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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 FORMS AND METHODS OF ART DISCIPLINES' TEACHING UNDER THE CONDITIONS OF DISTANCE LEARNING

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Abstract: This article describes the development of forms and methods of art disciplines’ teaching under the conditions of distance learning. The main aim of the research is to develop recommendations for the artistic disciplines' teaching by educational institutions under the conditions of distance learning. To achieve this goal during the research, the following tasks will be carried out: - substantiation of the relevance of the study under the conditions of quarantine restrictions; - critical analysis of the literature on the development of the form and methods of teaching art disciplines; - the features of online work, and the features of work under the conditions of distance learning in higher education institutions. To conduct empirical research aimed at confirming the effectiveness of the developed teaching forms, we surveyed a group of students. It allowed proving the hypothesis that distance learning can be effective. The article contains recommendations for lecture classes, the organization of independent and group work, and other types of distance learning. The main direction of the development of teaching artistic disciplines is the development of educational technologies within the virtual environment. The developed forms and methods of distance learning are expedient to use both in the work with full-time students and the work with extramural students, attracting the possibilities of web-conferencing and communication using Skype, which forms the practical significance of the research.

Keywords: art disciplines, distance learning, online education, teaching methods, teaching forms.

1 Introduction

The COVID-19 pandemic has caused the greatest disruption of education systems in history. It affected students in more than 190 countries on all continents. In low- and below-middle-income countries, the closure rate for schools and other educational institutions reached 99%. The crisis has exacerbated the already severe inequalities that have long existed in education. A large proportion of the most vulnerable children, youth, and adults are unable to continue their education. Losses in education can negatively impact decades of progress.

At the same time, it is worth noting that the crisis has spurred innovation in education. Innovative approaches, from video, radio, and TV broadcasts to the provision of homeschooling kits, have emerged to ensure the continuity of education and training. The rapid response of the world governments to provide a seamless learning experience has led to the development of distance learning solutions.

The problem of keeping people healthy has become a priority for Ukraine as well. That is why the most effective way to change the format of communication between the participants of the educational process was distance learning.

Distance learning is a universal, integral, humanistic form of learning, based on which conditions are created for students, relatively free choice of academic disciplines, teaching staff for a particular discipline (Garbich-Moshora, 2015).

The relevance of this education format is in the fact that it allows nationwide access to educational resources through the use of modern information technologies and telecommunications networks, creates conditions for citizens to exercise their rights to education (Samolyuk & Shvets, 2013; Sydorenko et al., 2020).

If receiving basic education remotely evokes ambiguous reactions to the opinions of students, students, teachers, and scholars involved in the study of this issue, the situation with receiving a second higher education, taking additional professional development courses is quite different. The relevance of distance education, in this case, does not doubt because it allows:

- to study per their educational needs;
- do not limit themselves in their choice of educational institution and educational opportunities, despite their location;
- to use modern technologies, i.e., at the same time to learn skills that will be needed later in the workplace;
- independently plan the time and schedule of classes;
- to study in the most pleasant and productive environment, creating for oneself a favorable atmosphere;
- to receive additional education abroad when there is no possibility to go to another country.

However, the positive practice of the effectiveness of distance work is not observed in every educational institution. Besides, the problem is aggravated by the constant dissatisfaction of parents, students, and pupils themselves with the format of such work. It allows forming the main hypothesis of the study. However, distance learning in art disciplines' teaching can be effective not only theoretically but also in practice.

The solution of this form has shaped the research relevance and its purpose. The research aims to develop new forms and methods of distance learning for art disciplines' teaching, which make it more accessible and qualitative.

2 Literature review

Theoretical and practical aspects of distance education are actively studied by both domestic and foreign scientists. To the main scientific materials that are important for the study of this topic, we should include modern studies of foreign researchers Liang L. (2018), Vidal T. et al. (2021), Leduc D. & Beland S. (2021), Yu S . (2019), Hermon R. (2021), Jeong D-E. (2020). The researches of Ukrainian scientists who carried out the study of the peculiarities of teaching art disciplines are also important. The most relevant at the moment are the papers by Lvova I. & Bakhlova N. (2021), Lemeshko L. (2018), Solomakha S. (2020). The issues of teaching under distance learning conditions in Ukraine were investigated by Garbich-Moshora, O. (2015), Samolyuk N.& Shvets M. (2013), Alexandrova E. (2010), Ponomareva A. (2011), Sadirova G. (2021), Shtykhno L. (2016) and others.

Recently, a lot of attention has been paid to distance learning. It is at the center of scientific circles' attention. Current trends suggest that research in this area will continue. Nowadays, the theoretical, methodological, and methodical problems of distance learning are being studied by domestic and foreign scientists. In particular, much attention is paid to the issues of art disciplines’ teaching in a distance learning environment.

The problem of studying artistic disciplines online was considered by Lvova I. & Bakhlova N. (2021) in their research paper. The authors traced the changes in the problems of teaching and made analytical conclusions about how students' attitudes to the process of distance learning have changed. In their opinion, teaching creative disciplines cannot be fully implemented online.
Lemeshko L. (2018), in her article, focused on the need to develop and use electronic textbooks in the educational process in the study of artistic disciplines. In her opinion, the electronic textbook is not an analogue of the printed edition; it, rather, acts as a kind of educational environment. In addition to text information, it has a large amount of multimedia material, allows

working with remote resources, and quickly moves to different parts of the publication.

The necessity of introducing innovative educational technologies in the educational process of master's training to form the professional competence of art teachers is considered in the paper by Solomakha S. (2020).

The features of the aesthetic culture of the art disciplines' teacher considered in the research by Liang L. (2018). He identified the determinants of successful training of future teachers of disciplines in higher education institutions. He also revealed the theoretical basis for understanding the meaning of the phenomenon "aesthetic culture of an art disciplines' teacher," defined the content of the concepts "culture," "aesthetic culture," "cultural training, aesthetic competence".

Vidal T. et al. (2021), in their research, considered the introduction of virtual reality (VR) technology to improve student performance. They have proposed new instructional techniques that incorporate VR and gamification techniques in the development of video game projects.

Based on theoretical and empirical findings from art teachers in Canada and Europe, in Perspectives on the Assessment of Arts Learning in Higher Education, Leduc D.& Beland S. (2021) explored how arts education can be effectively and fairly assessed in the context of higher education. They examined a variety of assessment methods in music, visual and plastic arts, performing arts, design, fashion, dance, music and illustrated how knowledge, competencies, skills, and progress could be viable and fair assessments.

A new basic model of learning for the arts disciplines in the age of information was examined by Yu F. (2019). According to him, it is needed in the general background of the new creative-entrepreneurial circuit, and learning should be done from a core of "learning to know, developing aesthetic analysis, and developing the logic of the visual arts."

Hermon R. (2021), in her article, examines new online experiments in alternative art education as examples of para-institutional practices. Her goal is to demonstrate that the boundaries of institutional practice are gracious spaces for questioning the terms of conversation when exploring institutional processes and parameters as part of an ethically engaged project that seeks more inclusive and diverse art worlds.

In his review, Lierse S. (2015) concluded after research that distance education had become the best learning method for many educators seeking professional degrees.

The Korean scholar Jeong D-E. (2020) conducted a study aimed at observing art education through online classes through the Crown Crisis. According to him, changing the learning environment through new media requires a learning method suitable for students. Media literacy must be fostered to read new media. Artistic online education through digital media deserves research because it shows the possibility of configuring an individualized curriculum.

3 Methodology

While exploring the problem of the latest educational trends in the educational organization of higher education in today's challenges, we used several scientific research methods. One of the key methods at the initial stage of the research was the method of literary analysis. It allowed us to find out the content of the main concepts of our research, including educational trends, informatization of educational process in higher education, information and communication technologies of education, trendspotting, visualization, networking, networking, etc. The inductive, deductive, and logical methods allowed to consistently dissect the research material, analyze key aspects, and move from the individual to the general. The use of the comparison method allowed us to compare the views of domestic scientists on the problem of our study. While using the synthesis method, the practical and applied aspects of ICT use in the organization of distance format educational process in higher education were identified, including the features of effective use of individual means of computer technology.

For empirical research, an experiment was conducted among students and the Lviv National Academy of Arts. Sixty students took part in it. While selecting the control and experimental groups for the pedagogical experiment, we took into account their quantitative and qualitative components and the level of their learning achievements in artistic disciplines.

During the classes in the control groups, we used traditional teaching methods. In the experimental group, a distance component was used both in classes, using ICT, special learning platforms for online learning, and in the study of artistic disciplines remotely.

During the research, we established the criteria and indicators by which we tested the feasibility and effectiveness of the distance component in the full-time learning form:

- learning achievements. Learning achievements were determined by the initial, average, sufficient, high levels;
- cognitive interests of students, the level of which was established by the coefficient of the inconsistency of time perception.
- the effectiveness analysis was carried out according to the results of initial, ongoing, and final testing.

4 Results

The main forms of distance discipline teaching are described in the Regulations on Distance Learning (2013). Accordingly, the educational process of distance learning is carried out in the following forms: independent work; tutorials; practical training (in HEIs); vocational and practical training (in vocational-technical schools); control measures. The main types of educational activities in the distance learning form are: lecture, seminar, lesson, practical training, laboratory classes, consultations, and others, developed under the features of the discipline.

Elaboration of forms and methods for art disciplines' lectures

Conducting lectures on artistic disciplines in conditions of distance learning has its peculiarities. It is subject to the provisions, which are related to the classes in the traditional form of education but differs from them by the specifics of the applicant-teacher interaction.

The work with e-learning courses happens under the control of the teacher by using distance learning technologies.

The teacher independently chooses an online platform convenient for him and the students or students, which will be used to conduct lectures on a particular discipline. The most popular platforms include:

- Moodle distance learning system;
- Google Classroom platform;
- Zoom video conferencing App;
- Skype App;
- Edmodo web App.

Such popular platforms as Coursera, Khan Academy, edX, iTunes U, Udemy are used abroad.

Elaboration of forms and methods for organizing independent work while teaching art disciplines

The self-organization of independent work is one of the main features of distance education. In distance learning, pupils and students move away from the conventional education system, as they learn a significant part of the training material without a teacher. It requires from them more independence and clear organization of the working day. A special responsibility rests on the teacher because active independent work of students is possible only with serious and sustained motivation. The student must see the usefulness of the work performed. If in traditional education a teacher spent most of his time giving lectures, education in a distant format is different in many ways. In particular, the use of the Internet, with a wide database, allows diversifying the educational materials used to organize learning activities of students and pupils, taking into account their characteristics. The Internet has opened up new opportunities for applicants for education, who can use it to find almost any information. Many sources are offered in English, so its knowledge is very relevant in today's world.

Elaboration of forms and methods for organizing sightseeing tours as a form of studying art disciplines

Virtual tours are an effective form of distance learning. They allow you to diversify and make interesting and, consequently, more effective educational processes, help to implement the principles of clarity and scientific learning, contribute to the development of observation, skills of independent work of students and pupils (Alexandrova, 2010). The virtual tour is a software and information product designed for the built-in presentation of video, audio-graphic and textual information. The multimedia panoramic photo, in contrast to the video or conventional series of photographs, has interactivity. During the interactive tour, you can zoom in and out of any object, look up and down, look around, examine in detail the panorama of the object being studied or the individual details of its interior. It is also possible to move from one panorama to another, for example, to walk around the museum halls, etc. Without leaving the classroom or classroom, you can walk around the entire object from the inside and even examine it from the outside. A virtual tour is a specific form of cognition, allowing for a considerable amount of information. It forms the means of analytical activity: comprehensive perception of the object, observation, study, research, as well as increases interest in the work and provides more in-depth and lasting assimilation of the material (Ponomareva, 2011).

Elaboration of forms and methods of group work organization

Working in groups is one more important condition for effective distance learning. In the digital world, teamwork skills are needed, both face-to-face and distance learning. Group work also helps to increase motivation and communicate at a distance. Other benefits of group work include increased comprehension of material, logical and reasonable group work done, and an increase in out-of-the-box solutions.

For work in groups to be productive, three factors must be considered:

- each member of the group should understand the purpose of the activity;
- distribution of responsibility between each member of the group;
- precise time limits must be set, i.e., the work-in-groups rules must be established.

Digital tools which help to organize group work are important. Digital tools essentially for group work already exist quite a lot. By this time, we are all used to working in the cloud, and cloud technology allows us to work on collaborative documents, collaborative presentations, shared spreadsheets, collaborative mapping, working on a timeline, and online whiteboards (Sadirova, 2021). Google Docs, Google Table, and Google Presentation tools should also be included.

Thus, distance learning is a major challenge for all participants in the educational process – educators, teachers, students, students, and their parents. It requires all the attributes typical of face-to-face learning. These are group discussions, collective discussion of the material, live communication, etc. To provide a full-fledged learning process at a distance in addition to the technical tools, school teachers and university professors have mastered several professional and personal competencies. They are necessary for interest, organization of students at the initial stage, and retention of their attention. However, this has become insufficient: the role of parents has rapidly increased in the distance learning environment, as it is difficult to demand absolute discipline and concentration from students.

It is especially problematic for teachers of art subjects to switch to new teaching technologies. It happens due to the subject specificity, which did not previously assume the use of information technology. Today teachers have mastered the distance learning platforms quite quickly. Teachers of the older generation have mastered computers. The teachers, who had the necessary technical capabilities, are mostly working with the Google Classroom App, which greatly simplifies the organizational aspects of training. Some recorded and downloaded to disk short video explanations of lessons in a familiar format to which students could ask specific questions. Phone calls and voice messages have become a common practice. Each educator uses the most convenient and easy-to-understand tools, making sure that the majority of students have access to them afterward.

It is important to note another promising learning tool – virtual technologies. Virtual reality is one of the perspective educational methods offered by modern information technology. Nowadays, in domestic educational institutions, it is difficult to imagine a virtual reality in the educational process. However, education is one of the most common areas of this technology development. That is why those educational institutions, which will allocate resources to obtain such technology, will be able to organize a more interesting and high-quality educational process.

The main advantages of this technology for teaching artistic disciplines are:

- visualization (thanks to the use of 3D graphics, there is an opportunity to show chemical processes in detail down to the atomic level);
- involvement (with the help of virtual reality, we can change the scenarios, influence the course of the experiment, or solve problems playfully and understandably);
- focusing (the virtual world allows you to focus completely on the material and not be distracted by external stimuli);
- virtual classes (the feeling of one's presence in the depicted world is the main feature of virtual reality).

Classes with the use of modern technology are of great interest. As a result, learning motivation and the activity of students/pupils are enhanced (Trach, 2017).

Thus, digital technologies of distance learning of artistic disciplines have enough forms, methods, and tools that would raise the level of education. To date, being under quarantine constraints, the experienced have the field to carry out empirical research and the opportunity to conduct experiments that would generally confirm the hypothesis that distance learning can be effective.

The main purpose of the experimental part of this study was to confirm the effectiveness of distance learning in parallel with full-time. The results of the initial testing are shown in Table 1.

Table 1 – The results of the initial testing of students

Levels	Experimental group		Control group	
2	2	6,7	3	10.0
3	7	23,3	8	26.7
4	12	40,0	12	40.0
5	9	30,0	7	23.3

Source: Developed by the authors.

The analysis of Table 1 shows that the majority of the surveyed students, both experimental and control groups, have good knowledge of art disciplines. They correspond to the average and sufficient levels:

1. Experimental class – 63.3%;
2. Control class – 66.7%.

The sufficient level of students' learning achievements encourages us to expand the course and the inclusion of a distance component in the learning process. It should intensify cognitive activity and improve the quality of learning.

The next stage of our research was to develop distance learning courses in art disciplines and place them on Moodle, eLearning Server, Blackboard. Our research was focused on the sufficient provision of learning material for the students in the experimental group. After studying each topic, students in both groups were tested. The results of the second testing are presented in Table 2.

Table 2 – Students' test results on the effectiveness of using distant art courses using Moodle, eLearning Server, and Blackboard

Levels	Experimental group		Control group	
2	2	6.7	3	10.0
3	6	20.0	9	30.0
4	12	40.0	11	36.7
5	10	33.3	7	23.3

Source: Developed by the authors.

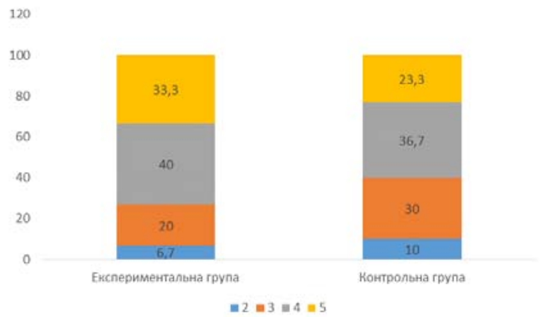

Figure 1. – The diagram of students' learning achievements in the experimental and control groups

Source: Developed by the authors.

The data analysis in Table 2 shows the following results of our experiment:

Students in the experimental group who studied the topic with the involvement of distance learning had higher achievements (73.3%) than students in the control group (66.7%) who studied the same learning material. The results of learning achievements with the involvement of distance learning component can be explained by the fact that distance learning allows you to expand the learning material and direct it to the development of cognitive activity and creative abilities of students, allows you to increase their level of independence, the overall success in learning artistic disciplines.

Thus, the introduction of distance learning into the educational process while studying art disciplines is more effective than the traditional form of learning.

5 Discussion

Today, the distance learning issue has become the object of active discussions among educators, politicians, parents, and students. In particular, representatives of the authorities, scientists, journalists, and direct participants in the educational process have different positions on this issue. Thus, according to Hryshina Y. (OP, 2020), the need to develop online education in Ukraine should not be denied, but a mixed system of education would be more effective and efficient. In turn, the principal of one of Kyiv's schools Dmitry Loza, notes that there are no clear tools for the distance learning introduction.

The same opinion is held by Sovsun I., the former Deputy Minister of Education, who notes that distance education needs several shortcomings, correcting of which requires corrective programs both at school and higher education institutions level.

At the same time, the teaching of art, as well as any other disciplines in a distance learning environment, has many advantages, among which we can note:

1. Increase in students' free time.
2. Isolation of students from each other (which is an advantage during epidemics).
3. Possibility to study at any time.
4. On-the-job learning.
5. Mobility.
6. Passing exams in a relaxed atmosphere.
7. Individual approach.
8. Learning in a relaxed atmosphere
9. Virtuous testing of knowledge by teachers.

Thus, today there are quite significant advantages of teaching artistic disciplines under conditions of distance learning, but at the same time, there are also disadvantages. Many researchers (Donetsk Law Institute of Ministry of Internal Affairs of Ukraine, 2020) consider that one of the negative aspects of distance learning is the lack of personal communication with the teacher, as well as communication with other students. Nowadays, this problem has many solutions – e-mail, telephone, video conferencing programs, etc. Sometimes you don't have to be around to be able to communicate in person. Other disadvantages include:

1. The need for a strong motivation to learn.
2. Increased time spent on communication between the teacher and the educational seeker.
3. Loss of interest in learning.
4. The lack of student identification.
5. Lack of practical skills.
6. Communication skills development.
7. The possibility of unfavorable passing the control of learning among students.

Distance learning is an effective complement to traditional forms of education. One can say that it is an effective means of solving its urgent problems. While learning artistic disciplines, distance education provides students and pupils with access to non-traditional information sources. It provides unlimited and new opportunities for creativity, as well as the consolidation of various professional skills. In turn, teachers can implement fundamentally new forms and methods of learning. The development of distance learning in the system of Ukrainian education will continue and improve with the development of Internet technologies, as well as with the support of public institutions that will invest in improving the technological equipment of educational institutions (Shtykhno, 2016).

6 Conclusions

According to the empirical research results, we concluded that the students in the experimental group, who studied the topic using distance learning, had higher achievements than the students in the control group, who studied the same study material. This result was achieved since the teachers of art disciplines of Lviv National Academy of Arts placed their lectures on art on the platforms Moodle, eLearning Server, Blackboard. The research results confirmed the hypothesis that distance learning in art disciplines could be effective. It happens because the students are using all the advantages of distance learning, in particular:

- the possibility of learning at any convenient time;

- the possibility of repeated listening and receiving more extensive information. Because of that, students were able to show better rates of information assimilation.

At the same time, to improve the forms and methods of distance learning of art disciplines, it was proposed to use special tools to improve the lectures, group studies, independent work, etc. A separate emphasis was placed on virtual reality and its significance in the educational process, a promising direction for improving the distance learning of art subjects.

Even though in some cases the issue of distance education shows high indicators of its quality, today this issue remains the most controversial, because the organization of quality education depends on the work of teachers in this direction, on the technical equipment of higher education institutions and teachers in particular, on the state support for the development of innovative programs.

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THE MODERN PRACTICES OF USING INFORMATION TECHNOLOGY IN ELEMENTARY EDUCATION

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Abstract: The use of information and communication technology (ICT) is becoming more widespread and important in elementary schools around the world because ICT has the potential to facilitate learning processes and innovative approaches in teachers' practices. The article aimed to assess the current practice of information technology in elementary education, using the example of the Czech Republic and Slovakia. The research methodology was based on statistical analysis and analysis of the results of a survey of Czech and Slovak teachers on the inclusion of ICT skills development subjects in teacher training programs, the use of skills in practice, and the effectiveness of professional development of ICT skills of teachers. The results indicate that in the innovative pedagogical practices of teachers in OECD countries the introduction of technology and digital tools for teaching elementary school students is the least common type of innovation. Within OECD countries there is almost no difference in the implementation of innovative technologies in pedagogical practice. The limited availability of computers and the Internet for students was revealed. It was determined that in the Czech Republic and Slovakia, thematic disciplines related to technology were included in formal educational training programs for teachers in 45% and 63% of cases, respectively. At the same time, a high level of ICT training in both countries was assessed (in the Czech Republic 89%, in Slovakia 95%). Differences in subjective assessment of the need for professional development of ICT skills between the countries were found (43% and 60%, respectively). Among Czech and Slovak teachers who had undergone professional development for ICT skills development, more claimed positive effects such as supplementing prior knowledge, adapting to personal development needs, holistic structure, reinforcement of subject content teaching in the school by the teacher, active learning, using new ideas and knowledge in the classroom, introduction of different activities in teaching, focus on innovative teaching practices.

Keywords: information technology, elementary education, use of ICT, development, ICT skills.

1 Introduction

The use of information and communication technology (ICT) is becoming more widespread and important in elementary schools around the world because ICT has the potential to facilitate learning processes and innovate teacher practice. Among the main potential innovations, thanks to ICTs is the autonomous learning of students and their active involvement in the learning process. To successfully integrate such technology into classroom practice, we need to promote alignment between existing educational practices and the use of information and communication technologies in the classroom. Teachers play a significant role in integrating information and communication technology (ICT) in schools, and motivated teachers reflect a higher level of ICT use in the classroom.

This article aims to assess current practices in the use of information technology in elementary education using examples from the Czech Republic and Slovakia.

2 Literature review

Change and improvement are two keywords associated with innovation in general and, in particular, innovative learning using ICT. Based on these two keywords, educational innovation can be defined as "the application of an idea that stimulates planned innovative changes in educational processes, services or products and then leads to improved learning outcomes" (Vanderlinde & van Braak, 2011).

The role of the computer in educational innovation is seen as a facilitation tool because educational innovation deals with the topic of "knowledge." The ability of technology to manage information makes it an ideal tool to develop the potential of different options for implementing innovative teaching methods. The different ways in which teachers and students interact are guided by teaching methods. This means that the computer can be used to: improve existing teacher-student interaction methods, such as replacing traditional lecture lessons; disseminating alternative methods that are difficult to implement in the current environment, such as individualized instruction; developing new methods, such as flipped learning; analyzing data from teacher-student interactions to assist in decision-making to improve instruction (Sein-Echaluce, Fidalgo-Blanco & Alves, 2017).

The scholarly literature discusses 21st-century skills in the context of elementary education. The results of Chalkiadaki (2018) showed a particular interest in skills and competencies related to the conditions of information-communication technology development, globalization, and the need for innovation. Nevertheless, the need for research focusing specifically on the context of ICT use in elementary education was recognized. Research by Kırkgöz (2008a; 2008b) emphasizes the need for ongoing teacher training and teacher development opportunities, especially in the critical first few years of the innovation process to facilitate curriculum innovation in elementary education. A study by Uluyol & Şahin (2016), through a survey of 101 elementary teachers from 24 elementary schools in Turkey, assessed the current state of teachers' ICT use and their motivation to use ICT. The authors argue for the need to develop more specific incentives, support, and capacity to increase teachers' motivation to improve the level and quality of ICT use in classrooms.

A study by Vanderlinde, Aesaert & van Braak (2014) examines the experiences of schools and teachers in Belgium to identify factors in the use of ICT for learning in elementary school. Particular attention is paid to teachers' widespread use of technology. Vanderlinde, Aesaert & van Braak (2014) draw the following key findings: 14% differences in teachers' use of ICT are explained by differences between schools; professional development in ICT use and ICT-related competencies are positively related to teachers' use of technology; individual differences in teachers' ICT use competencies are explained by differences between the schools in which they work. Tezci (2009) finds that the most common types of ICT among elementary school teachers are the Internet, email, and word processing software, and teachers' attitudes toward computers and the Internet are generally positive. It was also found that their attitudes change depending on years of experience and level of knowledge.

Atman Uslu & Usluel (2019) identified influencing factors for ICT integration in elementary schools, among which: 1) school-dependent factors, namely providing access, technical support, administrative support, and professional development support for teachers; and 2) teacher-dependent factors: teacher beliefs and competencies in using ICT. The model built on the above variables, verified by structural equation modeling using data from 403 teachers, indicates that these factors explain 70% of the variance of technology integration. Selwyn & Bullon (2000) found that many elementary students frequently use ICT in school, but their access to technology outside of school is varied. The findings raise questions about the challenges of using ICT beyond accessibility in the elementary grades and the need for meaningful, regular access to technology in school for all children.

A study by Vanderlinde, Aesaert & van Braak (2015) cites different types of ICT use in elementary schools: basic use of ICT as a learning tool and as an information tool. The authors also provide a list of factors for technology use: 1) at the level of the individual teacher (e.g., teacher competencies in ICT use, ICT professional development, etc.); 2) at the level of the school organization (e.g., school perception of ICT, leadership in ICT integration, etc.) that support or hinder the use of ICT for student learning.

In traditional schools, ICTs are mostly used to augment and support standard teacher-centered learning activities. Innovative schools, by contrast, use ICT tools to support open-ended activities with active student participation and role (Sydorenko et al, 2020). Elementary schools expected ICT to increase student motivation, improve learning outcomes, promote independent learning, and allow for differentiation of students. Within these goals, however, there are clear differences in expectations between the two types of schools (de Koster, Kuiper & Volman, 2012).

A survey of 232 elementary school teachers by Kerckaert, Vanderlinde & van Braak (2015) identified two types of ICT use in elementary education: "ICT to support basic skills and attitudes toward ICT" and "ICT to support content and individual learning needs. The first type of ICT is more frequent and related to students' assessments, teachers' perception of ICT, and the number of years of experience with ICT in school. The second type of ICT is closely related to students' assessments, teachers' perceptions of ICT, teachers' professional development of ICT skills, and teachers' attitudes towards ICT opportunities for teachers. This indicates that professional development is a critical factor in encouraging ICT use, which goes beyond basic skills training and attitudes toward ICT.

Smeets (2005) surveyed 331 upper elementary teachers and found that many teachers use several elements of a powerful learning environment in their classrooms to present tasks and facilitate active, autonomous learning. The use of ICT, in general, allows only traditional approaches to learning. Teachers who created a powerful learning environment for students were more likely to use open-ended ICT applications that would enhance the learning environment, provided there was greater access to computers for students. In addition, teachers' views on the role of ICT in active and autonomous learning, teachers' development of ICT skills, and teacher gender were the most favorable factors in the use of technology.

Surveys by Tondeur, Van Braak & Valcke (2007) among 570 respondents in a stratified sample of 53 elementary schools indicate that teachers focus predominantly on developing technical ICT skills. At the same time, the curriculum focuses on the integrated use of ICT in the learning process. This indicates that there is a gap between the proposed and implemented curriculum for ICT integration.

Thus, the literature examines the experiences of schools and teachers in the use of ICT, factors promoting the use of ICT for learning in elementary school, the most common types of ICT among elementary school teachers, factors influencing ICT integration in elementary school, the problems of ICT use for accessibility in elementary school, different types of ICT use in elementary school. At the same time, there is a lack of comprehensive research on the use and practice of ICTs in elementary education in different countries.

3 Methodology

Methods

The first part of the research conducted a statistical analysis of indicators of the use of different types of innovations in elementary schools in OECD countries in 2020, including innovative technologies, tools, and instruments. An analysis of the availability of computer equipment and the Internet in elementary schools in OECD countries in 2020 was carried out.

The second part of the study includes secondary data from The Teaching and Learning International Survey (TALIS) for 2018 for the Czech Republic and Slovakia. The survey involves teachers' assessment of working conditions, the environment in schools within the country for the understanding of the challenges, especially in the practice of information technology in elementary schools.

In the context of the study, the analysis was based on the practice of using information technology in such areas as 1) inclusion of ICT skills development and ICT usage into pre-service teacher training curricula; 2) inclusion of ICT usage subjects into formal teacher training curricula and elementary school curricula; 3) inclusion of ICT usage issues in the teacher's professional development program; 4) the positive effect of ICT usage training on teachers; 5) the need for further training in ICT usage by teachers.

Table 1 – Questionnaire and checklist for teachers about ICT use in elementary schools

Question	Answers
1. Were the following elements included in your formal education, and to what extent did you feel prepared for each element in your teaching? Please mark one choice in both part (A) and part (B) in each row. h) Use of ICT (information and communication technology) for teaching	(A) Inclusion in formal education: 1 – Yes. 2 – No (B) Preparedness: 1 – Not at all; 2 – Somehow; 3 – Well; 4 – Very well
2. Were the following subject categories included in your formal education, and do you teach them during the current school year to any pupils in this school? Please mark as many choices as appropriate in each row. g) Technology Includes orientation in technology, including information technology, computer studies, construction/surveying, electronics, graphics and design, keyboard skills, word processing, workshop technology/design technology:	1. Included in my formal education. 2. I teach it to pupils this year
3. Were any of the topics listed below included in your professional development activities during the last 12 months? Please mark one choice in each row. (e) ICT (information and communication technology) skills for teaching	1 – Yes, 2 – No
4. Thinking of the professional development activity that had the greatest positive impact on your teaching during the last 12 months, did it have any of the following characteristics? Please mark one choice in each row. (1 – Yes, 2 – No).	a) It built on my prior knowledge. b) It adapted to my personal development needs. c) It had a coherent structure. d) It appropriately focused on content needed to teach my subjects. e) It provided opportunities for active learning. f) It provided opportunities for collaborative learning. g) It provided opportunities to practice/apply new ideas and knowledge in my own classroom. h) It provided follow-up activities. i) It took place at my school. j) It involved most colleagues from my school. k) It took place over an extended period of time (e.g., several weeks or longer). l) It focused on innovation in my teaching
5. For each of the areas listed below, please indicate the extent to which you currently need professional development. Please mark one choice in each row. (e) ICT (information and communication technology) skills for teaching	1 – No need at present; 2 – Low level of need; 3 – Moderate level of need; 4 – High level of need

Source: OECD (2019).

Table 2 shows the distribution of surveyed Czech and Slovak elementary school teachers by gender. 66.7% of the respondents are Czech Republic teachers, 33.3% are Slovakian teachers. 75.4% of the respondents were female teachers, and 24.6% were male teachers.

Table 2 – Surveyed the Czech Republic and Slovakia elementary school teachers by gender

	Frequency	%
The Czech Republic	6039	66,7
Slovak Republic	3015	33,3
Total	9054	100,0
Gender – T		
Female	6823	75,4
Male	2231	24,6
Total	9054	100,0

Source: calculated by the author based on OECD (2019).

4 Results

In the innovative pedagogical practices of teachers in OECD countries, the introduction of technology and digital tools for teaching elementary school students is the least common type of innovation, as innovative teaching methods, new knowledge, services, or products predominate (Table 3). Within OECD countries, there is virtually no difference in the adoption of innovative technologies in pedagogical practice: the standard deviation is 1.9%. The percentage of students learning in highly innovative workplaces and playing a role in introducing innovation is 28.6%; the percentage of students playing a role in introducing innovation is 32.7% with a standard deviation of 1.7%; overall, the percentage of students working in highly innovative workplaces and playing a role in introducing innovation is 15.7% in 2020.

Table 3 – Innovation in elementary education in OECD countries (mean) in 2020 by type

Innovation type	Percentage of pupils working in highly innovative workplaces, 2020		Percentage of pupils who play a role in introducing innovation, 2020		Percentage of pupils working in highly innovative workplaces and playing a role in introducing innovation, 2020	
	Mean	Standard error	Mean	Standard error	Mean	Standard error
Innovation type: Knowledge or methods	56,5	-2,5	68,5	-2,0	45,2	-2,3
Innovation type: Products or services	36,8	-2,4	42,3	-2,0	24,6	-1,8
Innovation type: Technology, tools or instruments	28,6	-1,9	32,7	-1,7	15,7	-1,3
Across three types of innovation	17,0	-1,8	23,7	-1,7	8,6	-1,2
At least one type of innovation	65,4	-2,5	73,0	-1,8	54,8	-2,1

Source: OECD (2021a).

The average percentage of pupils with computers available for use in the first year was 56-57% for math, reading, and other elementary school subjects. The percentage of pupils with Internet access in the classroom in the first year is slightly lower than 49-53%, depending on the subject of elementary school (Table 4). In the final year, the figures increase, being 56-60% and 54-58%, respectively.

Table 4 – Innovation in the availability of computers and the internet in the classroom in the 4-th grade in elementary education in OECD countries (mean) in 2020

Measure	Indicator	Initial year in percentage			Final year in percentage			Change in percentage points		
		Mathematics	Sciences	Reading	Mathematics	Sciences	Reading	Mathematics	Sciences	Reading
Mean	Percentage of pupils with computers available to use and change over time	55,909	57,142	56,525	56,605	60,065	58,335	0,696	2,923	1,810
	Percentage of pupils with Internet access in the classroom and change over time	49,158	53,156	51,157	54,291	58,069	56,180	5,133	4,913	5,023
Standard error	Percentage of pupils with computers available to use and change over time	1,061	1,059	1,060	0,959	1,061	1,010	1,430	1,499	1,464
	Percentage of pupils with Internet access in the classroom and change over time	1,111	1,071	1,091	0,946	1,060	1,003	1,459	1,507	1,483

Source: OECD (2021b).

