrate it into the production process, as well as the need to supply most digital commodity markets. More detailed features of the global printing market are shown in Table 3.

Table 3: Characteristics of the global printing market

Indicators	Details	Development prospects
Market value in 2022	USD 476.21 billion	The market value is gradually increasing, which may be a positive aspect of the printing industry's development
Revenue forecast in 2030	USD 574.12 billion	The estimated value is based on an assessment of the largest worldwide printing companies
Digital Transformation Index	70-100 points	This index is used for countries, and the assessment is carried out by enterprises, including printing companies
Expected Market Growth Rate	2.4% between 2022 and 2030	The average growth rate of the printing market and the possibility of its expansion by using digital technologies
Regional scale	North America, Europe, Asia-Pacific, Latin America; Middle East and Africa	The biggest sales regions are countries with a high turnover of services and products in the commodity markets
Major companies	Quad/Graphics Inc., Acme Printing, Cenvo, RR Donnelley, Transcontinental Inc., LSC Communications US, LLC., Gorham Printing, Inc., Dai Nippon Printing, The Magazine Printing Company, Cimpress plc, Quebecor World Inc.	The leading printing companies are becoming more and more involved in the use of modern technologies and the possibility of digitalizing the service process to improve their current operations

Source: compiled by the author

The analysis in Table 3 on the development of the printing market shows that legal companies are taking some active measures in the printing industry to expand their influence and penetrate new commodity markets and regions. The critical issue for the modern printing industry is to master the digital printing commodity market. It will include various information services, from advertising and design to digital logistics and automated

production systems. The investment activities of the largest companies are similar to those in Ukraine, as they direct most of their investments to automation and improvement of the quality of such activities. For this reason, the development and opportunities for improvement of the printing market will be monitored in 2024 and 2025 due to its digitalization.

The war in Ukraine has also affected the overall operations of most printing companies. They have to increase their corporate social responsibility and have clear policies regarding the regions in which they operate. However, the increased use of digital technologies and many tools can help to improve the quality of the overall transformation and the possibility of developing a global digital market that will interact with each other. The modern printing market closely cooperates with various types of businesses. It will continue to grow, which is strategically essential for its long-term viability, and secondly, it will become a key tool for servicing physical commodity markets.

Traditional printing markets will also be widely represented, as full digitalization is a long-term process, so companies use a mixed form of activity. This should be an example to follow for the Ukrainian industrial printing sector. This principle is used to transfer the implementation of technologies diversified by the nature of their work and focus on a specific customer group. For example, the Raksul uses a diversified system to improve the quality of traditional printing activities, the production of printed materials, as well as specialized structures. The company also has a number of programs for its own digital development, which were adopted in 2021.

Such principles of printing companies' operations allow them to maintain their competitiveness in the modern world and improve their performance. The specifics of the largest printing companies in the global market are shown in Table 4.

Table 4: Analysis of the largest printing companies' activities in the global market

Company	Market capitalization	Specifics of the company's activities
Quad/Graphics, Inc	\$272,39 mln.	The company uses modern tools of the printing industry, increasing production rates by around 2% per year
The Vomela Companies	\$510 mln.	The company is focused on the use of advertisement graphics and its implementation in the global printing industry
Raksul Inc	\$570 mln.	A Japanese company whose key focus is printing of any materials regardless of their size
Fort Dearborn Company	\$613.5 mln.	The company serves the food industry and many others by manufacturing customized labels, stamps, etc.
Elanders AB	\$689 mln.	The high capitalization results from the use of innovative technologies and special tools aimed at improving the printing industry
TungKong Inc	\$770 mln.	The company is focused on modern personal data protection systems. Its major clients are financial and banking institutions and certain public authorities.
Transcontinental	\$1 billion	Over the past 5 years, the

Inc.		company has been widely implementing the use of digital technologies and 3D printing
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Source: compiled based on (Paszkiwicz, Bolanowski, Budzik, Przeszlowski, Oleksy 2020)

The companies listed in Table 4 occupy the bulk of the global printing market and have a qualitative impact on its functioning and opportunities for further development. For Ukraine, the experience of such companies can be a means to improve the current market situation and encourage domestic production, improve the quality of digital infrastructure, etc. However, given the current circumstances, it is difficult to predict the prospects for further development of the Ukrainian market. It is necessary to increase the presence of businesses and the number of operating enterprises to focus on national production and local consumers. The development of the industrial sector can help to stabilize both the economic situation and create the conditions for further growth of the printing market.

Thus, the analysis of the Ukrainian and global printing markets suggests that their digitalization is a key means to improve the functioning of companies in the future. The closest perspective is the use of Big Data tools by printing companies, the introduction and creation of additional branches responsible for 3D printing, and the development of automated systems. However, the global community has been gradually recovering since 2019. Since then, it has been stimulating the growth of medium and large businesses, which are the focus of printing companies. Meanwhile, Ukraine has seen its economy shrink by almost one-half. This situation requires improving the printing market digitalization quality and diversifying its corporate strategy for further recovery in Ukraine.

## 6 Discussion

The study results show the prospects and importance of the printing market development, while business entities use various means to improve their functioning. Over the last 5 years, the transformation of the printing market has undergone significant changes due to the emergence of digital technologies, automated systems, Big Data technologies, changes in the global geopolitical situation, and new global challenges for humanity. Such challenges stimulate active market growth and the possibility of its improvement. It allows printing companies to implement competitive actions and means to strengthen their market positions.

The analysis of digital technologies used by printing companies in the Ukrainian and global markets may be a prospect for further research on the specifics of their activities. The Ukrainian market is in a difficult situation, so, in fact, each company is forced to partially be split into other commodity markets and improve its own manufacturing capabilities to strengthen its competitiveness in the global market. The use of digital technologies, which are accepted in the worldwide space, can provide Ukraine with valuable experience in interacting with an external buyer. In addition, rational and high-quality management will be a successful factor in integrating with the international world market. It is still essential to develop smart logistics for the circulation of traditional printing products and the possibility of their transportation based on the efficient distribution principle.

An exciting direction for analyzing may be the allocation of companies in the world that have been retrained for digital and traditional products, as well as the analysis of further prospects. In addition, to conduct this analysis, it is possible to use a methodology for calculating indicators and percentages of resource management efficiency and the difference between traditional printing and modern digital manufacturing. The same calculation scheme can be used to analyze the Ukrainian national printing space and provide clear data for further development

strategies. Such systems will also be effective for any business that operates both digital and traditional production facilities.

The principles of quality, competitiveness, and marketing are important for successful operation in the global printing market. Ukrainian companies should conduct marketing research to obtain complete information on the general state of the global or international regional printing market to achieve a positive result. Therefore, conducting a study on quality standards in different world regions, rules, and principles of printing products' sales, as well as the specifics of this business, can be an important area for further research. By choosing one of the segments and conducting a comprehensive statistical study on the peculiarities of using specific tools, it can qualitatively improve the prospects of Ukrainian companies in the world space.

Based on the statements made above, it is vital to conduct a comprehensive study of the functioning of the current global printing market, its segmentation, the competitiveness of business entities, and the real prospects for Ukraine to enter it. The use of this information can help stabilize the internal state of the economy in the country.

## 7 Conclusion

According to the conducted research, it can be concluded that the activities of printing enterprises should be aimed at improving current business processes, considering global trends in the development of the printing industry, and stimulating their own output to international standards. The most acute challenges for the printing industry include:

- the rapid digitalization that began after the spread of the coronavirus pandemic;
- the need to create additional corporate departments dealing with digitalization.

In addition, the current printing services market is dynamic due to geopolitical challenges and the transformation of the business approach to corporate social responsibility.

Ukrainian printing companies were mainly focused on medium and large businesses operating in the South-Eastern region. Therefore, with the beginning of the war in 2022, most of them were either fully or partially closed down. As a result, printing companies operating in the Ukrainian market are forced to diversify their corporate strategy to enter global commodity markets and accelerate digitalization to improve:

- the quality of basic manufacturing processes;
- the possibility of further transportation;
- the use of efficient logistics routes.

When analyzing the global market of printing companies, it is possible to state that over the past 5 years, there has been a tendency to use the mechanism of Big Data technologies and special tools to be implemented to improve the product quality. The main principles of the global printing market include the following:

- a gradual increase in production capacity;
- a focus on the development of medium, large, and small businesses.

These principles allow companies to ensure their own viability and financial stability. In addition, the companies with the largest market capitalization are gradually digitizing and using digital marketing tools to improve the quality of their market presence, strengthen their own brand, and expand into other commodity markets. For Ukrainian companies, this example can serve as a basis for an effective management policy and become a key tool for implementing economic stabilization policies in the country caused by the war.

Thus, the study shows that during 2018-2022, the printing market went through two stages of a crisis, and despite this, it

tends to grow until 2030. Digital technologies and effective management tools can be a factor in improving the quality of competitiveness among printing companies in Ukraine and worldwide.

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**Primary Paper Section: A**

**Secondary Paper Section: AF**

## PSYCHOLOGY OF STRESS: MECHANISMS OF ADAPTATION AND EFFECTIVE STRATEGIES FOR COPING

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**Abstract:** Unfortunately, stress is a problem, although it is an inherent feature of our time. Covid-19, the war in Ukraine, and the unstable global economic situation create conditions for a person's constant emotional overload. Representatives of almost all social classes and nearly all countries of the world, regardless of gender and age, are affected by stressors. Despite existing classifications of stress and various contributing factors, the consequences of stressors lead to the development of psychosomatic diseases such as cancer, hypertension, and others. It also includes anxiety disorders and depression, which are the most harmful negative mental states. In addition, the risk of suicide is increased in people with depression. The presence of post-traumatic stress disorder in people reduces the overall level of happiness in society and triggers numerous problems. The solution to these issues requires significant resources, including economic. This study aims to identify the most effective personal and environmental resources that facilitate coping with and overcoming the effects of stress on the body. Relevant scientific articles were searched in the DOAJ and EBSCOhost databases over the past decade. Numerous factors have been found to increase the body's resistance to the effects of stressors. These include high levels of resilience, problem-solving skills, and others. High levels of resilience are associated with lower levels of anxiety and depression and higher levels of life satisfaction.

**Keywords:** stress, post-traumatic stress disorder, anxiety, depression, cognitive stress assessment, resilience, protective factors.

### 1 Introduction

The modern world is experiencing numerous globalization crises. The recent years' instability, vulnerability, and continuous upheavals have left workers restless. Now, as layoffs increase and wages fail to keep up with rising inflation, they continue to worry – in some cases, more than ever. The global crisis, sometimes referred to as the "permacrisis," affects workers of various ages. Among the most significant problems is the anthropological crisis, linked to the loss of individuality, creativity, and intuitive perception of the world. In other words, what makes one unique, distinctive, and "independent". People have had to face many negative phenomena, with stress being one of them.

Stress (derived from the English "stress" – strain, tension, heightened pressure) is a set of nonspecific adaptive reactions of an organism to the influence of various adverse stressors (physical and/or psychological), which disrupt its homeostasis, as well as the state of the organism's nervous system. The term "stress" is used to denote various phenomena:

- A strong, adverse impact that negatively affects the organism.
- An adverse solid physiological or psychological reaction of the organism to the action of a stressor.
- Nonspecific factors of physiological and psychological manifestations of the organism under extreme conditions, which trigger intense adaptive reactions.

The issue of stress and its consequences is extremely important because there is a rapid increase in stress-related behavioral disorders and stress-related illnesses (various forms of neuroses and depressions) observed worldwide, affecting 25 to 35% of the global population. Stress has been identified as a precursor to various health problems and is associated with cognitive, behavioral, and emotional changes that can limit decision-making (Dyess, Prestia, Marquit, Newman, 2018).

According to the stress theory, people can experience emotional, physiological, and behavioral reactions when facing different stresses and challenges. These reactions are considered stress responses that arise from overloading a person's resources beyond their coping capabilities. The theory emphasizes the interplay between a person's behavior, personal characteristics, and environment, explaining why some people may be more prone to stress than others in the same situation (Feng, Xu, Lei, 2023). The analysis and assessment of life events have a significant impact on emotional reactions, coping behavior, and positive or negative adaptation to adverse events. Cognitive appraisals play a key role in mental health outcomes (Padmanabhanunni, Pretorius, 2023).

### 2 Literature Review

Stress (strain, tension, increased tension) is a combination of non-specific adaptive responses of the organism to the influence of various adverse stressors (physical and/or psychological). Stress disrupts homeostasis, as well as the state of the organism's nervous system. Psychological theories of stress emphasize perception rather than physiology. Pathogenic forms of stress arise in specific situations when demands exceed resources. They are considered complex but not destructive when needs are perceived as within human capabilities and threatening only when demands exceed resources for coping, leading to physical and mental dysfunction (Feng, Xu, Lei, 2023). The term "stress overload" describes a sustained state of excessive demands that increases susceptibility to illness.

In studying the psychophysiological mechanisms of stress development in humans, four phases of stress have been identified that develop sequentially:

- 1) Emotional-Behavioral;
- 2) Vegetative;
- 3) Cognitive (changes in cognitive activity under stress);
- 4) Social-psychological (changes in communication under stress).

If the first two subsyndromes are related to manifestations of adaptive activation stages concerning the low "functional systematicity" of the organism, the last two are determined by individual personality traits that appear in extreme conditions.

The following types of stress are distinguished: chemical, biological, mechanical, physical, traumatic, and post-traumatic. Physical stress is caused by overheating or hypothermia of the organism, exposure to sources of ionizing radiation, hypokinesia, immobilization, etc. Traumatic injuries, tissue and organ damage, and surgical interventions can lead to the development of mechanical stress. Chemical stress may result from poisoning by various toxic agents presence of toxic substances in the atmosphere, water sources, or soil. Microorganisms (parasites, viruses, bacteria, fungi) and products of their life activity, which cause various diseases in humans, lead to the emergence of biological stress. Recently, stress has been linked to the syndrome of emotional burnout. It is characterized by increasing emotional exhaustion that can lead to personality changes in interpersonal communication.

At present, neurophysiology and psychology have accumulated a sufficient amount of scientific data to consider psychological stress from the perspective of a complex physiological phenomenon that is not limited to the nervous system.

There are three main groups of factors that increase the harmful effects of psychological trauma:

- a) Characteristics of the traumatic event itself;
- b) The state of the person's defense mechanisms;
- c) Additional risk factors.

The characteristics of the most traumatizing event are suddenness, absence of similar experiences, duration, lack of control, grief, and losses, constant changes, exposure to death, moral uncertainty, behavior during the event, and the scale of destruction. The more sudden the event, the more destructive it is for the victim. Potential victims can be warned of only a few disasters. The absence of similar experiences, such as misfortunes and disasters, is, fortunately, rare, and people learn to cope in the moment. The duration of the trauma varies from case to case.

Nevertheless, the traumatizing effects can accumulate and intensify with each passing day for people who have experienced certain prolonged horrors. The lack of control is evident because no one can control events during disasters. Even competent, independent citizens may show signs of helplessness if the loss of control is prolonged. Victims may find themselves separated from loved ones, often due to their death, and worst of all, in anticipation of possible losses. In addition, victims lose their social status, most often due to a disaster. The destruction caused by a disaster may be irreparable.

Most researchers identify traumatic events as the primary stressors of psychological trauma, shaping the negative ways in which people respond to life-threatening situations. The disruption of a sense of security triggers traumatic stress experiences, the psychological consequences of which are manifold. Emotional and psychological stress manifestations underlie the etiopathogenic basis for developing Post-Traumatic Stress Disorder (PTSD). Traumatic experiences lead to disturbances in the person's psychological defense system, which reduces its functioning.

Currently, there are three approaches to identifying the causes of post-traumatic stress disorder:

- From the perspective of learning theories;
- In terms of changes in cognitive schemata and dysfunctional cognitions;
- Biological approach.

These approaches are fully compatible and successfully complement each other. As psychological concepts, learning theory and the cognitive approach do not explain hyperarousal symptoms and the peculiarities of psychophysiological changes. Meanwhile, the biological perspectives on the nature of post-traumatic stress are intended to fill this gap.

The theory that explains the individual characteristics of experiencing traumatic stress is the multifactorial concept. Within the provisions of this concept, three groups of factors are identified, the combination of which leads to the development of PTSD:

- Factors related to the traumatic event.
- The severity of the trauma.
- The unexpectedness of its occurrence.

Protective factors include:

- The ability to make sense of what has happened.
- The presence of social support.
- Coping mechanisms.

People who can respond to a traumatic event experience better well-being and are less likely to seek professional help. Risk factors include:

- Age at time of trauma.
- Negative past experiences.
- Mental disorders.
- Low intelligence.
- The low social level of the victim.

The prevalence of post-traumatic stress disorder (PTSD) and other mental disorders is high in conflict settings (Charlson, Ommeren, Flaxman, Cornett, Whiteford, Saxena, 2019). PTSD can develop

after exposure to a highly threatening or frightening event or series of events. It is characterized by all of the following symptoms:

- Re-experiencing the traumatic event(s) in the present (intrusive memories, flashbacks, or nightmares);
- Avoiding thoughts and reminders of the event(s) or avoiding actions, situations, or people that remind you of the event(s);
- A persistent sense of heightened current threat.

These symptoms persist for at least several weeks and cause significant impairment in functioning. Post-traumatic stress can lead to the development of other mental disorders, such as depression, generalized anxiety disorder, aggression, addiction, and suicidal behavior, emphasizing the importance of timely diagnosis and provision of qualified medical-psychological assistance to victims of this profile.

In 2019, one in eight people, or 970 million people worldwide, lived with a mental disorder, with anxiety and depressive disorders being the most common (Institute of Health Metrics and Evaluation. Global Health Data Exchange (GHDx), <https://vizhub.healthdata.org/gbd-results/>, accessed May 14, 2022). In 2020, the COVID-19 pandemic caused a significant increase in the number of people living with anxiety and depressive disorders. Early estimates show 26% and 28% increases in anxiety and major depressive disorder in just one year (Mental Health and COVID-19: Early evidence of the pandemic's impact. Geneva: World Health Organization; 2022). Although effective prevention and treatment options exist, most people with mental disorders lack access to effective help. Many also face stigma, discrimination, and human rights violations. Numerous studies suggest that anxiety and imagined depression are the most harmful negative mental states. They are prevalent in people's daily lives and lead to serious mental health problems over time without effective intervention (Monzonís-Carda, Adelantado-Renau, Beltran-Valls, Moliner-Urdiales, 2021); (Casey, Varela, Marriott, Coleman, Harlow, 2022).

In 2019, 301 million people lived with an anxiety disorder, including 58 million children and adolescents (Institute of Health Metrics and Evaluation. Global Health Data Exchange (GHDx), <https://vizhub.healthdata.org/gbd-results/>, accessed May 14, 2022). Anxiety disorders are characterized by excessive fear, worry, and related behavioral disturbances. The symptoms are severe enough to cause significant distress or impairment in functioning. There are several different types of anxiety disorders, including:

- Generalized anxiety disorder (characterized by excessive worry)
- Panic disorder (characterized by panic attacks)
- Social Anxiety Disorder (characterized by excessive fear and worry in social situations)
- Separation anxiety disorder (characterized by excessive fear or anxiety about being separated from people to whom a person has a deep emotional connection) and others.

In 2019, 280 million people lived with depression, including 23 million children and adolescents (Institute of Health Metrics and Evaluation. Global Health Data Exchange (GHDx), <https://vizhub.healthdata.org/gbd-results/>, accessed May 14, 2022). Depression is different from normal mood swings and short-term emotional reactions to challenges in everyday life. During a depressive episode, a person experiences a depressed mood (feelings of sadness, irritability, emptiness) or loss of pleasure or interest in activities for most of the day, almost every day, for at least two weeks. Several other symptoms are also present, including difficulty concentrating, feelings of excessive guilt or low self-worth, hopelessness about the future, thoughts of death or suicide, sleep disturbances, changes in appetite or weight, and feelings of profound fatigue or lack of energy. People with depression are at increased risk for suicide.

Thus, people in the modern technogenic society are constantly exposed to stressors. The persistent presence of negative emotions, fatigue, and exhaustion leads to a reduction of adaptive resources. As a result, a person is immersed in stress,

develops anxiety states, depression, and post-traumatic stress disorder, significantly reduces the quality of life, influences the growth of numerous diseases, and requires the search for new solutions to increase human resilience.

This research aims to identify the most effective personal and environmental resources that facilitate coping with and overcoming the effects of stress on the body.

### 3 Materials and methods

For a comprehensive search, the DOAJ and EBSCOhost databases were searched for relevant studies over the past decade. A selection of terms has been created to remove a large number of irrelevant papers during a manual search: "stress/post-traumatic stress disorder," "stress/anxiety," "stress/depression," "stress/cognitive assessment," "stress/coping methods" "stress/resilience," and "stress/protective factors." The same search terms were used to search the EBSCOhost database. The current literature review includes works that focus on mechanisms of stress perception, implementation of modern strategies, and inclusive education methods in contemporary pedagogy.

### 4 Results

Negative emotions are a general dimension of subjective distress and unpleasant activation that includes various aversive mood states (Feng, Xu, Lei, 2023). From an evolutionary psychology perspective, negative emotions serve adaptive functions, such as helping people identify threats and dangers (Feng, Xu, Lei, 2023). In contrast, from a mental health perspective, negative emotions are more likely to lead to a range of dysfunctional responses and detrimental consequences, such as disruptions in a person's thought and action sequences and chronic burnout from social responsibilities, as well as to predict various forms of psychopathology, including mood disorders (Lapid Pickman, Geklopf, Greene, 2021); (Liu, Wang, Wang, Wu, Ding, Zhao, 2021).

However, the question remains as to how seemingly unavoidable negative emotions gradually worsen in everyday life, leading to emotional problems or disability in healthy people. Previous research, mainly based on cross-sectional and cross-lagged longitudinal methodologies, has shown that feelings of stress, anxiety, and depression are potential precursors of mood disorders (Asmundson, Paluszek, Landry, Rachor, McKay, Taylor, 2020); (García-Mieres, Montesano, Villaplana, Trujillo, Salla, Paz, 2020); (Armon, Fine, Seligman, Ginzburg, Ben-Zion, 2021) and are closely related to each other (Levine, Milyavskaya, Zuroff, 2019); (Huang, Xie, Owusua, Chen, Wang, Qin, 2021).

Everyday trivialities that a person doesn't pay proper attention to shape their long-term psychological state. For instance, daily tasks better predict stress-related health issues than significant life events (Feng, Lei, 2023). Accumulating adverse reactions to minor stressors will likely lead to health problems and psychological disorders (Johnsson, Zolkowska, McNeil, 2015). Therefore, it is necessary to explore the dynamic internal interaction, mediation, and moderation mechanisms between daily stress and its associated negative emotions (i.e., anxiety and depression) in a natural context.

The perception of stress is the cognitive evaluation by a person of the threat posed by stressors and their ability to cope with these threats (Liu, Wang, Wang, Wu, Ding, Zhao, 2021). In dealing with stressful events, people are prone to experiencing a range of negative emotions such as anxiety, depression, anger, and pain (Huang, Xie, Owusua, Chen, Wang, Qin, 2021).

Perceiving stress at a certain moment in daily life can positively predict imminent anxiety (Du, Xu, 2019). Anxiety can also play a role in stress perception. Anxiety is often closely linked to adverse cognitive styles such as rumination (Feng, Xu, Lei, 2023), leading to higher levels of physical and psychological arousal in people, causing them to hyper-focus on future

stressors, further intensifying their subjective experience of stress (Yang, Liu, 2016). Stress perception maintains a consistently positive relationship with the perception of depression, even across different time intervals (Xu, Wang, Fu, 2018); (Levine, Milyavskaya, Zuroff, 2019). People in stressful situations may evaluate external stimuli differently and respond to them in different ways. It can lead them to adopt negative cognitive styles that can exacerbate depression (Rodríguez-Naranjo, Caño, 2016). However, a persistent sense of depression can lead to an amplification of stress. According to cognitive resource theory, processing depressive emotions can deplete or divert resources needed to perform control functions. Such a diversion of resources leaves people with insufficient cognitive resources to cope with environmental events, leading them to perceive more stress (Bui, Nguyen, Pham, Tran, Ha, 2021). Mothers with depression raising children experience more parental stress than healthy mothers (Ma, Chen, Xian, Wang, Li, 2019).

Depression and anxiety are highly interdependent, meaning that people with high levels of depression (anxiety) tend to experience high levels of anxiety (depression) (González-Mesa, Kabukcuoglu, Blasco, Körükcü, Ibrahim, González-Cazorla, 2020). Despite the common co-occurrence of depression and anxiety, these disorders are distinct in nature. According to the tripartite model of anxiety and depression, anxiety is simply a high level of negative emotion, whereas depression combines a low level of positive emotion with a high level of negative emotion. Anxiety is associated with high physical arousal, whereas depression is not.

Emotions do not arise on their own but are triggered by changes in the internal or external (usually social) environment (Kuppens, Verduyn, 2017). Due to constant changes in one's internal and external environment, temporary emotions shift dynamically. Perceived stress is another dynamic variable that can easily change with time, context, and other factors (Henderson, Child, Moore, Moore, Kaczynski, 2016); (Ekuni, Souza, Cogo-Moreira, Lourenço, Pompeia, 2022). However, most previous cross-sectional and longitudinal studies have typically treated stress and negative emotions as relatively "stable" states. Retrospective questionnaires have been widely used to measure stress, anxiety, and depression. However, this approach may suffer from "memory and experience bias" and may not sensitively capture the dynamic changes of these variables in everyday life, as stress and emotional perception can be situational (Ellison, Trahan, Pinzon, Gillespie, Simmons, King, 2020). Thus, previous findings have relied mainly on observations across different groups over a relatively long time.

In the cognitive-emotional downward spiral, perceptions of stress and negative emotions were mutually reinforcing. This conclusion is consistent with the cognitive model of depression. Stress can induce depression and is likely to be mediated by cognitive biases (Feng, Xu, Lei, 2023). Regarding cognitive resource allocation, the daily experience of stress can cause people to be more vigilant and evoke negative emotions (Bulley, Henry, Suddendorf, 2017). Negative emotions can also significantly occupy attentional resources and prevent people from focusing on information that aids in problem-solving, leading to more passive and rigid thinking (Feng, Xu, Lei, 2023).

Negative emotions associated with threats can lead to rumination. It can impair the analytical thinking and executive control needed to cope with stressful life events. It may also lead to ineffective processing and increased self-criticism as people perceive more stress from unresolved life events (Bernstein, Heeren, McNally, 2017); (Zuroff, Clegg, Levine, Haward, Thode, 2021). This cognitive-emotional spiral process has important theoretical implications for understanding cognitive-emotional interactions.

Symptomatology does not occur in isolation; studying how stress and negative emotions influence each other helps to understand their impact on mental health and how poor mental health outcomes can persist over time. In practice, these findings mean

that interrupting the downward spiral of stress and negative emotions (anxiety and depression) in everyday life effectively prevents mental health problems.

Cognitive assessments fall into two groups:

- Primary assessments, which involve a direct assessment of whether a stressor threatens a person's well-being or goals;
- Secondary assessments, which involve an examination of a person's ability to cope with the stressor and the internal (e.g., sense of coherence) and external (e.g., financial resources and social support) resources available to them (Padmanabhanunni, Pretorius, 2023).

Most cognitive appraisal research focuses on the role of dysfunctional cognitions in the onset and maintenance of mental health disorders (Gómez de La Cuesta, Schweizer, Diehle, Young, Meiser-Stedman, 2015). Appraisals of the loss of essential life investments (e.g., romantic relationships, job opportunities) and feelings of inadequacy are at the core of depression (Mehu, Scherer, 2015). In contrast, dysfunctional appraisals of one's ability to cope with or personally affect negative events are associated with the maintenance of generalized anxiety disorder.

In suicide studies, negative subjective appraisals of problem-solving ability and perceived availability of social support predict suicidal ideation (Padmanabhanunni, Pretorius, 2023). In PTSD, significant differences in assessments are found to explain the persistence of the disorder after traumatic events. Problematic appraisals of the trauma and its consequences and perceptions of constant threat maintain post-traumatic symptomatology. Negative appraisals of personal vulnerability and future harm also explain the unique manifestations of PTSD (Padmanabhanunni, Pretorius, 2023).

Post-traumatic stress disorder (PTSD) develops in response to the impact of traumatic events and is characterized by symptoms of intrusive re-experiencing (such as memories and nightmares of the trauma), physiological arousal, cognitive and mood changes, and cognitive and behavioral avoidance strategies. Data show that college students are at increased risk of experiencing traumatic events, with levels ranging from 48% to 95%, which increases the risk of developing PTSD (Artime, Buchholz, Jakupcak, 2019). In South Africa, McGowan and Kagee (Kagee, McGowan, 2013) examined the prevalence of 14 potentially traumatic events among university students and found that approximately 90% of the sample reported the impact of one or more traumatic events in their lives. In a more recent study, Padmanabhanunni (Padmanabhanunni, 2020) reported a prevalence rate of 97.6% for trauma among the students sampled. They indicated that the most common types of traumas were physical assault, motor vehicle accidents, and sexual violence. Bryant (Bryant, 2019) reported that despite the high prevalence of trauma, a significant portion of the population does not develop PTSD. These findings highlight the potential role of adaptive appraisals, which may protect by buffering the effects of dysfunctional cognitions or facilitating their reappraisal. In addition, the primary emotional response associated with persistent PTSD is helplessness and powerlessness. They are elicited by appraisals of an inability to effectively respond to or resolve problems related to the traumatic event (Littlewood, Gooding, Panagioti, Kyle, 2016).

Adaptive appraisals are the absence of maladaptive cognitions and specific thoughts and beliefs that positively influence outcomes (Gómez de La Cuesta, Schweizer, Diehle, Young, Meiser-Stedman, 2019). Psychological distress is determined by the interaction between negative appraisals of adverse events and positive appraisals of personal control and coping (Padmanabhanunni, Pretorius, 2023). Having positive or adaptive cognitions can help a person tolerate negative appraisals or reassess situations in a way that facilitates coping with stress. For example, a benevolent religious reappraisal of stressful circumstances as a valuable learning opportunity has been found to help young people cope with stress (Padmanabhanunni, Pretorius, 2023).

Empirical support for the role of adaptive appraisals has come mainly from research on self-efficacy, defined as the belief that one can effectively cope with adverse events. Self-efficacy significantly predicted psychological distress and acute stress disorder among nurses during the COVID-19 pandemic (Shahrouh, Dardas, 2020) and partially mediated the relationship between cyber-victimization and depression (Trompeter, Bussey, Fitzpatrick, 2018). Low coping self-efficacy predicts high emotional dysregulation among adults (Padmanabhanunni, Pretorius, 2023).

## 5 Discussion

Different people exposed to the same level of stress or adverse circumstances may not necessarily exhibit the same response to these unfavorable environmental conditions. Differential vulnerability is a concept whereby personal and environmental coping resources react differently to negative circumstances. Examples of variables that make people differentially vulnerable to adverse conditions include:

- social support (Szkody, Stearns, Stanhope, McKinney, 2021);
- willingness to use social support (Padmanabhanunni, Pretorius, Khamisa, 2023);
- locus of control (Pedron, Schmaederer, Murawski, Schwettmann, 2021); (Strong, Gore, 2020);
- problem-solving appraisal (Heppner, Heppner, Wang, Lee, 2019);
- safety evaluation (Padmanabhanunni, Campbell, Pretorius, 2017);
- career vocation (Wu, Hu, Zheng, 2019).

These variables are believed to have either a direct, moderating, or mediating effect.

The hypothesis of direct impact posits that coping resources or protective factors directly link to psychological well-being that exists independently of the level of adverse circumstances a person encounters. The direct effect hypothesis is also referred to as the health support model (Padmanabhanunni, Pretorius, Khamisa, 2023). In its most straightforward formulation, the health support model asserts that coping resources or protective factors operate not only under adverse conditions. Instead, a high level of these resources is generally beneficial for psychological well-being. Moderator variables interact with adverse circumstances, influencing psychological health. A variable acts as a moderator if the negative link between adverse conditions and psychological well-being diminishes as the level of coping resources increases. A mediator variable is a pathway through which an unfavorable state affects psychological well-being. In the mediated path, the adverse state causally precedes the mediator (Pretorius, 2020).

The direct, moderating, and mediating roles of protective factors have been the most prevalent research topic on occupational stress. However, Cooper and colleagues (Cooper, Baglioni, 2018) proposed and found empirical support for the "root" model of the relationship between stress and physical and psychological health. In this model, coping resources causally precede work-related stressors, meaning that coping resources determine how stress is experienced. This, in turn, positively influences psychological well-being. This model assumes that managing resources are always present and impact how stressors are perceived or coped with. In this model, or the indirect effect hypothesis, the mediated pathway is work-related stress, not coping resources (Padmanabhanunni, Pretorius, Khamisa, 2023).

Most research on constructive problem-solving focuses on problem-solving ability, which refers to a person's ability to effectively and successfully use internal and external resources to cope with stress. Problem-solving ability involves both cognitive and behavioral processes. These processes include the following:



- understanding the nature of the problem;
- generating and evaluating potential solutions to the problem;
- assessing the resources available to address the problem;
- implementing strategies and evaluating their effectiveness in addressing the issue.

Furthermore, existing studies (Chu, Walker, Stanley, 2018); (Gabrielian, Bromley, Hamilton, 2019) have predominantly examined the relationship between problem-solving skills and mental health or psychological adjustment, as a deficit in this area increases the risk of depression, suicide, and physical health problems. Comparatively, fewer studies have examined the role of self-reported problem-solving ability in mental health outcomes. In addition, a significant portion of the research on problem-solving ratings was conducted in the late XX century (i.e., during 1970-1999), highlighting the need for further research in this area. Higher self-esteem in problem-solving ability is associated with lower levels of depressive behavior and psychosocial disorders. At the same time, lower problem-solving self-esteem is associated with increased pain, depression, and disability. Reduced problem-solving appraisals are more predictive of suicidal ideation and hopelessness (Padmanabhanunni, Pretorius, 2023).

One effective approach to coping with and perceiving stress is resilience. The construct of resilience lacks a precise definition in the literature: some studies view it as a stable and enduring "trait," while others view it as a dynamic and flexible "state." The latter definitions view resilience as a dynamic process through which a person positively adapts to stressful events or adverse circumstances (Stainton, Chisholm, Kaiser, Rosen, Upthegrove, Ruhrmann, Wood, 2019).

Resilience can be divided into personal assets, such as the ability to regulate emotions, the propensity to use active coping strategies, self-esteem, and locus of control, and external resources, such as social support networks that exist outside of the person. The resilience process involves a person's use of both assets and resources to overcome stressors and achieve positive outcomes (Padmanabhanunni, Pretorius, Khamisa, 2023).

Resilience may be associated with role conflict (Eun, Jin, 2018); (Lee, Seol, Kim, 2021). One study found that resilience mitigates the negative impact of role conflict on the performance of frontline service providers (Yang, Lee, Cheng, 2015). De Clercq (Clercq, 2019) found that high resilience reduces role ambiguity. Employees with high resilience have high energy levels. Without resilience, this energy would lead to stress reactions due to a lack of information about role expectations.

Researchers also hypothesize that resilience positively influences life satisfaction (Prayag, Spector, Orchiston, Chowdhury, 2020), and some studies suggest that resilience plays a mediating role in the relationship between career adaptability and life satisfaction (Santilli, Grossen, Nota, 2020). In addition, resilience has been found to be inversely related to depression and anxiety in people affected by the COVID-19 pandemic (Zhang, Yang, Wang, Li, Dong, Wang, Li, Wei, Zhang, 2020).

Resilience may also protect against anxiety and depression by allowing resilient people to maintain a positive attitude or worldview despite life-threatening events (Kim, Lim, Kim, Park, 2019). Resilience contributes positively to psychological well-being (De Clercq, 2019). Yildirim (2019) found positive associations between resilience and life satisfaction, positive affect, balance, and flourishing. Social support is associated with high-stress resilience, which may enhance psychological well-being. Other protective factors include locus of control (Strong, Gore, 2020) and sense of coherence, both of which have been found to be beneficial for psychological well-being (Padmanabhanunni, Pretorius, Khamisa, 2023).