There are virtually no differences between OECD countries in the percentage of pupils with computers available for use and with Internet access, as evidenced by a standard deviation of 1-1.1%.

Compared to Slovakia, in the Czech Republic, thematic disciplines related to technology were included in formal teacher education programs only 45% of the time (orientation in technology, including information technology, computer research, construction/geodesign, electronics, graphics and design, keyboarding skills, word processing, professional technology/design). In Slovakia, teachers claim the inclusion of technology-related disciplines 63% of the time. At the same time, among Czech teachers, 3% consider unprepared to teach the use of technology in school, 60% claim an average level of preparation, 83% claim a high level, and 89% claim a very high level. In Slovakia, the distribution of responses by the level of preparation is 7%, 64%, 91%, and 95%, respectively.

Table 5 – Combinational table: Country ID – Numeric Code * Elements in form. educ. Use of ICT for teaching * Prep. for tch. elements Use of ICT for teaching

Prep. for tch. elements Use of ICT for teaching			Elements in form. educ. Use of ICT for teaching		Elements in form. educ. Use of ICT for teaching		Total
			Yes	No	Yes, %	No, %	
Not at all	Country ID – Numeric Code	Czech Republic	66	2202	3%	97%	2268
		Slovak Republic	45	611	7%	93%	656
	Total		111	2813	4%	96%	2924
Somewhat	Country ID – Numeric Code	Czech Republic	1103	732	60%	40%	1835
		Slovak Republic	562	313	64%	36%	875
	Total		1665	1045	61%	39%	2710
Well	Country ID – Numeric Code	Czech Republic	963	195	83%	17%	1158
		Slovak Republic	793	80	91%	9%	873
	Total		1756	275	86%	14%	2031
Very well	Country ID – Numeric Code	Czech Republic	445	54	89%	11%	499
		Slovak Republic	373	21	95%	5%	394
	Total		818	75	92%	8%	893
Total	Country ID – Numeric Code	Czech Republic	2577	3183	45%	55%	5760
		Slovak Republic	1773	1025	63%	37%	2798
	Total		4350	4208	51%	49%	8558

Source: calculated by the author based on OECD (2019).

Overall, 27% of teachers in both countries were trained in technology-based education, while 74% were not trained in technology-based subjects. In the Czech Republic, the training rate was 26%, and in Slovakia, it was 28%. Among those who were trained, in the Czech Republic 64% indicated that they teach subjects for the use of technology, 36% – do not teach. In Slovakia, the figures were 54% and 46% respectively (Table 6).

Table 6 – Combinational table: Country ID – Numeric Code * Subject cat. inc. in form. educ. and train Technology * Subjects taught in current school year Technology

Subjects taught in current school year Technology			Subject cat. inc in form.educ. and train Technology		Subject cat. inc in form.educ. and train Technology		Total
			Checked (Yes)	Not checked (No)	Yes, %	No, %	
Checked (Yes)	Country ID – Numeric Code	Czech Republic	543	309	64%	36%	852
		Slovak Republic	225	194	54%	46%	419
	Total		768	503	60%	40%	1271
Not checked (No)	Country ID – Numeric Code	Czech Republic	981	4140	19%	81%	5121
		Slovak Republic	623	1934	24%	76%	2557
	Total		1604	6074	21%	79%	7678
Total	Country ID – Numeric Code	Czech Republic	1524	4449	26%	74%	5973
		Slovak Republic	848	2128	28%	72%	2976
	Total		2372	6577	27%	73%	8949

Source: calculated by the author based on OECD (2019).

In the Czech Republic, 43% of teachers claimed to include ICT skills for student learning in their professional development programs, while in Slovakia it was 60%. On the other hand, 57% of teachers in the Czech Republic and 40% of teachers in Slovakia did not include such subjects.

Table 7 – Combinational table: Country ID – Numeric Code * Areas prof.dev. ICT skills for teaching

		Areas prof.dev. ICT skills for teaching		Total	Areas prof.dev. ICT skills for teaching	
		Yes	No		Yes, %	No, %
Country ID – Numeric Code	Czech Republic	2471	3341	5812	43	57
	Slovak Republic	1647	1092	2739	60	40
Total		4118	4433	8551	48	52

Source: calculated by the author based on OECD (2019).

Among Czech and Slovak teachers who have undergone professional development to develop ICT skills, more claim positive effects such as supplementing prior knowledge, adapting to personal development needs, holistic structure, reinforcement of subject content teaching in the school by the teacher, active learning, using new ideas and knowledge in the classroom, introducing different activities into learning, focusing on innovative teaching practices.

Table 8 – Type of impact of the professional development activity that had the greatest positive impact on teaching during the last 12 months

Type of impact	Yes	No	Yes	No
a) It built on my prior knowledge.	3105	366	89%	11%
b) It adapted to my personal development needs.	2382	1078	69%	31%
c) It had a coherent structure.	2692	765	78%	22%
d) It appropriately focused on content needed to teach my subjects.	2778	684	80%	20%
e) It provided opportunities for active learning.	2719	746	78%	22%
f) It provided opportunities for collaborative learning.	1649	1799	48%	52%
g) It provided opportunities to practice/apply new ideas and knowledge in my own classroom.	2800	663	81%	19%
h) It provided follow-up activities.	2522	940	73%	27%
i) It took place at my school.	1446	2018	42%	58%
j) It involved most colleagues from my school.	1054	2410	30%	70%
k) It took place over an extended period of time (e.g., several weeks or longer).	1078	2388	31%	69%
l) It focused on innovation in my teaching	2583	877	75%	25%

Source: calculated by the author based on OECD (2019).

Figure 1 provides information about the needs of Czech and Slovak teachers for professional development of ICT skills. Overall, 52% of teachers in the Czech Republic and 61% of teachers in Slovakia reported such a need.

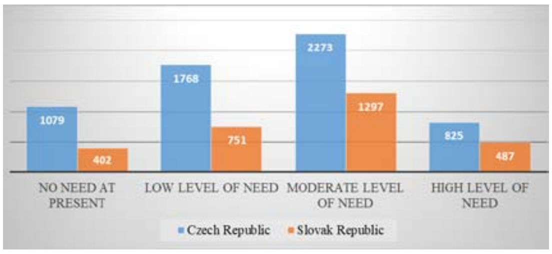

Figure 1 – Need for professional development of teacher's ICT skills in the Czech Republic and Slovakia

Source: calculated by the author based on OECD (2019).

5 Discussion

The results of this study correlate with the findings of other authors on the need for ongoing teacher training and opportunities to develop teachers' ICT skills (Kırkgöz, 2008a; 2008b). Accordingly, there is a need to develop specific incentives, support, and capacity to increase teachers' motivation to improve the level and quality of ICT use in classrooms (Uluyol & Şahin, 2016). As revealed in this work, 48% of Czech teachers and 39% of Slovak teachers do not see the need for professional development of ICT skills, which requires motivation and encouragement.

While in the study of Vanderlinde, Aesaert & van Braak (2014) we saw a widespread teachers' use of technology in the learning environment, in this one we found that only 15.7% of elementary students in the countries learn in an environment where teachers use technology. We also found differences in the level of professional preparation when teachers receive a formal education, the level of use of ICT in student learning, and the level of need for professional development of ICT skills. As shown in Vanderlinde, Aesaert & van Braak (2014) 14% of the difference in teachers' use of ICT is due to differences between schools. Additional reasons for the differences are professional development experience in the use of ICT and competencies acquired during teachers' education. It is also worth considering the individual differences of teachers, in particular competencies in ICT use, and differences between the schools in which teachers work.

This study shows no significant differentiation in the use of technology across countries in the education of elementary school students. As Atman Uslu & Usluel (2019) show, this may be due to similar school environments, particularly similar levels of access, technical support, and professional development support for teachers. Selwyn & Bullon (2000) found a difference in students' access to ICT outside of school. We also found that the adoption of technology and digital tools for teaching elementary school students is the least common type of innovation (28% and 32% of students learn in an innovative environment). This points to the problematic use of ICT for its availability in the elementary grades and the need for meaningful, regular access to technology in school for all children.

This research also confirms the effectiveness of professional development of teachers' ICT skills, is to promote active learning. These findings are contained in de Koster, Kuiper & Volman (2012). This means that ICT promotes innovative ways of teaching students, supporting open-ended activities with active student participation and role (de Koster, Kuiper & Volman, 2012).

6 Conclusion

In the innovative pedagogical practices of OECD teachers, the introduction of technology and digital tools for teaching elementary school students is the least common type of innovation. Overall, the percentage of elementary students working in highly innovative workplaces and playing a role in introducing innovation is 15.7% in 2020. Within OECD countries, there is virtually no difference in the adoption of innovative technologies in pedagogical practice.

The average percentage of pupils with computers available for use in the first year of school was 56-57%, while the percentage of pupils with Internet access in the classroom in the first year was slightly lower – 49-53%, depending on the subject of the elementary school.

In the Czech Republic and Slovakia, technology-related subjects were included in formal teacher education 45% and 63%, respectively. At the same time, among Czech teachers, 3.0% considered unprepared to teach the use of technology in school, 60% claimed an average level of preparation, 83% claimed a high level, and 89% claimed a very high level. In Slovakia, the distribution of responses by the level of preparation is 7%, 64%, 91%, and 95%, respectively. In the Czech Republic, the rate of formal ICT training was 26%, while in Slovakia it was 28%. Among those trained, in the Czech Republic, 64% said they taught disciplines to teach the use of technology, while 36% said they did not. In Slovakia, the figures were 54% and 46%, respectively. In the Czech Republic, 43% of teachers say they include ICT skills subjects in their professional development programs to teach students, compared to 60% in Slovakia. Among Czech and Slovak teachers who had undergone professional development for ICT skills development, more claimed positive effects such as supplementing prior knowledge, adapting to personal development needs, holistic structure, reinforcement of subject content in school by the teacher, active learning, using new ideas and knowledge in the classroom, introduction of different activities in teaching, focus on innovative teaching practices.

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Primary Paper Section: A

Secondary Paper Section: AM

EXPERIENCE OF UKRAINE AND THE EU COUNTRIES IN IMPLEMENTING DECENTRALIZATION

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Abstract: The purpose of the article is to identify the fundamental legal framework for decentralization in the EU and Ukraine and the main problems of their implementation in the state system of the EU countries, which must be taken into account in developing the state system of Ukraine. The study of the current situation of the decentralization consequences in Ukraine showed the main problems, which include the lack of legal support for decentralization, the development of legislation on the administrative and territorial organization of Ukraine, problems with land management, lack of state supervision over the legality of local government decisions. Finally, the study is summarized in solving problems by developing the legislation in Ukraine and its adaptation to European experience and standards..

Keywords: decentralization, EU, Ukraine, legal framework JEL Classification: H11.

1 Introduction

The current stage of formation of European countries is characterized by the use of the most optimal models of government, which are well accepted by the population and are convenient for the countries financial and economic system. A necessary condition for the stable development of society and the effective functioning of the state is to ensure a balance between national interests, the interests of the population of regions, and territorial communities. European practices of the state system show that the decentralization of authority is one of the effective tools for modernizing the public power system, and its successful implementation creates the necessary organizational and legal prerequisites for further democratization of power relations. The idea of public authority decentralization is implemented in different forms in the vast majority of developed countries (Bashtannyk et al., 2021). Generally, due to decentralization, the efficiency of public power has been raised to a qualitatively new level in many democracies. At the same time, in Ukraine, this idea is realized according to the peculiarities of the development of public and state institutions formed here. However, decentralization reform has been relatively recent, and the population of certain regions is still experiencing some of the inconveniences associated with it. In connection with the above, there is an urgent need for in-depth consideration of the concept of decentralization, the study of successful examples of decentralization in Europe, its legal regulation in European countries and Ukraine, as well as to identify problems of legal regulation of decentralization that exist today (Arhipenko, 2018).

2 Literature review

The issue of decentralization is widely studied in the scientific literature. Each author considers it from the point of view on the object of decentralization. Therefore there are different approaches to the definition of “decentralization”, and the most valuable among them are:

- independence in approaches to management (Odintsova *et al*., 2002);
- transfer of some part of the public administration functions of central executive bodies to local executive bodies (Obolenskij, 2005);
- transfer of part of functions and powers from higher levels of government to lower to weaken or abolition of centralization (Malynovskij, 2005);
- the process of redistribution of power and competencies between the central and local levels (Kolyshko, 2003).

Let's consider this concept from the scientific point of view, having investigated scientific researches of Ukrainian and European scientists.

Table 1 – Approaches to the definition of “decentralization”

№	Author	Decentralization is …
1	Decentralization.gov.ua	the process of transferring power and financial resources from the central to the lower levels of government, such as regions, provinces, districts, and municipalities. The term “process” means the direct participation of citizens in political and socio-economic activities, which should strengthen democratization in the future.
2	Gritsyak I. (1997)	the activity of independent local self-government as a result of the transfer of state powers. It is the process of expanding and strengthening the rights and powers of administrative-territorial units or lower bodies and organizations while narrowing the rights and powers of the center.
3	Skuhaj, S. (2013)	the transfer of rights, responsibilities for the provision of funds for the performance of public functions from the central government to subordinate or autonomous authorities or organizations and the private sector.
4	Odintsova, G., Mostoviy, G., Amosov, O. (2002)	Decentralization is the appropriate compliance with the needs of functional society responsibility of different levels of government; independence in approaches to management taking into account the diversity of local features while maintaining unity in the main.
5	Faguet, J.-P. (1997)	the transfer by the central government of certain functions, with all the administrative, political, and economic attributes necessary for their performance, to local authorities, which are independent units and sovereign within the geographical boundaries or functional areas of activity defined at the legislative level.
6	Gibson, J. Ivancevich J. and Donelly, J. (1991)	a process that involves the transfer of power to make decisions at the lowest possible level within the organization.
7	Lelechenko, A. (2017)	the delegation of powers, resources, and responsibilities from central to local, semi-autonomous public authorities and private business entities.
8	Litvack, J. (2004)	the transfer of power and responsibility for the performance of public functions from the central government to subordinate or semi-independent state bodies and (or) to the private sector.
9	Shemchushenko, Yu. 1999	the process of expanding and strengthening the rights and powers of administrative-territorial units or lower bodies and organizations while narrowing the rights and powers of the relevant center.

Source: Developed by the authors.

Foreign experience shows the importance of decentralization for countries that are in profound changes in the system of regulation of public relations. For countries in transition, decentralization is an effective way to change the essential characteristics of society and has significant potential and prospects for local development (Baun & Marek, 2006; Feltenius, 2007; Baldini, 2014). The most effective reforms to decentralize public power have been in Germany, France, Poland, the United Kingdom, and Sweden. France's state policy on the organization of local self-government is implemented in two main directions: deconcentration – a more comprehensive delegation of state administrative functions on the ground, and deconcentralization – the transfer of state power to local governments. Thus, France began its path to decentralization as a unitary state with a strong bureaucracy. The modern French system of government is based on the principles of decentralization. The French reforms confirm that the central administration retains only those national functions that have general state character or those that cannot be delegated to local authorities according to the law (Kyiv City Council, 2017). The result of decentralization in Poland has been a clear division of functions and powers between state and local authorities. The Polish government is in charge of foreign policy, national security and defense, and the development of strategic directions for the country's development. For its part, local authorities consider such issues as:

- Economic development of the regions.
- Disposal of budget funds and property of the local community.
- Conducting an independent financial economy.
- Bringing the system of services to the population.

Thus, Poland's leading powers and financial resources are at the level of territorial communities that have the opportunity to address their development issues. Measures of the Polish government in the way of decentralization contributed to the growth of public investment, small business and civil society at the level of administrative-territorial units, which, in turn, had a positive impact on the living conditions of local communities members and significantly improved the economic situation. The decentralization of power in Poland has had a positive impact on the development of local communities and the country as a whole. The uniqueness of the Swedish experience lies in the fact that it initially laid down almost the highest level of decentralization of local government. Despite the already high degree of decentralization in local government, Sweden, together with Norway and Denmark, is conducting an experiment to expand the boundaries of local autonomy called “free local government”. The purpose of this experiment (which is part of the overall program for the development and transformation of the public sector as a whole) is to test in practice the various ways to intensify local government, take into account local conditions, and provide great opportunities for local communities and local authorities to influence local politics (Demchak, 2015). Given the experience of European countries, it can be argued that there is no universal model or methodology in the world that can be fully and unchanged applied during the decentralization of power in Ukraine.

After Ukraine gained independence in 1991, the state gradually took some steps to develop local self-government and empower the regions. Thus, in 1997, Ukraine ratified the European Charter of Local Self-Government. Over the next few years, several regulations were adopted that delimited and established the powers of individual regions of the state. In particular, such acts were the Constitution of the Autonomous Republic of Crimea, the Law of Ukraine “On Local State Administrations”, the Law of Ukraine “On Local Self-Government in Ukraine” and the Law of Ukraine “On the Capital of Ukraine – the Hero City of Kyiv”. However, all discussions and measures related to the reorganization of the entire system of public power in the state, as a rule, always concerned the redistribution of powers at the national level “President – Parliament – Government”, or transfer of powers from local governments to the level of district state administrations justifying this by the inability of the former to exercise the powers granted by law effectively. As one of the components of decentralization, administrative and territorial reform is one of the most unsuccessful transformation projects in recent Ukrainian history. The project was planned to be implemented 15 years ago, but each government initiative did not end in real change. Following the Euromaidan events, the new Government launched the national project “Decentralization”, on April 1, 2014, approving the Concept of Local Government Reform and Territorial Organization of Government in Ukraine and identifying support for decentralization reform as one of the priorities. Thus, the real decentralization process began in 2014. It allowed for the formation, following the provisions of the European Charter of Local Self-Government, of a significant, effective and capable institution of local self-government at the basic level – united territorial communities (UTCs). The Government has approved long-term plans for the formation of community territories in 24 regions, covering the territory of the regions by 100% (Government portal, 2020). Since then, many laws have been passed at the state and local levels. This legislation considers the experience of European countries, but despite this, it is far from ideal. This fact forms the purpose of the study.

The purpose of the study is to identify the fundamental legal framework for decentralization for the EU and Ukraine, as well as the main problems of their implementation in the state system of the EU, which should be taken into account in building the state system of Ukraine.

3 Results

European experience convincingly shows that an effective decentralized system of territorial organization of public power and governance is an integral part of a modern democratic state governed by the rule of law. The institutional basis of such a system is effective local self-government and balanced regional development (Grojsman, 2015). An important document that regulates the basic principles and mechanisms of self-government in the member states of the Council of Europe is the European Charter of Local Self-Government. On October 15, 1985, it was adopted and opened for signature by the members of the Council of Europe. The main idea of this document is the decentralization of power and the application of the subsidiarity principle. According to it, higher administrative bodies have the right to solve specific problems only if local administrations cannot solve them. All types of local self-government bodies fall under the principles of the Charter. In recent decades, regionalism has gained international legal recognition. His ideas and regulations have been reflected in several international legal acts and implemented in the practice of individual states and intergovernmental associations. The main such act is the Declaration on Regionalism in Europe, adopted on December 4, 1996, in Basel by the Assembly of European Regions. An international organization represents almost 300 European regions with about 400 million people (Koljuh, 2015).

An important document is the Helsinki Declaration on Regional Self-Government of 2002 (Helsinki Principles of Regional Self-Government). It contains recommendations for building a system of regional self-government, taking into account the models and forms of regional self-government in Europe, traditions, and features of countries. It is envisaged to hold a dialogue at the European level with elected representatives of local and regional authorities to achieve unity in order to preserve and implement the ideas and principles that are the common property of European countries, successfully implemented in the areas of democratic governance.

The Utrecht Declaration on Good Local and Regional Governance in Troubled Times: Challenges for Change was adopted on 17 November 2009 by the 16th session of the Conference of European Ministers responsible for Local and Regional Government. The document contains recommendations and a list of priorities of particular common interest to Council of Europe member states in the field of local and regional democracy development for 2010-2013.

The relevance of the Utrecht Declaration is that, according to existing practice, the Council of Europe, in monitoring the local and regional democracy state in the member states, pays special attention to the implementation of the guidelines and proposals contained in its thematic documents. Following in cooperation with all 47 of its members is also evidence of effective European integration development. The European Declaration of the Rights of Cities of 1992 and the European Charter of Cities of 1992, adopted to implement the Declaration's provisions, also play a vital role in forming and developing European standards of local self-government and the system of sources of municipal law. Some scholars point out that the sources of European legal standards for local self-government can be considered the recommendations of the Committee of Ministers or other Council of Europe (CoE) bodies. These recommendations are not legally binding and have direct legal consequences for the CoE member states. However, they have a so-called “moral authority”, reflect the common position of European governments on this issue, and therefore influence the state to which they relate.

Recently, the international rule-making activity of the Council of Europe and other organizations in the field of municipal law has intensified. Thus, the Committee of Ministers of the Council of Europe is considering drafts of such international legal agreements as the Charter for Mountain Regions, which provides guidance on the harmonization of issues related to the development and conservation of mountain regions; European Charter of Regional Self-Government; Charter on the rights and responsibilities of citizens, etc. However, despite all the benefits of decentralization in Europe, scientists warn of the need to abandon its idealization. They note the following problems with this process:

- Inequality of territories because not all of them have the opportunity to finance their powers from their resources. Weak government agencies are forced to ask their people for additional financial efforts to the detriment of the life quality. To avoid this threat, decentralization is often accompanied by equalization associated with the redistribution of public resources. At the same time, economically strong territories often do not agree with such solidarity.
- Lack of support from the general population because many people do not understand the process of decentralization. Moreover, they often hinder it for fear of losing jobs and powers, as the decentralization process is accompanied by government reformation and changes in governance.
- High risks of corruption in the use of public funds motivate the issue of introducing mechanisms for monitoring the local government's activities, both by authorities and the public (Bogatyrjova, 2012).

Legal regulation of decentralization in Ukraine began with the adoption in 2014 of the Law of Ukraine “On Cooperation of Territorial Communities”, which aimed to teach territorial communities the basic principles of cooperation and encourage them to unite further. The process of implementing the decentralization reform has entered an active phase with the adoption on 05.02.2015 of the Law of Ukraine “On Voluntary Association of Territorial Communities”, which allows its first basic stage through the formation of territorial communities without amending the Constitution of Ukraine. In 2017, the Law of Ukraine “On Voluntary Association of Territorial Communities” and the Law of Ukraine “On Local Elections” were amended by adopting the Law of Ukraine “On Amendments to Certain Laws of Ukraine on Voluntary Association of Territorial Communities” on February 9, 2017. After determining the parameters, the newly created territorial community can be considered capable of moving to direct inter-budgetary relations with the State Budget of Ukraine. Due to the adoption of the Law “On Amendments to Certain Laws of Ukraine on the Status of the Elder of a Village, Settlement”, the legal regulation of the status of the elder of a village or settlement was improved. The list of powers of the elder has been significantly expanded. It is not exhaustive and can be expanded in the regulation on the elder, which is approved by the Territory Community council.

Due to the adoption of the Law of Ukraine “On Amendments to Certain Legislative Acts of Ukraine on Peculiarities of Voluntary Association of Territorial Communities Located in Adjacent Areas”, obstacles to the first elections in Territory Community formed by territorial communities located in adjacent districts were removed. Prior to the adoption of this law, the Central Election Commission did not call the first elections in such Territory Community, citing the need to change the district's boundaries and refer the territorial communities that formed the Territory Community to one district.

It is important to adopt the draft “On Amendments to Certain Legislative Acts of Ukraine on Land Management within the Territory of United Territorial Communities (UTC).” It provides for the granting of UTC the right to dispose of land outside the settlements. Despite the large number of adopted regulations governing the decentralization process in Ukraine, there are several diverse problems. They concern organizational, personnel, and financial aspects and the legal regulation of decentralization in the state. Among the main problems of legal regulation of decentralization in Ukraine, it is necessary to note the following.

- Lack of a basic law “On the administrative-territorial system of Ukraine”, which would prescribe the principles of state policy in this area, the construction of a new administrative-territorial system, as well as indicate the same criteria for administrative-territorial units at all levels;
- the absence of legislative acts that clearly define the separation of functions and powers between state, local executive bodies, and local governments;
- incomplete creation of a new version of the Law of Ukraine “On Service in Local Self-Government Bodies”;
- non-adoption of the laws of Ukraine, which would regulate the management of land resources within the territory of the UTC and the expansion of types of urban planning documentation at the local level;
- lack of proper legislative regulation of state supervision over the legality of decisions of local governments (Baranov, 2018).

Successful implementation of decentralization reform requires the improvement of legislation in Ukraine regarding the expanded powers of communities and local authorities and ensuring control over their activities. The central element of economic and political reforms should be the development of the municipal economy, which means supporting entrepreneurial activity, the development of promising sectors and districts, promoting investment for the economic development of territories. Furthermore, local budgets should be independent, financially independent, have a balanced budget. Moreover, they must delineate the functions and powers between local, state executive bodies and local self-government bodies at the legislative level (Gavkalova et al., 2017; Mokhova et al., 2021). They also must address local problems and provide the population with a sufficient level of public services.

In addition, planning to join the EU, Ukraine needs to realize that European integration involves harmonizing national legislation with Europe. It is explained by the fact that EU norms are most consistent with the objectives of effective social policy, including through the introduction of decentralization in various spheres of public life.

4 Discussion

The issue of centralization is widely studied in the context of many individual countries, including the Czech Republic (Baun & Marek, 2006), Sweden (Feltenius, 2007), Italy (Baldini, 2014). It has been studied at various levels of government, in particular decentralization has a positive impact on the economic development (Carniti et al., 2019) of administrative services for the population (Halásková & Halásková, 2014); on the general development of the economy by reducing the cost of community services (Díaz-Lanchas & Mulder, 2021), ensuring social order (Mueller & Hechter, 2021), etc. Furthermore, decentralization is considered as a tool for the development of cooperation between different countries, in particular, Bakushevych, Goshchynska, Martyniak (2019) were considered this issue in terms of cooperation between Ukraine and the EU. Research confirms empirically practical, economic benefits of decentralization for the state. For example, Wang et al. (2021) recently conducted an empirical study according to which decentralization strengthens the country's economic situation and has important fiscal significance (Trusova et al., 2019). In addition, decentralization is a tool to reduce corruption in the government (Kuhn & Pardos-Prado, 2021), unite local communities, and raise public awareness.

5 Conclusions

Given the constant development of public administration in Ukraine in the European direction, the legal basis for decentralization is based on the example of the reform of the state system in developed European countries. There is no single model of decentralization in the world because such reforms take place in accordance with the socio-economic development of the country and the demands of its population. However, the best example of the legal framework for decentralization is the example of Poland, where similar reforms have resulted in a clear division of functions and powers between state and local authorities, where the regulation of financial resources determines the welfare of the population. The fiscal aspect of decentralization determines its usefulness to the community, as only the people will be genuinely interested in developing the settlements in which it lives. In Ukraine, the decentralization process has been going on since 2014, and a number of legal issues related to its regulation have not been resolved yet. In particular, there is a lack of a legal framework that would allow for a clear delineation of powers between local and state authorities. The formed territorial communities are still working effectively, some of them lack managerial and financial resources, and therefore the reform continues to this day in search of more effective solutions. Integration must be carried out according to the population's needs, but taking into account EU norms, as this is a key requirement that will allow the country to adapt to European standards of living standards and public administration quickly.

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Primary Paper Section: A

Secondary Paper Section: AE

PSYCHOLOGICAL SUPPORT FOR ELEMENTARY SCHOOL STUDENTS IN THE CONTEXT OF THEIR DEVELOPMENT AS PERSONALITIES

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Abstract: The article considers the main ways of involvement of psychological means of personality development in the elementary school, which considers various aspects of the comprehensive development of personality, intelligence, which each person possesses. The result of the study is a program for the introduction of psychological means of development of the personality of the pupils, which has increased the number of parents and teachers (11%, 14% respectively) who use the possibilities of psychological means for the development of a harmonious personality of the elementary school pupils.

Keywords: elementary school, personality development, psychological facilities, development, communication, team work.

1 Introduction

The educational realities of the XXI century pose new challenges to humans, we need to be prepared for the changes (Boguslavskii, Lelchitskii, 2016). On the one hand, modern society gives new opportunities for development, learning, and communication, and on the other hand, it forces to actively use the means of development of the child's personality, to form the skills of virtual and real communication. This leads to positive changes in personality, which is necessary for all spheres of modern life (Ko et al., 2013; Selin, 2016). It is worth working on an important societal task – to create conditions for the child to operate various formats of learning and other forms of activity, which allowed to maximize the positive qualities of personality and mitigate the negative trends inherent in the modern conditions of learning in the post–coveted society.

The development of the personality of the pupil promotes the child's own desire for personal growth and the formation of correctness to learning is significantly helped by the use of psychological means. The successful growth of significant characteristics of personal maturity is possible with the creation of certain conditions in the training of the child and extracurricular time. The optimal combination of developing external factors with the internal desire and desire of the pupil for personal growth (Puranik, 2020).

With the active position of teachers and parents on personal self–improvement, the student or pupil will be able to optimize the process of their development. Creating only appropriate conditions without a subjective position will bring minimal results.

Many studies are aimed at developing the skills necessary for the professional and personal development of young scientists, students, who should be taught to communicate, manage conflicts, correctly choose roles in the team, make decisions, and the like. Relevant remains the formation of programs dedicated to the personal development of students during academic work extracurricular activities, it is necessary to develop effective programs, it would be possible to integrate into the learning process of the elementary school.

Aims. This research aims to establish the effectiveness of personal development psychological means in their implementation in the practice of elementary school.

Based on the aim, it is planned to perform the following research tasks:

- to establish the main psychological means related to the development of personality in the field of school education (elementary school pupils);
- to determine educators' and parents' evaluation of the effectiveness of such a comprehensive program;
- to determine how well pupils feel about a comprehensive program of personal development with the active involvement of psychological means of pupil's development in educational activities.

2 Literature review

The innovative measures of personal growth, which can make the educational process modern, are proposed in the latest research projects supported by the National Education Association. Many experimental studies have adopted such attitudes as psychological means of personal growth is part of the latest pedagogical technologies (Muldrew, Miller, 2021), educational projects in preschool education, also take into account the conditions of multiculturalism, open information space, and significant changes that have occurred in school education with the introduction of teaching in the conditions of pandemic coronavirus (Ermakova, Sukhovskaya, 2020).

As a result, school educators and scholars face several important research challenges. Teachers must acquire the skills and knowledge necessary to apply psycho–pedagogical technologies that promote students' personal growth, master them, and apply them in their professional practice (Dzvinchuk et al., 2020). Some researchers (Gredler, 1970; Minibas–Poussard et al., 2018) believe that today's school educators are not active enough, not very willing to participate in educational and training projects of innovative nature or implement them at a low level. All this does not allow the practical and theoretical field of elementary school pedagogy to evolve. The intensity of the integration of digital technologies in the practice of stimulating the personal growth of the child was investigated (Anis, 2017). The extent of the use of innovative technologies and developments in the field of psychology in the educational process is also considered; the compilation of curricula taking into account the psychological means of personal development, materials for learning (Jayashree, 2017; Čuhlová, 2019).

Separately, the topic of value orientations of modern society in the context of the information revolution of the XXI century is being developed (McIntosh et al., 2021); are considered the theoretical foundations of the theory of unified motivation, personality development (Dweck, 2017) traced the path of formation of the motivational component from the determination of needs to the formation of goals and ideas, communicative potential of personality (Tyurina, 2019) requirements for the modern educator on continuous improvement of teaching skills and interdisciplinary knowledge (Shulman, 2018) professional counseling as an integral part of the personal and professional development of young professionals and students of higher education (Hainagiu, 2020; Longstreth et al., 2016); features of behavioral control, an analysis of modern consumer behavior (Minibas–Poussard, 2018; Kravchenko, 2019).

An important condition for success in the program's development for personal growth and learning is also a constant study of the previous to the world and its effectiveness, the successful implementation conditions (Boghian, 2018).

Constant research attention requires new research technologies implemented in the space of school education and aimed at improving personal growth, facilitating adaptive learning processes.

3 Materials and research methods

For effective implementation of the educational program for the use of psychological means of personal development (the experience of elementary school) used theoretical methods of analysis and synthesis. The purpose of the research experiment involved empirical (diagnostic) methods. This is a pedagogical experiment, as well as methods of questioning (written form) and observation.

In the realization of the program the teachers, teachers, pupils of elementary classes (the Ternopil educational complex School-Lyceum No. 6 named after N. Yaremchuk) and parents of the pupils.

The method of the pedagogical experiment was applied during one school year (2020–2021). The method of the experiment was used to determine how expedient is the active introduction of psychological means of personality development in the elementary school (evaluation by teachers, parents, and children of the innovative curriculum) and how effective is the introduction of psychological means of personality development adapted to the realities of our time in the educational process. Auxiliary to the pedagogical experiment is the method of observation. Statistical methods are used to evaluate the results of the experiment.

The educational program described in the work, aimed at stimulating personal growth with the use of psychological means – was considered in the study from the standpoint of observation. The method of observation is empirical, so the researchers cannot directly identify the proposed comprehensive program as a lever of systemic change.

A total of 28 students (Grade 2) from the School–Lyceum, 52 parents, and 7 teachers and educators were involved in the experiment. The variable in the class is the introduction to the approval of the educational program, aimed at the active personal development of the child.

Stage 1. A preliminary questionnaire on the demographic characteristics of parents and teachers is conducted, and the qualification characteristics of the latter are determined. The schedule and content of the additional group lessons for the personal development of students and parental consultations are prepared. Material for the courses is prepared and preliminary consultations are held with the teachers who will lead these courses.

Stage 2. At this stage in parallel with the training, consultations for parents, and active work of the teachers the system of means for the personal growth of the elementary school pupils are defined and classified.

The factors of respondents' attitudes towards the introduction of a personal growth program in the school space are also examined.