The negative impact of adverse factors on psychological well-being is well documented in the literature (Kock, Latham, Leslie, Grindle, Munoz, Ellis, Polson O'Malley, 2021), and several studies have demonstrated the mediating role of resilience, as

reported in the systematic review by Li and Hasson (Li, Hasson, 2020). For example, Zeng and colleagues (Zeng, Hou, Peng, 2016) found that resilience mediated the relationship between thinking style and psychological well-being in a sample of college students. Another study showed that resilience fully mediated the relationship between fear of happiness and life satisfaction (Yildirim, 2019). Resilience has also been found to mediate the relationship between traumatic events and post-traumatic stress disorder (Lee, Ahn, Jeong, Chae, Choi, 2014). However, it is essential to note that in these studies, the adverse factor was considered an antecedent of resilience.

Based on Cooper's model, it is possible to assume that resilience is not only demonstrated in the presence of adverse circumstances but is always present, thus influencing how an adverse event or stressor is perceived and overcome, subsequently affecting psychological well-being.

Padmanabhanunni, A., Pretorius, T. B., & Khamisa, N. (Padmanabhanunni, Pretorius, Khamisa, 2023) proposed hypotheses related to Cooper's model:

- High levels of resilience will be associated with low levels of role conflict, which, in turn, will be linked to low levels of anxiety, low levels of depression, and high levels of life satisfaction.
- High levels of resilience will be associated with low levels of role ambiguity, which, in turn, will be linked to high levels of life satisfaction, low levels of anxiety, low levels of depression, and high levels of life satisfaction (Padmanabhanunni, Pretorius, Khamisa, 2023).

## 6 Conclusions

In this research, based on data from contemporary literature devoted to the study of the psychology of stress, it was established that the most effective means of perceiving and overcoming anxiety and preventing the development of post-traumatic stress disorder is the assessment of problem-solving skills and high resilience. Society should foster these qualities in individuals from an early age. This will help to protect people from the onset of severe psychosomatic disorders, including oncological and cardiovascular diseases, which affect both the duration and quality of life and require significant economic expenses.

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**Primary Paper Section: A****Secondary Paper Section: AN**

## INNOVATIVE INFORMATION SYSTEMS AND TECHNOLOGIES IN THE FIELD OF HOTEL AND TOURISM BUSINESS

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**Abstract:** Today, the tourism industry, which includes hotels, resorts, health resorts, and travel companies, is gaining increasing importance for the economic and social development of many countries worldwide. Information and computer technologies form the basis of the globalization process. The implementation of new information technologies in the hospitality industry contributes to the improvement of guest service quality. Tour operators in the international market utilize modern information technologies. They include global distribution systems (GDS), online reservation systems, network information systems, information management systems, mobile communication networks, and Internet services. This article aims to explore the peculiarities of using information systems and technologies in the hotel and tourism industries. Also, it assesses the impact of applying modern information tools on the development of tourist companies and the hotel business. **Methodology.** The research employs analytical, inductive, deductive, and information analysis methods and a systematic-structural method for evaluating theoretical and statistical data. The information-analytical basis of the study consists of analytical-statistical materials from the UNWTO regarding the trends in the development of global distribution systems used in the hotel and tourism sectors. Results. The research has identified the main critical theoretical aspects of applying information technology tools in the hotel and tourism industries. The significance of the influence of information instruments on the tourism sector has been substantiated. Also, the vectors for implementing electronic commerce in the tourism market have been outlined. Additionally, statistical indicators on the use of information systems in international hotel and tourism markets have been analyzed.

**Keywords:** processes automation, information technology, tourism industry, resource access, automated information systems

### 1 Introduction

The primary importance of developing the tourism industry lies in ensuring sufficient automation in enterprise departments, enabling managers to make timely and informed decisions and take appropriate management actions to improve company operations. In this context, the use of modern computer technologies in the business activities of enterprises, especially in accounting, marketing, and management, is becoming increasingly relevant. Such specialists as accountants, economists, managers, etc., constantly have to solve the problems of using office technologies to process economic information in various areas of economic activity of a travel organization.

Information technology's impact on tourism development is significant, as it directly contributes to enhancing the efficiency of individual tour operators and the tourism business as a whole. Furthermore, it directly affects a company's ability to compete in the modern market. Therefore, utilizing computer networks, the Internet, internet technologies, and software products for end-to-end automation of all business processes in the tourism industry is now not only a matter of leadership and competitive advantage but also survival shortly.

The theoretical part of this study justifies the relevance and primary directions of utilizing information resources in the tourism industry. The practical part of the research includes:

- A statistical overview of booking information systems in the international tourism market.

- Changes in internet sales indicators for tourism companies.
- The dynamics of internet searches for hotels in different countries worldwide.

Based on the research findings, conclusions have been drawn regarding the discussed topics. Specifically, it has been established that online sales of tourism services have been snowballing in recent years, particularly in the United States. However, starting in 2020, there has been a significant decrease in internet searches for hotel locations, especially in Southeast Asia and Northern European countries.

This study aims to identify the main tendencies and directions of development for certain types of information systems and technologies related to information and technical support of the hotel and tourism industries.

### 2 Literature review

Over the past years, the modern tourism industry has undergone significant changes due to implementation of new computer technologies. As a result, the success of any company in the tourism market is practically only possible by using modern information tools.

In a highly uncertain and stochastic external environment, a tourism company's adaptability is a necessary characteristic. High reliability and ensuring stability are among the fundamental principles of any organization's operations. The specific conditions of each tourism enterprise require developing and implementing complex automated systems that combine organizational, regulatory, technical, and other tasks. These tasks help to achieve a sufficient level of efficiency and operational safety.

The rapid development of information technologies has led to the establishment of various information technology solutions in the economy's service sector in recent years. Consequently, information management is closely associated with rapidly developing technologies that provide fast and efficient information transmission, processing, storage, and retrieval methods.

Automation of various processes is achieved through the integration of diverse information technologies. It aims to enhance the efficiency and productivity of employees in the tourism company and offers significant potential to improve organizational management efficiency in the tourism sector.

An important element that determines the reliable functioning of a company's operating system is an information center, which ensures the integration of supply, consumption, and production processes into a unified and highly efficient system. It allows for quick and flexible adaptation of the operational system (working, informational, material, and financial flows) to the individual needs of different segments in the face of rapidly changing demands and desires of consumers in the tourism service market. Additionally, it can minimize service provision costs, significantly reduce service and delivery times, accelerate the process of obtaining information about various services, and improve the level of customer service (Baloch et al., 2022), (Rasoolimanesh et al., 2019), (Buhalis, Leung & Lin, 2023).

The specificity of the development and implementation of a tourist product requires the following:

- The presence of systems that provide information about the availability of transportation
- The possibility of accommodating tourists in the shortest possible time,
- Allow for quick reservations, and automate handling of additional tasks in providing tourist services (parallel

processing of documents such as tickets, invoices, travel guides, providing reference information on payment, etc.).

It can be achieved through the extensive use of modern computer processing and information transmission technologies in tourism (Verhun, 2022), (Isaac & Dodeen, 2023).

The tourism industry is so diverse that it requires the use of all types of information technologies, ranging from developing specialized software that automates the operations of a single travel agency or hotel to using global computer networks (Lee, Hunter & Chung, 2020), (Aamir & Atsan, 2020).

Today, the formation of a tourist product requires the use of Global Distribution Systems (GDS), which allow for quick and convenient booking of train tickets, hotel reservations, car rentals, currency exchange, ticketing for entertainment events, and more (Krasovska, 2018).

Modern information technologies, systems, and networks enable the effective implementation of functional activities in the tourism and hospitality industry. These activities include information and reference services, image policies, tourism promotion, and other opportunities for the country (regions, towns, zones, and facilities), marketing of tourism products and services, ordering and selling tourism products, monitoring, analysis, and planning of tourism activities, development of tourism products, and more (Buhalis, 2020).

The development of computer information systems and telecommunications technologies has led to the emergence of a range of IT systems already actively used in tourism and are spreading noticeably across all tourism enterprises.

Information systems are intended to increase efficiency, reduce the error rate in performing the same tasks, and improve employee comfort by automating information acquisition and processing processes. For example, in recent years, domestic tour operators typically offered real-time tour packages based on GDS, significantly simplifying and expanding the company's tourism offerings without significant costs (Chen, Gozgor & Koo, 2021).

The key feature of information technologies in the tourism industry is automating planning, accounting, and management processes for core activities. Thus, they can be considered an integrated set of the following main subsystems: financial management, resource management, service management, quality, human resources, sales, financial analysis, expense accounting, operating assets, marketing management, and so on (Chen & Yao, 2022).

Distribution management systems for the tourism sector are a modern approach to controlling the distribution of goods and

services and addressing tasks related to organizing and conducting events in a tourism agency. These systems effectively manage the activities of the company's commercial department, analyze the profitability of incoming requests, determine pricing policies, create contracts, and monitor their execution. All this contributes to increased sales and significant savings of resources and time (Bec et al., 2021), (Chang & Sokol, 2022).

### 3 Materials and Methods

The practical study of modern trends in the information provision of the hotel and tourism industries is carried out using the method of statistical estimates. Also, the authors used comparative, logical, and linguistic approaches, abstraction, and idealization for evaluating and processing statistical data on the research topic.

### 3 Results

Modern tourism can only be imagined with information technologies, particularly the Internet. It provides numerous advantages for business development, which include:

- The ability to quickly post and search the Internet for information about "hot" tours, hotel rooms, tickets, and the possibility of booking them;
- Large-scale, round-the-clock, effective, and relatively cheap advertising;
- Significant cost savings due to the use of e-mail in cooperation with foreign partners, tour operators, hotels, transportation companies, etc.;
- The ability to receive timely information about new tours, discounts, political and economic situations in different countries, news on tourism legislation in these countries, etc.

Currently, the tourism industry utilizes Global Distribution Systems (GDS) for fast and convenient ticket booking, hotel reservations, car rentals, currency exchange, and ticket orders for sports and cultural events.

The largest GDS in the international market for tourism services are Amadeus, Worldspan, Galileo, and Sabre. These terminal systems are installed in hotels worldwide, occupying over 90% of the market. No wonder they are called the "Big Four." The regional reservation systems and systems merging with one of the aforementioned ones occupy the remaining 10%. Despite being global, each GDS has its distribution arsenal. Europe is the primary market for Amadeus and Galileo, while Sabre and Worldspan focus on America. Interestingly, the Galileo system is used in 116 countries worldwide and serves over 45,000 agencies. The most famous computer reservation systems in the international tourism market are Amadeus, Galileo, Sabre, and Worldspan (Figure 1).

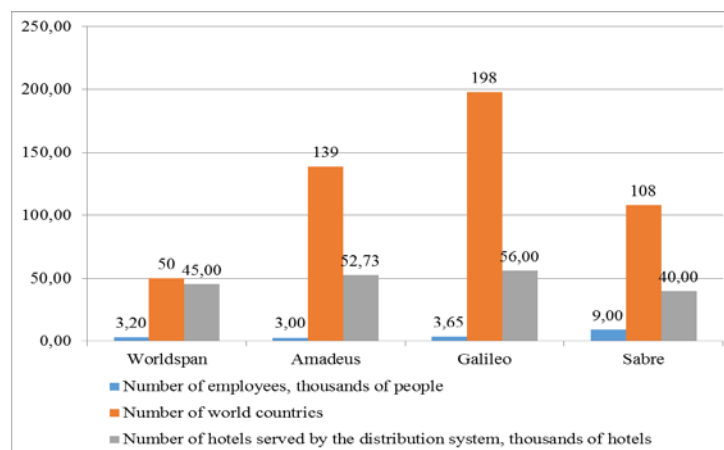


Figure 1: Comparative characteristics of global computer reservation systems in the international tourism market. Source: compiled by the authors based on Krasovska (2018).

The systems depicted in Figure 1 encompass approximately 500,000 terminals installed in travel agencies worldwide.

Amadeus is a leading global distribution system that provides real-time access to resources from tourism service providers such as airlines, hotels, car rental companies, insurance companies, and more. It distributes these resources among travel agencies in 139 countries worldwide. The Amadeus system grants access to resources from 513 airlines, representing over 95% of the global scheduled passenger air travel market. It also includes 52,731 hotels grouped in 322 hotel chains and 46 car rental companies and enables working with tour operator products, railways, cruise lines, and insurance companies. As an undeniable leader in the European and South American markets, the Amadeus system holds strong positions in the American market, as well as in Africa and Asia.

The Galileo system is a comprehensive suite of integrated subsystems, each designed to provide complete information and easy access to resources from 527 airlines, 202 hotel chains, car rental companies in 14,500 cities, and more. It allows for booking cruises, tours, and theater tickets, as well as providing information on fares, weather, visas, vaccinations, credit cards, and much more.

Worldspan is one of the world's top four global computer reservation systems. Currently, the Worldspan system enables 18,500 agencies worldwide to book 492 airlines, 45 car rental companies, 25 tour operators, and 191 hotel companies, representing approximately 45,000 hotels.

Sabre is one of the top four global booking systems. Currently, Sabre is used in over 40,000 agencies in 108 countries worldwide. The system is most widely used in the United States. It offers access to booking 420 airlines, over 40,000 hotels, and 50 car rental companies (Krasovska, 2018).

The efficiency of information technology implementation in tourism on a global level is assessed by determining the number of Internet users worldwide, global volumes of online travel sales, and the number of bookings made through global distribution systems. According to the World Tourism Organization, the countries with the highest number of Internet users are the United States (200 million people), China (111 million people), and Japan (85,29 million people). In Western Europe, there are approximately 205,5 million Internet users.

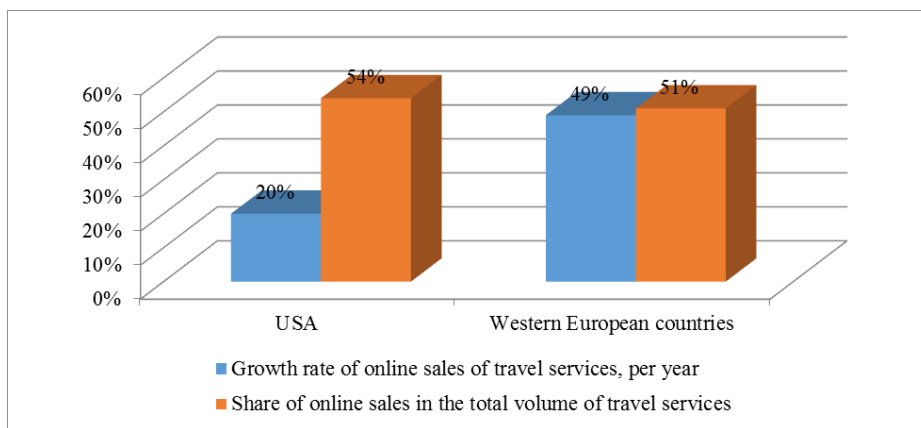


Figure 2: The dynamics of online sales in the tourism sector. Source: compiled by the authors based on Kucherenko (2014).

Recently, the volume of online sales of tourist services has been growing the fastest in the USA, at a rate of 19-20% annually, and in Western European countries, at a rate of 37-49%. Among the latter, France and the United Kingdom are the leaders. As a result, the share of internet sales in the total volume of tourist services amounted to 54% in the USA and 51% in Western European countries (Kucherenko, 2014).

When examining changes in hotel searches worldwide, according to data provided by the United Nations World Tourism Organization (UNWTO) as of December 2020 compared to December 2019, the largest decreases in searches for locations were in South Asia (63%), Northern Europe (61%), Africa (56-58%), Southeast Asia (57%), and Southern and Mediterranean Europe as well as Central America (56% each region) (Figure 3).

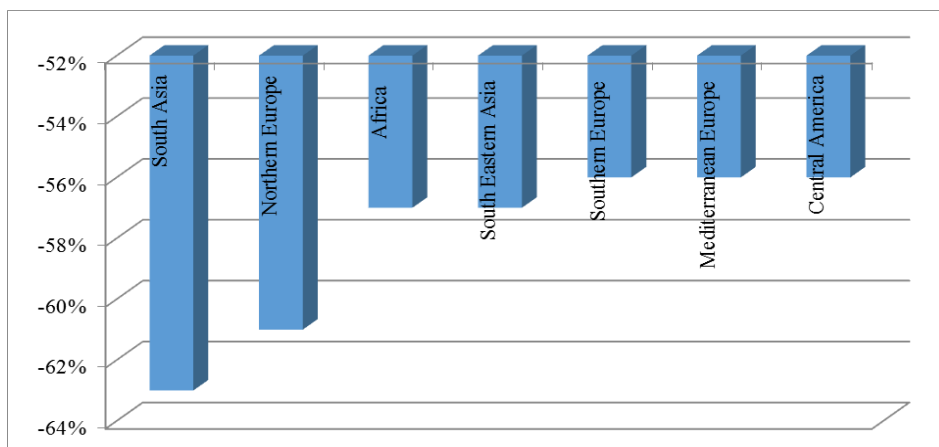


Figure 2: The dynamics of online sales in the tourism sector. Source: compiled by the authors based on Kucherenko (2014).

## 5 Discussion

Tourism is a highly information-rich industry that is one of the economy's most dynamic sectors. Efficient collection, storage, processing, and dissemination of up-to-date information are crucial and necessary for the functioning of any tourism company. The success of specific sectors of the economy in this direction depends on the speed of information transmission and exchange, its relevance, timely delivery, adequacy, and completeness. In this regard, the successful development of the tourism business requires the widespread use of the latest technologies both in the development of tourist products and in their promotion in the service market (Fan, Buhalis & Lin, 2019), (Kan, Lyu, Huang & Yao, 2022).

The impact of information technology on tourism is felt at various stages of creating and delivering tourism products. However, they significantly influence tourism services' promotion, dissemination, and sales. First and foremost, this concerns the ability to create new marketing and distribution channels, such as advertising and selling tourism products. In the advertising sphere, the practice of sending tourism information via e-mail (direct mail) has become established. In recent years, most tourism companies have created websites and utilized banner advertising (Banga, 2022), (Ding, Zhang & Tang, 2021). The XXI century has made it possible to speed up the process of booking airline tickets and carry it out in real-time. As a result, the quality of service has improved by reducing customer service time, and there has been an increase in the volume and variety of services offered (Timchuk & Evloeva, 2020).

One of the main directions of applying information technology in tourism is the implementation of multimedia technologies, including guides and catalogs. Currently, guidebooks and catalogs are produced in printed form, videotapes, laser discs, and the Internet. Electronic catalogs enable virtual travel along proposed routes, actively view these routes, obtain information about the country, objects on the route, information about hotels, camps, motels, and other accommodation options, as well as familiarize themselves with advantages, discounts, and legislation in the tourism industry (Elia et al., 2021), (Jiang, 2021).