Stage 3. At the final stage, the level of interest in the implementation of the program providing for psychological means of development of the child's personality is monitored. The results of parents' attendance at the counseling sessions are also determined.
Regarding the difficulties encountered during the implementation of the program, it is possible to determine the duration of the program (1 school year), also the research group cannot determine the reasons for the respondents' evaluations; there is no possibility to conduct a qualitative in–depth study.

4 Results

Psychological means of personal development, meaningful characteristics of personal growth of elementary school pupils are psychological materials and tools through which students develop personal qualities in a shorter time and successfully. The psychological means of personal growth of pupils, significant characteristics of personal development include narrative training, art therapy, creation of research projects, questionnaires, formation of individual programs, supervisions, acmeological technologies, and the like.

Also, the need for regular physical activity and regimen should be provided in the personal development program. It is worth accustoming the child, not only the learning process and getting grades is important, but it is also necessary to find time for the playground, outdoor games, and sports. These positions were provided in the educational program presented in the study of personal growth. Such activities improve the concentration of attention and motivation of the child, and with the help of psychophysical exercises increase self–confidence and relieve the stress of studying. Students regularly take time for physical activity.

At the first stage, a questionnaire is administered to program participants (teachers and parents) on demographic (parents and teachers) and qualification characteristics (teachers and teachers) (Table 1). A system of consultations and classes for parents is formed, as well as educational materials, logistical support, and the learning space for the successful implementation of the program.

Table 1 – Demographic and qualification characteristics of the respondents (*author's note*)

		Parents	Teachers
Age	24–40	38	3
	40–60	14	4
Gender	Female	27	6
	Male	25	1
Qualification obtained (for teachers)	Social work specialist		1
	Elementary education		5
	Fine art teacher		1

As can be seen, all teachers are qualified specialists in the field of elementary school pedagogy, most adult participants in the experiment are between 24 and 40 years old.

At the 2nd stage, the structure of the introduction in the program of a set of psychological means for the development of the child's personality in the conditions of learning in the elementary school was determined (Figure 1).

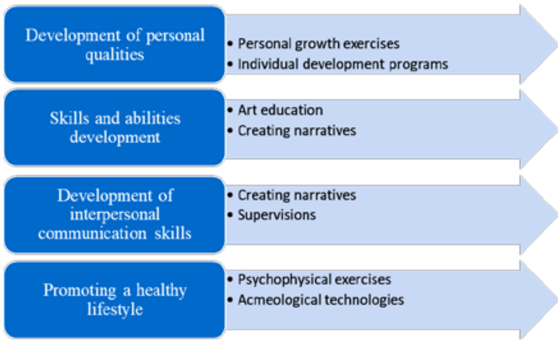

Figure 1 – Means of elementary school pupils' personal growth (*author's note*).

For the second stage, it was important to make an algorithm of application of psychological means – it is a sequence of training and development stages. Teachers could create together with pupils' collective works on their vision of personal growth ways where images of personal achievement were also smoothed out. The results of the students' work in artistic, creative, academic activities, sports achievements, growth of intellectual capabilities, and the like were regularly reviewed and positively assessed.

Final Stage. At this stage, we introduced a survey of participants' evaluation of the educational and methodical set of psychological tools for the development of elementary school pupils (Figure 2).

As shown in the figure, the attraction of various psychological means of personality formation was most liked by students (28 elementary school pupils rated the program as interesting), among the children no one was not interested in learning from the program. Among the respondents who found the program, not at all interesting, there were two parents. Among the teachers who worked in the program, 2 found the program not very interesting, and among the parents – 10.

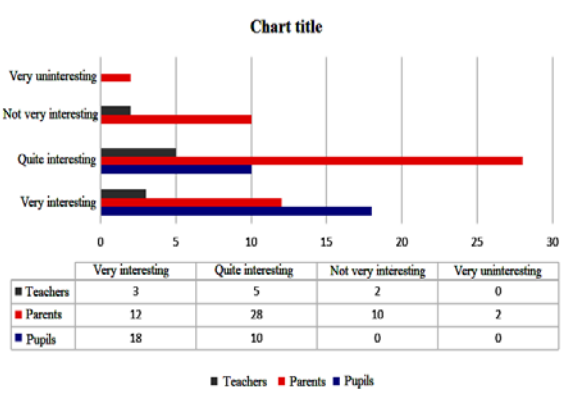

Figure 2 – Graphical representation of the participants' interest level (students, teachers, parents) in the activities of the educational and developmental program (*author's design*).

At this stage, there was also a study of the frequency of attendance organized for parents in the educational program (Figure 3).

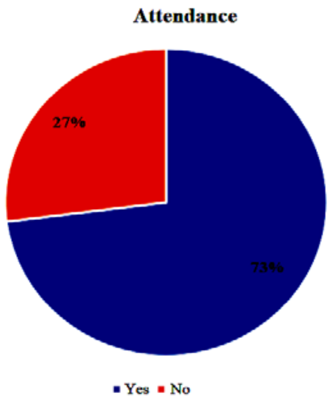

Figure 3 – Graphic description of the attendance frequency of joint developmental groups and counseling events by the parents of pupils (*author's design*)

The high level of attendance by parents (73%) shows their motivation to learn, increased pedagogical skills, and interest in using the potential of psychological means to raise a child's personality.

6 Discussion

The topic of personal development in modern pedagogy has a broad perspective and is defined by thematic diversity. Hainagiu S. (2020) considered the program of professional counseling, implementation of extracurricular activities as an obligatory part of the processes of professional and personal development of students, trainees, etc. According to the results of the study, the attendance of such counseling and activities was 99 percent of the 95 participants in the experiment. Also, as very interesting and challenging the program was identified by 74 percent of the respondents. In the study described, the attendance rate for parent consultations was 73%. And a positive evaluation of the program, which actively used psychological tools for personal development, was given by 76 individuals (students, teachers, parents).

Other studies (Elizabeth, 2007; Hill, Pargament, 2017; Ermakova, Sukhovskaya, 2020) focus on the effectiveness of the combination of ideology and modern high technology, personal development in the context of the information revolution of the 21st century. Orientation on the practical application of psychological means of influence on personal growth correlates with the development of creativity and realization of interpersonal contacts. According to the results of this study, such characteristics should also include the physical development of the child, the formation of learning skills, and the general development of the child's full potential.

5 Conclusion

The participants of the educational program, which involved the active use of psychological means of personal development of the pupils, found a high degree of satisfaction with the proposed activities (76 respondents identified the measures as interesting), as well as an increased interest of parents in attending consultations and joint classes (73%). These results indicate a high level of awareness among parents and teachers of the need to intensify the use of psychological tools to stimulate the personal development of elementary school pupils and the usefulness of introducing such curricula, especially in the field of school education, where soft skills should take their rightful place.

The main psychological means associated with the personal development of elementary school pupils were art creativity, personal growth training, and counseling, individual programming, acmeological technology, physical education, supervision, etc.

Prospective for further research is the development of programs providing for the active development of personal qualities, attention to the formation of defining features of a child's personality, which would help to better adapt to the conditions of the modern world, the changes that have been caused by changes in recent years in the conditions of implementation of the educational process.

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ECONOMIC AND LEGAL REGULATION OF COMPETITION: THE EUROPEAN COUNTRIES EXPERIENCE

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Abstract: The research aims to reveal the relationship between the investment flows from major partners (the United States and China) and the indicators of competition regulation in EU countries (as in the case of France and Germany, where the need to protect national markets is advocated) at the international level in the context of geopolitical issues. The research identifies a non–linear relationship between the PMR 2018 score and Inward FDI, indicating differences between countries in terms of competition regulation impact on FDI attraction. According to the level of competition regulation impact, three groups of countries have been distinguished: 1) countries where competition regulation has an adverse impact on attracting FDI; (2) countries where competition management has minor impact on attracting FDI; (3) countries where competition regulation affects FDI.

Keywords: competition regulation, competition law, geopoliticization, digitalization, product market regulation in the EU.

1 Introduction

Economic digitalization, geopoliticization of EU investment and trade policies (e.g. The securitization of foreign direct investment in China), and the need to support European industry have necessitated a transformation of competition policy. The transformation envisages the modernization of the legislative framework, meaning political and economic factors affect the legal and, as a result, competition regulation mechanisms of European countries. An example of this causal relationships is the adoption of a European FDI screening framework in 2019 aimed at the FDI strong verification, the protection of European assets and collective security (European Commission, 2019). The significant impact of foreign investors on the EU economy via inflow and control of the high–tech sectors of European enterprises required an upgrade of the legislative framework for competition regulation. For instance, Chinese firms' investment inflows jeopardised European companies, since one of the rules for financing is the transfer of technology and production methods to Chinese investor companies. The government aid to Chinese companies operating in the European Single Market reinforces the issue of competition regulation and protection of European companies, becoming a geopolitical issue. The next problem for the EU is the influence of such technology giants as the US and China and the need to develop competition law in the field of information and communication technologies to mitigate the risks of technological expansion by the developed world leaders. Above mentioned represents the relevance of assessing the relationship between legal, economic factors and competition regulation in Europe.

The purpose of the article is to measure the relationship between competition regulation and legal, economic factors affecting the European countries' competitive environment.

2 Literature review

Legal factors of competition regulation
The nature of the legal system determines the EU competition law (Hefti, 1993), which is relatively young and has started development with the Treaty on the Functioning of the European Union ("TFEU"). The legal framework of EU competition regulation has been formed since the beginning of the unification of the EU member states and the establishment of a single market, strengthening institutions and harmonizing legislation (Hefti, 1993; Wise, 2007).

Characteristics of competition law in Europe are: 1) regulation of vertical competition mechanisms; (2) Articles 81 and 82 of the EU Treaty address provisions aimed at ensuring private business reputation and non–discrimination; 3) the constant interest of state authorities to preserve rivalry while protecting companies from intensive competition.

In his book, Nazzini (2011) examines the normative theory of competition law, distinguishing the vagueness of the competition concept, whose rules are based on the prevention, restriction or "distortion" of competition, and abuse of dominant position. The meaning of these concepts varies depending on the political and economic environment. Therefore, competition law can be used to pursue various objectives. Geradin & Petit (2010) claim the use of conservative approach to Article 102 of the Treaty on the Functioning of the European Union (General Court, "GC"), which indicates the lack of modernisation, development of regulatory standards for competition regulation in the EU. The essence of the problem is that a firm with a dominant position cannot overturn the European Commission's decision to admit the abuse of this position, and the European Commission is entitled to decide whether the conduct of firm violates Article 102 TFEU. Therefore, barriers to economic growth–oriented reforms can arise. Kadar (2015) points out that competition law cannot solve all the issues in various markets. However, legislation is an effective tool to combat distortion of competition for market power (Zapara et al., 2021; Marchenko et al., 2021). The current legal framework is flexible enough for the European Commission to intervene and eliminate abuse.

Economic factors of competition regulation
The establishment of a common market for trade and economic purposes is a prerequisite for the formation of competition law within the EU (Gifford & Kudrle, 2003). Individual countries have a significant impact on competition policy and control the EU's central management structures, which limits the development of the legal framework. Nevertheless, supranational institutions make the most significant decisions in EU competition policy (McGowan & Wilks, 1995).

Since the beginning of the 21st century, due to the development of democracy and the free market, EU competition policy has been implemented through the operation of an extensive network of national authorities (Wise, 2007). In 2001, the EU's competition policy aimed to protect the consumer welfare (Gifford & Kudrle, 2003). Yet in literature, such goal is considered vague, sufficiently general and abstract, leading to the development of competition law (Odudu, 2010). Cengiz (2016) notes the absence of citizen participation in competition policy with a specific objective of "consumer welfare", which exacerbates the problematic legitimacy of EU competitive law.
Traditionally, the EU develops market competition by providing government aid and foreign subsidies (Meunier & Mickus, 2020). However, amidst the pandemic, the EU policy is changing (Denysov et al., 2021). The UK's exit from the EU, the digitisation of the global economy (Preta, 2018) and the geopoliticisation of competition regulation have reinforced transformational change (Meunier, 2019). Under the new socio–economic conditions, member states should aim for protection of national industries in the domestic market by strengthening the supranational legislative framework. Nevertheless, discussions between EU member states (in particular France, Germany, Poland) concern only certain aspects of competition law, in particular horizontal merger policy, BigTech issues and industry. The main objectives of a potentially new competition policy are to overcome foreign competitors – state–owned industrial companies in other countries; to support the regulation of large technology companies (Heim, 2019).

Thus, legal and economic factors of competition regulation have been discussed in the academic literature since the establishment of the EU: the impact of the EU legal system on competition law, characteristics of European competition law, the objectives and approaches to competition policy, the need to modernise the law through new challenges (digitalization, geopoliticization), formation of a common market, democratization, consumer welfare as economic factors of the need to regulate competition. However, there is an absence of quantitative research on the relationship between current legal and economic factors and competition policy, which guarantees market regulation within the EU. Therefore, this study aims to reveal the relationship between the investment flows into the EU from major partners (the United States and China) and the competition regulation indicators of EU countries (such as France and Germany, which advocate the protection of national markets) at the international level in the context of geopolitical issues.

3 Materials and research methods

The Product Market Regulation (PMR) framework of indicators has been used in the research to evaluate the level of competition regulation in national markets. Indicators on the level of market competition and government regulation are collected through the OECD 2018 PMR questionnaire (2018A). The questionnaire includes over 1,000 questions on economy–wide or industry–specific regulatory provisions. The information collected through the questionnaire is assessed and aggregated into the PMR indicators according to 2018 Economy–wide PMR schemata and the sector PMR schemata.

The OECD's Product Market Regulation (PMR) indicators allow for benchmarking and measuring the promotion or retardation of competition through legislation and policies in goods and services markets. These indicators assess the de jure regulatory environment in 34 OECD countries and a number of non OECD countries in 2018. The general economic indicators include the level of state intervention in market regulation, provide an opportunity to reveal the causes of competition 'distortion' and the level of barriers to entry, expansion of domestic and foreign firms in different economic sectors.

The questionnaire results enable the assessment of the product market regulation level in different countries in the three sectorssuch as energy, transport and E–Communications (Figure 1). In each sector, the legal framework regulates certain aspects (entry, vertical integration, retail prices, foreign entry, public ownership).

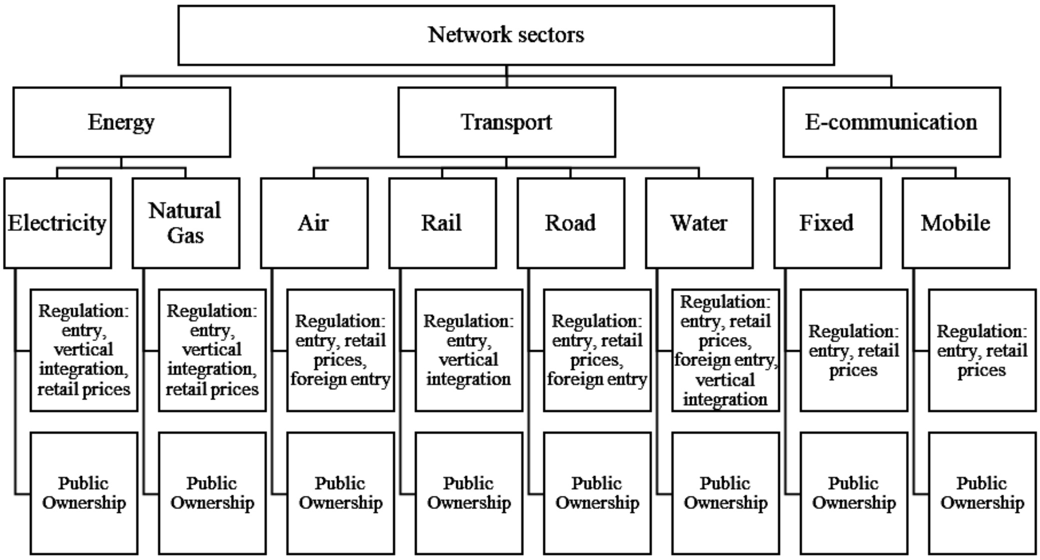

Figure 1 – The tree structure of the new PMR Network Sectors indicators

Source: OECD (2018b)

Results

Legal factors of European competition management

The formation of the EU Common Market required the development of a legislative framework to regulate competition, in particular the adoption of White Paper on Modernisation of the Rules Implementing Articles 101 and 102 TFEU and a new enforcement regulation. On 30 March 2004 the Commission finalized the modernization package of notices and guidelines aimed at clarifying the application of Article 101 TFEU (European Commission, 2004). Union competition law has been subject to an extensive reform process that transformed the enforcement of rules against anticompetitive mergers (EU Merger Regulation No.139/2004), anticompetitive agreements (Art. 101 Treaty on the Functioning of the European Union, hereinafter 'TFEU') and abuse of dominance (Art. 102 TFEU). The policy objective in this extensive reform process was to protect 'consumer welfare'. The European Commission, the pioneer of the reform process, relied primarily on soft multi–level governance1 methods in the reform process, including coalition building with the epistemic community2 and network governance.

Therefore, the European Competition Network (ECN) was established in 2004. This network has been jointly formulated by the national competition authorities of the EU Member States and the European Commission on the provisions of EU Council Regulation No 1/2003. The ECN is a forum for discussion and close collaboration in the application and enforcement of Articles 101 and and 102 of the TFEU. The ECN aims to ensure consistent application of EU competition rules. Furthermore, it provides means for the European competition authorities to share experience, discuss competition–connected topics, and distinguish best practices. On 9 February 2009 the European Commission formally adopted Guidance on the enforcement priorities in applying Article 102 TFEU (European Commission, 2009).

Article 102 of the TFEU prohibits the abuse of a dominant market position by undertakings as incompatible with the internal market through its potential impact on trade between countries. Such abuse may consist in (Consolidated version of the Treaty on the Functioning of the European Union):

1. Imposing unfair purchase or selling prices directly or indirectly or other unfair trading conditions;
2. Limiting production, technical development or markets to the prejudice of consumers;
3. Applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
4. Making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations, which have no connection with the subject of the contract.

Economic factors of competition regulation in Europe

Germany and France were selected to evaluate the economic factors of competition regulation. The total PMR in 2018 was 1.08 and 1.57 respectively (Figure 2). Compared to France, Germany regulates the competitive market environment less markedly: all competition regulation sub–indicators have lower values (Figure 1). The state ownership regulation, in particular the scope of enterprises' regulation, state embeddedness in network structures, direct management, public enterprise management, is less regulated in Germany with corresponding indicator values of 2.98 in France and 2.15 in Germany.

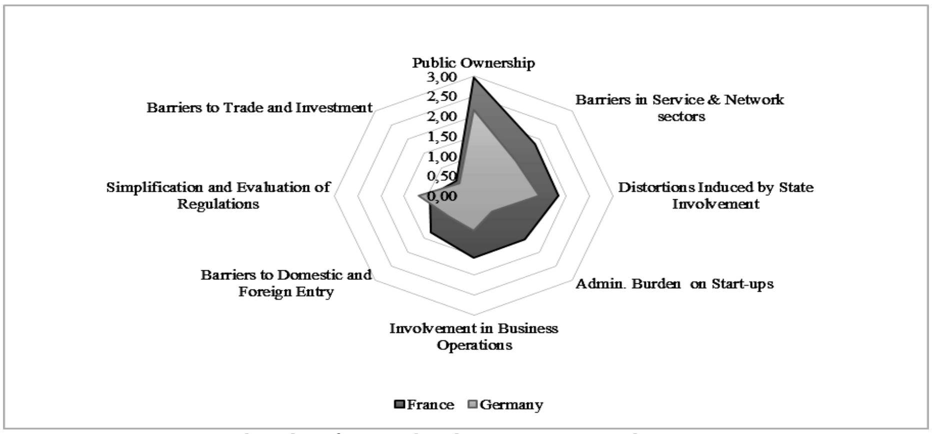

Figure 2 – The value of PMR sub-indicators in France and Germany in 2018

Source: OECD Stat (2021).

Barriers to entry in service industry and network economic sectors are estimated at 1.85 and 1.26, respectively. Specifically, this sub–indicator measures Barriers in Services sectors (2.70 and 1.66 respectively) and Barriers in Network sectors (1.01 and 0.87 respectively). The competition distortion caused by government intervention is more obvious in France with a score of 1.83, while in Germany the score is 1.41. The level of administrative workload on start–ups is 1.56 and 0.56 respectively, in particular administration requirements for Limited Liability Companies and personally–owned enterprises–1.13 and 1.13; licenses and permits–2.00 and 0.00, respectively. Estimates of participation in business operations of companies (business activities) are 1.56 and 0.87, respectively. In particular, government participation is evident in Price controls (1.39 and 0.27), Command & Control regulation (1.41 and 1.59), and Public procurement (1.88 and 0.75). Barriers to internal and external market entry also differ between countries; France has larger barriers to entry (1.32), while in Germany they are insignificant (0.76). Simplification and evaluation of rules is more evident in Germany – the indicator is 1.2, while in France it is 0.96. Specifically, this sub–indicator is expressed in the assessment of impact on competition (0.75 and 0.75), interaction with interest groups (0.95 and 2.36) and complexity of regulatory procedures (1.17 and 0.50). In other words, France has a higher complexity of procedures whereas Germany has a higher level of interaction with stakeholders. The countries' barriers to trade and investment are almost equal (0.54 and 0.44, respectively). The sub–indicator includes the following indicators: barriers to FDI (0.27; 0.14) tariff barriers (0.00; 0.00), barriers to foreign suppliers (1.14; 1.00) barriers to trade facilitation (0.74; 0.62).

Inward FDI financial flows in Germany as a whole fell by 117% over 2010–2019 with some growth in 2017–2018 (Table 1), also due to a 29% decline in FDI from Europe on average over the period under study. Compared to France, however, German FDI is significantly higher in volume. China's share of FDI is only 1–3% on average over the years 2010–2019 (Table 2), whereas the EU–27 share of FDI is 87% and that of the USA 8%. Figure 2 – The value of PMR sub–indicators in France and Germany in 2018.

Table 1 – Germany Inward FDI statistics by partner country group, billion dollars

Count–ries	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Growth rate, %
FDI financial flows – Total											
World	65,6	67,6	28,2	12,8	–3,2	30,5	15,6	60,2	73,5	57,8	– 117%
US	9,3	9,0	10,3	11,4	4,3	1,8	0,0	23,5	– 3,9	10,7	7614%
EU–27	41,4	39,4	6,6	–9,1	–14,3	29,5	7,1	26,7	65,7	42,8	–29%
China	0,5	0,5	1,2	2,5	2,0	0,1	0,5	0,0	0,0	1,4	1061%
US share	14%	13%	37%	90%	–134%	6%	0%	39%	–5%	19%	–
EU–27 share	63%	58%	24%	–71%	447%	97%	45%	44%	89%	74%	–
China share	1%	1%	4%	20%	–64%	0%	3%	0%	0%	3%	–

Source: OECD Stat (2021).

In France as a whole, FDI from the rest of the world increased by 189%, with the US FDI decreasing by 8%, China's – by 230% and the FDI of 27 EU countries rising by 54%. The share of the US FDI in France averaged 7.8% from 2010 to 2019, Chinese FDI 0.2% and the EU-27 share of FDI was 78.5%.

Table 2 – France Inward FDI statistics by partner country group, billion dollars

Countries	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Growth rate, %
FDI financial flows - Total											
World	13,9	31,7	16,1	34,3	2,7	45,4	23,1	24,8	38,2	34,0	189%
US	5,2	–2,1	4,3	8,2	1,4	–6,8	–7,9	–0,6	–8,1	6,2	–8%
China	0,0	0,1	0,1	0,4	–0,1	0,6	0,2	0,1	–0,6	0,3	–230%
EU–27	4,8	23,4	20,0	17,3	9,4	23,7	25,6	24,0	40,8	19,1	54%
US	37%	–7%	27%	24%	51%	–15%	–34%	–2%	–21%	18%	–
China	0%	0%	1%	1%	–3%	1%	1%	1%	–1%	1%	–
EU–27	35%	74%	125%	51%	352%	52%	111%	97%	107%	56%	–

Source: OECD Stat (2021).

The dynamics of FDI in France and Germany suggests a correlation between barriers to trade and investment and foreign investment. Figure 2 illustrates the non–linear relationship between the PMR 2018 score and Inward FDI, indicating that there are differences between countries in the level of competition regulation impact on FDI attraction. Figure 3 clearly identifies three groups of countries according to the level of regulatory instruments impact: 1) countries where competition regulation has an adverse impact on attracting FDI; 2) countries where competition regulation has minor impact on attracting FDI; 3) countries where competition regulation affects FDI (Figure 3).

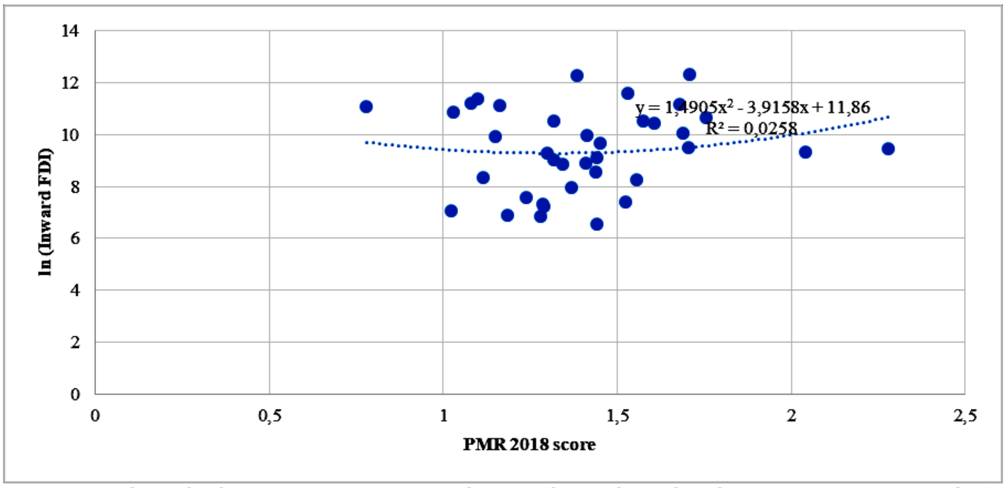

Figure 3 – Relationship between PMR 2018 score indicator and Inward FDI (based on OECD countries 2018 data)

Source: calculated by the author.

The correlation matrix for the relationship direction between FDI and FDI barriers indicates a strong direct relationship between FDI financial flows and attitudes towards foreign investors (0.277) (Table 3). Between other indicators of competition regulation and FDI exists an insignificant direct relationship (between FDI barriers and flows – 0.042; between tariff barriers and FDI – 0.048; between trade barriers and FDI – 0.04).

Table 3 – Correlation matrix between Inward FDI financial flows and sub–indicators of barriers to trade and FDI

Years	*PMR 2018*	*ln (Inward FDI)*	*Barriers to FDI*	*Tariff Barriers*	*Treatment of Foreign Suppliers*	*Barriers to Trade Facilitation*
PMR 2018	1,000					
ln (Inward FDI)	0,101	1,000				
Barriers to FDI	0,165	0,042	1,000			
Tariff Barriers	0,265	0,048	0,357	1,000		
Treatment of Foreign Suppliers	0,627	0,277	0,360	0,500	1,000	
Barriers to Trade Facilitation	0,395	0,040	0,389	0,389	0,603	1,000

Source: calculated by the author.

5 Discussion

Over the past decade (2010–2019), EU countries have strengthened national FDI screening mechanisms, in particular through the adoption of the European FDI screening framework in 2019. In accordance with Chan & Meunier's (2021) research on options for establishing a FDI screening system in Europe shows that, countries with higher technological development are more conducive to FDI screening due to the risk of technology transfer. Chan & Meunier (2021) have also detected no correlation between the overall amount of Chinese FDI and the particularity of FDI screening mechanisms. Countries with high levels of Chinese investment in European national strategic sectors are more likely to support screening and verification, while countries with a high level of Chinese FDI in low–tech sectors tend to be against FDI screening.

Chan & Meunier (2021) have also identified a correlation between technology intensity and China’s FDI to the EU countries and Member States' support for the FDI screening mechanism: the value–added percent increase of the economy, production and export technology sectors is correlated with the support level for the investment screening mechanism (correlation 0.69). According to the data of the World Bank, Germany's share of high–tech exports to the EU accounts for 28% in 2020 (2010–2020 average of 31%) and France – for 14% in 2020 (2010–2020 average of 17%) (World Bank, 2021).

These EU countries take the lead in supporting the protection of national security and economy, and promote the investment screening mechanism.

Long before the EU began to develop a legal framework in 2017, individual EU Member States had national FDI verification. Countries differ in the verification procedures: voluntary or mandatory, wide economic coverage or specific sectors, ex ante or ex post (Grieger, 2017). France and Germany, with the support of the European Commission, have contributed to the supranational institutionalization of the investment verification mechanism. due to France's long history of dealing with problems related to foreign investor financing of national companies (“Disneyfication”, “Cocacolonization”, etc.). The reason for strengthening the country’s FDI screening mechanism is the political dispute with the United States over the development of the technology and ICT sectors.

Since China's share of FDI in France is also high (China is the fourth largest investor in the French economy), the government is again tightening the screening rules and procedures. According to this research, the level of competition regulation in France and Germany is generally decreasing in the different network sectors (Table 4). However, the regulatory mechanisms in France are generally stricter, especially in the transport and energy fields.

Table 4 – Regulation in network sectors (energy, transport and communications) in France and Germany 1975–2018 (based on PMR methodology for regulation competition evaluation)

Years	Total Network Sectors	Total Energy	Ecommu–nications	Total Transport
France				
1975–1998	5,162	4,973	5,578	5,150
1999–2010	2,767	3,136	1,646	2,894
2010–2018	2,049	1,838	1,075	2,514
Germany				
1975–1997	4,803	3,473	5,279	5,530
1998–2010	1,513	0,976	1,125	2,001
2010–2018	1,103	0,533	0,852	1,566

Source: OECD (2018b).

France is tightening FDI screening rules to cope with the rise of Chinese investment in 2015–2017, which caused a decline in 2018, particularly in the cybersecurity and artificial intelligence sectors. The main reason for strengthening the verification mechanism is the absence of investment effect and the transfer of production technology from Europe to China (Fouquet et al., 2018).

Germany has been China's major FDI partner, especially in 2016, in 2019 with investments reaching $1.4 billion, which has led to government anxiousness about technology transfer and the use of domestic high–tech companies as a source of China's production technology. The country has therefore supported France in strengthening competition regulation and promoting the European investor selection system (Chazan, 2018). By the middle of the first decade of the 21st century (up to 2010), Chinese FDI had grown rapidly, in particular, as demonstrated in this research, due to the reduction in competition regulation (Table 4). Investment has contributed to Germany's economic growth driven by synergy between the Chinese and German economies, and China's investment in small and medium–sized enterprises. In 2016, however, there has been an acquisition of the German company Kuka for $4.5 billion by a Chinese investor (appliances manufacturing company Medea). The German government did not cancel the acquisition transaction. However, this has resulted in rising anxiousness in the country about purchasing technology to strengthen Chinese business operations (Tsang, 2016).

The Ministry of Economy, in particular, debated the national security issue, which prompted an attempt to obtain guarantees to protect Kuka's intellectual property rights. In 2016, the Chinese company Fujian Grand Chip attempted to acquire the German chipmaker Aixtron. However, the U.S. authorities have blocked the deal in the CFIUS process because Aixtron was managing a U.S. subsidiary. These two cases show the transcendence of national economic security concerns in certain industries and the need to regulate competition internationally. In addition, these security issues also affect the relationship between Europe and the United States, the largest investor in the EU. Several other acquisitions of German companies in high–tech sectors by Chinese investors have been exposed in connection with the Kuka and Aixtron acquisitions. Along with France, Germany has tightened investment screening procedures. In particular, the board is authorized to block foreign investment in critical infrastructure where transactions exceed 25% foreign participation. For instance, in the energy and transport sector, Germany's level of competition regulation has increased from 1.09 in 2017 to 1.56 in 2018 and from 1.11 in 2017 to 1.65 in 2018 (OECD, 2018b).

6 Conclusion

The research proves that due to the investment of the United States and China in the French and German economies, it is necessary to establish an FDI verification mechanism. Compared with France, Germany regulates the competitive market environment less markedly. From 2010 to 2019, China's FDI share in Germany averaged 1–3%, whereas the EU–27 FDI share was 87% and that of the United States was 8%. The US FDI share in France averaged 7.8% in 2010–2019, China's FDI share was 0.2%, and the EU–27 share of foreign direct investment was 78.5%. The research identifies a non–linear relationship between the PMR 2018 score and Inward FDI, indicating differences between countries in terms of competition regulation impact on FDI attraction. According to the level of regulatory instruments impact, three groups of EU countries have been distinguished: 1) countries where competition regulation has an adverse impact on FDI attraction; 2) countries where competition regulation has minor impact on FDI attraction; 3) countries where competition regulation affects FDI. A strong direct relationship between FDI financial flows and attitudes towards foreign investors have been identified (0.277). An insignificant direct relationship exists between other indicators of competition regulation and FDI (between FDI barriers and flows – 0.042; between tariff barriers and FDI – 0.048; between trade barriers and FDI – 0.04).

Further research is worthwhile in assessing the quantitative relationship between the EU economic digitalization as an economic factor in competition regulation. Moreover, the regulatory environment in the largest economies of the EU that most support the FDI screening mechanism is worth studying.

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Primary Paper Section: A

Secondary Paper Section: AH

IMPACT OF DIGITALIZATION ON THE MEDIA SPHERE DEVELOPMENT

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Abstract: This article aims to identify the impact of digitalization on the development of the media sphere because of the requirements that digitalization places on the media education that journalism students receive in higher education institutions in Italy, Denmark, Great Britain, and Spain. To determine the prospects of the media sphere under the influence of the requirements of digitalization to the media education, a forecast was made, the results of which show that during 2021 – 2026 this indicator will tend to increase annually, as evidenced by the research conducted on the example of the University IULM, University of Bologna, Aarhus University, University of Kent, University of Sussex, Autonomous University of Barcelona.

Keywords: media sphere, digitalization, digital product, media specialist, higher education institution.

1 Introduction

Under the influence of digitalization there are changes in every sphere of activity, and in particular in the media spheres. Digitalization, affecting the development of the media sphere, causes a significant digital divide between countries. In addition, it is necessary to note the positive aspects of digitalization in the media sphere, namely the creation of new digital products and digital platforms. Thus, the development and effective functioning of media spheres are not possible without proper information support and the use of modern information and communication technologies in this process. The study of the main trends in the development of the media sphere has shown that the impact of digitalization on the sphere of traditional media, namely on print media, radio and television broadcasting, which have been replaced by new digital products and digital platforms, is quite significant. These changes can be seen in the 21st century. In today's environment, for example, access to media is largely enabled by the Internet, as well as by many other information and communication technologies.

Given these changes that occur under the influence of digitalization, the educational institutions that train future media students face the challenge of adapting the features of such training to the requirements of digitalization. In particular, we are talking about the fact that in the context of such training the requirements of digitalization, under the influence of which the development and formation of media spheres take place, must be laid down. Students as future media professionals must clearly understand their essence. In the prospect of carrying out their professional activities, a proper understanding of the impact of digitalization will enable them to work effectively in this field. It should be noted that such training will be no less important for the further development of the media sphere because with sufficient knowledge in the direction of the impact of digitalization on the development of the media sphere, it will be possible to foresee changes and determine the main directions of such development.

2 Literature review

Praprotnik (2016), considering the peculiarities of the development of digitalization, notes that digitalization significantly affects the social system, in particular, the media industry and the production of media products. Makarova et al. (2019) note that digitalization significantly affects the development of media literacy in the context of receiving media education. In turn, Kirillov et al. (2020) note that media spheres develop under the influence of digitalization and modern digital technologies. Hess et al. (2018) in their study consider the manifestations of the impact of digitalization on the development of media spheres and note that changes in the media industry of all caused by the influence of digital technology, acquire new opportunities with each new digital revolution. Spann M. (2013) examines the characteristics of the impact of digitalization on the development of modern business models in the media industry. Jantunen et al. (2018) argue that the changes that have occurred in the media industry during the last years, mainly caused by the influence of digitalization, resulting in effective interaction between dynamic capabilities, operational changes, and the performance of media spheres.

Piskun (2017) examines the characteristics of the transition of the UK media spheres to digital format as part of the influence of this country's government program called Digital Britain. Based on the results of the research, the scholar notes that the digitalization of the media spheres is an inevitable process and significantly affects the development of the media sphere and society as a whole. Molchanova (2020) argues that digitalization contributes to the transformation of modern media spheres, under the influence of which an objectively new type of personality is formed, whose life takes place in a relatively new digital society. Such a personality, according to the scientist, is called the "information face. De Blasio et al. (2020) and Gholampour Rad, M. (2017) notes that in the context of the development of the media sphere, special attention should be focused on improving the managerial cognitive level of these spheres.

It should be noted that the modern development of media spheres, under the influence of digitalization, is characterized by the emergence of new areas of activity. For example, in the media sphere, thanks to digital technologies, virtual choirs, ensemble art in the online mode are increasingly becoming available to the potential consumer of such services (Gavkalova et al., 2020).

In the context of the development of the media sphere under the influence of digitalization, modern interfaces, the application of which in the media sphere will ensure better interaction between representatives of the media spheres and the consumers of media services, play an important role.

Summarizing the above, we note that the problem of the media sphere development in the context of the influence of digitalization on this process is not fully disclosed, so it requires more in–depth research, in particular in terms of the practice of determining the level of such influence.

This article aims to identify the impact of digitalization on the development of the media sphere because of the requirements that digitalization places on the media education that journalism students receive at institutions of higher education in Italy, Denmark, the UK, and Spain.
Researcher tasks. To achieve the purpose of the study, we will conduct a correlation and regression analysis between the variable of the level of requirements of digitalization to media education and the variable of the level of development of the media sphere under the influence of the requirements of digitalization to media education.

3 Materials and research methods

To reveal the purpose of the study, the following methods were used: 1) methods of theoretical analysis, synthesis, induction, and deduction – to present the theoretical and methodological aspects of media sphere development under the influence of digitalization; 2) methods of abstraction, measurement, hypothesis, observation, comparison, description, and generalization – to identify the impact of digitalization on media sphere development using the example of higher education institutions in Italy, Denmark, the UK, and Spain.

Some higher education institutions in Italy, Denmark, the UK, and Spain were selected for the study, using information from

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4 Results

To obtain the necessary data, we interviewed the heads of such higher education institutions as University IULM (Università IULM, *2021*) (Italy), University of Bologna (*University of Bologna, 2021*) (Italy), Aarhus University (*Aarhus University, 2021*) (Denmark), University of Kent (*University of Kent, 2021*) (United Kingdom), University of Sussex (*University of Sussex, 2021*) (United Kingdom), Autonomous University of Barcelona (*Universitat Autònoma de Barcelona, 2012*) (Spain) regarding what level of demands digitalization places on media education and what level of development of the media sphere is influenced by the demands of digitalization on media education. Given the particular popularity of these institutions of higher education in European countries and the excessive employment of their heads, we received answers from all the heads.

We will present the obtained information in Table 1, and it should be noted that this is our input data for the correlation and regression analysis

Table 1 – Input data for the correlation and regression analysis

HEIs	Years					
	2015	2016	2017	2018	2019	2020
The level of digitalization requirements for media education						
University IULM	0,37	0,41	0,45	0,48	0,56	0,69
University of Bologna	0,48	0,51	0,55	0,58	0,64	0,74
Aarhus University	0,47	0,55	0,62	0,69	0,71	0,78
University of Kent	0,45	0,54	0,59	0,64	0,69	0,78
University of Sussex	0,48	0,56	0,61	0,68	0,71	0,72
Autonomous University of Barcelona	0,38	0,42	0,49	0,51	0,56	0,59
The level of the media sphere development under the influence of digitalization requirements for media education						
University IULM	0,71	0,74	0,79	0,81	0,84	0,85
University of Bologna	0,74	0,75	0,78	0,84	0,87	0,89
Aarhus University	0,72	0,73	0,79	0,81	0,83	0,84
University of Kent	0,69	0,71	0,73	0,76	0,77	0,79
University of Sussex	0,72	0,74	0,78	0,79	0,82	0,84
Autonomous University of Barcelona	0,68	0,72	0,74	0,78	0,78	0,79

Source: systematized by the authors based on information received from the heads of University IULM (Università IULM, *2021), University of Bologna (University of Bologna, 2021), Aarhus University (Aarhus University, 2021),* University of Kent (*University of Kent, 2021*), *University of Sussex (University of Sussex, 2021), Autonomous University of Barcelona (Universitat Autònoma de Barcelona, 2012)*

During the conducted correlation analysis, we obtained the corresponding values of the correlation coefficient and regression coefficient (Table 2 and Appendix Table 3 of September). We qualitatively assessed the density of the relationship between the variable of the level of digitalization requirements to the media education and the variable of the level of development of the media sphere under the influence of digitalization requirements to the media education using the Cheddock scale.

Table 2 – Results of correlation analysis

HEI	Correlation coefficient	Correlation
University IULM	0,897475	straight and high
University of Bologna	0,942937	straight and very high
Aarhus University	0,971855	straight and very high
University of Kent	0,984961	straight and very high
University of Sussex	0,966658	straight and very high
Autonomous University of Barcelona	0,954072	straight and very high

Source: calculated by the authors

Based on the correlation coefficient analysis, it was found that the correlation between the level of digitalization requirements for media education and the level of development of the media sphere under the influence of digitalization requirements for media education is high and even very high and direct. Such statements are based on the results obtained on the example of such higher educational institutions as the University IULM, University of Bologna, Aarhus University, University of Kent, University of Sussex, Autonomous University of Barcelona. Consequently, the increase in the level of digitalization requirements for media education leads to an increase in the level of development of the media sphere under the influence of digitalization requirements for media education on the example of the University IULM by 89.74%, University of Bologna – by 94.29%, Aarhus University – by 97.18%, the University of Kent – by 98.49%, University of Sussex – by 96.66%, Autonomous University of Barcelona – by 95.40%.

Analyzing the results of the regression coefficient, it was found that the change in the level of development of the media sphere under the influence of the requirements of digitalization to media education affects the change in the level of requirements of digitalization to media education. Thus, on the example of the University IULM, the change in the level of development of the media sphere under the influence of the requirements of digitalization to the media education causes a change in the level of requirements of digitalization to the media sphere by 80.54%, on the example of the University of Bologna – 88.91%, on the example of Aarhus University – 94 45%, on the example of University of Kent – 97.01%, on the example of the University of Sussex – 93.44% and on the example of the Autonomous University of Barcelona – 91.02%.

To determine the prospects of the media sphere development under the influence of digitalization requirements to media education, we will conduct a forecast, which we will present in Figure 1 – Figure 6 of June, using the trend line in Table 2.

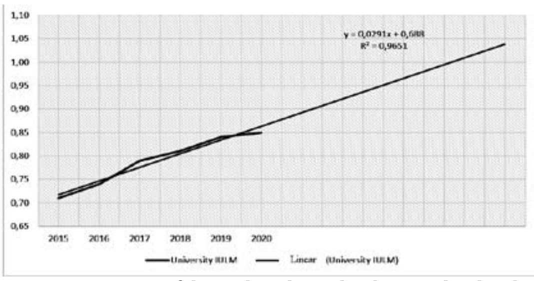

Figure 1 – Forecast of the media spheres development level under the influence of digitalization requirements to medical education using the trend line on the example of University IULM

Source: calculated by the authors

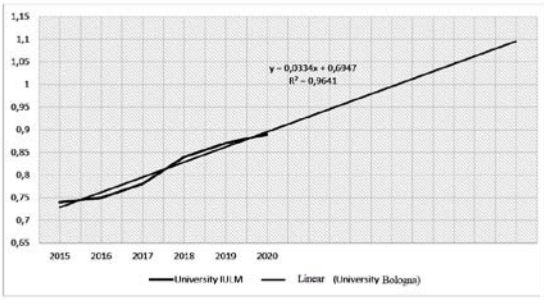

Figure 2 – Forecast of the media spheres development level under the influence of the requirements of digitalization to medical education using the trend line on the example of the University of Bologna
Source: calculated by the authors

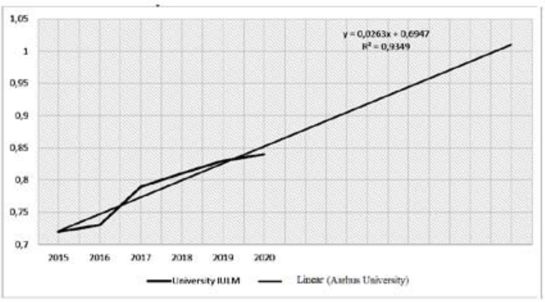

Figure 3 – Forecast of the media spheres development level under the influence of the requirements of digitalization to medical education using the trend line on the example of the Aarhus University
Source: calculated by the authors

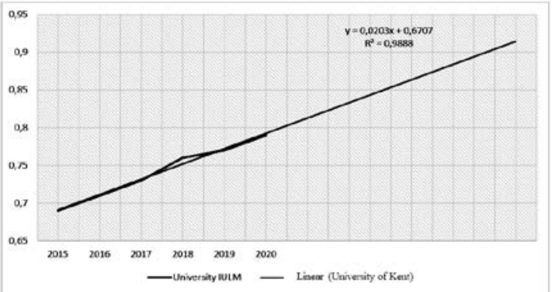

Figure 4 – Forecast of the media spheres development level under the influence of the requirements of digitalization to medical education using the trend line on the example of the University of Kent
Source: calculated by the authors

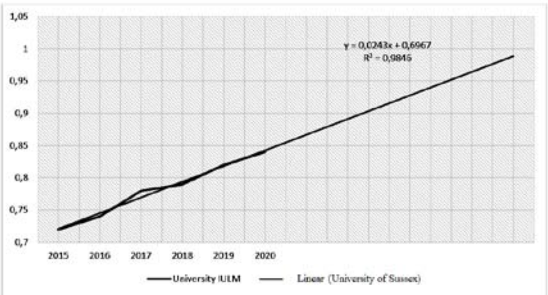

Figure 5 – Forecast of the media spheres development level under the influence of the requirements of digitalization to medical education using the trend line on the example of the University of Sussex
Source: calculated by the authors

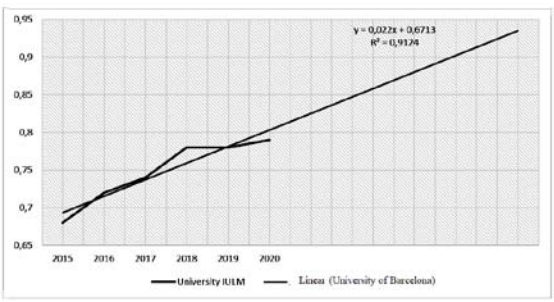

Figure 6 – Forecast of the media spheres development level under the influence of the requirements of digitalization to medical education using the trend line on the example of the Autonomous University of Barcelona
Source: calculated by the authors

Analyzing the forecast data of the media spheres development level under the influence of digitalization (Table 10), we can say that during the period 2021–2026, this indicator tends to increase rapidly, as the research conducted on the example of the University IULM, the University of Bologna, the Aarhus University, the University of Kent, the University of Sussex, and the Autonomous University of Barcelona.

Table 10 – Forecast values of the media spheres development level under the influence of the requirements of digitalization to medical education

HEI	Years					
	2021	2022	2023	2024	2025	2026
University IULM	0,89	0,92	0,95	0,98	1,01	1,04
University of Bologna	0,93	0,96	1,00	1,03	1,06	1,10
Aarhus University	0,88	0,90	0,93	0,96	0,98	1,01
University of Kent	0,81	0,83	0,85	0,87	0,89	0,91
University of Sussex	0,87	0,89	0,92	0,94	0,96	0,99
Autonomous University of Barcelona	0,83	0,85	0,87	0,89	0,91	0,94

Source: calculated by the authors

Thus, this analysis suggests that the digitalization influence level on the media spheres development is quite substantial, as evidenced by the results of research conducted by the University IULM, the University of Bologna, the Aarhus University, the University of Kent, the University of Sussex, and the Autonomous University of Barcelona.

5 Discussion

In the course of our research, we found that the problem of the impact of digitalization on the development of the media sphere is very relevant and researched among many scholars. Thus, according to the studies of Praprotnik (2016), Makarova et al. (2019), Kirillov et al. (2020), Hess et al. (2018), Spann M. (2013), and Jantunen et al. (2018) we found that due to the impact of digitalization on the media spheres, the media industry is developing at a rapid pace, new media products (digital products) are being developed and actively introduced to the market. It was found that digitalization also dictates new requirements for the development of media education, in particular in the direction of media literacy. In turn, Piskun (2017) and Molchanova (2020) argue that digitalization creates the right conditions for the transformation of modern media spheres into a new digital space.

However, we propose to identify the impact of digitalization on the development of media spheres because of the requirements that digitalization puts on the media education that students – future journalism professionals receive in higher education institutions in Italy, Denmark, Britain, and Spain. In the course of revealing such influence, a correlation and regression analysis was carried out, the results of which showed that the change in the level of development of the media sphere under the influence of the requirements of digitalization to the media education affects the change in the level of requirements of digitalization to the media education. That is, as the value of the correlation coefficient shows – an increase in the level of requirements of digitalization to media education leads to an increase in the level of development of the media sphere under the influence of requirements of digitalization to media education on the example of University IULM by 89.74%, University of Bologna – by 94.29%, Aarhus University – by 97.18%, University of Kent – by 98.49%, University of Sussex – by 96.66%, Autonomous University of Barcelona – by 95.40%.

6 Conclusion

According to the results of the researches, it is reasonable to conclude that the media spheres under the influence of digitalization are moving to a relatively new type of development. Thus, the traditional areas of activity carried out in the media sphere under the influence of digitalization are gradually replaced by new areas in which the use of information and communication and digital technology is an invariable component of development. Given that, we note that, as a consequence, to replace the traditional services provided in the media spheres come new digital services, the provision of which is often associated with the use of the Internet.

The study proposes to identify the impact of digitalization on the development of the media sphere because of the requirements that digitalization places on the media education that journalism students receive in higher education institutions in Italy, Denmark, Great Britain, and Spain. According to the results of the correlation and regression analysis between the variable of the level of requirements of digitalization to media education and the variable of the level of development of the media sphere under the influence of the requirements of digitalization to media education, it was found that an increase in the level of requirements of digitalization to media education leads to an increase in the level of development of the media sphere under the influence of requirements of digitalization to media education, that is, changes in the level of development of the media sphere under the influence of requirements of digitalization to media education affects changes This conclusion is evidenced by the results carried out on the example of the University IULM, University of Bologna, Aarhus University, University of Kent, University of Sussex and Autonomous University of Barcelona.

In the perspective of the following, it is expected to reveal the impact of digitalization on the development of the media sphere in the context of the vision of such a process by media specialists, as subjects carrying out professional activities in this direction of activity

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Primary Paper Section: A

Secondary Paper Section: AJ

LITERARY PORTRAIT OF ERNEST HEMINGWAY: THE EXPERIENCE OF USING THE BIOGRAPHICAL METHOD IN CLASSES ON FOREIGN LITERATURE

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Abstract: Facts have proved that Ernest Hemingway's biography, which can be called heroic without exaggeration, reveals his inner world even better than books containing only a small part. Perhaps this explains why everything he wrote is so true and genuine, for it was born from the writer's life, his own pain and misery, tears of joy and despair in war, love and friendship, travel, hunting and fishing. The correlation of Hemingway with all of his protagonists was not accidental: Hemingway seems to be immersed in them, sympathizes with them, rejoices over a victory and humbly suffers defeat. This is why kind–heartedness and empathy are the key concepts of Ernest Hemingway's literary portrait, which define him as a person and a writer.

Keywords: literary portrait, biographical method, "code" hero, image authenticity principle, "natural" heroism.

1 Introduction

Hemingway's works are not only remarkable for their unique writing style (the iceberg theory) and the accuracy and simplicity of characters' psychological portraits, the richness and diversity of nature's landscapes, they surprise with the author's gift of feeling and conveying the pain of the whole world with one artistic word, summarizing the strength and power of the whole nation in one portrayal, and emphasizing the importance of fighting for peace, humanity and justice through the description of a small failure or victory. The most important thing is not to be afraid and perform the duties of a man, a soldier and a writer firmly and confidently. "One of Hemingway's creative principles is that you can't turn a blind eye to the tragedy in life, no matter how terrible it looks" (Hrybanov, 1980:30). The tragedy in the writer's life is only enough to live again, because he believed that all the tragedies in the world were his own; he lived in them, fought against them and mentioned them in his works. His life and creative biography vividly prove this.

Therefore, the relevance of this study is that despite a lot of information about Ernest Hemingway (I. Kashkin, 1966; C. Baker, 1969; B. Hrybanov, 1980; D. Zatonskyi, 1999), his original writing style (T. Denysova, 2012; J. Benner, 1983; Y. Zasurskyi, 1984), problematics of his work (G. B. Colvert, 1955; I. Devdiuk, 2006, 2014; O. Veremiichuk, 2008; T. Vovk, 2009; E. Bai, 2012; O. Bila 2015) or modern methods to study the creative heritage of writers in schools or universities (T. Azomova, 2009; M. Vainovska, 2011) selected aspects of the analysis — the use of biographical method in the creation of writer's (Ernest Hemingway's) literary portrait — are innovative and deserve separate consideration. Creating a literary portrait by means of biographical method will enable people to more systematically examine Ernest Hemingway's creative heritage, because it involves some kind of synthesis of all other analysis vectors created by him (ideological significance, style, most importantly, it will help to correctly determine the focus when explaining the issues of his works.

Thus, literary portrait created by means of biographical method simulates the necessary psychological and sensory emotional perception algorithms considering the particularity of the social and historical situation of the author's life and work, and determining his creative world outlook, it will improve people's understanding of the cultural and aesthetic significance of his works.

2 Literature review

The literary heritage of Ernest Hemingway, who won the Nobel Prize for literature in 1954, has always been concerned by researchers. Even in the writer's lifetime, they took interest in him, criticizing him of his unwillingness to follow the main creative principles. Therefore, the writer firmly stood in the position of realism, while his contemporaries actively tried modernist writing styles and techniques. It is no accident that Ernest Hemingway mentioned Gertrude Stein and Ezra Pound when he described his literary life in Paris in the early 1920s in his book "A Moveable Feast", they thought the young writer had a great future and tried to make him their follower. However, as B. Hrybanov rightly said, "… this young man had a hidden desire to go his own way" (Hrybanov, 1980:20). Hemingway had never accepted the escape from a morbid reality to a world of "pure image" and artificial imagination, actively inculcated by modernism. He found showing the tragedy of existence as his creative mission, reflecting the one's true drama in war, love and friendship, as well as demonstrating the negative effects of the introduction of different ideologies and political experiments. This task didn't envisage escapism, but being in the eye of the storm meaning to experience what you write, what you try to warn against. D. Zatonskyi in his research papers "Ernest Hemingway, the writer and the man" (1999), "Realism of Ernest Hemingway" (1982) points out that for Hemingway realism is not only a creative choice, but also social and writer's positioning as well as the voice of his literary conscience.

Objective to achieve the authenticity of image Hemingway created a special writing technique, namely the Iceberg theory (the author's own term), which is also the subject repeatedly studied by national and foreign scholars. T. Denysova（2012), A. Erlikhman (2009), Y. Zasurskyi（1984), J. Benner (1983) studied the specific meaning and subtext of E. Hemingway, due to the "secret of the iceberg", in a narrative way. Many English studies of C. Baker (1973); J. Benner (1983) are also devoted to the iceberg theory. The researchers showed unity on the simplicity of Hemingway's style, the focus of narration, the absence of redundant description and lyrical retreat.

D. Zatonskyi in his book "From respect to subtext" (1998), cogently links the author's style with the code hero, that is a question that runs through E. Hemingway's works and embodies the concept of "respect".

The code hero became the object of T. Denysova scientific research "The code hero" actually loyal to himself" (1991), in which a scientist creates a moral and ethical portrait of the code hero and extrapolates it to Hemingway's literary characters. It is also important to note the wide range of subjects studied by T. Denysova: these are actually all the novels of the writer, enabling her to explore the code heroes in the evolutionary dimension.

In literary work "Ernest Hemingway: Hero and time" (1980), B. Hrybanov analyzes writer's creative work through the prism of Hemingway's hero spirit and social development. One of the great advantages of this work is consideration of heroes from the aspects of behavior, mode of thinking and the influence of historical environment, where the hero finds himself. B. Hrybanov, like most other researchers, believes that Hemingway is a realist who explains the problems of characters from the perspective of aesthetics and realistic poetry. More importantly, he is immersed in a real historical period, when the writer was creating a work, emphasizing extraliterary factors.

Recently, there has been an increasing number of comparative studies that assimilate Hemingway's works with those of other writers from the perspective of theme and poetry. These are the studies by F. Bagirova (2014), I. Devdiuk (2006), V. Kyriutkina (2009), which highlight the writer's creative heritage from a new modern perspective greatly broadening the vision of his scientific research. It is particularly necessary to note the study "In a world without illusions. Hemingway's novel "A Farewell to Arms", Camus's "The Stranger" and "The Plague", through the prism of existential dimensions" by I. Devdiuk and "Typological analysis of existential issues in the prose of E. Hemingway and S. Akhmedli" by F. Bagirova, which emphasizelocal existential vectors of problems in the studied works.

Many national and foreign studies are devoted to Hemingway's personality, his life and creative biography, as well as philosophical and aesthetic views. These researches include "Ernest Hemingway" by T. Denysova (1990), "Ernest Hemingway, the writer and the man" by D. Zatonskyi (1999) and "Ernest Hemingway. A Critical and Biographical Sketch" by I. Kashkin (1966), and the English–language "Ernest Hemingway. A life Story" (C. Baker, 1969), "Hemingway: the writer as artist" (C. Baker, 1973), "Ernest Hemingway's Morality in Action" (G. B. Colvert, 1955), which thoroughly covered questions about the writer's literary contacts, his personal life, his involvement in and attitude towards all the wars in which he fought, his attitude to the fascist regime (Hitler, Franco, Mussolini), his controversial perception of economic reforms of his motherland, and the reasons for his unwillingness to return there. However, for all the unquestioned scholarly value, there is a clear difference between Hemingway's biography and his works. Hemingway and his literary heroes are distinctive in the ontological dimension, whereas the close relationship between the biographer and his heroes is obvious, the biographical method enables this connection to predict and create the literary portrait of Ernest Hemingway. This is the purpose of the research.

Therefore, the purpose of this study is to prove that biographical method is an important means of shaping the writer's literary portrait, Ernest Hemingway's in particular, and can give a deeper understanding of challenges of his works.

3 Materials and research methods

The research method includes the extrapolation of biographical method (according to V. M. Peretts's classification of verbal arts research methods) to Ernest Hemingway's works, in order to interpret the the essence of what the author wanted to say by showing the main motivation guiding the artist's work, and by psychological analysis of the characters in the work.

The literature research based on biographical method puts forward three main stages: the first is critical psychoanalysis, the second – biographical research, the third – historical observation. The result of this study is the author's literary portrait.

Within the main biographical method, auxiliary methods were also used: semantic analysis techniques, historical–genetic approach, descriptive and comparative analysis methods.

The semantic analysis techniques enabled consideration and analysis of E. Hemingway's literary aesthetics in a certain system of literary and artistic direction (realism), and finding out its priority characteristics. Semantic analysis techniques also considered Hemingway's main literary characters, who are code heroes and reflect the author's position.

Historical–genetic approach was used to determine the origins of the author's literary aesthetic stance with its' evolution sources of influence.

The descriptive method enabled an investigation into the era in order to describe extraliterary factors, which determined the specific ideological form of Hemingway's literary works.

The use of comparative analysis method is due to the direct connection between the biographer and characters (especially code heroes) and events, reflected in his work, in order to create writer's literary portrait.

4 Results

The working experience of the major "Polish language and literature" (secondary education) has shown that preparing graduates of this major to work at schools requires teaching them to choose such an angle of literary expression, so as to encourage pupils' cooperation, challenge them for a debate, create an art space for exchanging opinions, feelings and associations.

One way is to create a literary portrait of a writer by means of biographical method. In my opinion, this enables a deeper insight of the author's personality and, most importantly, a better understanding of his works. This approach is also effective with the student audience: students demonstrate analytical and creative thinking skills, compare the thoughts of literary characters to the author's own point of view.

Thus, how does the author's biography designate him?

As pointed out in the scientific literature, the purpose of the historical psychological (biographical) method is "…to interpret the essence of what the author wanted to say in his work, by manifesting the main incentive factors that guide the artist's work and the psychological analysis of the characters in his piece of work. The reflection of the artist's personality in literary work lies in the full reproduction of his personality, mindset and feelings. Therefore, a meticulous study of the author's biography is necessary <…> The outstanding representatives of historical psychology (biographical) literary view have made positive research on writer's biographical works, his mental and physical life, passion and virtue. <…> The result of this study is the writer's literary portrait…" (Kozlyk, 2020:116).

The given definition speaks volumes for the close relationship between the author and his characters, and also proves the possibility of the author's literary portrait creation.

Ernest Hemingway. How does he appear from the pages of his works, from the analysis of his life and work biography, from the thinking and behavior of his favorite characters?

The first notion that attracts attention when reading the author's biography is his active attitude towards life. He did not step aside any war, any human disaster, any military, civil strife or conflict, no matter where in the world, in which continent or country these events took place. "The world and civil wars are one of the tragic geniture of contradictory, complex history of the 20th century, notes D. Zatonskyi, and Hemingway was not an indifferent observer of bloody military conflicts, but participated in them" (Zatonskyi, 1999:11–2).

For him, there was no someone else's war, grief or misery. He was equally sensitive to the cruelty and injustice of the world, regardless of his own interest and involvement in what was happening. He regarded it as his duty going there where he could subserve, help somebody or perhaps even save lives. His motto was to always be in the eye of the storm, in the flashpoint, in the most dangerous place, because that is where life is real and unvarnished, it cannot be rewritten. It is a life that beats, time that tempers, examines, and trains, sometimes breaking, but forcing to rise and move forward again. Not to passively observe, but to take action, not to neglect events, but to determine their course personally. Most importantly, one must take responsibility for what is happening, constantly quering: what did I do to change this situation for the better and did I do everything I could and had to do? In this regard, Robert Jordan's words in the novel "For Whom the Bell Tolls", which to my mind best reflect the author's own position, tell: "It was a sense of duty assumed for all the oppressed in the world, <…> it defined your position in something what you believed in unconditionally and wholeheartedly…" (Hemingway, 1982:318 –319). Therefore, "obligation to all the oppressed in the world" is the life compass of Hemingway and his favorite characters.

"The writer's task, Hemingway asserted, is unchanged, it is always to write truthfully and to express it so that it enters the reader's mind as part of his own experience" (Quoted in

Hrybanov 1980: 9). However, to write like this, one must bear everything, undergo all the terror and pain in the world and suffer, and only in this way the experience given through the words and lines born from blood, sweat, fear and pain will become the reader's "own experience". This is exactly how it was with Hemingway. His heroes are not fictional characters, but himself: "… This is Jack Barnes in the novel "The Sun Also Rises", Lieutenant Frederick Henry in "A Farewell to Arms", Colonel Cantwell in "Across the River and into the Trees", writer Harry in "The Snows of Kilimanjaro" and artist Thomas Hudson in "Islands in the Stream" (Zatonskyi, 1999:11). Still missing from this list is Robert Jordan when he, fatally wounded, preparing not so much to die as to sell his life dearly, thinks "The world is a good place and worth fighting for, and I hate to leave it" (Hemingway, 1982:542). The key to this vocation are the words "peace" and "combat". In this case, no matter where exactly, it is important that you were in that part of the world where there is an urgent need for you, for your presence, for your destiny of participation in the effort for good and justice.

Hemingway's life, full of events and adventures, ups and downs, joys and sorrows, without exaggeration can be called a book of experience and hedonism. Yes, he was a great life–lover, despite the tragic ending. Therefore, "Not only the style of writing, but also the way of living life attracted attention to Hemingway," D. Zatonskyi justly points out, making him at the same time a bait for newspapers, for literary critics and psychoanalysts, or just curious idlers.

Hemingway the fisherman, Hemingway the hunter, Hemingway the alcoholic, "the adventurer of the century", "the great individualist", "the enemy of intelligence", supporter of "total action" is almost as famous, as Hemingway the writer (Zatonskyi, 1999:9). Therefore, to live with a full breath, not to be afraid of trials and difficulties, to accept equally firmly the gifts and challenges of fate, not to feel sorry for oneself – this is all Hemingway. "For Hemingway being strong, apt, indestructible, like an iron lever, is a role or rather a predetermined and strictly embodied moral agenda. He created himself according to the terms of this agenda: for instance, he sought danger not because he emotionally craved it, or for the reason that he was involved in an overwhelming "attraction to death", but to polish his art of reincarnation, to test it over again in practice" (Zatonskyi, 1999: 10). Then he embodied the agenda into his favorite characters, or rather the code heroes, for this "code" was born from the writer's life, as a result of what had been experienced and seems to have already been overcome, but, unfortunately, often recalls itself in dreams, in anxieties and phobias, in physical pain as the consequences of combat injuriess and concussions.

5 Discussion

Significantly, the code heroes Jake Barnes and Pedro Romero in "The Sun Also Rises", Frederick Henry in "A Farewell to Arms", Robert Jordan in "For Whom the Bell Tolls" have nothing exaggeratedly heroic. They perform no glorious feats, show no particular bravery or courage. They are ordinary people in war, in everyday life, in human relations. B. Hrybanov's opinion about Frederick Henry ("A Farewell to Arms") is a reasonable one: "…Hemingway seems to lay stress on the commonness of his character, who lives for the day and does not really want to think about the fatuity of this war and how it may end" (Hrybanov, 1980: 84). However, this muted, undemonstrative "commonness" is most appealing about them. For the reason that they are real, with their true fears and pain, suffering and jealousy, with their true, tacky understanding of life, love and friendship. Thus, genuineness, naturalness are one of the key concepts in the Hemingway's code hero. All the genuine and natural caused the writer's admiration and respect, as it was born of the wisdom of life, it had no insincerity and significant charm, it was life itself. Speculating on the heroine of the novel "The Sun Also Rises" Brett Ashley the researcher B. Hrybanov rightly remarks: "Brett Ashley has the main trait that Hemingway valued most in people, naturalness" (Hrybanov, 1980: 64).

One more trait of Hemingway's code heroes is connected with genuineness and naturalness "…the ability to face the truth, no matter how dreadful it may be. < … > accept life … as it is…" (Hrybanov, 1980: 70). Thus, meekness at the challenges of destiny is an important marker of the code heroes' moral agenda. Not to complain and not to growl of life, but to follow their own way humbly and bear their cross decently. Hemingway detects true heroism in this: "…the ability to behave "sportingly" in any, even the most odious circumstances. He found true heroism in conquering any obstacles through constant efforts of self–disciplined will" (Hrybanov, 1980: 70)

The quintessence of the ideas of humility and at the same time battle and active opposition to the challenges of destiny is the parable "The Old Man and the Sea". Hemingway repeatedly acknowledged that he was blessed with the image of the Old Man: "The Old Man is not only good for his benignity, naivety and humility, by which is meant the ability to live in harmony with oneself. There is something more significant in the Old Man, genuine and natural heroism (Hrybanov, 1980: 247).