Thanks to the use of efficient technologies, potential customers can receive real-time information about each tour of interest to them. This information allows them to quickly and accurately choose the exact tour product they need. In this process, tour operators (travel agents) can change the trip, if necessary, or create a new exclusive sightseeing tour, reserve seats, and sell the tourism service designed during the operation.

There have been significant changes in the management of the tourism industry as well. The current level of tourism development and strong competition in this field give particular importance to the information systems of tourism companies. The functional capabilities of these systems should allow for the input, processing, and storage of information about tours, hotels, clients, and the status of applications. Moreover, they should provide informational conclusions in the form of various documents such as:

- questionnaires,
- vouchers;
- tourist lists;
- tour and hotel descriptions;
- calculate the cost of tours considering exchange rates and discounts; control tour payments;
- compile financial reports;
- export and import data into other software products (Word, Excel, accounting software) (Fan, Jiang & Deng, 2022), (Qian, Liu & Pan, 2022).

Next to the automation of activities in travel companies, similar software development is being carried out for the automation of operations in hotels, restaurants, and other companies in the tourism industry. Using information systems in this field leads to

significant changes in management and enhances service quality (Zhang, Pan, Feng & Qin, 2022), (Ercan & Samet, 2018).

An ongoing trend in the international tourism industry in recent years has been the active utilization of profit optimization systems (revenue management systems). As a result, the companies actively employing such systems gain a clear competitive advantage and achieve noticeable sales growth.

## 6 Conclusions

The analysis of scientific literature on the research topic and the questionnaire survey results revealed that in today's economic conditions of fierce competition and market economy, tourism enterprises could only successfully develop and operate efficiently with modern automated information technologies. The analysis of modern information technologies and their application in the activities of tourism companies confirms their practical value and feasibility. The effectiveness of management and enhancing the competitiveness of tourism companies directly depends on the active implementation and utilization of various modern automation tools, such as specialized software products, tourism websites, CRM systems, and so on. Implementing the latest information systems opens up new possibilities for effectively addressing the main problems in the tourism industry. The system's functioning allows a travel agency to implement resource-saving programs by reducing operational costs for maintaining communication systems, lowering energy consumption, avoiding peak loads, creating conditions for increased labor productivity, and improving the quality of services and the performed work.

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**Primary Paper Section: A****Secondary Paper Section: AE, AK**



## BUSINESS AND ENTERPRISE DEVELOPMENT STRATEGIES FROM THE STANDPOINT OF ECONOMIC SECURITY IN CRISIS SITUATIONS

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**Abstract:** This article employs a systematic analysis to evaluate the progression of Small and Medium Enterprises (SMEs) within the framework of the Covid-19 pandemic, utilizing the European Union (EU) countries and Ukraine as illustrative cases. The analysis draws upon data sourced from Eurostat and the State Statistics Service of Ukraine, encompassing significant SME indicators such as the number of entities, employment figures, and turnover. The findings underscore substantial disparities in the magnitude and function of Small and Medium Enterprises (SMEs) within the economies of the European Union (EU) and Ukraine, as well as the measures employed to bolster businesses during crisis periods.

**Keywords:** SMEs, SME financing, crisis, SMEs, SMEs' resilience.

### 1 Introduction

To ensure the resilience and advancement of businesses during crises, it is imperative to effectively attract external financing, mobilize and allocate internal resources within enterprises, leverage political support mechanisms, and enhance organizational preparedness, among other factors. The global landscape has undergone significant transformation due to the COVID-19 pandemic, triggering a profound economic crisis that directly impacted both Ukraine and the European Union (EU). Consequently, European governments swiftly implemented a series of urgent socio-economic support measures in 2020 to counteract the adverse repercussions on the real economy, benefiting the general population as well as businesses. Among these businesses, SMEs emerge as one of the most vulnerable groups, grappling with financing difficulties during crises and necessitating preferential lending terms. Such circumstances underscore the pressing need to explore the dynamics of business development within crisis contexts. The objective of this article is to conduct a statistical analysis assessing the efficacy of business support initiatives in the European Union (EU) and Ukraine, specifically concerning the advancement of key indicators of SMEs.

### 2 Literature review

The study conducted by Juergensen, Guimón, and Narula (2020) examining the repercussions of the Covid-19 crisis on SMEs, as well as business response and support policies during the crisis, yields valuable insights. Within the study, several aspects of business support and development policies during the crisis are identified and presented in Table 1. These aspects encompass the following key elements: 1) identification of sectors within the economy and groups of enterprises that are most vulnerable and require support (such as SMEs, banks, large enterprises, and the manufacturing sector); 2) adoption of a problem-oriented approach to delivering support tailored to the specific challenges faced by enterprises/industries, accompanied by the formulation of prioritized areas for support, various types of assistance, and short and long-term financing frameworks; 3) transition from the "survival" phase towards the phase of recovery and growth, necessitating the utilization of structural policy tools and methodologies. This transition aligns with the findings of Jones,

Kelemen, and Meunier (2016) that emphasize the significance of prompt response to financial crisis consequences by EU institutions, further affirming the importance of policy measures during the "survival" phase.

It is noteworthy that during the stage of business survival, external financing assumes significance as it amplifies the positive influence of SMEs' innovative practices, which are implemented to ensure business sustainability (Adam & Alarifi, 2021). However, the productivity of SMEs during a crisis hinges more on the efficacy of their adopted innovations rather than the financial resources they procure (Adam & Alarifi, 2021). Additionally, at the survival stage, organizational preparedness, staff training, and knowledge transfer emerge as vital factors in effectively managing potential crisis consequences and formulating strategies to overcome them (Toubes, Araújo-Vila & Fraiz-Brea, 2021).

Table 1: Policy approaches to support manufacturing SMEs during the COVID-19 Crisis

	Survival phase	Renewal and growth phase
Main focus	Financial support to prevent liquidity crises and maintain employment	Structural measures to foster innovation, internationalization, and networking
Time horizon	Short-term	Medium-/Long-term
Target groups	One-size-fits-all approach	Differentiated strategy by sector and by type of SME
Policy mix	Reduction of working hours and temporary unemployment Deferral of tax, social security payments, debt payments, and rent and utility payments Loan guarantees Direct lending to SMEs Grants and subsidies	Support for internationalization Innovation support schemes Training and skills development Teleworking and digitalization Cluster development and networking initiatives Entrepreneurship and start-up support

Source: Juergensen, Guimón & Narula (2020)

In a comprehensive theoretical review of 69 academic publications by Eggers (2020) in the realm of SMEs navigating crises, the author delineates strategies to surmount economic downturns across three crucial business domains: finance, strategy, and the institutional environment. It is deduced that, in the majority of instances, finance represents the most susceptible area for SMEs during crises, characterized by challenges such as inadequate financial resources, constrained investment policies, and diminished revenues. Ukrainian authors also studied regional aspects of economic modernization, using qualitative data from the countries of the European Union for this purpose (Ladonko, L., Mozhalkina, N., Buryk, Z., Ostrovskiy, I., & Saienko, V. (2022).

Table 2: Business Area, Crisis, and Continents Covered

Business Area	Crisis	Continent*
Finance (50.7%)	2007 – 2008 Global Financial Crisis (81.2%)	Europe (75.4%)
Strategy and Strategic Orientations (40.6%)	1997 Asian Financial Crisis (5.8%)	Asia (18.8%)
Institutional Environment (8.7%)	2010 and 2011 Christchurch Earthquakes (1.4%)	North America (4.4%)
	2011 Thailand Floods (1.4%)	Oceania (4.4%)
	2015–16 Russian Financial Crisis (1.4%)	Global (2.9%)
	Variety of crises and disasters (8.7%)	

\* total exceeds 100% since some studies cover several countries and continents

Source: Eggers (2020)

Undoubtedly, amidst a crisis, the pursuit of favorable financing terms for enterprises emerges as a paramount undertaking. Casey & O'Toole (2014) highlight that credit-rated SMEs predominantly rely on trade credits, while constrained firms often resort to loans from other companies or informal lending, and small firms frequently avail themselves of grant financing.

Furthermore, in times of crisis, SMEs may adopt a strategy of cooperative collaboration or competitive alliances to leverage their respective strengths and foster synergistic outcomes (Kossyva, Sarri & Georgolopoulos, 2014). Consequently, both fundraising and marketing strategies assume crucial roles in navigating the crisis and ensuring survival (Omar, Ishak & Jusoh, 2020). Consequently, within the scientific literature, extensive discourse takes place regarding the various types, frameworks, and mechanisms of business financing during different stages of support within crisis contexts. Additionally, scholarly discussions emphasize the pivotal significance of innovation, marketing strategies, and organizational preparedness for businesses operating in crisis environments.

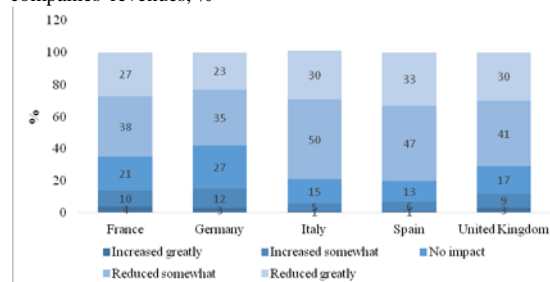
### 3 Methodology

This article employs a systematic analysis to evaluate the progression of SMEs amidst the Covid-19 pandemic, utilizing the European Union (EU) countries and Ukraine as illustrative cases. The analysis draws upon data sourced from Eurostat and the State Statistics Service of Ukraine, encompassing significant SME indicators such as the number of entities, employment figures, and turnover. To characterize the diverse financial support schemes, the study incorporates information from the Covid-19 Fund in Ukraine and the European Commission (2023), shedding light on the magnitude of funding provided in EU countries during the crisis, as well as the variation in support across different SME sectors. Furthermore, insights into the challenges related to SME financing in Ukraine are derived from the report of the State Audit Service of Ukraine.

### 4 Results and discussion

In the context of the EU, SMEs emerged as the most significant type of enterprise during the pandemic, constituting 99% of businesses across the Member States. Within the EU, a staggering 24 million companies fall under the SME category, contributing over 50% of the Gross Domestic Product (GDP) and fostering employment opportunities for more than 100 million individuals (European Parliament, 2023). Specifically, in 2020, the EU-27 consisted of 42,000 large enterprises with a turnover of €2,274 billion, 201,000 medium-sized enterprises with a turnover of €4,394 billion, and 442.68 thousand small enterprises with a turnover of €2,378 billion (Eurostat, 2023a; 2023b). The role of SMEs extends far beyond economic contributions, as they play a pivotal role in ensuring the sustainability of the European economy and the overall well-being of the population (Siakas et al., 2014). Survey findings on small and medium-sized enterprises reveal a notable increase in the proportion of businesses encountering a decline in revenue. Disparities across countries arise due to variations in the severity of policies implemented to contain the virus and its subsequent implications on business operations. Notably, Italian and Spanish SMEs have been affected the most, with 30% and 33% of surveyed companies reporting a decrease in revenues, in contrast to 23% in Germany (Dimson et al., 2020).

Figure 1: Respondents' views of Covid-19 impact on their companies' revenues, %



Source: Dimson et. al. (2020)

The Covid-19 pandemic has exerted a substantial influence on small and medium-sized businesses (SMBs) within the EU27. Numerous SMBs have encountered a decrease in sales,

disruptions in the supply chain, and a surge in delayed payments. To address the ramifications of the pandemic, SMBs have availed themselves of government assistance through initiatives aimed at wage subsidies, alleviating cash flow challenges, implementing reduced working hours, and similar measures. Encouragingly, many SMBs have embraced the adoption of digital tools to sustain their operations and have shifted toward or enhanced their online sales channels.

The impact of the pandemic on small and medium-sized businesses (SMBs) exhibited significant variations across both EU member states and industries. Notably, certain sectors experienced pronounced challenges as a result of the pandemic, including "accommodation and services to the public" (-37.8%), "transportation and storage" (-16.1%), "administrative and support services" (-13.3%), and "manufacturing" (-9.8%). Conversely, the value added by SMBs witnessed an increase in the "real estate activities" and "information and communication" sectors, with only a moderate decline observed in the "digital" domain, as well as in the "supply of electricity, gas, steam, and air conditioning", construction industry, and professional, scientific, and technical activities. During the year 2020, the EU-27 experienced a reduction in the number of new business registrations and startup formations, alongside a decline in startup financing. Nevertheless, the number of business bankruptcies exhibited a decrease, reflecting the impact of diverse economic support programs implemented by Member States, as well as enhanced cooperation between creditors and regulatory bodies.

In 2020, the Covid-19 pandemic had a profound impact on business operations within the non-financial sector of Europe, leading to a substantial decrease in employment opportunities. Available data reveals a notable decline in the value added generated by SMBs in the EU27 non-financial sector, with a decrease of 7.6%. Furthermore, employment within EU27 SMBs experienced a decline of 1.7%. Specifically, the value added on a factor cost basis decreased by 6%, amounting to USD 6.7 trillion in 2020 compared to USD 7.1 trillion in 2019 (gross operating income less operating subsidies and indirect taxes). Nonetheless, the implementation of various response policies and measures has contributed to the resilience of SMEs. Amid the peak of the pandemic in 2020, these enterprises managed to generate a value-added of USD 3.5 trillion, albeit experiencing a 5% decrease from the USD 4 trillion recorded in 2019. Additionally, the number of individuals employed in SMEs witnessed a decrease of 3%, declining from 121.5 million in 2019 to 127.7 million in 2020 (Wood, 2023).

In light of the challenges and risks faced by SMEs amidst the pandemic, the European Commission recognized the need to revise and align its SME strategy with other key initiatives such as the Industrial Strategy, the European Data Strategy, and the European Green Deal. In response, new measures were identified to support SMEs during these turbulent times. These measures encompassed several areas, including facilitating market access for SMEs beyond the EU, expanding the scope of the Erasmus scheme to provide more opportunities for young entrepreneurs, and promoting the development of pilot initiatives and projects aimed at fostering the adoption of digital solutions by SMEs. This emphasis on digital transformation was driven by the recognition of the imperative for SMEs to transition to digital business models to navigate crises effectively (European Parliament, 2021).

In terms of financial assistance, the European Commission (EC) and the European Investment Bank Group collaborated to allocate €1 billion from the European Fund for Strategic Investments. This funding aimed to stimulate local banks and other lending institutions, ultimately facilitating liquidity for a minimum of 100,000 companies across the EU. In 2020, the EC further announced a substantial €8 billion in support specifically designated for SMEs. To ensure compliance with EU state aid regulations, the EC also unveiled the establishment of a Pan-European Guarantee Fund, overseen by the European Investment Bank. This fund was designed to provide SMEs with access to

€25 billion in financing, bolstering their financial resilience (European Commission, 2023).

Table 3 presents an overview of various financial support schemes implemented during the crisis, highlighting the diverse funding amounts allocated in EU countries. Additionally, the table captures the differentiation in support based on specific sectors within the SME landscape. Notably, one of the most prevalent support mechanisms was the establishment of guarantee agreements between the European Investment Fund and national financial institutions. These agreements played a crucial role in facilitating SME financing by enhancing access to capital under more favorable conditions. The allocated funds were utilized for various purposes, including market expansion, product development, and workforce upskilling initiatives, among others. It is worth noting that Germany, Italy, and France have allocated significantly larger amounts of financial resources to SMEs in various sectors of the economy. France and Italy signed securitization agreements to provide loans to SMEs, with priority given to SMEs engaged in environmental innovation. Significant amounts of financial resources have also been allocated to support SMEs in Romania, with a focus on the agricultural sector, and in Spain, with a focus on digitalization and innovation.

During the pandemic crisis, SMEs in Romania encountered a substantial decline in turnover, necessitating prompt responses to external environmental changes with limited capital resources (Bordeianu, Grigoras-Ichim & Morosan-Danila, 2021). The increased focus on financing innovative SMEs in Italy and Spain can be attributed to the elevated lending risk associated with these firms during times of crisis. Lee, Sameen, and Cowling (2015) observed diminished access to finance for innovative SMEs during such periods, resulting in a decline in their financial performance. Furthermore, technological innovation plays a pivotal role in promoting the sustainability of SMEs and fostering a greener culture in crises (Alraja et al., 2022).