The reason why the image of the Old Man is so striking is that the author was personally acquainted with more than one such fisherman who went to sea as to duel with destiny, were great masters of their craft, loved fishing, loved the ocean, wisely respected its laws, bowed to its beauty and majesty. It seemed that the ocean was father and mother to them, taught them endurance and patience, fed them and simultaneously developed the wisdom of conciliation with losses and defeats. The ocean tested them for fear and courage, as if it wanted to determine that extreme, utmost measure of their mental and physical potential, and then sincerely rewarded the most worthy: "The figure of the simple old Cuban Santiago is a generalized image of a great man of unrevealed abilities in his own way, who in other circumstances would show "what a man is capable of"…" (Kashkin, 1966: 223). Moreover, it seems Hemingway himself turned into the Old Man for a while, for he also knew fishing with its risks, and adored the beauty of the ocean. Surely, it is he himself who experiences the whole Old Man's tragedy, talks to the fish, the ocean, the Boy, to God cheering himself up: "it seems sometimes… that behind Santiago's words there is the voice of the author getting old, his intonations and his favourite thoughts" (Kashkin, 1966:227). Hemingway's words come to mind again, that is, one has to experience everything what one is writing about, one has to know and feel the subject of the story: "… To enter the very essence of the phenomenon, to conceive the sequence of facts and actions that conjure this or that feelings, and to write about this phenomenon… so that the reader… feels himself a protagonist and his compassion becomes as convincing as if it were happening to him." (Quoted from: Hrybanov, 1980: 26). In the parable "The Old Man and the Sea", this creative goal is best realized, as the author himself said: "It seems that I to have finally achieved what I have been working on all my life" (Quoted from: Hrybanov 1980: 254).

Indeed, the parable "The Old Man and the Sea" on the one hand, is the result of the life exploration of both the author and his favorite code hero and on the other hand, it reflects the principle of truthful representation, arising from the writer's life itself, from his experience of victories, failures and losses, from his love of life, people and the great writer's work. It is not accidental that it is the hero of this story, Old Man Santiago, who delivers the words that best characterize Hemingway's and his heroes' moral code: "Man is not created to suffer defeat. Man can be destroyed, but he cannot be defeated!"

6 Conclusions

Thus, the author's biography is an important source of information about him. Biographical facts and events often reveal his mental world better than books, because behavior and actions are a more important proof of the author's moral ethics and literary appearance.

Ernest Hemingway's literary portrait absorbed all the disasters and pain of the era in which he lived and worked, because his positive writing urged to ring the bell, warning of danger or calling for a battle against all evil in the world. Not to stay away, not to observe indifferently, but to take action and sincerely believe in the victory of gooness and justice.

Ernest Hemingway's biography can be called a heroic one without exaggeration; the correlation of Hemingway with all of his protagonists was not accidental: Hemingway seems to be immersed in them, sympathizes with them, rejoices over a victory and humbly suffers defeat.

Perhaps this explains why everything he wrote is so true and genuine, for it was born from the writer's life, his own pain and misery, tears of joy and despair in war, love and friendship, travel, hunting and fishing.

This is why we emphasize kind–heartedness and empathy while creating Ernest Hemingway's literary portrait. Kind–heartedness and empathy determine his key concepts as a person and a writer.

It all lets us see and understand biographical method, which correlates the writer's life events with his works, and gives a more holistic view of the writer's literary portrait, Ernest Hemingway's in particular.

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Primary Paper Section: A

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IMPACT OF THE PANDEMIC ON THE PERSONAL FREEDOM LIMITATION (PERSONAL FREEDOM INCLUDES FREEDOM OF MOBILITY)

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Abstract: The main purpose of the research is to show the actual problems of restricting human freedoms and develop practical recommendations, which would be actual in the current and following years, taking into account improvement of the normative–legal base of administration and medical care standards. Relevance of the issue is substantiated by the lack of modern research, which could reveal the essence of the issue in the constantly changing situation of coronavirus control. Scientific cognition methods were used to study the normative–legal regulation of the fight against the spread of coronavirus.

Keywords: pandemic, freedom restrictions, freedom of movement, vaccination.

1 Introduction

COVID–19 has been a challenge for democracies around the world. Changes in the state order and the order of life occurred in all spheres of social activity. First of all, the economy was affected by restricting international contacts and many companies' internal activities. The medical field was also greatly affected, facing the most extensive threats in a decade. In response to the epidemiological situation, many state and local governments have resorted to a series of measures that have repeatedly restricted freedoms of movement and other personal freedoms of the individual. Such actions reduce the spread of the disease, so they are recognized as effective throughout the world. However, a number of restrictions on movement, labor, entrepreneurship, crossing borders of the country and separate regions, medical services caused discontent on the part of the population. As a consequence, there was a question of the legality of such decisions, so people were dissatisfied and organized mass protests.

However, the continuation of restrictive measures in the face of new risks of disease spread makes further research in this area urgent. It became especially critical during the vaccination period, which should help reduce the spread of the disease. To date, all these issues are understudied. In some ways, those studies that have already been conducted in 2020 have already lost their relevance through the emergence of new medical research, standards, regulations, documents that regulate freedom restrictions during quarantine. Therefore, modern research on the problem and methods of solving it are relevant to the present day. Particularly relevant is the problem of finding a compromise between human freedom and public safety in the current context of coronavirus control.

2 Literature Review

Today, we can say that researchers of movement restrictions and other citizens' freedoms are divided into two sectors. Some justify restricting freedoms to preserve society's health, while others believe that restricting freedoms is unconstitutional. In the early days of quarantine measures to prevent the spread of COVID–19, a great deal of research focused on the legality of such measures. This is not surprising because many people did not understand why their actions were restricted when the spread of COVID–19 was not felt in society. For example, Zolka, Kushnir, Tsarenko, and Havrik (2021) investigated the legality of such measures in Ukraine and compared the authorities' actions to the European Union ones. As a result of legal documents and state decisions analysis, they concluded that the limitation of human rights during quarantine measures is unconstitutional and violates the fundamental rights of human freedoms (Myronets et al., 2019). Ramji–NogalesIris & Goldner Lang (2020) also examined the restriction of freedoms in European countries and the United States. Finally, Cohen & Kupferschmidt (2020) investigated the main actions that different countries have developed to counter COVID–19. The authors believe that measures to restrict mobility due to COVID–19 pose a serious threat to fundamental principles of democracy in both the EU and the United States. Only the free movement of people without border controls confirms the values of the EU and the United States.

It is necessary to point out that home isolation for many people is a violation of the human rights of movement and risk of intimate partner violence. In various countries, staying at home is not a safe option for many families, as the house is a place where they can be exposed to sexual and other types of violence, including murder, physical, psychological, economic violence, or neglect and coercion. Children who typically live in such settings are also at risk, so if a child would be at increased risk of physical or psychological trauma in the home, they should be isolated from the setting or have their opportunities for such trauma limited. Asi Y. (2021) researched the issue of limiting women's rights to movement. The author emphasizes the possibility of obtaining medical services as an option for resolving restrictions on movement rights.

Isolation is not always a valid method of controlling the spread of disease in all situations. For example, Joseph Amon (2020) researched the issue of counteracting the spread of COVID–19 among prisoners in the context of ensuring their rights to health care, concluding that isolation contributes to the spread of the disease among prisoners.

However, similar studies on the benefits of isolation have been conducted on EU countries (Ortiz, 2021), particularly Spain, which has adopted the strictest restrictions in the Schengen Area. There are also generalized studies on the world as a whole (Simões, 2021). The authors conclude that such limits are legitimate and essential for society, but, at the same time, they point out the necessity of harmonizing one country's measures with others, which would result in eliminating the possibility of repeated outbreaks through increased mobility of citizens between countries. Potemkina O. (2020) investigated the issue of limiting the international mobility of the ordinary population and refugees during the pandemic. As a result, it can be concluded that the restrictions reduce the flow of refugees for a certain time, but as soon as the limits are removed, the flow rapidly increases, which negatively affects the dynamics of the spread of the disease.

Legal research by Zaryaeva & Oliynyk (2021) shows that measures that are applied to combat coronavirus are not clearly defined from a legal point of view; in particular, there is no legal limit and mechanism for its implementation today. If states continue to plan limits of movement, they must justify this at the legislative level, taking into account the balance between private interests and the interests of the public. Mendzhul &Melehanych (2020), Zaryaeva & Oliynyk (2021), Emmons, S. (2020) believe that during a pandemic, such restrictions are necessary, but they must be legal. In particular, personal human rights must be interpreted with the public interest and rights during a strict quarantine. Therefore, legislation must clearly define the circumstances that provide for legitimate restrictions on movement, the limits of possible movement, the means of enforcing such a regime, and the list of available rights and freedoms. It is also essential to have protection mechanisms for the population in the case of restrictions. Habibi et al. (2020) studied the specifics of the application of established medical standards during COVID–19.

As a result, we can conclude that the problem is about legal inconsistencies and medical ones, as they also require reform, amendment, and adaptation to the conditions of restrictions on freedom of movement and isolation.

Thus, the study's main purpose is to show the current problems of movement and personal freedom restrictions during the pandemic. It helps to develop practical recommendations that would be relevant in the current and next years with the improvement of the administration regulatory and legal framework and standards of medical care to the population.

3 Materials and research methods

The research results are based on the study of legal frameworks that regulate the issue of freedom of movement and other freedoms of populations in different countries. European legislation and Ukrainian legislation are considered (as a practical example of integration and adaptation of European standards to combat the spread of viral diseases). To study the practice of restricting freedom of movement and other personal freedoms in the world, we studied analytical reports and news from different countries, which reveal the essence of the problem in the world and methods of its solution.

Given the information on restrictions, the starting point in studying the impact of the COVID–19 pandemic on the state of protection of citizens' rights and freedoms can be a study of public opinion on the relevant issues. In particular, it assesses the state's provision of human and civil rights and freedoms under conditions of the mass spread of coronavirus infection (COVID–19). It is based on the study of citizens' attitudes toward the consequences of temporary restrictions on their rights and freedoms and the authorities' actions, determining the "limits of admissibility" of such restrictions and citizens' readiness to protect their rights. For this purpose, Repucci & Slipowitz (2020) conducted general research worldwide, and Razumkov Center, with the support of the Representative Office of Hans Seidel Foundation in Ukraine, conducted research "Ensuring human rights and freedoms in Ukraine under conditions of the spread of coronavirus infection (COVID–19): specific features and ways of improvement", the results of which are presented in this research (Razumkov Center, 2020). As a result, it makes it possible to solve problems that could meet the personal needs of certain citizens and the needs of society as a whole.

4 Results

The study of restrictions on freedom of movement and other freedoms will begin with studying the legal regulation of this issue. Let's start with the studying of European legislation. According to Article 15 of the Convention (1950) for the Protection of Human Rights and Fundamental Freedoms in time of war or other extraordinary circumstances threatening the life of the nation, either party may take measures derogating from the obligations under this Convention only in view of the high level of criticality of the situation. The main condition for imposing restrictions on freedoms is consistency with other obligations under international law. At the same time, the above provision is not absolute because it cannot be a ground for derogating from certain fundamental rights. Due to the international community's recognition of the appropriateness and legitimacy of restrictive measures in certain circumstances, international organizations have begun to emphasize the need to comply with restrictions that will protect health and protect against the arbitrariness of public authorities. For example, experts from the Organization for Security and Cooperation in Europe (OSCE) have noted that despite the priority of protecting the health and saving lives during a pandemic, restrictions must strike a balance between protecting health and respect for humanity.

To meet human rights standards, restrictions or other measures must:

– Be provided for by law;
– Be necessary for a democratic society;
– be based on sound scientific evidence;
– be neither arbitrary nor discriminatory;
– be subject to examination;
– be limited in time;
– be proportionate to the objectives to be achieved;
– take into account the differential impact on specific categories of the population or marginalized groups (Identified omissions in realization of human rights in Bosnia and Herzegovina, 2020).

The UN has also noted the observance of human rights and freedoms in the case of quarantine. In several speeches and reports, representatives of the organization repeatedly mentioned certain aspects of rights protection in the context of the pandemic, such as increased censorship, suppression of journalists, and criticism of the authorities' actions. These activities are a negative phenomenon, leading to a lack of important information and provoking a worsening epidemiological situation (UN, 2020). Furthermore, the prohibition against unlawful deprivation of liberty and safeguards against abuse by law enforcement should be limited, and a complete ban on leaving home is a criminal offense (UN, 2020). The UN continuously monitors the rights and freedoms of various population groups and has made recommendations for proportionate restrictions that balance the interests between the fight against disease and democratic standards.

Although other international organizations also create a sufficient system of criteria for national governments to consider planned restrictions, each of them involves careful elaboration. The need to respond urgently to unforeseen developments in the epidemic situation has led to the fact that some measures have been unnecessary, illegal, disproportionate, and show disrespect for human rights. As a consequence, there is now a fairly significant practice of appealing the constitutionality of decisions of public authorities, which imposed quarantine restrictions and developed a number of legal positions of constitutional justice bodies on compliance with the principle of proportionality in the case of limitations on the rights and freedoms of man and citizen.

The practice has shown that the issue of imposing democratic rules has affected many countries. According to COVID–19 (Repucci &Slipowitz, 2020), in more than 80 countries, democracy and human rights have weakened compared to the pre–civil rights period. The main problems were registered in African countries, the USA, China, many countries of South America, Belarus, and Ukraine.

It should be noted that people complain most of all about restrictions on movement, active misinformation and promotion of the conspiracy theory, police violence, restrictions on the work of the press, etc. The primary infringements of rights in the world are shown in Figure 1.

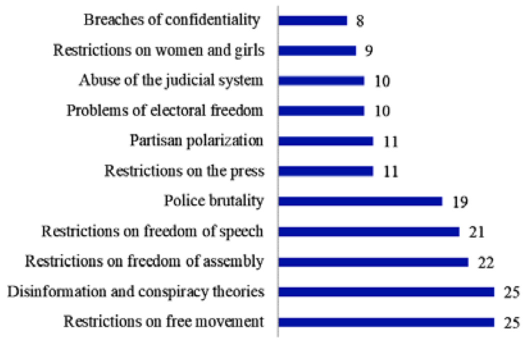

Figure 1 – Opinion of the world population on the negative impact of COVID–19 on established living standards in 2020, %
Source: According to Repucci & Slipowitz (2020)

Given that different countries have used various measures to combat COVID–19, it is helpful to study restrictions on freedoms using specific examples. Let's consider the policies of Ukraine, which, according to an international study, has lowered its level of democracy in the country.

For example, according to the results of the Razumkov survey in Ukraine, 38% of citizens faced restrictions on freedom of movement, restrictions on rest, problems with medical and social protection (Figure 2).

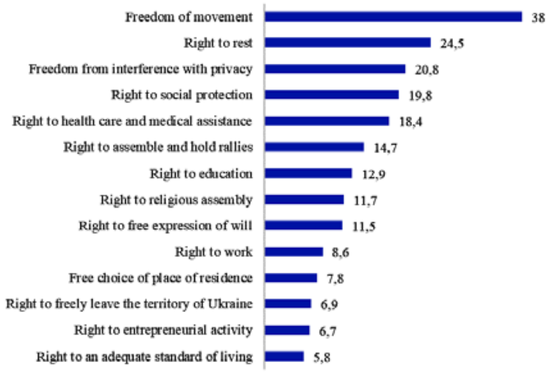

Figure 2 – Opinion of the population of Ukraine about the negative impact of COVID–19 on the established standard of living in 2020, %

Source: Compiled by the authors based on Razumkov Center (2020)

It can be concluded that many problems faced by other countries were not observed in Ukraine. For example, citizens did not feel violence from the police; there were no problems restricting women's freedoms rights, media freedom, etc. At the same time, people felt the problem of employment and doing business, the solution of medical issues.

Overall, 50.3% of the population felt that state and local authorities restricted constitutional rights and freedoms in the process of combating the spread of coronavirus infection (Figure 3).

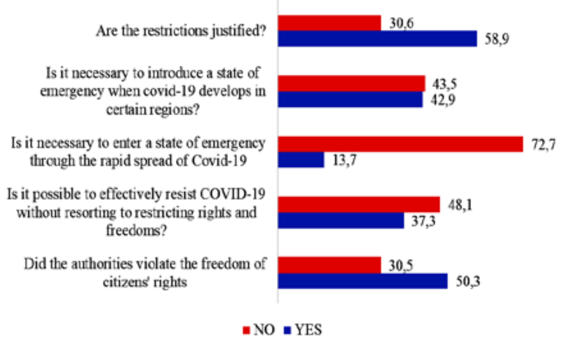

Figure 3 – Opinion of Ukrainian citizens about the actions of the authorities to address the spread of COVID–19 in 2020, %

Source: Compiled by the authors based on Razumkov Center (2020)

58.9% of respondents believe that such measures are justified. It shows that, in general, restrictions on freedoms are necessary, and the population supports such measures. But at the same time, some actions of the authorities were not understood by the citizens; for example, it concerns restrictions to visit parks, use public transport, and stay in the street without documents. Let us consider the primary resistance of the population to the actions of the authorities to prevent the spread of COVID–19 (Figure 4).

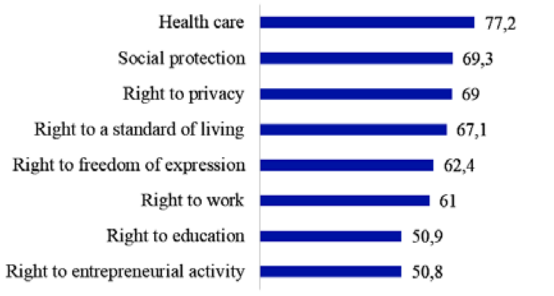

Figure 4 – Main resistance of the majority of the population to restrictions of freedoms in Ukraine in 2020, %

Source: Compiled by the authors based on Razumkov Center (2020)

Ukrainians believe that the restrictions on medical care in matters unrelated to COVID–19, social insecurity, the right to privacy, an adequate standard of living, the right to work, study, and engage in entrepreneurial activities are unacceptable.

Thus, in the process of solving the issues of restrictions of freedom of movement and other personal freedoms of a person in certain countries, it is necessary to take into account the point of view of the population of this country, which concerns unjustified or exaggerated prohibitions that cause misunderstanding and protests.

Today, vaccination is considered the primary method of solving the problem of freedom of movement and other restrictions during the pandemic in Ukraine. At the same time, compulsory vaccination is also a restricted form of human freedom, so it is not expedient to solve one issue of democratic importance at the expense of infringement of other rights. Let's consider what methods to fight the problem of restrictions of freedom of movement and other freedoms in different countries and how scientists of the world treat the problem.

5 Discussion

Today the most controversial issue of restrictions on rights and freedoms is considered the issue of restriction of movement. In many countries, this restriction has led to judicial intervention, but different courts have ruled differently. In Russia, for example, restrictions on movement during the fight against coronavirus are not considered illegal because such actions are taken by the authorities in an emergency situation and comply with the recommendations of the World Health Organization (Roudik, 2021). Conversely, in Bosnia and Herzegovina, where restrictions on crossing certain areas and movement restrictions were imposed on people over the age of 65, a court overturned this decision within one hour. The court's decision was based on a violation of human rights, given the principle of proportionality and reasonableness, as well as through the lack of explanation for the total ban on movement and the uncertainty of the grounds for such a decision. Thus, in adjudicating this issue the court relied on the principle of legality and proportionality during quarantine restrictions, violation of which may create a threat of distrust of citizens towards the authorities (Identified omissions in realization of human rights in Bosnia and Herzegovina, 2020).

Restrictions on religious beliefs are no less of an issue. It is one of the natural human rights ensured by international documents and constitutions of all countries, and it is the basis of decision–making in life (Yarmol & Tuchapets, 2015). Restrictions on freedom of religion and attendance at religious gatherings are one of the main restrictions methods in many countries, including Ukraine (Lykhova et al., 2021). But the issue has been most controversial in the United States since the Supreme Court of the United States imposed a ban on such restrictions in 2020. Despite public criticism that the court favored religion over health, the decision to ban religious meetings was deemed cruel. The situation was similar in California and other U.S. states, which have ruled that protecting the constitutional rights of human liberties trumps fighting a pandemic (Becket, 2020).

On the other hand, there have been a number of court sessions where the issue has been decided in favor of public health. For example, a judge has ruled that emergencies that have a real and substantial impact on a crisis do not constitute a clear, significant violation of human rights (Hudson, 2020). According to the authors, such judicial decisions can be the basis for deciding other precedents in the U.S. and other countries facing such a problem.

The problem of banning business work has become another field of discussion. The objective impossibility of providing remote work to everyone who wants to work has formed an active resistance of entrepreneurs to the prohibition of trade and the operation of stores and entertainment centers. For example, in the Czech Republic in a court order (Kučera & Jiří Maršál, 2021) was overturned a ban on the trade in construction materials because anti–crisis measures and restrictions should be based on objective and reasonable justification, which the Czech authorities could not do. The situation in the U.S. was similar, as some states banned gyms while swimming pools were not closed. Thus, such restrictions were judicially lifted on the grounds of unreasonableness and ensuring equality and fairness (Hull Eikho et al., 2021).

In 2021, the world faced another freedom restriction – compulsory vaccination. It is the main method to combat the spread of COVID–19 and resume the freedoms of citizens. Today, with mass vaccination in Ukraine and many other countries, this issue is the most debated (Mihus et al., 2021).

In more than 100 countries, compulsory vaccination is one of the main methods of fighting disease outbreaks. At the same time, 62 countries have now resorted to different responsibility measures for the lack of habit. Most of the restrictions concern the prohibition of children from attending educational institutions (). In some countries, such as Italy and the Czech Republic, parents of unvaccinated children must pay a fine. In addition to measles, children should be vaccinated against diphtheria, pertussis, tetanus, hepatitis B, polio, hemophilus influenza, chickenpox, mumps, and rubella. Mandatory vaccination against such diseases without fines is present in almost all European states. The U.S. has also supported such disease control methods, so compulsory mass vaccination practices in all 50 states. But despite the fact that the lack of vaccination restricts certain rights and freedoms of citizens, they still resist these decisions, especially in those countries where residents do not trust the authorities.

The issue of trust in mass vaccination has been scientifically studied, particularly by the London School of Hygiene and Tropical Medicine (2021), which showed that pushy recommendations and pressure lead to a natural resistance of people to do anything and to be vaccinated, among other things. So, on the one hand, there is a natural, unreasonable reaction of people to compulsory vaccination against COVID–19. But on the other hand, there is also a justified reaction. This is especially true for health professionals and people who study mass immunization.

Studies of the effects of mass vaccination have only been done on preschool and school–age children. Statistics on vaccinations for adults are available only for influenza, hepatitis A, and B. In some countries, vaccinations against these diseases are recommended by medical professionals, so they are not considered compulsory. Thus, there is no historical precedent for the impact of mass vaccination on disease development in society, so any predictions are not supported by statistical data. A group of Chinese researchers recently conducted another study, which found that people without medical education were more willing to be vaccinated than those with medical education.

The issue of collective immunity is also relevant. Six years ago, the WHO officially declared the UK rubella–free zone and promised to eradicate measles completely. But by 2020, there was a 10–fold increase in the incidence of measles. The collective immunity threshold was 68% for rubella and 92% for measles, so if a small part of the population lowers the measles threshold, the disease becomes particularly active in that region (Voronin, 2021). Unfortunately, there are no studies on the collective immunity threshold for Covid–19.

Professor of the School of Pharmacy at the University of Maryland Peter Doshi (2021) is convinced that compulsory vaccination cannot be raised categorically since all vaccines do not have enough research on the long–term effect. Mandatory vaccination will be possible only with those drugs that can receive a WHO certificate, which will not happen until 2022. Thus, for now, providing compulsory vaccination or restrictions on the rights of people who do not have the vaccine may also resonate in courts. As a result, they will decide whether to maintain or prohibit compulsory vaccination at their discretion. On the other hand, authorities recommend that their residents be vaccinated, providing many advantages in leading active lifestyles compared to unvaccinated people. Restrictions on equality rights can also lead to a number of public discontents, and at this point, states must prepare a legal framework to protect the rights of individuals and society.

6 Conclusions

Thus, the practice of appealing the constitutionality of restrictions on freedoms is not yet fully formed. However, due to the insufficient legal framework and the insufficient level of medical research, it will be up to judges to decide on the legality of government actions restricting freedoms in light of both national legislation and the recommendations and decisions of the WHO.

The possibility of threats to individual freedom to defeat a global pandemic remains a pressing and relevant issue today. Restrictive measures may be recognized as legitimate if imposed according to established procedures, and conversely, if authorities exaggerate their authority, such restrictions will be overturned in constitutional courts. In making different decisions about restrictions on freedoms, it is necessary to rely on current medical research, the level of violation of citizens' freedoms, and, of course, the legal and regulatory framework. But despite the lack of such information, in some countries, the fight against COVID–19 has been put in the first place, so it has created a justification for special powers to the executive branch and poses a number of threats to the violation of the constitutive legality. Therefore, each restriction requires constant, complete monitoring to ensure a balance between ensuring human rights and public health.

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Primary Paper Section: A

Secondary Paper Section: AG

MICROLEARNING OF HEI's STUDENTS IN THE STUDY OF FOREIGN LANGUAGES

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Abstract: The article aims to find out, ground, and checkup experimentally the effectiveness of foreign language studying by students in the context of increasing foreign language lexical competence level based on using individualized educational technology of micro–environments. According to the results of the analysis of the quantitative data of the experiment, there was an increase in the arithmetic mean value (M, Mean Average) of the results of the current control (from 73 to 95) with a decrease in the standard deviation (SD, Standard Deviation) (from 14,2 to 2,9), which illustrates the expediency of the microlearning technology for the formation of foreign–language vocabulary competence.

Keywords: education, student, teacher, individualization of learning, infographics, posters, foreign language lexical competence.

1 Introduction

The system of higher education in a dynamically changing world should form new qualities of a university graduate – initiative, mobility, flexibility, dynamism, and constructiveness. The person must have the ability to the intellectual, cultural, moral, physical, and professional self–development and self–improvement; to improve his qualifications and skills; to work in a team, lead and subordinate people; to strive to achieve goals and critically rethink the experience; to possess a culture of thinking. Learning a foreign language in higher education institutions (HEIs) is part of the overall task of training highly qualified personnel. Language learning is a rather time–consuming process that requires a lot of information, the access to which is limited under the traditional approach to learning.

Therefore, one of the modern formats of e–learning is microlearning, that is, focal or point–based learning. As is clear from the name, the key factor here is a small amount of content or a limited time of mastering training materials. The duration of a single session may even be a few minutes. Such a lesson is easy to build into modern training formats. Specialists point out that it is important to organize effective learning interaction between the participants of the educational process, joint work, and cooperation. Apply interactive forms of an educational interaction – webinar and forum, collaboration tools – network services Web 2.0, technologies – "flipped learning," gamification, BYOD (Bring Your Own Device), scribing. Thus, short classes that can be stopped and resumed at any time are replacing grueling traditional activities. Multitasking and lack of time dictate their own rules, so the duration of learning is constantly being shortened.

Considering the above, the scientific novelty of the research is as follows: introduction of microlearning tools (infographics and posters) into the educational process to increase the level of HEIs students' foreign language lexical competence.

The theoretical significance of the work lies in the fact that it highlights the most important aspects of the formation of foreign language lexical competence and offers an individual trajectory of e-learning – microlearning in foreign language studying as a technology for solving the highlighted problems. The practical use of the research lies in the fact that the theoretical provisions, results, and conclusions contained therein create real prerequisites for the foreign language studying by students' improvement in domestic institutions of higher education.

Allocation of scientific novelty, theoretical and practical importance allowed formulating the research's hypothesis: individualization of foreign language studying will be effective if its pedagogical design is based on the model of reverse pedagogical design. That is, it is carried out based on educational results and at the same time:

- pedagogical design of individualized subject foreign language studying is implemented, which ensures that the student manages his educational trajectory;
- the educational content is structured to the level of micro–portions, which increases the flexibility of adaptation strategies in building individual educational trajectories (implementation of microlearning technology);
- the level of foreign language lexical competence of students is increased.

2 Literature review

Nowadays, traditional teaching cannot lead students to innovation and creativity because it is not able to encourage them to learn new things. In addition, the knowledge that students acquire through traditional teaching methods is easily forgotten (Hug, 2010). Thus, students in higher education institutions need to have the ability to maintain concentration throughout the lecture, but in the first 10–15 minutes their attention span is the highest (Xia, 2016). According to research (Renard, 2017), the traditional learning process decreases a student's attention span. The average duration of concentration on a single object or stream of information decreased from 12 seconds to 8 seconds between 2000 and 2016. It seems that by giving the student information that is necessary and relevant now, directly related to its subsequent practical application, the likelihood that the student will remember it will increase. Therefore, microlearning is a new type of e–learning, a new educational technology, which will allow us to work and teach in the new realities, given the lack of concentration. We should note that the specified technology attracts a lot of attention. At the same time, it is most actively discussed by Western European scientists (Baumgartner P., Cole M., Giurgiu L., Souza M. I., Torres T. Z., Carvalho J. R., Evangelista S. R., Amaral S. F.), on the contrary, there are almost no works on this topic in the domestic science. Since the term "Microlearning" is new and not yet established, it is necessary to clarify its meaning. Microlearning is a form of learning that includes aspects of learning and education, where the focus is on the micro–level, in particular, micro–contents or micro–media (micro–sized media resources). Microlearning refers to relatively small learning units and short–term educational activities (Souza & Amaral, 2014).

The researcher (Almazova, 2018) argues that microlearning is an educational technology that involves the acquisition of knowledge in the form of small independent units, where each of them presents the information that is important at a particular point in the learning process and presented in the most structured, concise and accessible form. The scientist (Alqurashi, 2017) focuses on the pedagogical dimension, describing it as a learning strategy developed using a series of short learning materials and short activities, making a mini–course. The most widespread assumption (Hug, 2006) is based on seven dimensions:

- time (limited effort that results in short time requirements) content (short sections with clearly delineated subjects and relatively simple tasks) curriculum (parts of modules or parts of curriculum content, short didactic elements, etc.)
- format (variety of formats such as units, lab assignments, etc.); process (activities that are independent or integrated into a broader context, iterative processes, etc.)
- media (learning in the classroom or distance learning based on different multimedia content);
- models of learning (repetitive, reflective, pragmatic, constructivist, conceptual, conectivist, etc.). There are several studies conducted in the field of microlearning. The author (Freeman, 2016) used technology–friendly tools in the form of video content. He offered such videos to

introduce microlearning (basic terms, explanations, examples, potential, and experiences of the said technology). Researchers (Ozdamlı, Kocakoyun, Sahin & Akdag, 2016) tried to give students' opinions on infographics as another tool for microlearning.

To support the microlearning approach, it is necessary to provide actions and facilitate the development of adequate learning sequences. Regarding microlearning strategies, the academic literature offers a wide range of options: independent learning (Kizilcec, Pérez–Sanagustín & Maldonado, 2017), situational learning (Lave & Wenger, 1991), and community–based learning (Wenger, 1998). For collaborative content creation and sharing, collaborative learning and process–oriented learning are also worth mentioning (Davenport, Barry, Kelliher & Nemirovsky, 2004). The literature also recommends that microlearning processes should be designed to combine sessions (microcontent) of no more than 15 minutes each, which can be organized as loosely connected cycles of three sessions: introduction, exercise, and conclusion. Moreover, the microlearning material should be attention–grabbing, very concrete, and clear; there should also be supplementary materials that allow students to participate directly in their creation, collection, and modification. It is important to find a balance between a short format and additional information (Salomonsen, 2018; Souza, Torres, Carvalho, Evangelista & Amaral, 2015). Finally, it is particularly interesting to promote microlearning in HEIs, where materials from the learning events themselves are made available to the student community in a way that can serve as a basis for discussion, as support material for new events, or simply as a reference for consultation (Cole, 2017; Giurgiu, 2017; Kamilali & Sofianopoulou, 2015; Mohammed, Wakil & Nawroly, 2018; Sun, Cui, Beydoun, Chen, Dong & Xu, 2017; Sun, Cui, Yong, Chen & Shen, 2018). According to (Cates, Barron & Ruddiman, 2017), most microlearning efforts are directed specifically toward foreign language studying.

Although in the foreign study of the formation of microlearning a large number of scientific works but it is worth more attention to the problems of its development in the territory of Ukraine in the process of teaching foreign languages. Therefore, in our opinion, studying the influence of the above–mentioned educational technology on the level of formation of foreign language lexical competence among students of domestic HEIs is urgent and timely.

The research aims to identify, substantiate and experimentally verify the effectiveness of improving foreign language studying of students in the context of increasing the level of foreign language lexical competence based on the application of individualized educational technology of microlearning.

According to the aim set, the following tasks are formulated:

- to reveal the essence and content of the concept of "microlearning";
- to carry out an experiment aimed at the pedagogical design of individualized foreign language studying by students of the VSPU and DonNU in conditions of microlearning technology;
- to determine the level of foreign language lexical competence formation among students of domestic higher educational institutions;
- to determine the effectiveness of the suggested technology of improving foreign language studying by students of HEIs.

3 Materials and research methods

The foreign and domestic experts on the problem under study, periodical literature, educational programs, teaching packages, electronic educational tools, libraries of electronic aids, materials of scientific and practical conferences, interviews and questioning of students, teaching observations of the learning process of students, data of the experimental pedagogical research were the fundamental basis of the research.
In the process of studying and processing information sources, economic-statistical, abstract-logical, and economic–mathematical methods of research were used, as well as methods of factor and correlation analysis.

4 Results

Microlearning is a new stage in the development of mobile learning. If 5–10 years ago, the main emphasis in the integration of Web 2.0 services was on their accessibility through mobile devices (Wakil, Muhamad, Sardar & Jalal, 2017), nowadays the focus is on optimizing content not for technology, but according to the characteristics of clip thinking (ability to work with a lot of information; fast transition from one problem aspect to another; preference for non-textual (visual) information, high information processing speed and orientation in heterogeneous information flow; fast fatigability; reduced concentration of attention, operating with meanings of a fixed length; reduced ability for analytical activity).

Thus, in our view, the emergence and use of microlearning in the study of a foreign language is largely due to the emergence of a new type of thinking and features of the modern educational environment, requires the search for new approaches and learning tools to improve the effectiveness of the educational process. We are talking about splitting tasks into micro–parts (no more than 15 minutes), which are regularly published as posts on social networks and learning chats (Baumgartner 2013). The choice of these platforms as learning tools provides informal interactions, both between students and between students and teachers.

The psycho–pedagogical basis for microlearning as a technology of foreign language teaching consists of personality–centered and system–activity approaches. The implementation of the learning process in the familiar for the digital generation context of social services stimulates the involvement and active role of the student. Moreover, the initiative of such interaction comes precisely from the students, who invite the teacher to a group chat from the discipline. Thus, students become active participants in the learning process and content generators at the level with the teacher, who acts as a moderator, accepting the request for collaborative research activities, professional dialogue, and productive learning interactions (Khong & Kabilan, 2020).