Table 3: Cases of financial support for SMEs in the EU in crises

Country	Financing mechanism	Financing coverage	Sectors of SMEs
Bulgaria	Guarantee agreement between the European Investment Fund and Raiffeisenbank, that «provides loans with better terms and conditions»	€10 mio.	Private and public enterprises in the cultural and creative sectors
Denmark, Sweden, Norway, Finland, and Iceland	Guarantee agreement between European Investment Fund and the Danish alternative finance provider REinvent Finance through bridge financing loans, minimum guarantees, and content development loans through the finance provider.	Up to €50 mio.	Nordic film and TV series industry operators in Sweden, Norway, Denmark, Finland, and Iceland
Estonia, Latvia, Lithuania, and Finland	Guarantee of the European Investment Fund, which «was granted to Estonian lender Finora Capital, a fully digital, alternative finance providing company». It has provided «access to more affordable loans» to develop new products, enter new markets, and develop competencies.	€5 mio.	Cultural and creative sectors in Estonia, Latvia, Lithuania, and Finland.
France	The securitization agreement signed between the European Investment Bank Group and BNP Paribas for SME lending	€15 million during 2 years	SMEs from various sectors of the economy
Germany	A preferential lending scheme agreed upon between the European Investment Fund and the European Investment Bank and Commerzbank	Up to €500 mio.	SMEs from various sectors of the economy
Hungary	Guarantee agreement between the European Investment Fund and Magyar Vállalkozásfejlesztési Alapítvány to improve conditions and access to credit	€8,2 mio.	SMEs in the cultural and creative sector, to sustain jobs and speed up the economic recovery.
Italy	The securitization agreement signed between the European Investment Bank Group and Italian leasing specialist Alba Leasing	€90 mio.	SMEs from different sectors of the economy with a focus on environmental investments
Malta	Agreement between the	€28 mio.	SMEs from various

	European Commission, the European Investment Bank group, and the Government of Malta to increase the volume of financing for enterprises under SME development initiatives on favorable terms: lower interest rates, improved collateral requirements		sectors of the economy
Romania	Cooperation agreement between the European Investment Bank Group and Deutsche Leasing Romania, secured by a guarantee from the European Fund for Strategic Investments	€70 mio.	Private sector SMEs, agriculture and equipment, support for borrowers in rural and economically backward regions
Spain	Concessional financing based on the agreement between the European Investment Bank Group and Banco Santander, the signing of three agreements with Banca March, and an agreement with Banco de Sabadell	€900 mio. for Banco Santander and €270 mio. for Banca March. This enabled the mobilization of €300 million for Banco de Sabadell, which ensured the mobilization of €600 million.	SMEs, with a special focus on investments in digitalization and innovation

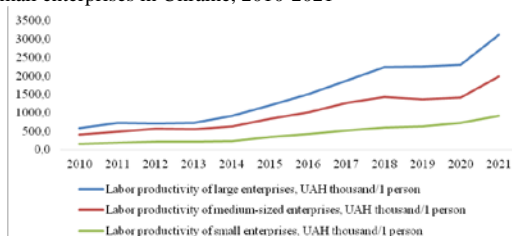
Source: summarized by the author according to the European Commission (2023)

In Ukraine, the level of funding and support provided to SMEs has been considerably higher in comparison to EU countries. On April 13, 2020, the Ukrainian Parliament decided to establish a Covid-19 Fund with a total value of UAH 80.9 billion (USD 2.4 billion). The support package encompassed various programmatic response measures designed to provide specific assistance to SMEs. These measures included a partial unemployment benefits program for SMEs that were compelled to halt their operations during the lockdown. The program provided financial support equivalent to two-thirds of the wage rate for each hour of lost working time, capped at a maximum amount of UAH 4,723. Additionally, amendments were made to the Affordable Loans 5-7-9% program, which was initially launched in January 2020. Furthermore, targeted support initiatives were implemented to aid individual entrepreneurs, including provisions such as child benefits and temporary tax exemptions. Tax measures were also introduced, such as the temporary suspension of commercial real estate and land tax, tax audits, and the deferral of interest payments for taxpayers and social security payers. Moreover, credit institutions were prohibited from increasing interest rates on previously issued loans. Based on the findings of the State Audit Service of Ukraine (2023), the existing legislation exhibits certain gaps that have resulted in the ineffective utilization of state budget funds disbursed from the COVID-19 Fund. These loopholes have enabled employers to obtain partial unemployment benefits without appropriate justification and cover expenses unrelated to quarantine measures or without suspending their operations. For instance, in the case of the Chernihiv region, there is an estimated potential misuse of budgetary funds amounting to UAH 6.5 million. These findings highlight the need for addressing the identified gaps to ensure the proper allocation and utilization of budget resources (State Audit Service of Ukraine, 2023).

In comparison to the EU27, Ukraine witnessed the presence of 1,955,119 small businesses (99.1%) and approximately 17,946 medium-sized businesses (0.9%) in 2020. These enterprises accounted for 60% of the country's GDP, 7 million jobs, and contributed 40% of tax revenues. Subsequently, in 2021, the number of small businesses decreased slightly to 1,937,827, while the count of medium-sized businesses reached 17,811 (State Statistics Committee of Ukraine, 2023a). The share of employed workers in small enterprises (SEs) constituted 47.4% in 2020 and increased marginally to 48.0% in 2021, whereas, in medium-sized enterprises (MEs), it stood at 35% in 2020 and slightly decreased to 33.6% in 2021 (State Statistics Committee of Ukraine, 2023b). SEs contributed to 27.6% of total sales in 2020 and 26.1% in 2021, while MEs accounted for 39.6% during the same period (State Statistics Committee of Ukraine, 2023c). Remarkably, the pandemic had a minimal impact on SME employment in Ukraine, as the number of employees in SEs only

experienced a 1% decrease in 2020-2021, while MEs witnessed a 4% increase within the same timeframe. However, it is worth noting that labor productivity in Ukraine's SEs remains comparatively low, with medium and large enterprises demonstrating higher efficiency (Figure 2).

Figure 2: Labor productivity dynamics of large, medium, and small enterprises in Ukraine, 2010-2021



Source: calculated by the author based on data from the State Statistics Committee of Ukraine (2023a; 2023c)

It is noteworthy that the agricultural sector in Romania experienced a negative growth rate of -5.88% in gross value added during the pandemic. However, in 2021, the sector demonstrated a significant recovery with a growth rate of 22.57%, followed by a further growth rate of 8.55% in 2022. These figures indicate the effectiveness of SME financing in Romania's agricultural sector and the success of supporting borrowers in rural and economically disadvantaged regions, as evidenced in Table 4. In comparison, Bulgaria did not provide specific support for its agricultural sector. Consequently, Bulgaria's agricultural sector experienced a negative growth rate of -1.10% during the pandemic, but saw a remarkable recovery in 2021 with a growth rate of 51.00%, followed by a growth rate of 15.74% in 2022. This discrepancy can be attributed to variations in the countries' economic structures and the composition of their agricultural sectors. In Romania, the agricultural sector accounted for 19% of employment in 2021, whereas in Bulgaria, it constituted 6% of total employment. Additionally, in terms of value-added, the agricultural sector in Romania contributed 4.4% of the country's GDP in 2021, equivalent to \$12,356.96 million. In contrast, the agricultural sector in Bulgaria represented 4.4% of GDP in 2021, amounting to \$3,670.75 million (World Bank, 2023a; 2023b; 2023c).

Table 4: The growth rate of Gross value added of the agricultural industry in Eu-27, basic prices, %

TIME	2012	2018	2019	2020	2021	2022	Growth (+/-), 2022-2019
European Union - 27	0,56%	-2,31%	3,91%	-0,98%	7,33%	15,75%	11,84%
Belgium	27,18%	-9,96%	18,04%	-5,90%	3,99%	7,91%	-10,14%
Bulgaria	1,82%	-3,34%	2,04%	-1,10%	51,00%	15,74%	13,71%
Czechia	-6,21%	1,50%	3,05%	10,44%	19,62%	17,49%	14,44%
Denmark	34,33%	-28,77%	35,60%	22,11%	-12,48%	27,40%	-8,21%
Germany	-9,19%	-22,80%	31,11%	-5,38%	0,27%	44,31%	13,19%
Estonia	15,89%	-25,80%	36,86%	-8,90%	5,82%	65,20%	28,34%
Ireland	-4,60%	-17,79%	10,21%	12,95%	21,48%	22,23%	12,02%
Greece	4,45%	-5,33%	7,41%	0,58%	1,43%	16,44%	9,03%
Spain	0,38%	-0,36%	-2,78%	-0,37%	7,64%	-5,57%	-2,79%
France	3,06%	12,58%	-5,71%	-2,37%	13,94%	23,54%	29,24%
Croatia	-9,63%	11,09%	4,82%	1,58%	26,46%	6,20%	1,38%
Italy	4,18%	4,86%	-1,85%	-2,74%	3,41%	10,68%	12,53%
Cyprus	2,26%	-3,98%	12,86%	4,08%	-8,38%	-1,64%	-14,50%
Latvia	24,39%	-18,82%	65,49%	2,91%	5,55%	27,56%	-37,93%
Lithuania	29,75%	-20,23%	24,45%	21,72%	2,95%	9,77%	-14,68%
Luxembourg	24,53%	4,02%	0,03%	0,38%	6,63%	36,99%	36,95%
Hungary	-11,05%	-3,04%	2,41%	-3,18%	12,82%	-18,78%	-21,19%
Malta	-5,81%	-5,04%	8,04%	-12,35%	-8,34%	-0,02%	-8,06%
Netherlands	7,16%	-8,67%	4,94%	-6,07%	3,90%	9,94%	5,00%
Austria	-1,19%	-3,27%	-2,02%	2,53%	16,22%	18,87%	20,88%
Poland	1,82%	-11,07%	9,33%	6,87%	-3,78%	41,30%	31,97%
Portugal	-3,13%	0,82%	10,13%	-0,24%	7,65%	-8,69%	-18,82%
Romania	-23,43%	7,96%	5,54%	-5,88%	22,57%	8,55%	3,00%
Slovenia	-19,16%	44,01%	-9,64%	5,22%	-28,09%	27,29%	36,93%
Slovakia	8,20%	-16,97%	-3,70%	23,18%	9,46%	25,83%	29,54%
Finland	6,31%	5,38%	11,01%	7,85%	2,75%	10,22%	-0,79%
Sweden	5,63%	-22,41%	5,87%	8,77%	24,04%	6,22%	0,35%
Iceland	5,53%	-18,13%	1,94%	6,37%	2,84%	14,56%	12,61%
Norway	6,54%	-13,39%	3,82%	0,01%	5,67%	5,01%	1,20%
Switzerland	-1,33%	1,68%	7,17%	9,51%	-7,13%	9,36%	2,19%

Source: Eurostat (2023d)

Furthermore, it is essential to acknowledge the varying levels of financial support provided to SMEs by EU institutions across different Member States. It is pertinent to concur with the perspective put forth by Polishchuk & Chugaev (2022) that the COVID-19 pandemic and the subsequent severe recession, the most profound since 1945, have impacted the collaborative sectors of the EU. This crisis has exacerbated existing disparities in economic development among countries and regions, necessitating a comprehensive review and enhancement of financial instruments within the scope of common policies and, specifically, financing policies. The effectiveness of stimulating entry into new markets through SME financing in the EU during the crisis appears to be insufficient, as indicated by the negative trade balance observed in 2022. The proportion of EU-27 national imports in world imports stood at 13.4% in 2015, 14.0% in 2019 before the pandemic, 13.8% in 2020-2021 during the pandemic, and 15.3% in 2022. In terms of national exports of the EU-27 countries, their share in world exports was 15.6% in 2015, 15.9% in 2019 before the pandemic, 16.1% and 14.7% in 2020 and 2021 respectively, and 13.7% in 2022. Throughout the period from 2015 to 2021, the EU-27 countries maintained a positive trade balance, with figures such as €191.1 billion in 2019, €15.3 billion in 2020, and €5.039 billion in 2021. However, in 2022, the trade balance turned negative, reaching -€29.4 billion euros (Figure 2) (Eurostat, 2023e). The trade deficit in the EU can be attributed to several factors. Firstly, the negative energy balance caused by the escalation of energy prices and the ongoing conflict in Ukraine has had a significant impact. Secondly, there has been a decline in manufacturing exports to the EU, which has contributed to the trade deficit. Lastly, the war in Ukraine has also resulted in a reduction in export and import activities with Russia and China, further exacerbating the trade deficit (Eurostat, 2023c).

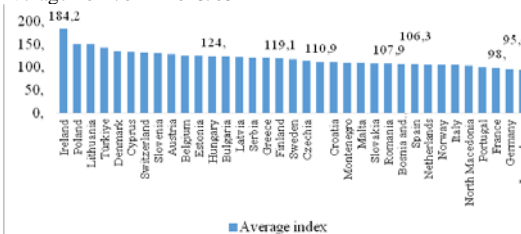
Figure 3: Export, import, and trade balance of goods in EU-27 in 2022/04 – 2023/03, million euro



Source: Eurostat (2023f; 2023g)

Furthermore, it is noteworthy to highlight the observed decline in industrial production in Germany and France. During the period from April 2022 to March 2023, the Average Volume Index of production stood at 95.6 for Germany and 98.0 for France (Figure 4).

Figure 4: Volume index of production in EU-27, 2015=100 (SCA) (mining and quarrying; manufacturing; electricity, gas, steam, and air conditioning supply, excluding construction), Average 2022/04 – 2023/03



Source: Eurostat (2023h)

### 5 Conclusions

The EU and Ukraine exhibit notable differences in the scale and role of SMEs in their respective economies, as well as the measures implemented to support businesses during times of crisis. In the EU, SMEs play a crucial role in ensuring economic stability, contributing to 50% of GDP. Conversely, in Ukraine, despite SMEs making a significant contribution to GDP (60%),

their labor productivity is considerably lower compared to larger companies. Both the EU and Ukraine have recognized the importance of SME financing and policy support measures, particularly in response to challenges such as declining revenues, decreased sales, and supply disruptions. It is noteworthy that the approaches taken by the EU and Ukraine differ. EU countries have emphasized the provision of preferential terms for SME financing through the establishment of guarantee agreements with key financial institutions within member states. Funding has been allocated in the EU27 to support the most vulnerable SMEs, aiming to facilitate their development of new products and enhancement of staff skills. Additionally, initiatives have been introduced to enable SMEs to explore new markets outside the EU, expand the Erasmus scheme for young entrepreneurs, and foster the adoption of digital solutions through pilot projects and initiatives. In Ukraine, the response measures have included the implementation of a partial unemployment benefits program for SMEs, modifications to the Affordable Loans 5-7-9% program, targeted support for individual entrepreneurs, and the implementation of tax measures. Despite variations in response policies, SMEs in EU member states have experienced a more pronounced impact. The number of employed SMEs witnessed a decline of 3%. Conversely, in Ukraine, the number of employed small enterprises decreased by 1%, while medium-sized enterprises experienced a 4% increase during the period of 2020-2021. These contrasting trends suggest potential disparities in the enforcement of quarantine restrictions and the diverse effects of the pandemic on different countries.

The study uncovers variations in financial support schemes among EU member states, including disparities in the amount of SME financing provided during the crisis and variations in support across different sectors of SMEs. A prevailing support scheme observed in the EU involves the establishment of guarantee agreements between the European Investment Fund and national financial institutions to facilitate SME financing. This mechanism has proven effective in enabling enterprises to secure funding and gain access to capital under more favorable conditions.

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**Primary Paper Section: A**

**Secondary Paper Section: AH**

## IMPLEMENTATION OF PUBLIC POLICY IN THE FACE OF POLITICAL, MILITARY AND FINANCIAL RISKS AND THREATS

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**Abstract:** The evolution of conceptual frameworks concerning national security, driven by emerging challenges such as shifts in the global order and potential military threats from specific aggressor nations, has emphasized the necessity of formulating an effective state policy. This policy should possess the capability to uphold resilience against external and internal aggressive influences, promptly address a wide array of threats, adapt its operations, and uphold fundamental societal values and legal institutions. Additionally, it should exhibit the ability to sustain continuous functionality during times of crisis and successfully recover from the deleterious impacts of various phenomena. The objective of this article is to ascertain the specific characteristics of challenges that influence the operations of public authorities. Furthermore, it seeks to analyze the principal trends in contemporary public policy, considering the prevailing political, military, and financial risks and threats. Methodology. During the study, a range of scientific methodologies was employed, including induction, deduction, analysis, synthesis of information, systemic and structural approaches, comparative analysis, logical reasoning, linguistic analysis, abstraction, idealization, and systematic and functional methods for data examination and processing. Additionally, the method of expert opinions was utilized to enhance the depth and accuracy of the research findings. Results. The study identifies the crucial theoretical aspects of public policy within the framework of political, military, and financial risks. It further scrutinizes the principal legislative acts of Ukraine and references scholarly works that explore the experiences of European countries concerning this matter.

**Keywords:** ensuring national security, countering threats, national stability, responding to crises, shaping public policy, responding to challenges, neutralizing threats.

### 1 Introduction

The current situation, characterized by extensive military actions conducted by the Russian Federation within the independent territory of Ukraine, represents a scale of conflict unprecedented in Europe in recent decades. Consequently, it underscores the urgency of undertaking scientific exploration to discover novel approaches to public policy, innovative strategies for responding to challenges, and proactive measures to anticipate political and military threats amidst external aggression and internal instability. Notably, the development of an effective concept of national resilience emerges as a critical avenue for addressing these concerns.

The theoretical segment of this study provides a comprehensive rationale for the significance and constituent elements of the state's policy, as implemented within the framework of political, military, and financial risks and threats.

The practical component of the study involves elucidating the constituents of the national stability system, implemented to ensure that society and the state are well-prepared to respond to a wide spectrum of political, military, and financial threats. Furthermore, it explores the direction of Ukraine's state policy in countering crisis phenomena, drawing insights from the current regulatory framework of the country. Additionally, by analyzing research conducted by scholars, the author identifies prominent trends in the practices of government agencies in highly developed European nations regarding the establishment of national stability.

Drawing upon the findings of the study, the author formulates conclusions regarding the raised issues. Specifically, emphasis is placed on the pressing need for the state to establish an effective system for safeguarding and maintaining the stability of critical infrastructures. This system should be built upon a well-defined

delineation of responsibilities among its stakeholders and foster public-private partnerships.

### 2 Literature review

The objective of public policy encompasses a broad scope, encompassing the mitigation of threats across various domains such as political, economic, military-political, informational, ethnocultural, social, and environmental spheres. Achieving effective public policy necessitates not only a responsive approach to hybrid challenges and detrimental influences but also proactive strategies to anticipate their emergence and cultivate sustainable resilience within the state and society. This can be accomplished by creating an unfavorable environment for the implementation of diverse threats and challenges. It is important to acknowledge that the formation of national stability cannot be solely entrusted to the state; rather, it requires the active involvement of civil, multi-ethnic society, particularly in democratic countries. Characteristics of a well-functioning modern country-subject's public policy include predictability, flexibility, adaptability, rapid response capabilities, and a balanced combination of systemic and situational interactions among institutions. These qualities signify the development of an effective public policy framework that should be aspired to and implemented across nations worldwide (Landi et al., 2022), (Sun, Liu & Chen, 2022), (Hossein et al., 2022).

The national stability system is undergoing a gradual delineation from the national security system, as indicated by the analysis of security documents. This separation is occurring within the core of the state and is often accompanied by the utilization of these concepts as supplementary systemic mechanisms to address emerging threats (Zhang & Luo, 2022), (He & Guo, 2022), (Zhu & Zhang, 2018).

It is crucial to consider not only the interests but also the shared values among governments and leaders of nations who make critical strategic decisions to formulate a comprehensive national stability strategy. Understanding these ideological and psychological factors becomes essential in developing an effective national stability strategy, which pertains to the ability of a civilized subject country to respond to challenges and anticipate threats in the contemporary world marked by crises (Han, Wang & Xu, 2019), (Chen & Zhao, 2022), (Bannier, Bofinger & Rock, 2022).

During each phase of implementing the national state strategy, it is imperative to analyze the interplay between global and local challenges and threats, including political challenges, where constructive elements often intertwine with destructive ones. A fruitful outcome of such analysis can only be achieved through the establishment of a globalization strategy for the country's development. This strategy assumes a pivotal role in the national stability strategy, and its successful implementation stands as a paramount factor in ensuring the attainment of civilizational subjectivity in the modern world (Amiri et al., 2020), (Capelli, Ielasi & Russo, 2021).

Undoubtedly, the national system of sustainable development necessitates institutional support, with a particular emphasis on institutional synergy. In light of this, public policy emerges as a comprehensive framework comprising targeted measures, methods, and mechanisms of interaction between public authorities, local governments, enterprises, institutions, organizations, and civil society institutions. This collaborative framework aims to safeguard the security and continuity of critical institutions, ensuring the vital functioning of society and the state both before, during, and following crises (Pyrozkhov et al., 2022), (Gil-Alana et al., 2018), (Levich, Conlon & Poti, 2019).

Economic security stands as a prominent feature of the economy, constituting a vital component of national security. It underpins the resilience of the economy against both external and internal threats, ensuring independence, competitiveness, developmental capacity, and the fulfillment of economic needs for both citizens and society. Moreover, economic security guarantees the safeguarding of national interests. Within the framework of economic security, the financial component assumes a significant role, as finance acts as a driving force that establishes favorable conditions for the efficient functioning and advancement of each participant in the realm of economic security, ranging from individual citizens to the state and society as a whole (Xin, Hung & Qiao, 2018), (Fan, Ke & Wang, 2020).

Contemporary economic development is subject to multifaceted influences stemming from various economic and non-economic factors. However, the emergence and swift fluctuations of these factors do not always yield positive effects on the economy and frequently pose a threat to the financial interests of the state. Consequently, financial risks escalate, highlighting the imperative of establishing and maintaining an effective system of financial and economic security. This system stands as a vital prerequisite for ensuring the stable development of the national economic framework and fostering conducive conditions for the efficient operations of economic entities at all levels. Ultimately, the establishment of such a system aims to create favorable socioeconomic conditions for the well-being of the population (Ali et al., 2018), (Wang Wang, 2018).

It is important to acknowledge that the capacity to effectively respond to challenges and threats is a defining characteristic of a

civilized nation. Challenges can manifest as external or internal stimuli that have the potential to either contribute to the advancement or the destruction of a country. They serve as means to exert influence on domestic political or geopolitical players (Ott, 2021), (Levich, Conlon & Potì, 2019).

**3 Aims**

The objective of this study is to identify and examine the key facets related to the implementation of contemporary public policy within the context of prevailing political, military, and financial risks and threats.

**4 Materials and methods**

In the absence of comprehensive mathematical and statistical data on the topic of study, the method of expert evaluation was employed to identify and analyze the primary trends in public policy concerning the management of political, military, and financial risks.

**5 Results**

The examination of Ukraine's experience in implementing specific contemporary initiatives by public authorities, as reactive measures to prevalent security, financial, and military threats, has facilitated the identification of a systematic set of actions prescribed in the current regulatory documents of Ukraine. These actions aim to ensure a heightened level of preparedness within society and the state to effectively address a broad spectrum of threats (Figure 1).

Risk assessment and prompt identification of threats	Effective strategic planning and crisis management	Implementation of universal protocols for responding to military threats and recovery, considering NATO recommendations	Effective coordination and clear interaction of the security and defense sector bodies	Dissemination of the necessary knowledge and skills in the field of interaction between security sector agencies and other state bodies, as well as local governments, businesses, civil society, and the public
Creating an effective system of security and stability of critical infrastructures in the development of public policy				

Figure 1. The components of the national resilience system, contribute to the attainment of a heightened level of preparedness within society and the state to effectively address a diverse array of political, military, and financial threats. Source: built by the authors based on (Pyrozhev et al., 2022).

Aligned with the National Security Strategy of Ukraine, the state has been implementing a national resilience system to ensure a heightened level of preparedness within society and the state, enabling effective responses to a broad range of threats. These efforts encompass various aspects such as risk assessment, timely identification of threats, challenges, and vulnerabilities, strategic planning, crisis management, and the adoption of universal protocols for crisis response and security restoration. Recommendations from NATO are considered during these endeavors. The security and defense sector, alongside other state entities, local governments, businesses, civil society, and the population, engage in effective coordination and clear interaction to prevent, respond to, and mitigate the consequences of emergencies. Disseminating essential knowledge and skills in this domain, as well as establishing and maintaining reliable communication channels between state authorities and the

population throughout the country are equally vital. Moreover, the state is developing an efficient system to ensure the security and stability of critical infrastructures, based on a well-defined division of responsibilities among relevant stakeholders and public-private partnerships. Consequently, the national security system will be augmented with a new dimension to enable a more flexible, appropriate, prompt, and effective response to the emerging hybrid challenges brought forth by the evolving realities of modern Ukraine (Pyrozhev et al., 2022).

When delineating the directions of state policy on countering crisis phenomena, it is pertinent to consider the strategic orientations of state policy in the domains of national security and defense as delineated in the Law of Ukraine titled "On National Security of Ukraine" (Figure 2).

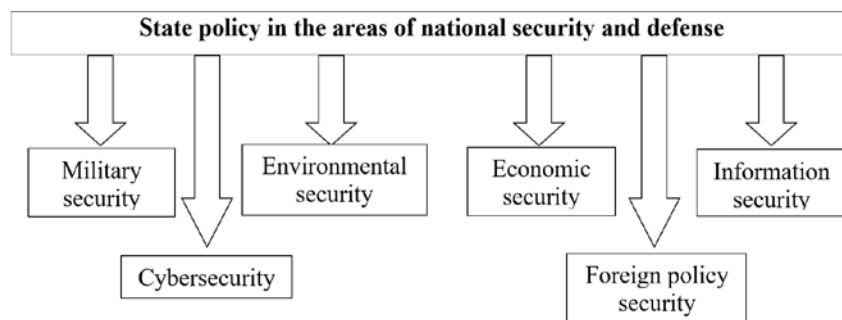


Figure 2. Directions of the state policy of Ukraine in the field of counteracting crisis phenomena Source: built by the authors based on the Law of Ukraine on national security (2018).



Consequently, as depicted in Figure 2, under section four of Article 3 of the Law of Ukraine titled "On National Security of Ukraine," state policy in the realms of national security and defense is oriented towards the achievement of objectives encompassing military, foreign policy, economic, information,

cybersecurity, environmental security, and other relevant domains.

An exploration of international practices in constructing national stability indicates the fundamental significance of the following spheres of engagement within this undertaking (Figure 3).

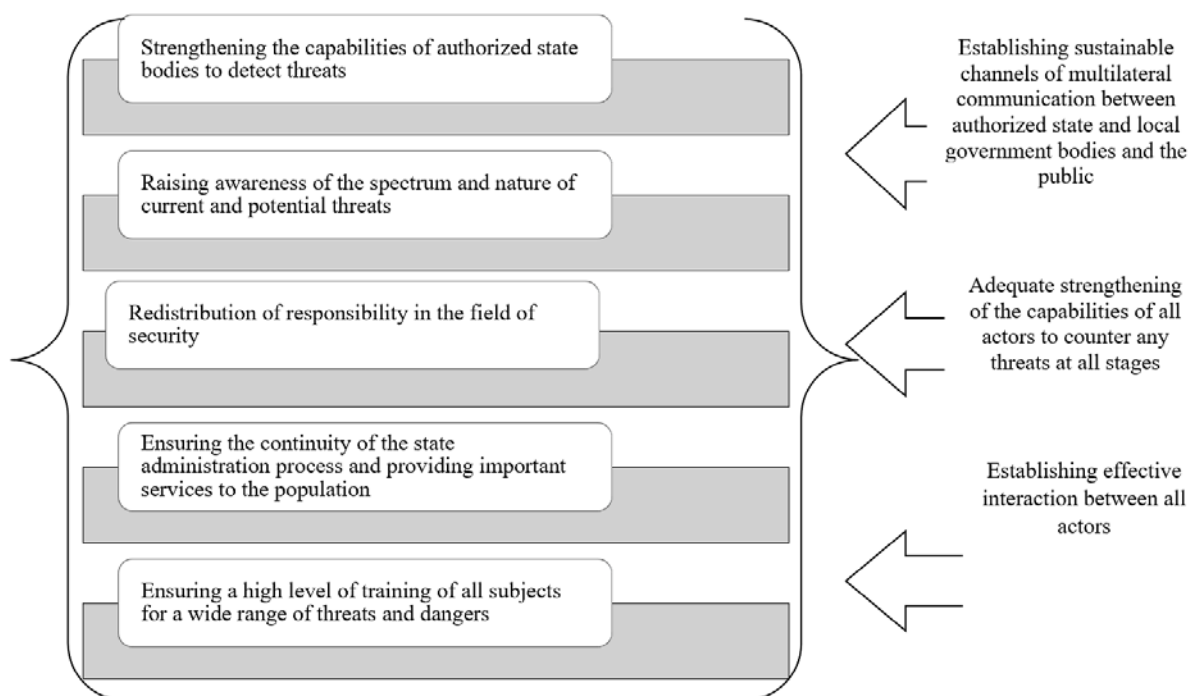


Figure 3. Trends in the areas of activity of government agencies of highly developed European countries in building national stability, %. Source: built by the authors based on (Derbali & Jamel, 2019), (Pyrozchkov et al., 2022).

An examination of diverse countries' experiences in establishing national stability underscores the fundamental importance of the following areas of activity within this process:

- Facilitating effective collaboration among all stakeholders, encompassing governmental and non-governmental entities. This may necessitate the establishment of novel organizational structures such as formal and informal communities, enduring working groups, and the like.
- Enhancing the capacities of authorized state entities to identify and address threats promptly.
- Raising awareness regarding the range and nature of prevailing and potential threats.
- Redistributing responsibility within the security sector, wherein non-state actors, local communities, and individuals assume greater accountability for their security, while the state fosters conducive conditions and strengthens coordination and oversight functions.
- Ensuring the continuity of public administration processes and the provision of critical services to the populace.
- Ensuring a high level of preparedness for all actors to confront a broad spectrum of threats and hazards through effective information exchange, regular exercises, training initiatives, and the development of relevant programs and action plans.
- Establishing resilient channels of two-way communication between authorized state and local government bodies and the general population.
- Adequately bolstering the capabilities of all actors to counter threats across all stages, encompassing preparedness, response, and recovery (Derbali & Jamel, 2019).

## 6 Discussion

An analysis of the principal security regulatory documents across the majority of countries reveals that national stability is

emerging as a pivotal prerequisite for safeguarding and reinstating territorial integrity, as well as countering potential and existing threats to territorial integrity (Tkachenko & Diadin, 2022).

In the current era of rapid global transformations, national stability is not a static condition but rather a dynamic and evolving process. The primary indicator of the efficacy of this process in a democratic country lies in the reinforcement and humanization of civilizational subjectivity (Smolianiuk, 2018).

Primarily, it is noteworthy that in philosophical, psychological, and political literature, the concept of effective public policy is frequently conceived not merely as a deliberate strategy but rather as an inherent ability, at best, as the actualization of potential (Loishyn, 2022), (Pyrozchkov et al., 2022).

From the perspective of contemporary international practice, effective public policy primarily entails the capacity of an international relations actor to withstand threats. The attributes that contribute to this capacity must be acquired. In the modern world, the notion of state resilience commences with an apprehension of threats. As a civilized entity, the state must dynamically identify potential risks and threats by conducting a comprehensive examination of the external and internal milieu. Equally vital to the establishment of effective public policy is the recognition and delineation of the attributes that need to be acquired (Wan & Raju, 2022), (Mačák, 2021).

To attain an adequate level of national stability, signifying a specific maturation of civilizational subjectivity, a cohort of competent professionals equipped with theoretical knowledge, scientific advancements, and practical expertise is indispensable. These individuals ought to be institutionally consolidated to enhance efficiency and effectiveness. Nevertheless, before delineating the potentialities of such an alliance, it is imperative to acquire a deeper comprehension of the nature of a country's

civilizational subjectivity sustainability in the contemporary world, characterized by prevailing trends of wars and confrontations (Kostyuk & Brantly, 2022), (Amiri et al., 2020).

The implementation of effective public policy involves several key components. These include the legal regulation of the national system of sustainable development. Additionally, it entails the establishment of a comprehensive legislative framework for crisis planning and response. Another crucial aspect is the facilitation of coordinated actions among state entities during such situations. Finally, it involves the legislative consolidation of regular multilevel national risk and threat assessments, particularly related to national security (Shumilova et al., 2022), (Capelli, Ielasi & Russo, 2021).

Currently, the evolving landscape of threats has exposed the deficiencies and inadequacies of existing countermeasures within the framework of the national security system. Consequently, there is a pressing need for an extensive interdisciplinary analysis of the concept of "national stability" (Smolianiuk, 2018).

An appropriate and effective response to challenges and threats represents the most favorable approach to attaining civilizational subjectivity, known as national stability. By adopting such a strategy, a country can ensure timely preparedness, mitigating potential political and material repercussions that could have severe consequences for its national interests, civilizational subjectivity, and overall existence within the contemporary crisis-ridden world (Shumilova et al., 2022), (Kaarbo, Oppermann & Beasley, 2023).

## 7 Conclusions

Hence, through an examination of relevant scientific literature and the findings of the questionnaire survey, it is evident that contemporary nations must vigorously formulate an efficient public policy strategy to safeguard their sovereignty, independence, and the ability to manifest their subjectivity globally. Attaining an effective public policy represents a crucial strategy for modern states, enabling them to safeguard their autonomy, and intellectual capabilities, and foster the advancement of their civilizational subjectivity.

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**Primary Paper Section: A**

**Secondary Paper Section: AD**

## **F MEDICAL SCIENCES**

FA	CARDIOVASCULAR DISEASES INCLUDING CARDIO-SURGERY
FB	ENDOCRINOLOGY, DIABETOLOGY, METABOLISM, NUTRITION
FC	PNEUMOLOGY
FD	ONCOLOGY AND HAEMATOLOGY
FE	OTHER FIELDS OF INTERNAL MEDICINE
FF	ENT (IE. EAR, NOSE, THROAT), OPHTHALMOLOGY, DENTISTRY
FG	PAEDIATRICS
FH	NEUROLOGY, NEURO-SURGERY, NUERO-SCIENCES
FI	TRAUMATOLOGY AND ORTHOPAEDICS
FJ	SURGERY INCLUDING TRANSPLANTOLOGY
FK	GYNAECOLOGY AND OBSTETRICS
FL	PSYCHIATRY, SEXOLOGY
FM	HYGIENE
FN	EPIDEMIOLOGY, INFECTION DISEASES AND CLINICAL IMMUNOLOGY
FO	DERMATOLOGY AND VENEREOLOGY
FP	OTHER MEDICAL FIELDS
FQ	PUBLIC HEALTH SYSTEM, SOCIAL MEDICINE
FR	PHARMACOLOGY AND APOTHECARY CHEMISTRY
FS	MEDICAL FACILITIES, APPARATUS AND EQUIPMENT

## MODERN MECHANISMS OF MUNICIPAL HEALTHCARE MANAGEMENT

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**Abstract:** The current status of municipal healthcare systems in most countries is marked by a multitude of issues, primarily of a systemic and organizational nature. Presently, a noticeable disparity exists between the treatment capacity of healthcare establishments and the scale and composition of illnesses in regional and district cities. Furthermore, there is a declining assurance of medical care provision for the populace, despite the increasing expansion of normative criteria for healthcare facilities. Moreover, the management of healthcare establishments continues to adhere to conservative practices, impeding the adoption of progressive models for medical care development. Additionally, the spatial differentiation of medical services remains inadequate. The objective of this article is to delineate and elucidate the characteristics of key mechanisms of municipal healthcare management across various countries worldwide. Additionally, this study endeavors to delineate the domains associated with risk management within the healthcare sector by examining diverse management approaches employed in the organization of medical institutions' operations. **Methodology.** Throughout the study, a combination of bibliographic and analytical methods was employed to examine the existing literature on municipal healthcare management. Additionally, the utilization of generalization, substantiation, and system-structural methods aided in the practical elucidation of crucial aspects of municipal healthcare management at both state and local levels. **Results.** Drawing upon the study findings, the author identifies the principal management models prevalent in the realm of healthcare institution management. These models are characterized, highlighting their key attributes, and the primary areas of risk management within the medical domain associated with these management models are delineated.

**Keywords:** Healthcare management at the local level, regulation of the healthcare industry, improvement of the healthcare network, healthcare risk management, hospital capacity, healthcare powers.

### 1 Introduction

In the present context, the development and enhancement of the national healthcare system is regarded as a priority area of state policy in numerous countries worldwide. The focus on the organization and functioning of this domain is driven by the imperative of consistently safeguarding, strengthening and restoring the population's health, which serves as a pivotal factor in the economic and social progress of a nation. At the local level, local self-government bodies assume a prominent role in healthcare management, specifically in facilitating the enhancement of the health of the territorial community and meeting the populace's demands for healthcare services of commendable quality.

In light of the prevailing state of operations within the local medical institution system, there is an imperative need to introduce novel regulatory mechanisms. Consequently, a comprehensive analysis of the current state of healthcare development becomes indispensable for the advancement of key healthcare directions. Ukraine's healthcare sector currently faces a multitude of adverse trends stemming from both the ongoing conflict and the systemic, long-standing industry crisis. Unlike other sectors, healthcare in Ukraine relies predominantly on funding from the state budget. The exploration and mobilization of alternative financing sources are impeded by the private sector's lack of interest and the generally unfavorable stance of healthcare authorities towards medical entrepreneurship. As a result, the primary predicament in healthcare financing lies in the insufficiency of public funds, leading to a reduction in the availability of free medical care. Notwithstanding substantial advancements in the delivery of quality, accessible, and prompt medical care to local community residents and internally displaced persons (IDPs) over the past year, it is pertinent to underscore the overarching trend of declining healthcare

expenditures. Additionally, there is an observable transfer of responsibility and costs from the state to patients, posing challenges for a significant portion of the population to access healthcare services of commendable quality, given their low-income levels. It is worth noting that although there exists a considerable number of healthcare facilities operating efficiently under martial law, the aforementioned financial dynamics contribute to the impediment of equitable healthcare access.

The development of a high-quality management mechanism for medical and other institutions within the healthcare sector is a fundamental prerequisite for its efficient operation. The healthcare regulation mechanism represents a distinct component within the broader framework of economic regulation. This mechanism can be comprehended as a collection of objectives, principles, and administrative, economic, legal, and social methods. It is implemented through a system of means and is directed toward facilitating the effective and dynamic development of the healthcare sector.