In terms of the education form, microlearning as a technology can be implemented in blended and distance learning. However, here there is a departure from the usual modular form of presentation of learning material. On the one hand, students themselves can offer individual fragments of material according to the predetermined criteria. At the same time, the perception of the content offered by the teacher changes, namely, each content post can be saved to the selected by individual participants according to their inclinations and interests (Jomah, Masoud, Kishore & Aurelia 2016).

The goal of microlearning is to build sustainable skills in a familiar authentic environment for students. Actualized content, acting as learning content, allows to engage students in the learning process and provides a so–called "student's plan," where the user performs tasks not to achieve educational goals but to communicate. The teacher, in turn, follows the "teacher 's plan", which implements on social platforms the traditional curriculum of the discipline, transforming the tasks according to the audience's request (Panaqué & Soria–Valencia, 2021).

The principles of microlearning correlate harmoniously with the principles of lexical skills development through the use of the didactic potential of social networks and messengers. Thus, the unity of language and speech is achieved in the process of applying linguistic material in the primary context of exchanging comments and posts in the digital culture. Verification of mental components in solving problem situations is provided by diagnostic measurement of the level of background knowledge and formation of interdisciplinary skills, followed by compensation of gaps when integrating the material varies in complexity. Finally, the introduction of elements of the method of collaborative learning (peer learning) supports creativity, which includes originality, independence, and novelty of thought and statement.

In our study, given the above features of learning a foreign language, we used microlearning to explain the material, the introduction of certain special terms and concepts, as well as activation of students when performing paired and group tasks of an oral nature. Thus, the purpose of the study is to explore the possibilities of microlearning technology in the study of a foreign language in higher education and to assess the potential of its use as a teacher's tool. The objectives of the study are to determine the main features of this technology, the selection of necessary tools for the implementation of microlearning in the study of a foreign language, and further conduct a pedagogical experiment on the implementation of an individualized technology of microlearning in the educational process.

Speaking about the use of microlearning in higher education, the function of the teacher is defined in the selection of the necessary material, its processing, and presentation in a concise, concentrated form. The presentation of the material should be as accessible, capacious, and concise as possible. According to the concept of microlearning, the selection of material should be guided by what is needed "to date" to solve specific current problems, that is, a certain necessary and sufficient minimum (Salinas & Marín, 2015).

It seems that if the teacher gives the student information that is necessary and relevant now, directly related to its subsequent practical application, the probability that he will remember it will increase. Thus, microlearning makes it possible to work and teach in new realities, given the deficit of concentration (Redondo, Rodríguez & Escobar, 2021).

The key features of microlearning are: short duration of content units; focus on a specific learning outcome and practice–oriented; maximum mobility.

There are many tools (various applications and programs) with which it is possible to implement microlearning in HEIs, but each has its characteristics and deserves attention. In general, we can distinguish two main groups of such tools: some allow you to create video and audio content, while others help you create static visualizations.

As an example, for videos, applications such as "Powtoon" and "Canva" are well suited for easy-to-use, for infographics, posters (Piktochart" and "Infogram" etc.). Such programs do not require special hardware (a computer/laptop and an Internet connection are enough) and can be used both by a teacher directly in the classroom to explain the material (or to create additional materials for students to study independently) and by students, for example, when doing project work.

However, at the moment, there are not enough materials to analyze the impact of microlearning on foreign language studying in HEIs in Vinnytsia.

In this connection, we conducted an empirical study, which consists of verifying the effectiveness of the proposed technology to improve foreign language studying in conditions of microlearning, the approbation of the complex of tasks in foreign language classes to increase the level of foreign language lexical competence on the example of Vinnytsia State Pedagogical University named after Mikhailo Kotsyubinsky (VSPU) and Donetsk National University named after Vasyl Stus (DonNU).

360 respondents of I–V years of study with the level of foreign communicative competence from A_2 to B_2 according to all-European scale CEFR took part in the survey. The empirical research of the improvement effectiveness of foreign language studying by the students of VSPU and DonNU, based on the application of microlearning technology, was conducted in three stages:

1. Surveying HEIs students to determine the current state of their foreign language studying in e-learning: to find out the main difficulties of its organization on the part of both students and teachers, their attitude towards the use of microlearning in foreign language classes.
2. Pedagogical design of individualization of foreign language studying by HEIs students in the conditions of microlearning to increase their foreign language lexical competence.
3. Determination of the effectiveness of the proposed technology for improving foreign language studying in HEIs (checking the assimilation of new vocabulary) as well as the level of satisfaction with it.

Stage I. A total of 360 respondents of I–V years of study took part in the survey. Analyzing the results of the questionnaire, it can be noted that the majority of students consider learning a foreign language in e–learning conditions as a means which has significant potential. But at the same time, they note certain difficulties, which makes it necessary to develop and improve this approach.

Thus, 67.8% (244 people) believe that the difficulties in the educational process cause large portions of educational material presented in the electronic environment: 58.2% (209 people) noted difficulties in navigating in electronic learning courses and resources, 51.1% (184 people) noted insufficient consideration of individual characteristics and personal characteristics, 49.7% (179 people) noted lack of adaptation of educational material and test materials, 37.5% (135 people) noted lack of individualized interface settings, 36.4% (131 people) believed believe that in the implementation of e-learning there is a problem of the holistic organization of the educational process.

The following was found during the survey of I–II years students (162 people): 62.9% (101 people) note low student motivation as a source of e-learning problems; 60.2% (97 people) believe that e–learning causes difficulties in student self–organization; only 35.5% (57 people) believe that e–learning causes difficulties in communication with the discipline teacher; while 31.4% (50 people) note that difficulties may arise in the absence of teacher support in the educational process.

Questionnaires of students in the III–V courses (198 people) demonstrate that the situation is somewhat different: 45.7% (90 people) believe that in e–learning there are difficulties in the self–organization of students; 37.4% (74 people) note low motivation of students as a source of problems in organizing e–learning; at the same time 22.4% (44 people) note that difficulties may arise in the absence of teacher support in the educational process; only 17.4% (34 people) believe that there are difficulties in e–learning communication with the discipline teacher.

The analysis of the respondents' questionnaires allowed us to draw the following conclusions:

- a significant number of students note the lack of mechanisms for adapting learning material, difficulties in navigating in e-learning courses, insufficient consideration of individual characteristics (Figure 1);
- at the same time, part of the students notes low motivation and difficulties of self–organization when learning in the electronic environment, significantly higher than in senior courses (Figure 2);
- students also consider the participation of the teacher in the educational process when organizing it in the electronic environment as important, as they note as difficulties with communication problems with the teachers and the need for support.

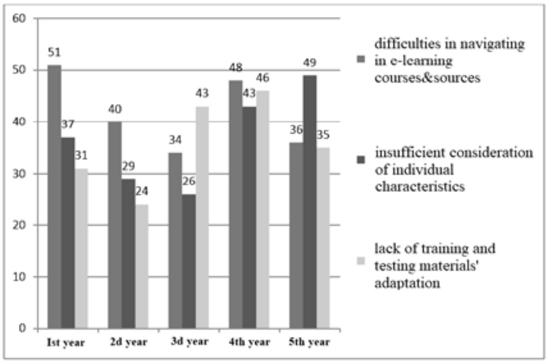

Figure 1 – Characteristics that cause difficulties in e–learning for students of VSPU and DonNU, persons
(Author's source)

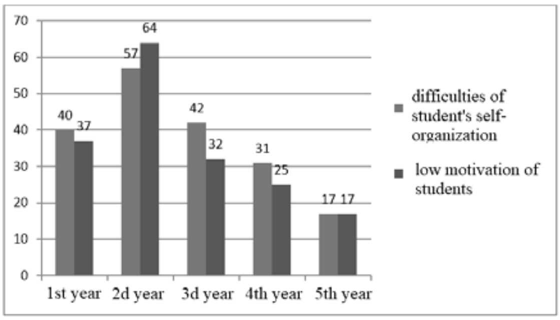

Figure 2 – Difficulties of e-learning: self-organization of students and low motivation for courses, persons
(Author's source)

As for the use of electronic educational technologies in the learning process and improving foreign language studying, it was determined that the respondents have a great interest (61.3%) and willingness to learn a foreign language is in conditions of microlearning, noting its possible effectiveness and productivity (58%).

When answering the question, "Do you think that learning a foreign language in a microlearning environment contributes to better learning of information?" 88.1% (317 students) agreed; 7.7% (27 students) could not answer this question; 4.2% (15 students) disagreed with this statement (Figure 3).

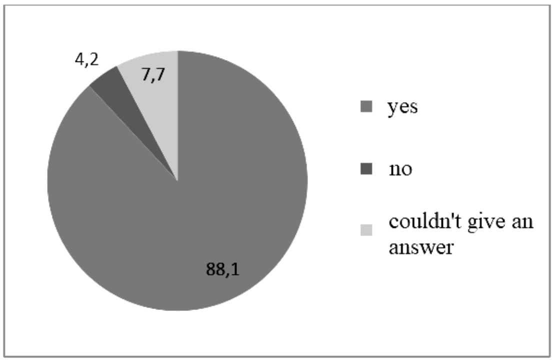

Figure 3 – Evaluation of the microlearning impact on foreign language acquisition by students of VSPU and DonNU, %
(Author's source)

When assessing the impact of microlearning on motivation according to the responses of students: 83,6% (301 respondents) noted the increase of motivation to study a foreign language, 14,5% (52 people) abstained from the answer, and only 1,9% (7 people) offered the technology seemed rather uninteresting, for the total absence of interest in the application of adaptation of educational content in learning a foreign language nobody spoke out (Figure 4).

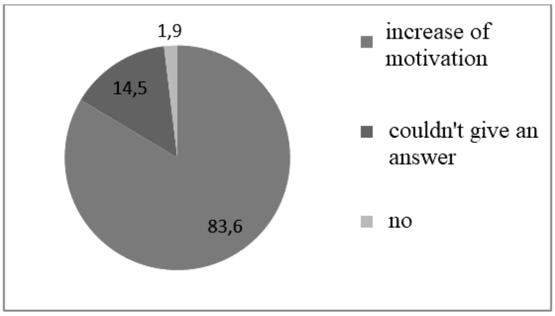

Figure 4 – Evaluation of the microlearning impact on motivation to learn a foreign language by students of VSPU and DonNU, %

When assessing the difficulties arising in the process of microlearning, 23.3% (84 people) noted a high rate of learning, 16.2% (58 people) noted high complexity of the learning material, 7.3% (26 people) noted a lack of sufficient interest in the discipline, 5.6% (20 people) noted technical problems, and 47.6% (172 people) showed no difficulties (Figure 5). It is important that no one noted that the difficulties in learning a foreign language are related to the lack of attention from the teacher, despite the increase in the proportion of independent work and the increasing advisory role of the teacher.

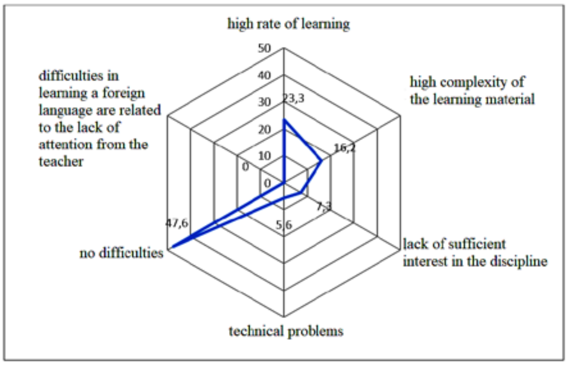

Figure 5 – Difficulties arising in the process of microlearning in the study of a foreign language by students of VSPU and DonNU
(Author's source)

At the same time, among teachers, there was partial organizational work on the systematic implementation of microlearning in the classroom. We found that only 25% of teachers use the technology of microlearning systematically, 3% don't use it at all.

Stage II. Let's proceed to the presentation of the results of the pedagogical experiment, aimed at the pedagogical design of individualization of foreign language studying by the students of VSPU and DonNU in conditions of microlearning to increase the level of their foreign language lexical competence. For experimental verification of the effectiveness of the results of pedagogical research, experimental work was carried out. The total number of 360 students consisted of 109 people: 1 control group (CG) – 50 respondents, studied according to the traditional program and 1 experimental group (EG) – 59 respondents (subgroup 1 – 30 respondents, subgroup 2 – 29 respondents) – with the involvement of an interactive microlearning tool (application "Pictochart"). As part of the pedagogical experiment, such microlearning tools as infographics and posters, independently created using Pictochart software, were used during a semester in the English language classes of VSPU and DonNU masters (discipline "Business foreign language").

The introduction of these tools in the educational process consisted of the preparation of the teacher and the further use of posters and infographics in each lesson studied. Since this course foresees active development of oral speech skills (including spontaneous monologic speech), infographics and posters were used to introduce the topic and, later on, as a stimulus for speech exercises (such as "brainstorming," "lexical map", "dialogue from the studied topic," "discussion" etc.) as well as for repeating the studied material.

Thus, microlearning technology can be effective at all stages of the formation of foreign language lexical competence in the tasks of the following formats:

- "meme–presentation" (introduction of language material);
- "interactive semantization" (consolidation of language material);
- "micro discussion" (development of lexical skills in oral speech);
- "interactive writing" (development of lexical skills in written speech).

All these tasks were performed in the framework of independent extracurricular work with the interaction of students with each other. Current control should be student-oriented (learner–oriented formative assessment). The feedback is provided by all participants of the educational process. The task process is illustrated below.

Our technology for microlearning vocabulary includes four additional tasks of the formats proposed above for each thematic block of the basic educational and methodological complex (EMC) (A. Doff, C. Thame, G. Puchta, J. Stranks, P. Lewis-Jones. EMPOWER. Advanced Student's Book. Cambridge University Press, 2016) in the discipline of Business Foreign Language (English, C1) for students in the fifth year of study in Linguistics.

Experimental work is carried out in a group chat messenger Telegram, which can be traditionally used for the organization of the educational process and exchange of materials. The experiment consists of 32 tasks (4 tasks for each of 8 thematic blocks, where 1 block takes 1 week, or 6 academic hours). The results of input and interim testing, as well as 16 tasks on the production of oral and written speech, checks as part of the current control (8 grades), are used for analysis.

The process of formation of foreign language lexical competence passes the above 4 stages.

1. "Mem–presentation". At the first stage of speech material input, the teacher distributes a list of vocabulary among the students according to the individual results of the entrance test and invites them to find or create memes with these expressions to present them to their classmates in a chat room.
2. "Interactive Semantization." To reinforce the language material in the second task on the topic, each student should comment on one of their classmates' memes with an example of the use of an expression from a dictionary or linguistic corpus.
3. "Micro–discussion." Each student should record an audio message with a statement on a problematic issue for 1–2 minutes using 1–2 "their" expressions and 1–2 expressions of comrades.
4. "Interactive Writing." Each student should write a written message with statements on the problematic issue for 1–2 minutes using 1–2 "their" expressions and 1–2 expressions of friends.

The format of the notification statements corresponds to the tasks of the basic EMC: for oral speech, it is a debate, a story from life, etc. For writing, it is an essay, an article, a report, etc. Separately, it is necessary to note the fact that more than 98% of the works are handed in by the stipulated deadline.

According to the results of the analysis of quantitative data of the experiment, we can conclude about the increase in the arithmetic mean (M, Mean or Average) of the current control results with a decrease in the standard deviation (SD), which illustrates the feasibility of microlearning technology implementation to form foreign language lexical competence (Table 1).

Table 1 – Results of the current control tasks

The arithmetic mean	1	2	3	4	5	6	7	8
M, %	73	82	81	84	89	91	96	95
SD	14,2	8,3	8,5	5,4	6,2	3,7	3,3	2,9

Author's calculations

In our opinion, it is also important to compare the progress in the experimental (Group 1) and control groups (Group 2) according to the results of the entry (Placement Test) and intermediate (Final Test) tests. Moreover, the control group did not have additional vocabulary individualization tasks. In Group 2, lexical skills were developed on the EMC basis, which was placed on the MOODLE platform. As a result, a higher value of the arithmetic means result (M) for the experimental group (#1) with a lower standard deviation (SD) indicates the effectiveness of the described method for individualization of the learning process (Table 2).

Table 2 – Results of entry and intermediate testing in the experimental and control groups

Groups	1	2	3	4
Group 1 experimental – microlearning, involving an interactive tool (individualization of learning)	62	12,3	96	2,7
Group 2 control, traditional program (does not support flexible active adaptation of educational content to students' characteristics)	61	14,4	78	8,7

Verification of the developed tasks was carried out in three stages. The first stage was the diagnostic cut-off stage. At the second stage, our experiential learning was organized. The third stage is the final stage, where the final and delayed cut–offs were carried out.

Thus, the level of students' acquisition of foreign language lexical competence was determined based on the success coefficient (C_s). The success rate was determined by the formula: $C_s = a \div n$, where a – the number of correct answers, and n – the total number of expected answers.

The results obtained at the diagnostic, final, and delayed cut–off stages were summarized and summarized in Tables 3–8.

Table 3 – C_s of the operations performed while reading special texts (diagnostic segment)

Subgroup number	Number of students	C_s definition on the topic of a previously read text	Cs of selecting lexical units within the text	Cs of recognizing the meanings of lexical units
1	30	0,42	0,38	0,38
2	29	0,44	0,40	0,42

Author's calculations

Table 4 – C_s of performing oral and written tasks (diagnostic cross–section)

Subgroup number	Number of students	C_s of answers richness using English–language vocabulary	C_s of the logical structure of the answers	C_s of the adequate choice of lexical units
1	30	0,30	0,38	0,28
2	29	0,32	0,42	0,32

Author's calculations

Table 5 – C_s of operations performed when reading special texts (final cut)

Subgroup number	Number of students	C_s definition on the topic of a previously read text	C_s of selecting lexical units within the text	C_s of recognizing the meanings of lexical units
1	30	0,90	0,92	0,94
2	29	0,88	0,90	0,92

Author's calculations

Table 6 – C_s of performing oral and written tasks (final cut)

Subgroup number	Number of students	C_s of answers' richness using English–language vocabulary	C_s of the logical structure of the answers	C_s of the adequate choice of lexical units
1	30	0,88	0,84	0,82
2	29	0,88	0,82	0,82

Author's calculations

Table 7 – C_s of operations performed when reading special texts (delayed cross–section)

Subgroup number	Number of students	C_s definition on the topic of a previously read text	C_s of selecting lexical units within the text	C_s of recognizing the meanings of lexical units
1	30	0,82	0,88	0,88
2	29	0,80	0,84	0,84

Author's calculations

Table 8 – C_s of performing oral and written tasks (delayed cross–section)

Subgroup number	Number of students	C_s of answers' richness using English–language vocabulary	C_s of the logical structure of the answers	C_s of the adequate choice of lexical units
1	30	0,84	0,80	0,80
2	29	0,82	0,78	0,80

Author's calculations

The results of the delayed cut–off show that the achievement coefficients in the experimental groups remain almost stable, despite small deviations, which are the norm in terms of memory work features. The achievement coefficients in the two groups of experimental training remained above the score of 0.8, indicating the formation of foreign language lexical competence in the students. The quality of the lexical skill functioning of operating with English–language vocabulary is at a sufficiently high level.

To assess foreign language lexical competence at any stage of microlearning, it is possible to conclude the level of its formation among students: liminal (reproduction); basic (interdisciplinary integration); advanced (professional integration).

Let us note that the formation of foreign language lexical competence often takes place in several disciplines. Therefore, at the initial stage of curriculum development, it is necessary to determine the list of disciplines forming the foreign language lexical competence and to place a coefficient for each discipline reflecting the contribution of the given discipline to the competence formation. We found that foreign language lexical competence (FLLC) is formed in 5 (L) disciplines distributed in the curriculum, then its assessment was determined by the formula (Davenport, Barry, Kelliher, Nemirovsky, 2004):

$$COMP^{EMC} = \sum_{k=1}^{L} q_k^{EMC} * COMP_k, \quad (1)$$

where q_k^{EMC} – is the coefficient of the k–th discipline's contribution to the foreign language lexical competence formation.

Thus, the dynamics of the foreign language lexical competence formation level in the control and experimental group at the beginning and at the end of the experiment is shown in Figure 6.

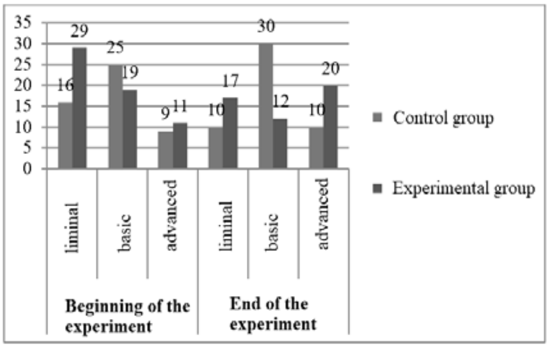

Figure 6 – Dynamics of the formation of foreign language lexical competence among the students of VSPU and DonNU, persons

Author's design

As can be seen from Figure 6, there is a positive increase both in the EG and in the CG. In the experimental group, we note a more intensive increase in the "productive" level of competence and a more intensive decrease in the "non–productive" level. At the same time, we refer to the basic and advanced levels to the productive level and the threshold level – to the non–productive one. This result indicates the effectiveness of the foreign language studying process of pedagogical design of individualized learning in the context of microlearning.

Consequently, the positive results of the conducted cross–sections (final and delayed) in the groups of experimental learning and the calculations made in the experimental and control groups testify to the validity of the previously put forward working hypothesis of the research. The students' acquisition of foreign language lexical competence by HEIs is more effective in the case of microlearning technology implementation, which allows them to operate successfully with English–speaking vocabulary based on a specially developed set of tasks.

Stage III. It is connected with determining the effectiveness of the improvement of foreign language studying of HEIs students based on the application of educational technology – microlearning. The analysis of the results obtained in the course of the study was carried out through mathematical and statistical data processing, as a result of which, was found positive dynamics in all the indicators of effectiveness assessment.
We assessed the authenticity of the results of experimental work with the help of methods of statistical analysis of data. As an example, let's check the authenticity of the results of the entrance and final control of the students of the experimental and control groups.

Statistical processing of the results of the pedagogical experiment was carried out by us in the R programming language environment. To verify the application of parametric one–factor analysis of variance, we tested the data for normality and homogeneity.

We checked whether the obtained samples (results of the experimental and control groups) belonged to the normal distribution based on visual analysis and formal tests. We made a visual assessment by examining the empirical distribution of the experimental group before the experiment.

To formally verify the subordination of data to the normal law of distribution, we conducted statistical tests: Anderson–Darling, Cramer–fon Mises, Kolmogorov–Smirnov, and Shapiro–Francia. We used these tests to test the hypothesis H_0: "The data is subject to a normal distribution" vs. the alternative H_1: "H_0 is incorrect". The results of the data normality tests in the experimental group at the beginning of the experiment are presented in Table 9.

Table 9 – Test of data normality in the EG before the beginning of the experiment

Test	Test statistics	p–value	Significance level a	Conclusion
Anderson–Darling's test	A = 0.66085	0.08259	0.05	we accept the hypothesis H0 that the distribution is normal
Kramer–von Mises test	W = 0.09589	0.1266	0.05	we accept the hypothesis H0 that the distribution is normal
Kolmogorov–mirnov's test	D = 0.06812	0.162	0.05	we accept the hypothesis H_0 that the distribution is normal
Shapiro–Francia's test	W = 0.98075	0.0656	0.05	we accept the hypothesis H0 that the distribution is normal

Author's calculations

Analyzing the results of the tests, we can note that the obtained p–value for each test is greater than the fixed level of significance, therefore at the significance level of 0.05, there is no reason to reject the hypothesis H_0 about the normality of the data distribution in the experimental group before the experiment.

We did the same work for the control group data at the beginning of the experiment (Table 10).

Table 10 – Test of data normality in the CG before the beginning of the experiment

Test	Test statistics	p–value	Significance level a	Conclusion
Anderson–Darling's test	A = 0.69777	0.06686	0.05	we accept the hypothesis H0 that the distribution is normal
Kramer–von Mises test	W = 0.10571	0.09267	0.05	we accept the hypothesis H0 that the distribution is normal
Kolmogorov–Smirnov test	D = 0.07577 3	0.07499	0.05	we accept the hypothesis H0 that the distribution is normal
Shapiro–Francia test	W = 0.9823	0.09236	0.05	we accept the hypothesis H0 that the distribution is normal

Author's calculations

The visual analysis and the results of formal tests of the control group data by the beginning of the experiment also confirm the correspondence of the data in the control group (by the beginning of the experiment) to the normal distribution.

We then tested the condition of applying classical analysis of variance on the homogeneity of the sample data. To test homogeneity, we used statistical tests, the results of which are presented in Table 11. These tests verify the hypothesis H_0: $\sigma_1^2=\sigma_2^2$, i.e., samples are homogeneous, under the alternative hypothesis H_1: $\sigma_1^2 \neq \sigma_2^2$.

Table 11 – Verification of the data homogeneity at the beginning of the experiment

Test	Test statistics	p–value	Significance level a	Conclusion
Bartlett's test	0.1224	0.7264	0.05	we accept the hypothesis H0
Leven's test	0.0874	0.7677	0.05	we accept the hypothesis H0
Fligner–Killin test	0.1635	0.686	0.05	we accept the hypothesis H0
Fisher's test	0.93909	0.7266	0.05	we accept the hypothesis H0

Author's calculations

In all tests p–value significantly exceeds the fixed level of significance, so we can conclude that the data of CG and EG before the experiment are distributed homogeneously.
Since by the results of classical analysis of variance we obtained the fulfillment of normality and homogeneity conditions, therefore, we can use parametric analysis of variance criteria, such as Student's t–criterion (The probable), to compare independent samples of experimental and control groups before the experiment to assess the effectiveness of pedagogical research. The null hypothesis H_0, which was tested using Student's t–test, involved the fact that there were no statistically significant differences in the mean values of the results of the students of the experimental and control groups. According to the alternative H_1, "there are statistically significant differences in the mean values of the results of the students of the control and the experimental group". The results of the Student's t–test are shown in Table 12.

Table 12 – Results of the Student's t-test application

Student's t-test	The beginning of the experiment	The end of the experiment
Student's t–criterion statistics	t = 0.82634	t = –5.7036
p–value	0.5214	3.315e–08
Significance level a	0.05	
Conclusion	H_0 accepted	H_0 accepted
Interpretation	There are no statistically significant differences between groups (p–value > a)	The compared groups are both statistically and significantly different (p–value < a)

Author's calculations

The analysis showed the absence of statistically significant differences before the experiment between CG and EG students. Since the t–test statistic is less than the critical value and is in the zone of insignificance, we accept the null hypothesis and reject the alternative hypothesis of the existence of the statistically significant differences between CG and EG before the experiment.

Checking hypotheses H_0 and H_1 for EG and CG at the end of the pedagogical experiment, we found that the t–test statistic exceeds the critical value and is in the zone of significance, which allows us to reject the null hypothesis and accept the alternative hypothesis of the existence of statistically significant differences between the CG and EG at the end of the experiment.

Thus, testing the results of the study showed the presence of reliable differences in the educational results of CG and EG, which allows us to state the effectiveness of the introduction of microlearning technology. The conducted pedagogical experiment confirmed that the pedagogical design of individualized learning allows the teacher to organize individualization of foreign language studying of HEIs students in the conditions of microlearning to increase the level of mastering foreign language lexical competence and to build an individual educational trajectory for each competitor.

In general, following the results of the technology implementation in the educational process, the number of the students in the experimental group (N = 59) with the threshold level of formation of foreign language lexical competence has decreased from 49.2% (29 people) to 28.8% (17 people); the number of the students in the experimental group with the advanced level of formation of foreign language lexical competence has increased from 18.6% (11 people) to 33.9% (20 people). Thus, the microlearning technology proposed in the process of experimental work contributes to the increase in the level of foreign language lexical competence of HEIs students, i.e., the quality of subject knowledge improves.

According to the results of the processing of the level 4 survey, the satisfaction with the psychological side of microlearning has a high rate of 82%, and the content side is 73%, which is an average indicator. The lowest satisfaction of students is the organizational side of microlearning – 61% (Figure 7), it was explained by students themselves in answers to open–ended questions of the questionnaire, where the conditions (Figure 1–2, 5), which hurt learning.

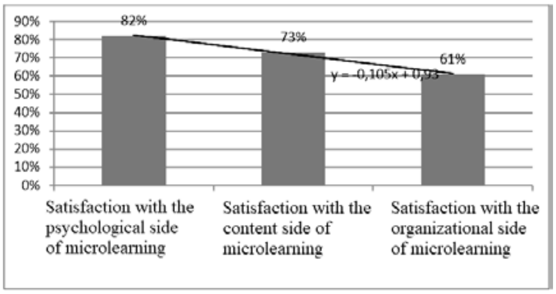

Figure 7 – The results of student satisfaction with microlearning

In general, the satisfaction with microlearning is demonstrated by the linear equation =–0.105x+0.93 and the group index, which is 68.75% and represents the average level. This index, on the one hand, is a positive result and indicates the effectiveness of microlearning technology to improve foreign language studying, and on the other hand, points to the need for management actions aimed at improving the level of organization and conduct of the educational process.

5 Discussion

Foreign scientists note that the introduction of microlearning firstly increases the level of interaction with the educational process, as it focuses solely on conveying relevant information through short visual and interactive elements. As a consequence, the likelihood of falling behind is reduced, and the student is less likely to drop out or disconnect during learning. Secondly, it improves memorization because microlearning activities are brief, concise, and coordinated with short–term memory, which is estimated to be able to manage no more than 4 items at a time. Microlearning technology works well with learning methods following a forgetting curve based on three basic principles:

1. interval repetition with adequate frequency to facilitate the cognitive process;
2. variety of formats and contexts for the same concept or element;
3. alternating between different concepts or elements to be learned to facilitate the transfer and acquisition of new knowledge.

Finally, it improves the process environment as content is adapted to students' schedules, educational backgrounds, and prior knowledge. The learning environment becomes more flexible and efficient (Alqurashi, 2017; Cole, 2017; Freeman, 2016; Renard, 2017).

However, this learning paradigm cannot be seen as a solution to all foreign language studying problems. Despite its obvious advantages, this paradigm also has an important disadvantage. Microlearning does not work as well when teaching complex abstract concepts that require a combination of interdisciplinary knowledge. In these cases, students need to spend a significant amount of time to ensure that they understand new concepts, make sure they are properly related to previously acquired ones, and apply them in practice to reinforce cognitive processes and guarantee their permanence. In other words, microlearning is an option for simple mechanistic learning that can be combined with more complex learning or directed toward basic skills.

We found that microlearning is an educational technology, which involves the acquisition of knowledge in the form of small independent blocks. Each of them presents the currently necessary information in the most structured, concise, and accessible form. Also, during our research, we found that university lectures are in a favorable position to adopt the new approach for the following reasons: increasing student motivation and engagement; increasing the level of content.

Quantitative and qualitative data of the conducted experimental work on approbation of the pedagogical design of individualized learning in the conditions of microlearning in a foreign language confirm its effectiveness, which indicates the achievement of the research goal, fulfillment of the set tasks, and confirmation of the research hypothesis. Undoubtedly, for the active implementation of microlearning technology in the educational process, it is necessary to conduct a large number of pedagogical experiments and further analysis of the obtained data and learning outcomes. However, it cannot be denied that in the modern educational environment, we are faced with high information density, high speed of information transfer and receipt, and individualization of information receipt and processing, in addition, modern students are carriers of a new type of thinking. Therefore, it is necessary to look for new ways and ways of students' adapting to these features of their successful socialization and professional activity. Therefore, a separate issue for further study may be to determine the place of microlearning as a technology in the network form of education.

6 Conclusions

Thus, the scientific novelty of the research is as follows: microlearning tools (infographics and posters) have been introduced into the educational process to increase the level of formation of foreign language lexical competence among the students of VSPU and DonNU.

Our research has shown that the theoretical significance of this study is that, in fact, it highlights the most important aspects of forming foreign language lexical competence. It also offers an individual e–learning trajectory – microlearning in foreign language studying as a technology for solving the highlighted difficulties. Practical use of the research consists in the fact that the theoretical provisions, results, and conclusions contained in it create real prerequisites for improving foreign language studying by students of domestic institutions of higher education. The hypothesis of the effectiveness of the pedagogical design of individualized subject microlearning in foreign language studying of HEIs students in the context of increasing the level of foreign language lexical competence is experimentally confirmed. The obtained results and scientific methodological experience can be replicated in the system of higher education. The main directions for further research should be considered, on the one hand, the development of entrance testing taking into account the foreign language; on the other hand, the study and optimization of the proposed technology for other learning contexts, namely, for a cycle of disciplines in the higher education system (for example, language for special purposes), for additional education (for example, for individual lessons), etc.

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Primary Paper Section: A

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PREVENTIVE MEASURES OF ADOLESCENTS' INVOLVEMENT IN COMMERCIAL SEX: THE EXPERIENCE OF GENERAL HIGH SCHOOL EDUCATION INSTITUTIONS

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Abstract: The present academic paper contains practical recommendations for the prevention of involving adolescents in commercial sex, which can be used by specialists of general secondary educational institutions of Ukraine. The created prevention program is focused on solving the problem of both girls and boys by looking for alternative methods of personal empowerment and the opportunity to improve their own financial condition. The issues of transferring responsibility for the prevention of commercial sex not only to secondary institutions, but also to other organizations and families remain controversial.

Keywords: deviant behaviour, commercial sex, prostitution, general secondary educational institutions, pedagogy.

1 Introduction

The complicated social-economic situation in numerous countries of the world, including Ukraine, the deepening of the crisis in the spiritual, social and economic spheres of life have entailed profound changes in the formation of the worldview and behaviour of adolescents. The problem of deepening the crisis of all life spheres lies in the fact that it is systemic; it significantly affects the psyche and contributes to the formation of antisocial behaviour among the younger generation. The increase in crime, the development of drug addiction and alcoholism, prostitution, the loss of high ideals, a non-optimistic perception of life, and alienation from the society are especially destructive. Prostitution among adolescents, according to the UN (UPR Working Group of the Human Rights Council, 2017) currently is becoming an increasingly pronounced problem in Ukraine, leading to negative consequences as follows: degradation of personality, unwillingness to master other activities, unwanted pregnancy, negative impact on the future of a person, damaged reputation, increased number of abortions, loss of ability to have a standard marriage and motherhood / paternity, the spread of alcoholism and drug addiction due to high emotional stress, can have a negative impact on health, namely the emergence of sexually transmitted diseases, HIV / AIDS, as well as mental disorders (Koroma, 2020).