The theoretical segment of this study provides a substantiation of the significance, essence, and principal theoretical and organizational facets regarding the advancement of medical infrastructure at the municipal level. This article delineates the pivotal factors that influence the state of industry development and delineates the trajectories for the progress of medical infrastructure at the municipal level. Through an examination of global experiences in modernizing the municipal healthcare system, notable avenues of successful transformation have been identified.

The practical component of this study focuses on identifying crucial practical facets of healthcare management mechanisms. Specifically, it reveals that the utilization of administrative methods within a market economy promotes the preservation of social justice and accessibility of services, while also addressing information asymmetry within the healthcare sector. Furthermore, the study highlights the employment of economic methods for state regulation, which facilitate the creation of favorable conditions for the active development of the medical sphere. The author presents a fundamental model encompassing the key constituents of contemporary healthcare management mechanisms at the municipal level, as well as mechanisms of public-private partnership in the healthcare domain, which have demonstrated efficacy in numerous countries.

The study derives conclusions regarding the examined issues, notably emphasizing that the practical implementation of effective regulatory tools is a crucial prerequisite for the efficient functioning of healthcare. Examples of such tools include the development and execution of state programs aimed at providing citizens with free medical care, as well as the establishment of rigorous oversight mechanisms for both public and private healthcare systems. Analyzing the interrelation of primary public-private partnership mechanisms, which have demonstrated effectiveness in various countries, it becomes apparent that well-established healthcare sectors often witness widespread adoption of public-private partnerships. These partnerships encompass endeavors such as facility construction and maintenance, as well as the optimization of the industry's infrastructure.

### 2 Literature review

The current stage of healthcare development is marked by an evident disparity between cities concerning the level of medical care and the resource potential of healthcare institutions. In recent years, there has been a noticeable escalation in territorial discrepancies regarding resource distribution and performance indicators within the healthcare system and preventive care. The challenge of bridging this gap is subject to debate and is linked to the extent to which public health is influenced by the available resources within the healthcare system. The alignment of the

medical infrastructure with the population's needs serves as a crucial factor in shaping effective policies within the community health system. The accurate determination of healthcare's impact on reducing morbidity is a topic of discussion among experts, guiding practical measures for transforming the organizational and economic mechanisms governing the development and functioning of the medical sector (Diegtiar et al., 2021), (Nezhyva & Mysiuk, 2021), (Castanho, Gómez & Kurowska-Pysz, 2019).

In the contemporary context of social development, numerous factors, operating in various contexts and combinations, contribute to the heightened significance of healthcare management in shaping public health and population treatment. Among these factors, the development and utilization of cutting-edge medical technologies play a pivotal role in facilitating effective disease treatment and prevention, thereby substantially enhancing the prospects of patient recovery. Simultaneously, organizational and technological transformations, made feasible within an open economy and an expanding information landscape, work in synergy toward this objective. Examples of such transformations include the reorganization of outpatient and inpatient care, optimization of bed capacity utilization, enhancement of medical service quality, and the expansion of social partnerships within the healthcare domain, among others (Hellowell, 2019), (Thellbro, Bjärstig & Eckerberg, 2018), (Smith & Thomasson, 2018).

An essential domain for the advancement of healthcare infrastructure at the municipal level lies in the potential for cooperation concerning the resource capabilities of cities. However, the practical objectives of resource pooling, particularly economic and financial resources, frequently conflict with constitutional norms and the objectives of receiving intergovernmental transfers (Hossu et al., 2018), (Ciot, 2022).

Considering the disparity between the resource potential of healthcare and the healthcare needs of cities at the municipal level, there is a pressing need to enhance the interbudgetary mechanism for redistributing financial resources. The prevalent equalization model, employed through transfer mechanisms, to some extent, mitigates regional disparities in the physical healthcare infrastructure. However, a challenge arises in preserving medical facilities and ensuring their efficient operation as professional institutions, necessitating technical upgrades. To address this challenge, it is crucial to expand the legal authority of local governments in managing financial resources (Hassen & Bilali, 2022), (Bentley, 2022), (Maurer, Whitman & Wright, 2023).

To date, the operational execution of healthcare responsibilities for the population residing in specific territories, such as villages, cities, districts, or regions, is delegated to local governments. However, it is important to consider that at the regional and district council level, the functions of executive bodies are fulfilled by competent regional structures, while local authorities in villages and towns cannot adequately sustain primary healthcare facilities (Ha & Shin, 2022), (Lukin, 2019).

### 3 Aims

The primary objective of this practical study is to discern the fundamental characteristics and constituents of diverse regulatory mechanisms within municipal healthcare facilities. Furthermore, it aims to evaluate the risks associated with their implementation in distinct healthcare management systems. The research delves into the interconnections among key mechanisms of public-private partnerships, which have demonstrated effectiveness across numerous countries worldwide while outlining the principal factors contributing to the success of such partnerships.

### 4 Methods and materials

A practical investigation into the contemporary trends in the utilization of municipal healthcare management mechanisms was conducted, employing a systematic analysis of scientific literature on the research subject. The analysis of data involved the utilization of statistical methods for information processing, the graphical presentation of data, as well as the synthesis and analysis of data to evaluate the developmental indicators of the healthcare sector.

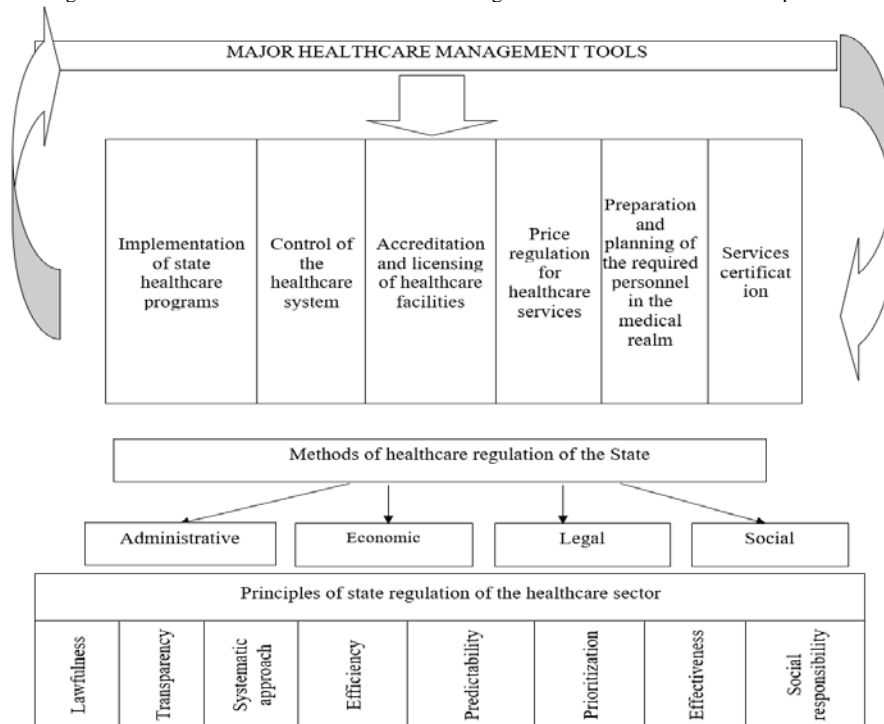
### 5 Results

An analysis of the existing scientific literature on the research topic, as well as practical instances involving diverse management mechanisms within the healthcare sector, has revealed that in the majority of countries, the key constituents of the healthcare system management process encompass the subject, subject matter, purpose, goals, principles, and tools for implementing the management mechanism. Concurrently, the subjects responsible for state regulation within the healthcare sector comprise state and local governments, legislation, executive and judicial authorities, as well as public and political associations. In regulating the healthcare industry, the state defines the purpose, objectives, directions, and principles of state policy, establishes the allocation of budgetary resources, and establishes a system of regulatory bodies.

The primary objectives of healthcare regulation encompass the identification of medical service requirements, the planning of medical institution organization, the collection of essential information, resource mobilization, the facilitation of access to high-quality medical services, disease prevention, diagnosis, and treatment, as well as the establishment of necessary restrictions and prohibitions. Consequently, in the present context, the principal goals of the state's healthcare sector regulatory mechanism entail the provision of quality healthcare services and financing to citizens, the facilitation of the adoption of state-of-the-art technologies, the development of healthcare personnel, the establishment of a robust legal framework, and the adaptation of the existing healthcare sector to evolving conditions.

During the regulation of the healthcare sector, public authorities are expected to uphold fundamental principles, including the legality, transparency, consistency, optimality, predictability, priority, efficiency, and social responsibility (refer to Figure 1). Diligently adhering to these principles is essential for enhancing the effectiveness of the state's regulatory mechanism in the healthcare sector, particularly within the framework of economic and social reform.

Figure 1. A basic model of modern healthcare management mechanisms at the municipal level



Source: compiled by the authors based on (Lkhaajav, 2022), (Diegtiar et al., 2021), (Diphorn & van Staple, 2021).

The availability of effective regulatory tools is a crucial factor in ensuring the efficient functioning of the healthcare sector. These tools are designed to establish conditions that mitigate potential negative consequences. The primary methods employed for state regulation of healthcare encompass administrative, economic, legal, and social approaches.

The healthcare sector utilizes various management tools, including:

- development and oversight of state programs aimed at providing citizens with free medical care;
- supervision and regulation of both public and private healthcare systems;
- accreditation of hospital institutions to ensure quality standards;
- issuance of licenses for the provision of medical services, ensuring compliance with regulations;
- regulation of prices for medical services to maintain affordability and fairness;
- planning and training of adequate healthcare personnel;
- certification of services to uphold quality assurance;
- authorization of the use of new technologies in healthcare;
- organization and enforcement of state sanitary and epidemiological supervision in medical institutions.

The application of administrative methods within a market economy serves to uphold social justice and ensure the accessibility of services, while also addressing information asymmetry in the healthcare market. Economic methods of state regulation are instrumental in establishing conditions that incentivize market participants to align their actions with the

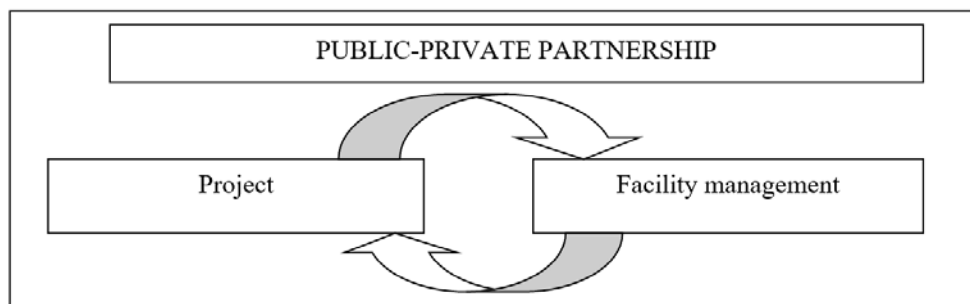
societal goals and objectives outlined in addressing specific tasks.

A crucial element in the functioning of an efficient healthcare regulatory mechanism, particularly in the context of reforms, is the establishment of a comprehensive legal framework. The legal mechanism possesses the vital attribute of being aligned with a specific objective, enabling the realization of a structured and interconnected system capable of achieving the desired goal by legally addressing the interests of the relevant stakeholders.

Currently, municipal law is evolving globally as an independent branch of law. It focuses on local self-government, which constitutes a distinct form of social relations associated with the organization and exercise of power within territorial communities. Notably, city councils hold significant authority over healthcare, given the concentration of the population residing in proximity to public healthcare facilities and establishments. As a substantial portion of healthcare facilities operates under municipal ownership and management, reforming the municipal administrative structure emerges as a top-priority domain in the comprehensive healthcare system reform efforts.

Taking into account the international experience of implementing diverse public-private partnership mechanisms in healthcare, we have identified those that have demonstrated effectiveness across numerous countries (see Figure 2). Figure 2 reveals that contemporary public-private partnerships primarily involve investment contracts aimed at constructing, renovating, or modernizing specific socially significant facilities. This form of partnership enables the integration of business models into the public domain and facilitates the resolution of pressing local healthcare service-related policy matters.

Figure 2. Interconnection of the main mechanisms of public-private partnerships in healthcare, which have proven to be effective in numerous countries



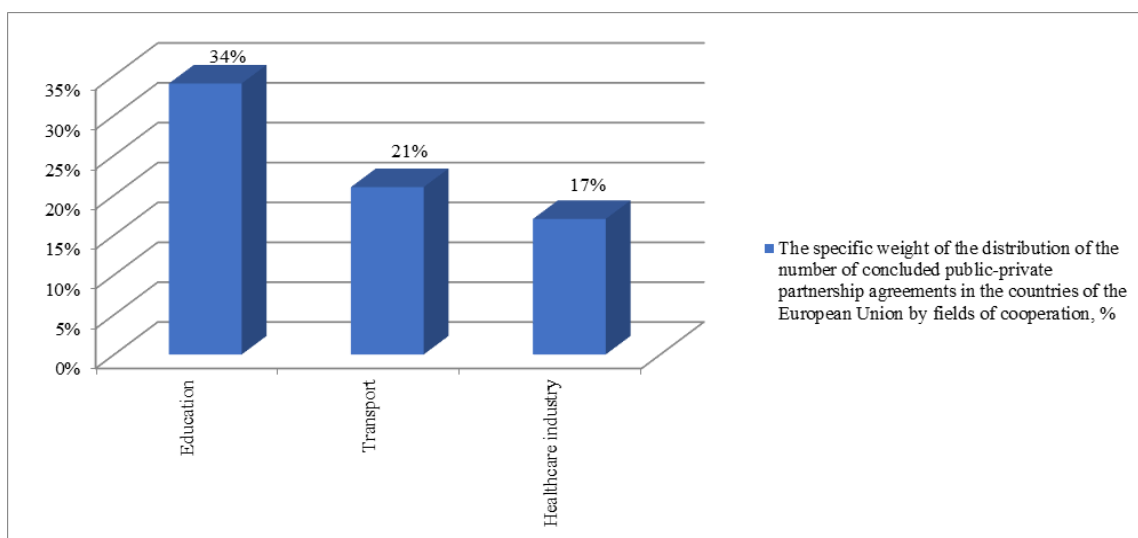
Source: compiled by the authors based on (Mia et al., 2022), (Papageorgiou et al., 2018).

The healthcare sector differs from other industries in terms of the limited number of public-private partnership projects in terms of their forms, content, contract structure, guarantees provided by public authorities, and regulatory methods. In countries with a well-developed healthcare sector, public-private partnerships are relatively prevalent and can be categorized into three main forms. Firstly, there are partnerships focused on constructing hospital infrastructure. Secondly, partnerships are established for the construction and maintenance of infrastructure facilities.

Lastly, there are public-private projects that incorporate elements from both the first and second forms.

An analysis of the European experience regarding public-private partnerships reveals that the healthcare sector ranks as the third largest industry worldwide in terms of the number of projects implemented in 2017 (Figure 3). The data indicates that approximately 17% of all registered projects within the European Union were associated with the healthcare sector.

Figure 3. Share of the number of public-private partnership agreements concluded in the EU countries by sector of cooperation, %



Source: compiled by the authors based on (Lavrentij, 2018).

The subsequent mechanism for regulating economic activity within the healthcare sector is through public-private partnership (PPP) projects. An examination of international instances of PPPs in the form of projects reveals that the distinctiveness of these models and their application, particularly in the healthcare system, bestows healthcare organizations with novel avenues and levels of financing, decentralization, and management autonomy. Consequently, this enhances the economic development trajectory of the country. Facility management represents another prevalent mechanism of collaboration in the form of public-private partnerships in Western Europe. The regulatory framework for implementing facility management often entails the comprehensive transfer of all non-core business functions to the respective company through the establishment of property management agreements. Additionally, specific functions may also be delegated through subcontracting arrangements.

## 6 Discussion

The global experience of urban healthcare system modernization encompasses several key areas of transformation. Among these, structural and functional changes within the healthcare system take precedence. These changes involve a systematic reduction in the number of healthcare facilities, particularly at the local level, along with the regulation of hospital capacity while simultaneously enhancing their resource efficiency. Additionally, efforts are directed toward addressing territorial disparities in the provision of physical healthcare facilities and improving performance indicators (Biswas et al., 2018), (Derbali & Jamel, 2019).

To establish goals that will enhance the structural efficiency of the municipal healthcare system, it is imperative to comprehend the medical, demographic, socioeconomic, geographical, and other factors that directly or indirectly impact regional population needs and influence healthcare provision. These factors encompass demographic and socioeconomic characteristics, dynamics of socio-hygienic and socio-cultural-



medical pathology, the extent of healthcare network development, financial circumstances of the population, climatic and geographical aspects, as well as medical and organizational factors (Landi et al., 2022), (Sun, Liu & Chen, 2022).

From the perspective of international practices, risk management in healthcare encompasses two primary approaches: organizational, which focuses on both internal and external factors influencing the organization, and people-oriented, which emphasizes individual errors attributed solely to the human factor. To effectively manage risks in the healthcare sector, key tools such as quality standards for medical care and modeling of outcomes should be implemented. These tools facilitate the identification, assessment, and mitigation of risks, ensuring the delivery of high-quality healthcare services (Hossein et al., 2022), (Zhang & Luo, 2022).

The extent and scope of powers related to public health in local governments of villages and cities naturally vary. It is evident that heads of local governments and competent councils, particularly in large cities and regional centers with sizable populations and a well-established network of medical facilities, possess greater authority in this domain. The distribution of powers in public health management reflects the diverse needs and resources of different administrative units (Jegers, 2018), (He & Guo, 2022).

Financial support for healthcare institutions is sourced from city budgets through targeted funding, guided by financial plans and estimates. The healthcare sector's projected expenditures are determined within the approved budgets at the corresponding levels. The allocated funds specified in the estimates are then provided to the respective budget spending units. The provision of high-quality medical care to the population relies on addressing economic challenges such as determining the level of budgetary financing, enhancing the voluntary health insurance system, improving the framework for paid medical services, and facilitating the training and adoption of new technologies in the healthcare sector. To tackle these tasks effectively, it is crucial to establish a robust mechanism that enables objective analysis and assessment of financial resource requirements, as well as the planning and optimization of their generation and utilization (Jegers, 2018), (Derbali & Jamel, 2019).

## 7 Conclusions

The analysis of scientific literature and the findings of the questionnaire survey revealed that the present state of the municipal healthcare system exhibits a general trend of deteriorating health among the urban population, particularly in small towns, exacerbated by the inadequate organization and subpar quality of medical care. Furthermore, there is a lack of systematic comprehension regarding the organization, financing, and incentives for optimizing the operational efficiency of healthcare institutions. Addressing the challenges within the community healthcare system can be achieved through the implementation of diverse programs of national, regional, and local significance, aligned with the current healthcare policy of the state.