In the course of the statistical study, conducted in world practice, 303 prostitutes were interviewed in order to obtain information about the relevance of the topic under investigation (Plumridge&Abel, 2001). According to the survey results, 31% of women engaged in prostitution have started sex work prior to the age of 18. Due to the fact that it is forbidden to hire children under the age of 18 in massage parlors, about a third of employees have started sex work on the street. According to the ECPAT (NZ) survey, which involved 194 prostitute children, 10% were 12 years old or younger, 15% were thirteen years old, 20% were fourteen years old, and 30% were fifteen years old (Saphira, 2001).

According to the data of the Ukrainian Institute for Social Research after O. Yaremenko, among women engaged in the provision of sexual services for commercial purposes, also 31% of respondents began to be involved in commercial sex prior to the age of 18, including 11% were children aged 12 to 15 years old and 20% - aged 16 up to 17 years old (Balakireva et al., 2012). At the same time, according to the data of biobehavioral studies of the same Ukrainian Institute for Social Research after O. Yaremenko and UNICEF (2013-2014), boys are more often engaged in commercial sex than girls. From among 123,5 thousand at-risk children surveyed by the research institute, 13 thousand were children who provided sex to men, and 5 thousand were girls who also provided sex to men (Balakireva et al., 2018).

The specified statistical information confirms the urgency of the problem of adolescent commercial sex in Ukraine and requires the search for solutions that would reduce the current level of prostitution in Ukraine among both adolescent girls and adolescent boys.

The purpose of the research lies in developing a program in order to prevent the involvement of adolescents in commercial sex, which could be implemented in the pedagogical practice of secondary educational institutions in Ukraine.

2 Literature Review

The problem of preventing the involvement of adolescents in commercial sex in schools remains currently insufficiently studied. The world-class scientists: Cheung et al. (2011), Gavaghan, B. (2011), Hurst, T. (2019), Wills & Levy (2002), Bittle, (2002) and domestic scholars, in particular: Balakireva et al., (2012, 2018), Zvereva (2004), Kushnirchuk (2018), Protopopov & Savelieva (2019), Radelytska (2019), Shidelko (2011) determine the problems of preserving the sexual and reproductive health of adolescents as the priority directions of the research, however, the technological aspect of the prevention of risky sexual behaviour, including commercial sex, is not fully reflected in scientific works.

Herewith, in world practice, there are established explanations for the emergence of prostitution at an early age and approaches to their prevention (Kushnirchuk, 2013). In general, there are biological-anthropological, psychological, social-pathological, interactionist, functionalist, conflictological approaches, each of which takes place in the development of pedagogical measures in order to prevent the involvement of adolescents in commercial sex (Yakovleva, 2005).

The biological-anthropological approach, represented by Ch. Lombroso and G. Ferro, assumes that the maximum protection against the negative consequences of prostitution is carried out through state regulation of this social phenomenon. I. Blokh, a supporter of the same approach, believes that the preventive measures for solving the problem are the creation of conditions for sexual life in marriage, which would ideally accomplish the sexuality of men and women. That is, the author believes that the issue should be addressed by changing not adolescents but the behaviour of adults.

The psychological approach, which is represented by well-known psychologists and sexologists A. Moll, Z. Freud, K. Horney, G. Sullivan, and A. Adler, suggests that measures to prevent prostitution are aimed primarily at the individual development of the child. Prevention of prostitution, as well as any destructive and antisocial behaviour, is achieved through adequate education and full socialization of the individual, through the formation of a mentally healthy personality.

The functionalist approach, represented by E. Durkheim, N. Luhmann, K. Davis, involves the implementation of preventive measures through the fulfilment of social control over prostitution. This control should be aimed at the negative consequences of commercial sexual relations - sexually transmitted infections, HIV / AIDS, criminal behaviour, drugs, alcoholism, etc.

The social-pathological approach, represented by A. Kettle, E. Durkheim, R. Merton, A. Cohen, K. Shaw, G. McKay, suggests that combating early prostitution in this approach is possible through positive changes in living conditions and social functioning of such groups.

The interactionist approach, which is supported by J. Gasfeld, D. Black, J. Kitsus, D. Steffensm, F. Tannenbaum, E. Lemert,

G. Becker, involves the activities of social control institutions towards implementing preventive measures. The interactionist approach to the social control of prostitution makes it possible to clarify in many respects the problem of the discrepancy between public and "official" opinions about prostitution, to reveal the reasons for the high latency of this social phenomenon.

The conflictological approach initiated by K. Marx, F. Engels, L. Kozer, S. Spitzer, R. Quinny, suggests that in order to establish a normative social order in which there will be no conflicts and the resulting deviant behaviour, including prostitution, it is necessary to change the social-economic organization of the society as a whole.

In Ukraine, the issue of child prostitution has been extensively studied, however, A. Makarenko, who was at the origins of pedagogy, was the first to create and test the discipline techniques, conversations with pupils, self-government and punishment aimed at solving the issue outlined. It is also expedient to highlight the modern work of Protopopov A.O. and Savelieva N.M. (2008), who have developed the sequence and continuity of actions of the teacher in order to avert and prevent prostitution of adolescents.

3 Materials and research methods

The general scientific research methods have been used in the academic paper, namely: generalization of theoretical data, analysis, comparison, synthesis in order to determine the factors contributing to the involvement of adolescents in commercial sex; content analysis of legal documents, systematization and classification of scientific and theoretical material for the definition and characterization of domestic and foreign approaches to the organization and implementation of social prevention of involvement of adolescents in commercial sex; empirical methods - surveys of adolescents in order to determine the presence and features of risky behavioural practices; questionnaires for class teachers of general secondary educational institutions and adolescents' parents; methods of mathematical statistics for the purpose of quantitative data processing and determination of statistical significance of the results obtained during the experiment.

An important aspect of the research lies in determining the level of readiness of adolescents to resist involving in commercial sex. The investigation of the problem state has required the generalization of approaches to those features of adolescence which make it possible to determine it as sensitive for the implementation of the tasks of preventing involvement in commercial sex.

The collection of information for the empirical study lasted from January to May of 2018 - 2019 academic year. This process was focused on: defining the criteria, indicators of readiness of adolescents to combat involvement in commercial sex; identifying the levels of readiness of adolescents to counteract the involvement of adolescents in the conditions of general secondary educational institutions.

As part of the collection of information, a survey was conducted among pupils in grades 8-9 in order to determine the level of awareness of adolescents about the risks of being involved in commercial sex. By the way, we have used the developed questionnaire in order to identify personality traits and the degree of social-psychological adaptation, often, to the new environment, conditions and rules of behaviour, in particular, students' knowledge of sexual culture. The questionnaire contains both closed and open questions.

The survey was conducted on the basis of twelve general secondary educational institutions through a questionnaire. With the permission of the administration of educational institutions, the author's team distributed questionnaires among school pupils, which answered the questions. The obligatory item of the questionnaire was the consent of the minor to the survey and data processing on condition of anonymity. The study covered 644 respondents (students in grades 8-9). According to the results of the research conducted and joint analysis of the experiment procedure, the administration of the educational institution together with the teachers accompanying the information collection process confirmed the anonymity of the collection of information and, accordingly, the fact of the inviolable right of the child to expression and freedom of thought and speech, to free expression of their views and beliefs, which is guaranteed by Article 34 of the Constitution of Ukraine

4 Results

The analysis of the content of the respondents' answers has made it possible to testify that 56% of the respondents believe that commercial sex is prostitution, sex for money, a way to obtain material benefits, reward for material values.

At the same time, only 34,01% of students admit such relationships for the sake of sexual pleasure. The overwhelming majority of young people (49,7%) believe that such relationships arise in order to improve their material condition; 37,6% adolescents believe that adolescents are involved in prostitution out of desperation; 46,6% of young people believe that teenagers are involved in commercial sex in order to assert themselves in the eyes of other children; another 40,4% of respondents believe that the problem is spread due to adolescent desire to experience adventure. Only 15,8% believe that adolescents' commercial sex occurs under duress. 16,15% of young people do not know why teenagers are involved in commercial sex, however, 11,96% of respondents aged 13-14 years do not know or even do not understand what "commercial sex" means. Thus, there are many reasons to start commercial sexual activity among adolescents; however, the vast majority of respondents consider prostitution as a method of improving their financial situation. At the same time, 32,76% of respondents note that commercial sex is the same kind of work for which you need to pay decently, which indicates a fairly high percentage of loyalty to this social phenomenon.

The analysis of direct answers to questions with the answer "Yes" and "No" has made it possible to obtain the following results of the study, which are reflected in Table 1.

Table 1 – The results of a survey of adolescents concerning attitudes toward commercial sex

Questions	**Answers**	
	Yes	**No**
Is prostitution a problem of the day?	40,22	59,78
Is your attitude towards prostitution negative?	15,53	9,01
Do you know all the consequences of involving adolescents in commercial sex?	N/A	77,33%
Do you have a clear understanding of the reasons for the spread of commercial sex among adolescents?	N/A	77,80
Do you know all or any of the ways of involving in commercial sex?	67,4	63,82
Are you ready to talk to your parents about sex?	34,32	65,68
Are preventive measures for the spread of commercial sex among adolescents carried out in secondary educational institutions?	N/A	84,78
Do you consider it necessary to increase the cycle of topics devoted to the prevention of commercial sex among adolescents?	81,37	N/A

According to the results of the questionnaires, the phenomenon of involving adolescents in commercial sex can be summarized as follows: the majority of young people are loyal towards prostitution among young people, which is explained by ignorance of the consequences of commercial sex, insufficient home education on the topic of sexual relations, the lack of preventive measures in educational institutions that would make it possible to educate the inscrutable or unknown sides and consequences of commercial sex among adolescents. In addition, adolescents are not aware of the responsibility for such actions. 59% of respondents are clueless about any responsibility for the provision and receiving services connected with commercial sex by adolescents.

The results of the study on stimulating such activities are also interesting. Adolescents were asked to rate situations related to young people’s behaviour using a scale of 1 to 5, where 1 is normal behaviour and 5 is very bad behavior (Table 2).

Table 2 - The results of a survey of adolescents about attitudes toward commercial sex

Questions	Answers				
	1	2	3	4	5
Opportunity to have sexual contact with adults for gifts	1,24	9,94	50	17,7	21,12
Opportunity to have sexual contact with adults for financial support	0	14,75	38,51	13,35	33,39
Opportunity to have sexual contact with adults in exchange for things necessary for life	0	10,56	46,74	33,23	9,47
Posting nude photos online for money	0	0	17,39	55,59	27,02

Thus, summarizing the results of the study, certain features of the perception of prostitution by adolescents can be obtained. In particular, many young people accept the opportunity to have sex with adults in exchange for the usual gifts of clothes, shoes, mobile phones, etc., that is, means of distinguishing among other children. Along with this, young people are less loyal towards sexual contact with adults on the basis of ongoing financial support or in order to address their urgent needs to purchase livelihoods. Herewith, digital literacy among young people is at an ever higher level than sexual literacy, forasmuch as the vast majority of adolescents understand that posting nude photos on the Internet for money is a negative and even unacceptable action. Adolescents perceive such actions as more categorical to compare with the sexual involvement.

Thus, according to the results of the adolescents’ survey, shortcomings have been identified in the organization of work with adolescents in the field of prevention of involvement of adolescents in commercial sex as follows:

- it has been confirmed that preventive work on the involvement of adolescents in commercial sex with the participation of teachers, social educators and school psychologists is unsystematic and ineffective.
- it is necessary to change the use of forms of work in accordance with the current demands of adolescents. It is necessary to apply such forms and ways of communication with the child, which provide an opportunity to avoid, neutralize the barrier of differences of opinion, forasmuch as the presence of a barrier isolates the teenager from the influence of teachers, class staff, and parents. Students can ignore educational activities that are not interesting to them, contain a negative assessment of their activities, behaviour. They may not accept at all what they are being asked to do or frankly avoid communicating with the form teachers.
- it is necessary to change the rather liberal attitude of adolescents towards the issue of commercial sex due to the fact that they do not feel the importance of this problem; they believe that this issue does not concern them in this context; it is necessary to form a value attitude to their health and safe lifestyle.

In order to solve the problems outlined, it is necessary to develop a plan of preventive measures and initiate its implementation in secondary schools in Ukraine. The sexual education of schoolchildren is very important in this context, which in many European countries begins with primary school, leading, as a result, to an increase in the age of first sexual involvement among young people. In particular, according to statistics, the average age at initiation of sexual relations is from 16 to 17 years, while children, who have sex education lessons at the age of 6 to 10 years, mainly enter into the first sexual relations after the age of 17 years (Table 3).

Table 3 – Statistics on sex education of schoolchildren in European schools and its impact on sexual behavior

	Austria	Belgium	The Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Italy	Norway	Spain	Sweden
Age of beginning of sexual education	10	6	7	12	7	6	9	6	10	11	14	12	14	6
The first sexual relations of boys and girls	16.3	17.2	17.5	16.5	16.5	17.1	16.2	17.8	17.3	15.7	17.6	16.5	17.7	16.4
% of girls who had sex prior to the age of 15 years old	19.1	23.7	17.2	37	33.1	18.3	33.5	9.6	16.4	28.2	20.5	13	14.8	30.9
% of boys who had sex prior to the age of 15 years old	22.1	26.3	19.4	33	23	26.1	22.5	33.6	25.5	22.3	27.2	11	18	25.3

Source: IPPF European Network, 2006

In Ukraine, sex education takes place in a formal form in most schools as part of a course in human anatomy and the topic of the reproductive system (Melnychuk, 2021). In addition, currently there are organizations (Association of Sexologists and Sex Therapists of Ukraine, religious organizations, etc.) inhibiting the development of directions of sex education, including homosexual relations. However, the investigation of Balakireva as of 2018 has revealed that it is boys who are more likely to have homosexual relationships with adult men for commercial purposes. That is, it can be assumed that the issue of the lack of the correct pedagogical basis becomes no less important reason for such a situation than upbringing within the family.

Currently, most of the programs developed to prevent the involvement of adolescents in commercial sex in Ukraine are aimed at working with girls, but do not include theoretical and methodological tools for working with boys. This forms the major novelty of the present research and allows proposing such preventive measures that will be relevant to modern problems of the society.

These measures include primary, secondary and tertiary prevention, where primary prevention is the most important for the present research, which makes it possible to timely influence adolescents before such a problem arises.

The implementation of the education stage begins with the 8th grade (average age 13 years old). The overall goal lies in limiting the spread of prostitution as a form of deviant behaviour. A special feature is that the implementation of the components of this stage begins simultaneously. For this reason it is so important at the organizational stage to identify and plan interaction with the specialists involved. The main components of the tasks and measures of the implementation stage are as follows (Figure 1).

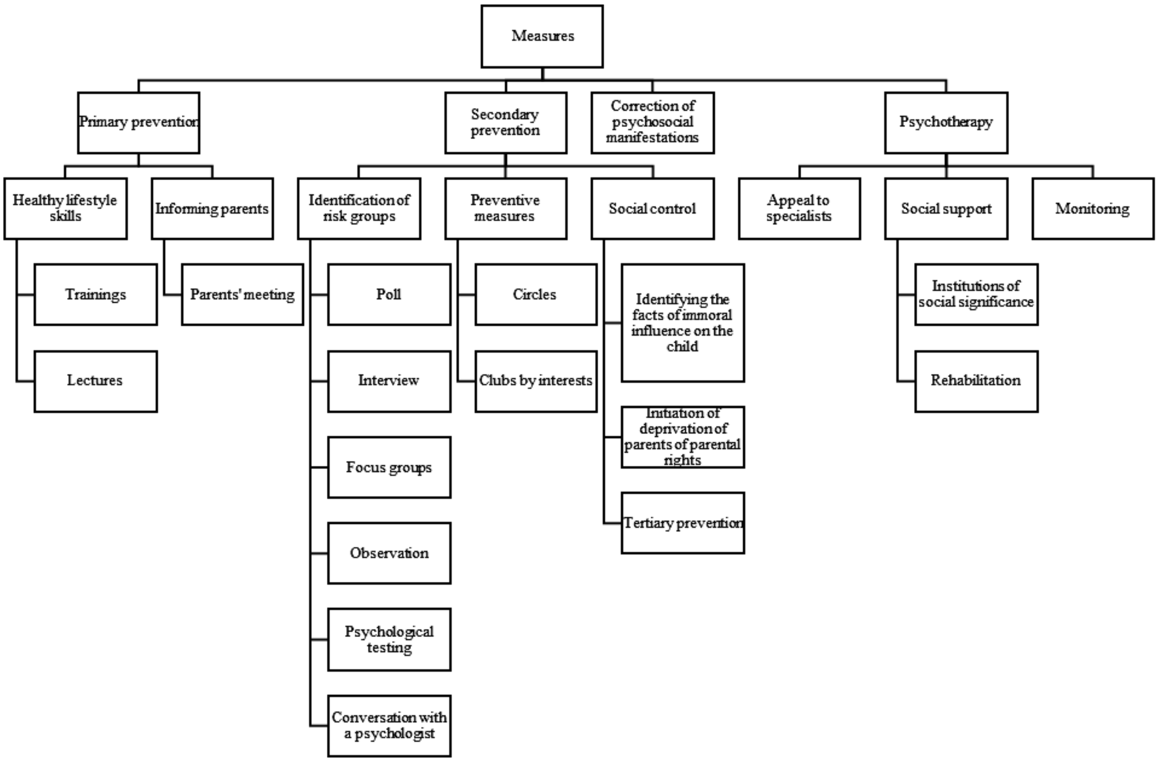

Figure 1 – Components of prevention of involvement in commercial sex in the framework of activities of general secondary educational institutions

Source: developed by the authors

1) Primary prevention. The target group for this level of prevention is the entire community of adolescent girls and boys of a particular general secondary educational institution. Let's consider in more detail the objectives of this level of prevention.

Goal 1. To develop skills of a healthy way of life. The implementation of this objective is characterized by a variety of topics and may include a whole arsenal of approaches to its conducting. They are as follows:

Lectures. A course of lectures is being developed; the duration of each lecture does not exceed 45 minutes. Large audiences should not be gathered, forasmuch as this will exclude trust between the lecturer and the students. It is recommended to conduct lectures with adolescent girls and boys in each class separately. Considering the fact that the main reason for commercial sex among adolescents is insufficient material support, it is advisable to involve organizations in lectures that can teach a teenager to earn money using his talents or allow him earning money by performing work that is not prohibited by labour legislation. At the same time, it should be understood that there should be enough choice of conditionally male and conditionally female works that could be of interest to both boys and girls. It is very appropriate to involve famous people in the course of lectures, especially young people who can share successes on the basis of a healthy lifestyle or financial success. It is especially important for boys to see the support of athletes who could guide them towards developing a sports career.

It seems probable that after the lectures, girls and boys will have a number of questions, the answers to which they would like to receive in a personal conversation outside the school. Therefore, at the end of any thematic lecture, the specialist, who has conducted it, should provide the audience with his contact phone number or contacts of other specialists, organizations and institutions, whose activities may be directly related to the topic of the lecture.

Trainings. More effective preventive effect can be achieved by combining various types of lectures with training. The trainings are conducted in close cooperation with the school psychologist with the invitation of the involved specialists, trainers - teachers and leaders from among the adolescent girls, specially trained by the method of "peer to peer".

The technology of conducting trainings requires from the trainer knowledge and ability to use modern approaches in training work, namely: interactive training tools; role-playing and psychological games; theatrical performances; group discussions the ability to organize work in small groups by the method of "brainstorming", which promotes the development of speech skills, communication skills, choosing the right solutions. The principal objective of the trainings lies in giving practical pieces of advice on achieving one's goals by other methods than prostitution or other antisocial solutions. However, these tips for girls and boys should be different, forasmuch as the psychological development of children at this age is very different.

At the training stage, it is very important to show the teenager the methods of combating prostitution and to determine the sequence of actions to be performed in case the child is offered sex for money (gifts, etc.). Clarification by lawyers of the consequences of voluntary or forced consent to commercial sex will be also of a particular importance.

Goal 2. To inform parents and children about changes in children's behaviour. The aim of the objective lies in developing a responsible attitude of parents to the upbringing of children and prevention of domestic violence; formation of children's conscious behaviour in relation to the protection of their rights; the formation of tolerant qualities in parents towards children with a tendency to homosexuality; the formation of a responsible attitude of parents towards children who, in adolescence, need additional financial support.

At this stage, the social educator should pay considerable attention to the family, namely: the relationship of children and parents in the family, information support of the educational process in the family, timely psycho-correctional intervention, etc. For this purpose, it is important to organize a parents' meeting (in the class or at the school level), and in some cases - individual work with parents aimed at correcting the relationship between parents and children in the family. An obligatory component of instructing parents is information about the behaviour of adolescents, knowledge about youth movements, trends and subcultures, about the social and medical consequences of prostitution (sexually transmitted diseases, HIV infection, etc.), problems of sexual life, sexual hygiene, the formation of a healthy lifestyle.

2) Secondary prevention is aimed at early identification of adolescents of "at risk group" and prevention of the formation of their deviant behaviour. The target group for this level of prevention is adolescents who are in the "at risk group". Let's consider the objectives of this level of prevention in more detail.

Goal 1. To reveal adolescent girls and boys of the "at risk group". The purpose of this objective lies in forming a target group for secondary prevention of adolescents who fall under the social-psychological criteria of "at risk group".

In accordance with the purpose, the implementation of this task includes conducting sociological and psychological investigations among the general adolescent schoolchildren in a particular secondary school. The work on conducting such investigation is based on close cooperation of the social educator, school psychologist and form teachers and includes the methods as follows:

- sociological survey (questionnaire);
- in-depth interview;
- focus groups;
- observation;
- psychological testing;
- conversation with a psychologist;
- study of available documentation.

Social-psychological investigation is carried out among all the adolescent schoolchildren of a particular general educational institution. At the same time, adolescents are distinguished by their atypical behaviour, which allows understanding the possibility of developing non-traditional sexual orientation and the propensity for prostitution for sexual pleasure.

In the course of preparing a social-psychological investigation, attention should be paid to the detection of hidden, not manifested deviant behaviour among girls and boys who are prone, but have not yet shown or exposed the fact of such behaviour. Particular attention should be paid to the use of alcohol, tobacco, drugs, domestic violence, problems of relations between children and parents in the family, the child's leisure time (how a girl spends her leisure time, how she divides her time, what she is interested in).

Focus groups are recommended to conduct in the final stage of the investigation or when the "at risk group" has been already formed.

Goal 2. Prevention of deviant behaviour among adolescents of the "at risk group". The aim of this objective lies in preventing the further development of deviant behaviour among adolescents of the "at risk group".

Preventive measures of this objective are formed on the basis of data obtained during the social-psychological investigation and they should be implemented by creating certain interest groups, courses, psychological circles, etc. All elements of this technology are aimed at changing the values, life guidelines, patterns of behaviour that adolescents of the "at risk group" rely on, as well as providing ready-made ways, tools and methods to achieve the desired goals without resorting to prostitution.

Goal 3. To introduce social control over the negative impact on adolescents of the "at risk group". The aim of this objective lies in preventing negative influences from the family and the immediate informal environment on adolescents of the "at risk group".

The basic components of social control in the implementation of this objective are as follows:

- revealing facts of immoral and criminal influence on the child in the family and in an informal environment;
- protection of children's rights;
- raising the issue of deprivation of parental rights, guardianship and patronage of the child.

Distinctive features of social control in this case are its focus not on adolescents from the "at risk group" but on the family and the informal environment, which can have a negative impact on them. Working peculiarities of a social educator in ensuring social control lies in implementing the educational function in relation to the parents of the child. Accordingly, safeguard-based tactics should be applied to the informal environment by explaining to the child and parents the negative impact of this environment and the possible negative consequences of this impact.

3) Tertiary prevention aims to correct and overcome psychosocial complications caused by deviant behaviour. The target group for this level of prevention is adolescents with persistent deviant behaviour that is antisocial and criminal in nature. The objectives of this level of prevention are as follows:

Goal 1. Correction of psychosocial manifestations of adolescents' behaviour. The aim of this objective lies in overcoming and / or mitigating the negative consequences of the formed deviant behaviour. There are two ways to achieve this goal, namely:

- application of psychocorrective approaches in the field of psychotherapy ;
- redirection of adolescents to other specialists and other institutions.

Psychological correction in this case lies in overcoming or reducing the manifestations of deviant behaviour by applying appropriate techniques.

Goal 2. Social support of teenagers. The aim of this objective lies in implementing social care and patronage of adolescents. It is of primal importance that the work of a social educator or a school psychologist shouldn't be formal, especially when referring to other specialists and in the breaks between classes with the child. A teenager should feel cared for all the time - so and in no other way he can be re-educated and accustomed to certain changes in his life.

In some cases, the content of a teenager's social protection lies in sending him to the shelter-care facility for minors. The shelter-care facility for minors is a social protection institution created for the temporary stay of minors under the age of 18. Adolescents, abandoned by their parents or guardians, who have left their families or educational institutions, who have been removed by the criminal police for minors from families or places where their safety and health are endangered, who have no permanent place of residence, or means of livelihood, should be sent to such shelter.

Goal 3. Rehabilitation. The aim of rehabilitation lies in facilitating the return of adolescents to a full, constructive and socially rewarding existence with a focus on developing and achieving life goals.

Ongoing monitoring makes it possible to identify shortcomings in the work of the proposed model, predict their consequences in the future and make adjustments to the model at any stage of implementation of measures.

It should be noted that regularity and timeliness in the control and correction stage of the model are directly related to efficiency. Failure to comply with them, as well as inaction, can lead to a real nullification of the efforts of the teachers' team and involved specialists, loss of trusting relationships with target groups and an increase in cases of deviant behaviour.

Therefore, the complexity of the proposed model affords an opportunity for social educators to apply it and fully implement their major professional functions and create the necessary preventive environment in a general secondary educational institution in order to organize the prevention of propensity to prostitution among adolescent schoolchildren.

4 Discussion

Thus, despite the fact that currently the issues of prevention of deviant behaviour, including child prostitution, are transferred to the school's consideration, most of the mechanisms and approaches used by the administration of educational institutions with the involvement of their own resources are not effective. Kruger A., Harper E. (2016) believe that those preventive measures will be considered effective which are based on a trusting relationship between the student and the teacher; however, this is rarely achieved in ordinary secondary schools. Most modern schools, even if they begin to develop a methodology for the prevention of school prostitution, the application of outdated approaches, traditional school staff, mostly older and of retirement age, will not have any positive impact, and may even increase unhealthy interest in the forbidden topic. For this reason, it is very important to involve in such events not the staff and resources of the school, but external experts with an appropriate reputation and approach to young people, recognized by practical experience. Therefore, to a greater extent, the problem should be solved not at the expense of educational institutions, but at the expense of specialized organizations, which, in cooperation with educational institutions, will obtain positive results of their activities.

At the same time, taking into consideration that the problem of prostitution is not only moral, but also material in nature, it is quite important to attract a wide range of specialists who are able to offer young people constructive solutions to solve their problems. These may be young businessmen, lawyers, attorneys, social protection specialists. Psychologists also play an important role in this process; they should not only formally carry out their work, shifting responsibility to other institutional bodies, but also initiate their own observation over young people and identify focus groups that may be prone to child prostitution. Herewith, even the issue of involving a professional psychologist should also be transferred to third-party specialized organizations, and not to the teaching staff of the educational institution.

Financing is another problem of the creation and functioning of such independent organizations. In order to address the issues outlined, it is necessary to fly to local governments for support; they can provide information on alternative sources of funding for such programs, which will come from global funds.

The solution of the problem within the family deserves no less attention, forasmuch as most children, who are subject to negative influence from adults, do not have sufficient attention from their parents, or even worse have a negative impact within their own family (Finkelhor, 2009). This is a problem for families involving children in sexual services not only through physical contact between a child and an adult, but also through the Internet. This issue is especially relevant for Ukraine, and the fact of its severity is confirmed by the UN, which has negative statistics on the spread of child prostitution in Ukraine (Working Group of the Human Rights Council, 2017).

5 Conclusion

Prostitution in the eyes of young people is gradually ceasing to be an immoral phenomenon and a form of social deviation. This emphasizes the relevance of the research of the psychological aspects of prostitution as one of the significant problems of our time.

The negative influence of the media and social networks, an unfavourable environment, a difficult financial situation, pedagogical neglect and other factors imply the use of a special approach and the use of non-standard methods of preventive work.

The results of the experiment prove the necessity to develop a preventive program aimed at preventing the involvement of adolescents in commercial sex and the creation of the necessary preventive environment in general secondary educational institutions for the organization of social prevention of adolescents' involvement in commercial sex.

In general, it can be said that methodological techniques and methods of prevention of adolescents' involvement in commercial sex go far beyond sex education or promotion of a healthy lifestyle. This is a complicated task that should be solved in a complex, including in particular as follows: preparation of material and technical support for such works, involvement of external specialists and development of consistent and permanent prevention programs, change of approaches towards pedagogy and education of schoolchildren, which should be based on the relevance of information to the needs of schoolchildren.

As a result, practical tools for preventing the involvement of adolescents in commercial sex have been developed in the academic paper; they can be applied at general secondary institutions in cooperation with third-party expert organizations.
The toolkit outlined consists of three approaches, namely: primary - based on information collection; secondary - based on the formation of focus groups; tertiary – based on constant monitoring and rehabilitation. By involving specialists and applying modern technical equipment in activities carried out at all levels, it is quite possible to improve the situation with child prostitution in Ukraine, which forms the practical significance of the research.

The major perspectives for further investigations should be based on the development of new mutual relationships between students and teachers, providing the formation of trusting relationship, which would allow the adolescent to receive information, protection and warnings about decisions concerning early commercial and non-commercial sexual relations.

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Primary Paper Section: A

Secondary Paper Section: AG

FEATURES OF THE USE OF MEDIA IN TEACHING THE UKRAINIAN LANGUAGE

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Abstract: In most modern countries, higher education institutions are actively implementing online technology. Teaching the Ukrainian language is no exception. Online applications in the teaching of this discipline are widely used both for students who are fluent in the language and for those who study it as a foreign language. Purpose: to identify the features of the use of different software in the study of the Ukrainian language by different groups of students. Research methods: description, observation, questionnaire, comparative analysis, generalization, systematization. Results. There is a direct dependence on the type of resource, its use in everyday life and the effectiveness of working with it during the study of the Ukrainian language.

Keywords: interdisciplinary approach, foreign students, online applications, native speaker, Ukrainian as a foreign language.

1 Introduction

Modern learning, in particular, language learning in higher education institutions, is impossible to imagine without the use of media resources. Their active introduction into the educational process is due to the direction of digitalization, globalization of processes, as well as the restriction of classroom training related to quarantine. It does not bypass the teaching of the Ukrainian language (as a professional language for its speakers and as a foreign language for students from other countries).

This process is most active in those institutions that work with contract students from other countries. Representative in this regard is the Bogomolets National Medical University, where native speakers of different languages (Hindi, Farsi, Turkish, Arabic and others), as well as students for whom Ukrainian is a native language. Under quarantine conditions, a number of online services have to be used to watch training videos, take tests and other tasks. And this process is not regulated by certain standards. Since applications are the busiest today, it is their specific implementation that needs to be clarified first.

It is obvious that in groups of native speakers and in groups of students studying Ukrainian as a foreign language, the strategy of using applications should be different. This is due to different levels of language training, students' personal interests and other factors. While there are no reasoned approaches to the use of certain programs in the educational process, students and teachers have a lot of difficulties when working with the material (some students can’t get into their account on the program site, do not understand how to use different functions, etc.). The quality of education deteriorates due to such problems, as students are unable to complete certain tasks, lose time preparing for lectures and seminars, and so on. This problem needs to be addressed immediately. This is due to the relevance of this study.

The purpose of the study: to identify the features of the use of multimedia tools in teaching the Ukrainian language as its speakers and students who study it as a foreign language.

Research tasks:

1. Outline the range of applications that are most effective in teaching the Ukrainian language in higher education institutions.
2. Analyze and generalize the world practice of using media in language teaching.
3. Conduct a survey in groups of students to assess the quality of work with online applications in different categories of speakers.
4. Identify groups of recipients. Establish 1 focus group of Ukrainian-speaking students, as well as two focus groups of foreign students (first and second years of study).
5. Outline the strengths and weaknesses of the use of different media for each group of recipients.
6. Formulate basic recommendations for the use of software for native speakers and learners who study it as a foreign language.

2 Literature Review

Methods of teaching the Ukrainian language are the subject of many modern scientific works. Thus, Tsurkan (2019) analyzes the history of the formation of teaching methods from 1993 to 2019 with its difficulties and achievements. She emphasizes that in 1993 there was little work on this topic. In addition, some of them could not be used due to the change of political paradigm. In recent decades, teachers have had to experiment with material, use different teaching aids, and engage in international practice. The researcher notes that today a comprehensive approach is used in teaching the Ukrainian language, which allows students with different levels of training to successfully master this course. Pal'chykova (2016) in her work analyzes the effectiveness of experimental teaching of the Ukrainian language on a cross-cultural basis. She takes two groups of students to conduct the experiment. These include those who are less familiar with Ukrainian culture. In one group of students, the researcher uses a cross-cultural approach, and in another – no. The study proves that the use of common cultural indicators in those groups in which there were foreign students who are not familiar with Ukrainian culture, can increase the level of mastery of the subject. The results of this investigation seem convincing.