In the present economic context, effective state regulation of economic processes necessitates the utilization of a flexible and efficient mechanism. The implementation of healthcare reform should be undertaken in adherence to the goals, principles, methods, and tools set at the national level.

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**Primary Paper Section: F**

**Secondary Paper Section: FQ**

## **G AGRICULTURE**

GA	AGRICULTURAL ECONOMICS
GB	AGRICULTURAL MACHINES AND CONSTRUCTION
GC	PLANT GROWING, CROP ROTATION
GD	FERTILIZATION, IRRIGATION, SOIL TREATMENT
GE	PLANT CULTIVATION
GF	DISEASES, PESTS, WEEDS AND PLANT PROTECTION
GG	ZOOTECHNICS
GH	NUTRITION OF FARM ANIMALS
GI	FARM ANIMAL BREEDING AND FARM ANIMAL PEDIGREE
GJ	BDISEDAISES AND ANIMAL VERMIN, VETERINARY MEDICINE
GK	FORESTRY
GL	FISHERY
GM	FOOD INDUSTRY



## DEVELOPMENT OF THE AGRICULTURAL SECTOR AND ENSURING FOOD SECURITY IN THE CONDITIONS OF WAR

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**Abstract:** It has been proven that the production of grains and legumes may decrease by up to 30% compared to 2021. Wheat production is expected to decrease by 34%, barley by 45%, and corn by 2%, respectively. However, this will not influence the satisfaction of domestic demand for grain and legume products. By the way, buckwheat production by reseeded and changing the structure of crops will make it possible to fully meet the needs of the population and get some residues. As for industrial and other crops, production is expected to decline by up to 30% and sunflower by up to 34%, respectively. The practice of vegetable gardening, popular in the 1990s, becomes relevant again. More and more citizens mention that they have land plots and undertake to cultivate them in order to grow basic products. In rural areas, the tendency toward self-sufficiency can be expanded by breeding poultry and animals, including cattle. It has been analyzed that before the war, wheat, sunflower, and corn accounted for the majority of the harvest since a significant part of it was intended for export. The blocking of ports has shown the disadvantages of exporting large volumes of these crops. Consequently, there is a growing demand for niche high-margin crops (peas, berries, mustard, etc.), the transportation of which is more variable. Thus, there are reasons to believe that such trends will continue in the coming years; however, this will not harm the cultivation of wheat, sunflower and corn as the major crops. It has been indicated that the primary task of the Ukrainian agricultural sector in the conditions of hostilities has become the reliable provision of the population with agricultural products and food. As a result, farmers and private agricultural households have demonstrated their key role in preserving and developing local markets and food supply chains. Thus, the conclusion of the classical agro-economic theory was demonstrated in practice: the major pillar of the sustainability of small-scale agriculture is not its economic benefits over large-scale agriculture but the important fact that large-scale agriculture is conducted as a capitalist enterprise for the sake of profit and rent, while small-scale agriculture is conducted to ensure the existence of the producer himself. A peasant farmer will not stop farming even if it gives him nothing but an average salary. Therefore, small-scale agriculture can exist and develop with much less income than large-scale capitalist agriculture.

**Key words:** Crisis management, war, reconstruction, market economy, agriculture

### 1 Introduction

Agriculture is the cornerstone of the Ukrainian economy. Concessional lending and the production of value-added products are the pillars of sustainable development of the agricultural sector. Risk diversification and planned development of the industry are extremely significant in the conditions of war. The present academic paper discusses the prospects for the development of Ukrainian agriculture and assesses its current state. Ukrainian agriculture is characterized by a deformed agricultural structure that includes:

- an individual sector focused on traditional goods and the domestic consumer market, ensuring domestic food security;
- the corporate sector, which includes agroholdings and large agricultural enterprises with a significant share of foreign capital, focused on the constant expansion of monocultivation and exports.

Agricultural holdings lobby their interests on such a large scale that, despite their high incomes from business activities, they also monopolize state support for the entire agricultural sector (before the war, 5-10% of the largest agricultural enterprises took 70-80% of the national funds for agricultural support measures). At the same time, the income of agricultural holdings is taxed based on a simplified system. Their profits are being used on a large scale through tax havens (including Cyprus and the British Virgin Islands), which undermines local development and public goods in Ukraine. In addition, these entities receive significant investment resources from such institutions as the World Bank, the International Monetary Fund, and the European

Bank for Reconstruction and Development. All the outlined aspects of the functioning of agroholdings lead to unfair competition with other actors in the agri-food market of Ukraine. They exert physical and economic pressure on individual and family farms, limiting their access to production factors (agricultural land, means of production) and sales, as well as reducing their income (by reducing purchase prices, and inflating prices for production inputs). It is extremely difficult to develop family farming in such conditions. It may become impossible in the long-term perspective (given the control of agroholdings over agricultural land and production chains).

The pre-war successes of Ukrainian agriculture (especially its corporate segment) in terms of technical progress, productivity growth, production and exports were unfortunately accompanied by significant social and environmental losses within the country. The aggression of Russia has revealed additional negative consequences of the agroholding model of Ukrainian agriculture. The war has made the functioning of large-scale agricultural production extremely difficult due to the breakdown of logistics chains, environmental disasters at corporate livestock farms, blocked markets, etc.

In the conditions of hostilities, the primary task of the Ukrainian agricultural sector was to ensure a reliable supply of agricultural products and food to the population. In this case, farmers and private households have demonstrated their crucial role in preserving and developing local markets and food supply chains. Therefore, the conclusion of the classical agro-economic theory was demonstrated in practice: the major pillar of the sustainability of small-scale agriculture is not its economic benefits over large-scale agriculture but the important fact that large-scale agriculture is conducted as a capitalist enterprise for the sake of profit and rent, while small-scale agriculture is conducted to ensure the existence of the producer himself. A peasant farmer will not stop farming even if it gives him nothing but an average salary. This is precisely why small-scale agriculture can exist and develop with much less income than large-scale capitalist agriculture.

Currently, Ukrainian agriculture is facing a choice between two possible scenarios for further development. According to the first one, Ukraine restores the prewar structure of agriculture within the framework of postwar reconstruction and continues its policy towards the agricultural sector with further excessive support for agricultural holdings. However, such a scenario would be clearly unfavorable for the state and society.

The second scenario envisages changing agricultural policy to a sustainable one based on ensuring equal development rights for all groups of stakeholders involved in agricultural production, including transparent and fair access to agricultural and other land, production resources, free access to markets and competition on a fair basis. The result of these approaches will be a change in the agricultural structure that will enable family households to use their production potential for creating public goods and local development. Moreover, it will help ensure the adaptation of Ukraine's agricultural structure to the EU. Such a scenario for the revival of agriculture and rural areas in Ukraine requires establishing a new institutional system to support domestic food security, implementing a European-oriented agricultural policy, responsible strategic planning and monitoring of the situation in the sector, and collecting relevant data. Ukraine should implement solutions, in particular, to manage agricultural and rural development according to the Polish (as well as the EU) model, including the establishment of state institutions providing small and medium-sized businesses with access to production resources and sales, and the creation of agricultural chambers bringing together both farmers and individual farmers. This will strengthen social control over the allocation of public funds to support agriculture and ensure fair competition for land and agri-food markets. In addition, it is

necessary to change legislation in the areas of land relations (land market), agricultural taxation and social security in accordance with European values. Poland should support Ukraine in developing systems of registration and reporting of agricultural producers and monitoring of rural development, as well as in forming models of cooperation between agricultural organizations and farmers, etc.

The purpose of the academic paper was implemented in analyzing the development of agriculture in the conditions of war.

## 2 Literature Review

The issue of agricultural development in the conditions of war has been explored in the following studies: Trofimtseva O. (2022), Sievidova I. O. (2017), Savchuk V. K., (1995), Sabluk P. T., (2006), Sabluk, (2001), D. Dibrova, (2016), Rohach S. M., (2017), Rassadnikova S. I., (2013), Radchenko V. (2002), Peterson, E. (2022), Glauben, T., Svanidze, M., Götz, L. J., Prehn, S., Jaghdani, T. J., Djuric, I., & Kuhn, L. (2022), Ghosh, N., & Bhowmick, S. (2022), Fiott, D. (2022), Celi, G., Guarascio, D., Reljic, J., Simonazzi, A., & Zezza, F. (2022), Câmpeanu, V. (2022), Banse, M. (2022). Ukrainian authors also considered regional aspects of economic modernization, using qualitative data from European Union countries (Ladonko, L., Mozhaikina, N., Buryk, Z., Ostrovskiy, I., & Saienko, V. (2022).

## 3 Method

The following general scientific methods were used in the research: comparative, comparative, analytical, historical, etc.

## 4 Result and Discussion

Agriculture is the engine of the Ukrainian economy. In recent years, agricultural products have made up over 40% of all exports. In 2021, Ukraine exported 61,5 million tons of grains and oilseeds in the amount of 22.2 billion USD.

Global economic chains are structured in such a way that a large number of processing enterprises in the world and in individual countries are dependent on the Ukrainian agricultural industry. Transportation of grown products is one of the most crucial economic factors. The primary way to export grain is by sea: about 90% of grain was exported by sea and only 10% by land. The current situation due to the war has significantly damaged logistics routes, and the blocking of ports has led to grain shortages and increasing prices on the world market. However, the situation in Ukraine is fundamentally different: a surplus of grain that cannot be sold on the domestic market due to the lack of demand has led to a decrease in prices. For comparison, world prices for wheat are 350-370 USD per ton, while in Ukraine they are only 180-200 USD per ton.

Currently, selling the grown products is the number one problem for agrarians since grain deteriorates over time, and the volumes of last year's crops stored in warehouses make it difficult to store the new yield due to lack of free space. The new sowing campaign, which will provide for next year's harvest, is now on the verge of failure. The major reason is that money is required to cultivate the soil, purchase seeds, fertilizers, protective equipment, fuel and lubricants, payment of taxes and salaries. Due to the lack of demand for the products and insufficient crediting, there is a severe shortage of them.

Government has announced about the first ships to leave Ukrainian ports. However, to what extent will this settle the situation on the market? The complexity of the situation lies in the fact that the grain purchased by foreign companies before the outbreak of the war will be sold in the first instance. Currently, more than 80 vessels are waiting to be loaded with grain, and hundreds of elevators and grain terminals are storing non-Ukrainian grain in Ukraine. The Ukrainian Sea Ports Authority reports that 480 000 tons of grain, oil and corn have been loaded in the cargo holds of vessels in the waters of "Pivdennyi",

"Odesa" and "Chornomorsk" ports, and another 1 million tons of grain is stored in terminals and warehouses at the ports.

In July, exports of grain reached 2,7 million tons per month from Danube ports. However, this is only 30% of the monthly requirement and monthly demand for agricultural exports [3]. In total, about 20 million tons of grains intended for export were blocked in Ukraine. The President of Ukraine Volodymyr Zelenskyi said this figure could increase to 75 million tons after this year's yield [4]. Such difficulties with exports will certainly slow down economic processes in our country. One should also take into account the lack of foreign exchange revenues from selling agricultural products.

It is necessary to search for options for selling the agricultural products. One of them is the creation of new agricultural processing enterprises that will operate in Ukraine and focus on exports. This means processing grain into finished products such as flour, pasta, cereals, alcohol, animal fodder, starch, and other products.

The construction of enterprises producing alternative renewable energy sources such as biogas, bioethanol, and biodiesel will make it possible to supply the domestic market with energy and reduce dependence on imports. For instance, currently, most of the Ukrainian rapeseed imported by the EU is used for biodiesel production. Why shouldn't Ukraine sell ready-made biodiesel? The government should initiate such projects and create the conditions for developing these industries, and ensure proper conditions for business crediting. These measures will help resolve the issue of surplus products, manufacture products with higher added value, create new jobs and provide jobs for related industries.

The situation is extremely tense and requires immediate steps to resolve the situation. We are convinced that we should reorient towards processing agricultural products, taking into account the long-term consequences.

The domestic agro-industrial complex will reconsider the specialization of crop production; agricultural holdings will continue to disappear, and donors will help primarily small enterprises.

Despite the large-scale destruction of agricultural infrastructure, mining of our fields and a decline in production, leading experts claim that this major industry is unlikely to lose its status as the breadbasket of Europe and the world.

According to preliminary scientists' estimates, the potential direct damage to the domestic agricultural infrastructure and its assets as a result of Russia's full-scale aggression against Ukraine exceeds 6 billion USD.

Additional economic losses in the industry due to the war in 2022 are expected to be around 22 billion USD, and the decline in revenues from agriculture and related sectors is expected to be between 10 and 30%. According to the results of 2021, the share of the agricultural sector amounted to 10,6% of the national GDP. However, the assessment of the hostilities' consequences for the agricultural sector is complicated by the lack of analogies when a country with such a large and important agricultural sector for the world market as Ukraine would be involved in a war.

The UN experts believe that the most approximate situation is in Syria. In 2011, the agricultural GDP of this country was close to 49 billion dollars, that is, 20% of the total GDP. However, the comparison of Ukraine and Syria is not entirely correct, as this country has a much lower volume of exports of agricultural products.

The Center for Food and Land Use Research at the KSE Institute, together with the Ministry of Agrarian Policy and Food, in its analysis "Overview of Indirect Losses from the War in Ukrainian Agriculture", estimates that this figure in

agriculture due to decreased production, port blockades, and higher prices for inputs is 23,3 billion USD.

After three months of full-scale war, losses in Ukraine's agricultural sector have already reached 4,3 billion USD, which is almost 15% of the country's capital. Most losses are recorded due to destruction or damage to agricultural land and lack of yield. Currently, it is impossible to clearly determine the amount of losses in the agricultural sector as a result of the hostilities because they keep happening. However, indirect losses in agriculture are expected to amount to about 23,3 billion USD.

International donors strive to ensure the so-called win-win effect – a form of cooperation where both parties are satisfied with the work. They involve suppliers of material resources in their programs, supporting both sides.

The target audience of international donor organizations is rural households and farmers, which are rightfully considered a factor in the fight against unemployment and a prerequisite for inclusive economic growth in rural areas. The small-scale farming sector is crucial for local employment and is the primary supplier of food at the local level.

In April 2022, the Ukrainian government sent comprehensive information to the EU on the needs of the agricultural sector for recovery. The European Commission should coordinate the expected assistance.

The most predictable expenditures by international donors are funding for demining programs. According to the Ukrainian Association of Deminers, about 83 000 square kilometers are currently mined with various types of explosives. For instance, according to the Food and Agriculture Organization of the United Nations (FAO), the cost of demining in Croatia was about 1,25 EUR per square kilometer, and the cost of destroying one stockpiled anti-personnel mine was 0,56 EUR. Oleksandr Nechyporenko informs, "Taking into account these expenditures, the cost of demining measures in Ukraine only in the specified area exceeds 10 billion USD".

It should be noted that a large part of the international assistance was provided by the European Union. For instance, since September 1, the State Agrarian Register has started accepting applications under a new program of assistance to small agricultural producers for a total amount of over 1,5 billion UAH, funded by EU budget support.

The non-refundable assistance is granted to farmers cultivating from one to 120 hectares of agricultural land or keeping from three to one hundred cows. However, both land plots and cows must be registered, since this is a key condition for receiving assistance. Private farms can also obtain this assistance.

FAO also plays an essential role. It has developed a rapid response plan since the outbreak of the war. It is currently calling to allocate 115,4 million USD to support nearly one million rural residents by providing agricultural assistance and food security to those most affected by the war. As part of this program, FAO has already provided assistance to 80 000 people in 13 regions of Ukraine. The organization continues to provide multi-purpose cash assistance to cover the basic needs of more than 5 000 families in the most affected regions of eastern and southern Ukraine.

Some experts believe that the tendency for large agricultural holdings and other companies to stagnate has intensified and the role of farms has increased since the outbreak of the war. What will the map of agricultural enterprises look like after the program is over (will large companies disappear, will the role of farmers and other small participants increase, etc.)?

The stagnation of agricultural holdings began long before the military conflict. According to the Institute of Agrarian Economics, only two companies in the group of these associations have been actively growing economically over the

past few years – AST and "Epicenter Agro". While most of them were moving towards optimization, that is, reducing their land banks. The war has only accelerated this process.

An interesting fact is that agricultural holdings in Ukraine controlled less than 15% of agricultural land, that is, about 6,5 million hectares before the military aggression. And they often had mediocre performance indicators. This is evidenced by the financial statements of companies that are used to assess their profitability and are under the control of regulators.

The fact that the programs already being implemented in Ukraine by FAO and other donors provide for the maximum size of the recipients' land bank at 250-1000 hectares is also not conducive to the development of agrohholdings in Ukraine.

Therefore, small agricultural holdings, which make up the majority of the total number, have no prospect of receiving international donor assistance for recovery. Consequently, without financial support, agricultural holdings' activities, which were already weak before the outbreak of war, will rapidly deteriorate.

How are the focus and specialization of agricultural enterprises currently changing? For instance, do farms stop growing particular crops and start growing other crops, or do they change their livestock specialization, etc.?

## 5 Conclusion

Thus, according to the forecasts of the Institute of Agrarian Economics, this year's production of grains and legumes may decrease by up to 30% compared to 2021. Wheat production is likely to decrease by 34%, barley by 45%, and corn by 2%, respectively. However, this will not affect the satisfaction of domestic demand for grain and legume products. By the way, buckwheat production through reseeding and changing the structure of crops will make it possible to fully meet the population's needs and get some residuals. As for industrial and other crops, production is expected to decline by up to 30%, and sunflower – by up to 34%. The practice of vegetable gardening, popular in the 1990s, becomes relevant again. More and more citizens mention that they have land plots and undertake to cultivate them in order to grow basic products. In rural areas, the tendency toward self-sufficiency can be expanded by breeding poultry and animals, including cattle. Before the outbreak of the war, wheat, sunflower, and corn accounted for most of the yield since much of it was intended for export. The blocking of ports has shown the disadvantages of exporting large volumes of these goods. Consequently, there is a growing demand for niche high-margin crops (peas, berries, mustard, etc.), the transportation of which is more variable. Thus, there are reasons to believe that such tendencies will also develop in the coming years, but this will not harm the cultivation of wheat, sunflower and corn as the major crops.

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