The possibility of using automated translation systems in intercultural communication is analyzed by Shadiev & Huang (2016). These researchers took two groups of students from countries that are far from each other and do not have cultural intersections. Joint training activities were organized for these groups within the study. At the same time, the participants had to use the systems of voice input of information and automated translation of the speaker's language into several languages of the participants at the same time. Surveys of such activities in two groups of students showed that, firstly, it was easy and convenient for them to use computer translation tools, and secondly, they had no problems communicating. Such results indicate the possibility of using such teaching aids in groups of students studying a foreign language that is not similar to their native language. Shelest (2018) offers practical techniques for teaching lexical and grammatical material: creating different language situations in the classroom, organizing cultural centers for people from different countries. The researcher notes that the material for students should be selected taking into account the language situations that they encounter most often (communication in everyday life, transport, shop). This will give additional motivation to foreign students to study Ukrainian as a foreign language. Undoubtedly, this approach is universal, and can be used in mastering different languages. Bokale (2020) summarizes existing approaches to learning foreign languages and notes that they can all be effective only when there is no constant communication between the teacher and the learners. Palins'ka (2012) emphasizes that in Ukraine there are still no standardized methods for teaching the Ukrainian language to different categories of students. This, on the one hand, does not allow to check the level of different groups of students according to common standards. That is, the level of training of students may suffer. But, on the other hand, the lack of balanced methods allows teachers to experiment with students, choosing different teaching aids. Nykyporets (2021) in his work gives general remarks on the learning process during the pandemic. The article states that the educational process in this situation should be flexible, adaptive, use different technical means. However, this work does not sufficiently reveal ways to modify the modern learning process in a pandemic. In particular, computer tools are quite concise.

Sehra, Maghu and Bhardawaj (2014) described the difference between distance and e-learning (these terms are often mistaken). The researchers noted that distance learning should be understood as a set of consistent measures to ensure the learning process for each student, regardless of location. At the same time, e-learning is a broad term that combines videos, learning materials, and so on. Regarding the prospects for the introduction of these types of training, they wrote the following:

“It can be concluded that both distance learning and e-learning can be effective modes of education, especially in a vastly growing population like India. Both have their pros and cons in dissemination and hence a hybrid of traditional and such innovative forms of educational methodology should be adopted and the usage of technology ion education should be effectively maximized”. (Sehra, Maghu and Bhardawaj 2014: 826).

A universal pool of programs for teaching in Ukrainian higher education institutions is described in the article Marchenko, Yuzkiv, Ivanenko, Khomova, Yanchytska (2021). This paper considers the possibilities of such programs as Kahoot, as well as many others, presents possible options for their use in performing certain exercises in learning Ukrainian as a foreign language (exercise "True or false" for Kahoot and a number of others). Intelligence Yuzkiv, Ivanenko, Marchenko, Kosharna, Medvid, (2020) describes the types of innovative methods used in Ukraine to study foreign languages (given that the country belongs to the countries with low or medium level of English proficiency). Such methods include: introduction to the scientific process of creative and interactive tasks, the use of computer technology, group work. This approach is also universal and can be applied not only in Ukraine but also in India, Pakistan and other countries.

A number of researchers have considered the features of the use of certain methodologies and applications in the educational process. Thus, Kuzminska, Stavytska, Lukianenko, & Lygina (2019) describe the experience of using CLIL-technology when working with students. To conduct the study, researchers take a group of 46 students. The results of their work show that the implementation of CLIL-technology in the educational process allows to increase the level of mastery of the material, to strengthen the motivation to learn foreign languages among students. Leshchenko, Lavrysh & Halatsyn (2018) come to similar results in their article. Researchers analyze the experience of using this technology in Ukraine and its implementation in Poland and conclude that CLIL can be used in any group of students. The technique will be fruitful. Awan & Sipra (2018) in their analysis of similar experiences note that the use of CLIL allows to build intercultural connections. Accordingly, this program should be applied in universities focused on international cooperation.

The lack of use of the usual media for students in education notes Kessler (2018). The researcher notes that they need to be widely introduced into the learning process. The work of Peters & Webb (2018) confirms the positive impact of audio and video recordings on the acquisition of foreign language material. Arndt & Woore (2018) note the increase in the efficiency of learning foreign words by those students who watch YouTube in everyday life and read blogs in the language they want to learn. Rodgers (2018) notes that television programs provide an opportunity to master unfamiliar words. Wang (2019) considers the influence of subtitles on the level of assimilation of educational video materials by students of different groups. The researcher takes four groups of students: preparatory, two classes of freshmen and one class of graduate students. These groups watched training videos without subtitles with Chinese subtitles, with English subtitles and double subtitles. As a result, it was found that the use of double subtitles is optimal for learning lexical material. Teng (2020) comes to similar results in his study. The author analyzes the experience of using subtitles for a group of 240 students. He also concludes that engaging videos with brilliant full subtitles has a better effect on the level of lexical material acquisition in the selected group. Karami (2019) also notes the positive impact of educational videos on learning foreign language vocabulary. Perez, Peters & Desmet (2018) describe an experiment using exercises to find the hidden word in a video. Researchers note that such tasks increase the level of learning foreign words, while conventional tests do not give a similar effect. Thus, these studies confirm the effectiveness of the use of media in learning the lexical layer of language.

Thekes (2021) investigated the impact of Xeropan on foreign language learning. The scientist notes that the use of such a gamified application in the preparation of students has increased their level of mastery of the material. Students continued to use it in their free time to master the language. Therefore, the researcher notes that the use of such applications is fruitful for the educational process, in particular, for language learning.

Zarzycka-Piskorz (2017) notes that the use of online applications allows well-organized work in groups of students. In her article she comes to the following conclusions:

“The students are not left alone, they act together, establish the manner in which they work together, as well as face the consequences of their wrongdoings/mistakes together. Therefore, the class-with-agame reality is not broken, because it offers more motivational stimuli than just reality” (Zarzycka-Piskorz 2017: 18).

Scholz, Schulze (2017) carefully analyzed the possibility of using less common in the educational process gamified systems. Scientists have worked with World of Warcraft. They were able to establish that the use of this game increased students' interest in the subject and improved learning outcomes.

Deghenzadeh, Fardanesh, Hatami, Talaee, Noroozi (2019) also draw attention to the role of gamified applications in language learning. Researchers note that these programs add motivation to students, make the learning process more exciting. It also improves the academic performance of students.

Csapó & Molnár (2019) describe the experience of using eDia in the educational environment. They note that this application allows the teacher to work with a significant number of students, facilitates the process of evaluating academic results and more.

Thompson, Khawaja (2016) in their article focused on the impact of the language environment on the level of knowledge acquisition by students. They noted that students from bilingual backgrounds may experience greater discomfort when learning a foreign language. At the same time, the level of anxiety in such students will not be constant. This will require the teacher to be more focused in working with such groups.

Particular attention in the choice of learning strategies in some intelligence is focused on the interdisciplinary approach and the problems of language acquisition as a foreign language. Thus, Thékes (2016) analyzes the most successful approaches to mastering new foreign language vocabulary and notes that good results in this process can give different activities: drawing, listening to songs in English and more. The author highlights the most fruitful strategy: “It has also been revealed, in accordance with my presupposition, that asking the teacher for the meaning of the new word, writing down the word many times, remembering the Hungarian equivalent of the new word and learning words in group work are within the most applied vocabulary learning strategies” (Thékes, 2016: 20). As for others, the scientist considers them fruitful but less reliable. This is due to the fact that not every student in the home will draw foreign words, sing foreign songs. These methods are more suitable for building an individual learning strategy. Khameis (2021) talks about the experience of using a variety of creative approaches in language teaching. The scientist writes about the need to use a large number of conversational exercises, songs, games. Hadaichuk and Nykyporets (2020) demonstrate similar results in their work. Researchers analyze the effectiveness of the use of collages in learning a foreign language and note that

they increase students' motivation. Accordingly, both studies confirm the need to use drawings and other similar objects when working with students.
Yazdi and Kafipour (2014) devoted their article to the analysis of foreign language teaching for Iranian students. They determined that simple learning strategies are effective in this category of students: listening to the lecturer, reproducing information from him. This is due to the culture of Iran. The results of this study are important for us, as groups of Ukrainian medical universities study people from this country.

The Wilang, Vo-Duy (2021) study deals with the study of a third foreign language by students from Korea and Vietnam. Researchers note that a multicultural approach should be used to work effectively in this direction.

Stavytska (2017) in her article analyzes the effectiveness of the use of multimedia tools in the preparation of engineering students. It comes to the following conclusion: "effectiveness the effectiveness of professional training of engineering students enhances if the formation of foreign language competence is carried out with the use of multimedia and under certain pedagogical conditions" (Stavytska, 2017: 123). The results of this study give grounds to talk about the feasibility of using online applications in the work of students of other specialties.

In general, these studies have created an excellent theoretical basis for the study of this problem and provided a good justification for the use of various applications in the process of preparing students. However, they do not obscure the need to analyze the effectiveness of the use of different programs for both students who are fluent in the language and those students who study it as a second foreign language.

3 Materials and research methods

In order to realize the set research goal, the following research methods were involved:

- descriptive method – for the analysis of professional literature on the latest approaches to teaching the Ukrainian language (including as a foreign language);
- method of observation – to correct the order of use of certain applications in focus groups);
- method of comparative analysis – to compare the results of mastering online applications in groups of native speakers and students studying Ukrainian as a foreign language after the appropriate correction of the strategy of their use.

Conducted 3 surveys among students of the Bogomolets National Medical University. The samples are formed as follows: a group of 30 students (Ukrainian – native language), a group of 30 students (Ukrainian as a foreign language – 1 year of study) and a group of 20 students (Ukrainian as a foreign language – 2 years of study). Students from different countries study in the last two groups. Their native languages (Farsi, Hindi, Arabic) are significantly different from Ukrainian. A questionnaire was compiled to interview students, in which they must indicate their group, level of proficiency in the Ukrainian language, as well as answer questions about the difficulties in working with online applications.

The first survey took place in the last week of the first month of study 2020-2021 school year, the second – in the last week of December (dates in different groups differed), the third - in the last week of May. The same questionnaires were used for all groups during the survey. They were the same for each stage of work and were taken into account in the further use of certain applications. Survey participants were not told which answers were correct and which were not. Scores for each specific questionnaire were also not reported. The form of the questionnaire is given in the appendix.

For analysis, we chose the applications used in teaching practice:

- Zoom (https://zoom.us/) – used for online conferences.
- YouTube (https://www.youtube.com/) – the service for storing and distributing video content. It is used for independent work with educational videos.
- Kahoot (https://kahoot.it/) – portal for testing.
- Wordwall.Net (https://wordwall.net/) – an online application for gamification of the educational process. Gives the opportunity to perform exercises to compare pictures with words, use the wheel of random selection of topics for dialogues and more.
- Google forms (https://docs.google.com/forms/) – used for surveys, ongoing evaluation.
- Mova.Info portal (http://www.mova.info/) – used for instrumental text analysis. Allows you to use internal libraries.
- For each of the applications, three questions were generated in the questionnaires. The first was a closed test in which you had to select the functions that the selected application has. The second is a closed question about the program interface. The third is an open-ended question, in response to which the recipients could indicate the problems that arise in them when working with the equipment. The third item could be filled in briefly.

4 Results

The first study was conducted in three selected focus groups (Ukrainian students and foreigners) in the last week of September. Its purpose is to establish the current level of mastery of online applications by students of different focus groups and to identify the main difficulties that arise in working with such resources. Summarized results of this survey are given in Table 1, Table 2, Table 3.

Table 1 – The results of the survey №1 for the first group of recipients

Group I (native speakers)			
Applications	The number of correct answers to question №1	The number of correct answers to question №2	Difficulties when working with the application
Zoom	30	29	No difficulty
YouTube	30	28	No difficulty
Kahoot	27	24	Associated with differen variations of test environments (with and without written answer options)
Wordwall.Net	15	13	No difficulty
Google-forms	29	27	No difficulty
Mova.Info	14	10	Related to text analysis

Source: Compiled by the authors based on the data provided by poll

The second group of students had the biggest problems with mastering the applications. Among them were those who did not answer any questions correctly about this or that online service (Table 2).

Table 2 – The results of the survey №1 for the second group of recipients

Group II (foreign students of the first year of study)			
Applications	The number of correct answers to question №1	The number of correct answers to question №2	Difficulties when working with the application
Zoom	23	22	Related to link connection
Youtube	25	24	No difficulty
Kahoot	18	15	Related to the formation of the testing environment
Wordwall. Net	20	19	No difficulty
Google-forms	25	23	No difficulty
Mova.Info	5	3	Related to login, text input, and so on

Source: Compiled by the authors based on the data provided by poll

The next group included students who had been studying the Ukrainian language for a year. Accordingly, they were familiar with some programs and had fewer problems with mastering the interface (Table 3).

Table 3 – The results of the survey №1 for the third group of recipients

Group III (foreign students of the second year of study)			
Applications	The number of correct answers to question №1	The number of correct answers to question №2	Difficulties when working with the application
Zoom	20	20	No difficulty
Youtube	19	18	No difficulty
Kahoot	15	15	Related to the formation of the testing environment
Wordwall.Net	13	12	No difficulty
Google-forms	18	17	No difficulty
Mova.Info	11	7	Related to login, text input, and soon

Source: Compiled by the authors based on the data provided by poll

The results of the first survey showed which applications students are well aware of. We were able to install the following:

- International platforms Zoom, YouTube and Google forms are well known to students. Students use them for their own needs (watching videos, communicating with relatives, conversations within the group). Both native speakers and those who study it as a foreign language have the least problems with them.
- Platforms for testing and creating gamified elements Kahoot, Wordwall.Net for students proved to be more complex. This is due to the fact that they were introduced only during the lockdown in 2020. Accordingly, students needed time to master them.
- The Mova.Info portal, which was not used by students before, caused the most difficulties.

After this survey, applications were used in the learning process without changing the strategy. That is, students were given tasks of the same type and to the same extent as before. The second slice of knowledge took place in the last week of December 2020. Its results are presented in Table 4, Table 5 and Table 6.

Table 4 – The results of the survey №2 for the first group of recipients

Group I (native speakers)			
Applications	The number of correct answers to question №1	The number of correct answers to question №2	Difficulties when working with the application
Zoom	30	30	No difficulty
YouTube	30	29	No difficulty
Kahoot	30	28	Associated with the formation of student's tests
Wordwall.Net	25	24	No difficulty
Google-forms	30	30	No difficulty
Mova.Info	23	20	Related to text analysis

Source: Compiled by the authors based on the data provided by poll

It should be noted that the participants of the first group still used the extended functionality of some applications, in particular, the Ukrainian-language portal Mova.Info. For the rest of the respondents, such options were not available due to the level of proficiency in the Ukrainian language. This applied to students of both the first and second years of study (regardless of previous academic results in this subject).

Table 5 – The results of the survey №2 for the second group of recipients

Group II (foreign students of the first year of study)			
Applications	The number of correct answers to question №1	The number of correct answers to question №2	Difficulties when working with the application
Zoom	28	27	Related to group transition
YouTube	29	28	No difficulty
Kahoot	30	25	No difficulty
Wordwall.Net	30	29	No difficulty
Google-forms	30	29	No difficulty
Mova.Info	15	13	Associated with logging in and processing simple tests

Source: Compiled by the authors based on the data provided by poll

Table 6 – The results of the survey №2 for the third group of recipients

Group III (foreign students of the second year of study)			
Applications	The number of correct answers to question №1	The number of correct answers to question №2	Difficulties when working with the application
Zoom	20	20	No difficulty
YouTube	20	20	No difficulty
Kahoot	20	17	No difficulty
Wordwall.Net	13	12	No difficulty
Google-forms	20	19	No difficulty
Mova.Info	13	9	Associated with logging in and processing simple tests

Source: Compiled by the authors based on the data provided by poll

The second survey showed that the vast majority of students who during the first survey could not correctly answer the questions about the software environment (application) were oriented in the applications and at the end of the first semester could use them freely. Educators who studied Ukrainian as a foreign language paid more attention to game applications (Table 5, Table 6). It turned out that for them it is more fruitful to study the language through clouds of meanings (which allows to expand the vocabulary, choose synonymous series, etc.) and gamified tasks (where you can place not only tokens but also images that illustrate them).

After this section, the strategy of working with foreign students was modified:

- Reduced requirements for working with Mova.Info.
- Increased use of applications for gamification of the educational process.
- Reduced the amount of work with YouTube, because this program, although well studied by students, but did not allow to reproduce the necessary material (to conduct ongoing monitoring, surveys in class, etc.).

Ukrainian students received additional teaching materials on working with portals. This allowed them to use similar resources in the preparation of independent work and so on.
The third survey took place in the last week of May. Its results are given in Table 7 Table 8 and Table 9.

Table 7 – The results of the survey №3 for the first group of recipients

Applications	Group I (native speakers)		
	The number of correct answers to question №1	The number of correct answers to question №2	Difficulties when working with the application
Zoom	30	30	No difficulty
YouTube	30	30	No difficulty
Kahoot	30	29	No difficulty
Wordwall.Net	30	29	No difficulty
Google-forms	30	30	No difficulty
Mova.Info	30	27	No difficulty

Source: Compiled by the authors based on the data provided by poll

It should be noted that at the end of the school year, Ukrainian speakers no longer needed any help in working with applications (Table 7). Moreover, they prepared their own projects using these programs. Yes, Google forms were used to conduct internal surveys in the group, to collect information about students. This application facilitated data processing. Kahoot students used to conduct quizzes. The program was chosen because of the ability to create a bright test that could be passed from any smartphone.

Table 8 – The results of the survey №3 for the second group of recipients

Applications	Group II (foreign students of the first year of study)		
	The number of correct answers to question №1	The number of correct answers to question №2	Difficulties when working with the application
Zoom	30	30	No difficulty
YouTube	30	30	No difficulty
Kahoot	30	30	No difficulty
Wordwall.Net	30	29	No difficulty
Google-forms	30	30	No difficulty
Mova.Info	25	23	Associated with logging in and processing simple tests

Source: Compiled by the authors based on the data provided by poll

In this group of respondents, the biggest problems were noted when working with applications that have a Ukrainian-language interface (Table 8). The rest of the applications on which the student can choose the interface language, at the end of the year of study does not cause problems.

The best results are observed in the next group. This is due to the higher level of proficiency in the Ukrainian language among students.

Table 9 – The results of the survey №3 for the third group of recipients

Applications	Group III (foreign students of the second year of study)		
	The number of correct answers to question №1	The number of correct answers to question №2	Difficulties when working with the application
Zoom	20	20	No difficulty
YouTube	20	20	No difficulty
Kahoot	20	20	No difficulty
Wordwall.Net	19	19	No difficulty
Google-forms	20	20	No difficulty
Mova.Info	15	15	Associated with logging in and processing simple tests

Source: Compiled by the authors based on the data provided by poll

Table 9 shows that in group III there are still some problems with the Mova.Info portal, although these students have no problems with other applications. The reason for this was the inconvenient interface of the program. However, it was not possible to replace it with a more successful one in this respect, as this portal has a wide vocabulary base and provides an opportunity to deeply study Ukrainian tokens and use dictionaries in English and other languages. It also has interesting game programs that students could not use completely due to the inconvenient interface.

Analysis of the results of three surveys showed:

- During the year, most students have fully mastered these resources. If at the beginning of the school year problems arose in all groups of recipients with different types of applications, then at the end of the selected period they are almost not fixed.
- The number of incorrect answers by individual categories at the beginning of the year was 60%, while at the end – no more than 25%.
- In the group of Ukrainian-speaking students, the number of incorrect answers decreased to 5%. At that time, in groups of students studying Ukrainian as a foreign language, this figure was 25%.

It was associated with a complex application interface. In cases where the application could be used with an English-language interface, the number of incorrect answers to it was also reduced to 5-10%.

There is a certain correlation between the ease of mastering the application and the personal interest of students (Figure 1). So, the game applications are mastered faster and more fully.

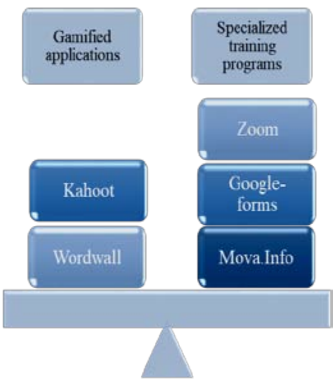

Figure 1 – Type of applications as used during the Ukrainian language course *(Source: Compiled by authors)*

It should be note that Figure 1 does not include YouTube, as it is often used by students for entertainment. They use it to watch movies, entertaining videos, etc. in their free time (which we have repeatedly noticed during breaks between classes).

The analysis of the survey results allowed us to come to the following conclusions about further work with online applications in teaching the Ukrainian language:

- Part of the materials from electronic textbooks should be replaced by gamified tasks.
- Students studying Ukrainian as a foreign language should be offered applications with the ability to connect an English-language interface.
- When a new application is introduced into the learning process, a survey should be conducted to find out whether students have understood its interface. If necessary, they should be provided with additional guidelines for working with it.

Students' interest in applications such as Kahoot has shown that gamified applications should be used more widely in student education. So, for the next semester it is already planned to replace some of the standard videos with game tasks. Their use will be accompanied by a survey of students in order to develop comprehensive guidelines for the use of game resources in the study of the Ukrainian language.

5 Discussion

Our research has confirmed a number of hypotheses put forward by our colleagues. Thus, the fairly rapid development of applications by all students, regardless of their level of preparation, highlighted the position of Kessler (2018) that media tools in education are fruitful, although they are used very little, although they have great potential.

Our research has confirmed that the most convenient for students are those programs that students use in everyday life. Here you can agree with the statement of Arndt & Woore (2018) that you can rely on learning on video on YouTube and blogs. These resources are suitable for working with students of different levels of training. For the same reason, they were mastered by students rather than a linguistic program.

It has been found that programs like Kahoot are more suitable for use by the general public than more specialized applications. However, their use must be adapted to the needs of specific groups of students. The practice of further work with the Kahoot program by students native speakers of the Ukrainian language confirmed the hypothesis of Thekes (2021) and Scholz, Schulze (2017) that participants with the educational process like working with gamified applications. Involving them motivates people to learn a foreign language outside the classroom. The results of the work of the same group allowed us to confirm the hypothesis of Zarzycka-Piskorz (2017) that Kahoot and other similar programs encourage students to work together. At the same time, we should note that for such work, students must have a certain base. Thus, first-year students of Ukrainian as a foreign language did not join such teamwork because they did not have the necessary vocabulary.

It is worth noting that the use of online games in the learning process can reduce the level of anxiety in multilingual groups, which drew the attention of Thompson, Khawaja (2016). As a result, students work with applications like Kahoot more willingly and learn them faster (which can be seen in table 5 and table 6, as well as table 7 and table 8 where the dynamics of the level of mastering Kahoot is higher than in other applications). Khameis' (2021) statement that drawings and diagrams should be used in working with students is also confirmed. Working with them in the Wordwall.Net application was convenient for students of different levels of language acquisition.

We note that to teach the Ukrainian language to foreign students, it is advisable to use applications with the ability to add pictures, maps, etc., as these elements are universal for different cultures. They allow to develop common standards for teaching the subject by speakers of different languages in multicultural groups, which, according to researchers, Ukraine lacks today (Palins'ka O., 2012). However, it should be borne in mind the study Thékes (2016) that such applications should be used when working in the classroom, because it is impossible to control work with them outside the classroom. It should be noted that the use of online games in learning reduces anxiety, which drew the attention of Thompson, Khawaja (2016). As a result, students work with applications like Kahoot more willingly and learn them faster (which can be seen in table 5 and 6, as well as table 7 and 8 where the dynamics of the level of mastering Kahoot is higher than in other applications). Khameis' (2021) statement that drawings and diagrams should be used in working with students is also confirmed. Working with them in the Wordwall.Net application was convenient for students of different levels of language acquisition.

6 Conclusions

Teaching Ukrainian to native speakers, as well as students studying it as a foreign language, requires the use of various media. Thus, for the first category it is necessary to use clouds of meanings, specialized resources (Mova.Info) for the analysis of the lexical layer of texts, online dictionaries. As for those applications that allow you to gamify learning, they should be used minimally. They are suitable for consolidating the material, strengthening the student's sense of success during their studies, etc.

As for those students who study Ukrainian as a foreign language, it is advisable to use a different type of application. It is fruitful to involve programs that allow you to do exercises to match the token picture (Wordwall), charts, interactive games right and wrong. Other resources may seem too complex for them. It is not recommended for this group of students to use software with a purely Ukrainian interface. An exception can be made for third-year students and beyond, as they have the appropriate vocabulary. As for first- and second-year students, they can use such portals only if there are guidelines in English. The latter must fully reproduce the interface of such a portal with accurate translation into a foreign language.

As for shared resources, these include online testing services. However, for Ukrainian-speaking students it is necessary to form more complex test tasks with open questions, while for speakers of other languages we must use simpler tests. Closed tests are more fruitful for them.

The study of the peculiarities of the use of media in the study of the Ukrainian language cannot be limited to the list of programs we have named. After all, new applications appear every day and existing ones are upgraded. The prospect of further research is the analysis of the effectiveness of the introduction of gamification tools, new Zoom applications and similar programs in the educational process. Our research group also sees prospects in conducting further surveys at the beginning of the academic year, after the end of the first semester and after the completion of the entire course. Such a survey will be conducted among a larger number of students and will allow to analyze the effectiveness of the use of certain multimedia tools at different stages of learning language material.

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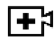
Appendix

Student questionnaire

Group	
Language proficiency:	
Block 1. Zoom	
1.1 What functions are in theZoom	
a) Co-editing text;	*c) Video sharing;*
b) Sound recording and automatic pronunciation check;	d) Building diagrams and tables.
2.2 What does the icon mean?	
a) Leave meeting	c) Stop video
b) Share Screen	d) Mute voice
2.3 What difficulties did you have when working with Zoom	
Block 2. YouTube	
2.1 What functions of the program can be used to learn a foreign language	
a) native language subtitles;	c) selection of fragments of training video;
b) transcription of words;	d) editing subtitles in someone else's video.
2.2 What button must be pressed to save the video?	
a) 	c) 
b) 	*d)* 
2.3 What difficulties did you have when working with YouTube	
Block 3. Kahoot	
3.1 How the program responds to the correct or incorrect view?	
a) test closes;	c) shows the score for the question;
b) the answer is highlighted;	d) in no way.
3.2 How the quality of the test is assessed in the group?	
a) by the overall rating and points for each participant;	c) only by score;
b) only by rating;	d) by having access to individual tasks.
3.3 What difficulties did you have when working with Kahoot?	
Block 4. Wordwall.Net	
4.1 What type of tasks CANNOT be used in Wordwall.Net?	
a) filling the table;	c) work with cards;
b) wheel;	d) points on the map.
4.2 How the wrong answer is indicated in the system?	
a) X;	c) 0;
b) -;	d) No.
4.3 What difficulties did you have when working with Wordwall.Net	
Block 5. Google-forms	
5.1 What is the Google- forms used for?	
a) repetition of material;	*c) conducting surveys and tests;*
b) access to video;	d) online-games.
5.2 How are required fields indicated?	
a) !	*c)* *
b) #	d) @
5.3 What difficulties did you have when working with Google-forms	
Block 6. Mova.Info	
6.1 What is the Mova.Info used for?	
a) watching a video;	c) testing;
b) working with audio recordings in Ukrainian;	*d) search lexemes, morphemes, text analysis.*
6.2 Which section of the portal should be selected to work with the lexeme:	
a) dictionaries;	c) projects;
b) corps;	d) miscellaneos.
6.3 What difficulties did you have when working with Mova.Info	

Primary Paper Section: A

Secondary Paper Section: AM

SCIENTIFIC ACTIVITY OF STUDENTS AS A COMPONENT OF THE EDUCATIONAL PROCESS

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Abstract: Relevance. In vocational education, the main aim of the scientific work of the student is to increase the level of his/her professional and creative training, use of creative potential in the interests of scientific development, involvement of youth in scientific activity. At the same time, for the student himself/herself, the research activity is an important condition for self-development and self-realization. The aim. To investigate the importance of the scientific component of the educational process of HEIs students and its basic elements. In this research were used theoretical and empirical levels, applied a closed-ended questionnaire aimed at the construction of thoughts about the scientific activity. The practical value of the study was to provide recommendations on how to improve the level of scientific training of students.

Keywords: HEIs, scientific work, students' research, scientific and educational paradigm, science in the educational environment.

1 Introduction

At the present stage of socio-economic development of society, which is characterized by the gradual and steady integration of Ukraine into the European political, economic, and cultural structures, of exceptional importance is to increase the educational level of training of highly qualified specialists for all sectors of activity, enriching the intellectual and scientific potential in professional activities.

The socio-economic development of the state is determined by the level of education and skills of the younger generation. In higher education the emphasis has shifted to the quality training of specialists, effective processes of their professional formation and development, so the search for innovative learning systems has become more relevant, and the importance of the scientific activity of students has increased.

The main purpose of the organization and development of scientific work is to increase the level of scientific training of specialists with higher professional education and identifying talented young people for further training and replenishment of scientific and pedagogical staff HEIs.

The legislation of Ukraine concerning higher professional education states that scientific and scientific-technical activity in higher educational institutions is an integral part of the educational process and is carried out to integrate scientific, educational, and production activities in the system of higher education. Integration of students' research activities in the system of higher education involves the orientation of education for the formation and development of students' research skills by engaging them in research work under the guidance of a teacher, as well as independently.

Relevance. In professional education, the main purpose of the scientific work of the student is to increase the level of his/her professional and creative training, use of creative potential in the interests of scientific development, involvement of young people in scientific activities. At the same time, for the student himself/herself, the research activity is an important condition for self-development and self-realization. At the same time, practice and research results convince us that the level of knowledge, skills, and abilities of students and graduates of higher education institutions are not enough to meet the growing needs of both professional and personal nature. The presence of contradictions between the amount of knowledge intended for study and the possibility of their assimilation and application, efforts to develop students' mental abilities, the formation of their desire to self-regulate the process of mastering new knowledge and improve learning efficiency, and insufficient availability of methods of their formation.

Now methods, forms, and means of scientific activity of students are not enough, thus, it is necessary to introduce interactive pedagogical technologies in the educational process to equip future specialists with skills to use their knowledge in future practical activities. The urgent problem is the application of scientific activity at an early stage of training, taking into account the specifics of the future professional activity of a specialist.

On this basis, therefore, students' scientific activity as a component of the educational process requires detailed study.

2 Literature review

The articles by Minhalova (2019); Aprian (2021); Zeng (2020); Haryono (2021); Borodina & Yershova (2021) indicate that creating better conditions and resources for learning, mastering innovative technologies, information systems, and modern ICT is necessary to ensure HEIs competitiveness in the international market of educational services. The author examines the content of the current problem associated with the use of information and communication technologies to support and accompany the research work of students of higher educational institutions. The author notes the feasibility of using Google services to support the organization of students' scientific communities given a certain commonality in the scientific circles and problem groups organization. To intensify the research work of students' youth, the package of cloud services Google Suite for Education is defined, which will help to create an information environment for the student scientific community. University libraries should maintain traditional and digital access to academic, research, and information resources, as well as maintain a modern information and library space. Due to the growth of forms of distance learning, students must have access to a wide range of digital resources. Thus, along with subscriptions to external digital library systems and databases, the university's digital library system must be maintained. Vtyurina (2019) Arizen & Suhartini, (2020) discuss new approaches and solutions for creating repositories and organizing information resources, methods, and tools for users to access them. Membership in an intercollegiate digital library allows universities to support educational programs with electronic resources. It allows students, post-graduate students, and faculty to track the digital publications of member universities provides a platform for faculty to post and promote their work.

The basic phenomenon of the modern educational-scientific paradigm of the student is competencies, as well as their structural content and the system of different approaches to understanding them as a pedagogical phenomenon. The authors Khoroshikh & Sazonova, (2020). Pay special attention to the discussion of competence in the sphere of scientific activity of undergraduate students as an important component through which professional activity is formed. Based on the integrated approach, Telemtaev et al., (2014) formulate the principle of the integrity of student's technological research activity and create a general model of the complex technology of research activity, starting from the formation of technological design and ending with the techniques of useful benefits formation for its creators. According to Medvedieva (2019), students' scientific activity will be successful only if students can be accustomed to the technology of working in science from their junior years. The bibliometric indicators and analytical tools of the Elsevier Scopus scientometric platform are the basis for expert evaluation of scientific results. Analysis of bibliometric indicators: the Worse Index, journal rankings and source impact indicators on publication will allow students to apply all the possibilities of using experts in analytical scientometric tools: the SCImago Journal and Country Rank portal and the Spotlight database.

According to Ryabovol (2019), Dilmukhamedov & Yarulov (2021), Daher et al. (2020), Barceló-Oliver & et al. (2020), scientific research is an indicator of the quality of processes in a university environment, so it should be increased as a result of the increased scientific work done by faculty and students. As the importance of students' scientific creativity has received increasing attention, there are now three types of problem-solving for scientific creativity: collaborative learning, conceptual construction, and scientific reasoning. Problem-solving has a large effect on students' scientific creativity, as does scientific reasoning, while cooperative learning has a medium effect and conceptual construction has a small effect (Shuaishuai, 2020).

Tereshchenko & Shcherbakov (2021), looking at important socio-economic characteristics of student research activities, find that student publications indexed in lists and databases, as well as publications in regional research organizations that contribute to the innovative development of the region.

Sukhodolov et al. (2019) review the statistics of scientific research, summarizing the experience of the organization of research activities and proposing a model of its systematic provision. It is noted that there is a "customer crisis" in university science: the demand of the business sector does not provide the necessary volume of large and long-term orders for scientific research and research, which depend mainly on the state budget. The authors propose organizational measures for a gradual transition from teaching to research with step-by-step proof of productivity: the creation of a new academic subject to the university-"scientific unit" consisting of two or more employees, regardless of their academic rank, with administrative rights and corresponding responsibilities.

Chatwirakom (2016) is working on a pilot research project that aims to explore and develop the use of science activities as learning tools to improve learning behavior.

To achieve the actual scientific and technological ability of students in the context of innovation and cognition, the analysis of the students' cultural ability development to innovation, thoughts, and measures to develop students' scientific and technological ability to innovation is proposed in Zhanjun (2010).

Despite the mentioned topical developments, still unexplored is the issue of enhancing students' scientific activity in HEIs.

Aims. The aim of the research: to explore the scientific component importance of the HEIs students' learning process and its basic elements.

Research tasks:

- to conduct a sociological survey of 427 HEIs students (list the HEIs where the author works);
- to make recommendations on how to raise the level of scientific training of students.

3 Materials and research methods

To carry out this research and to obtain percentage results, sociological and statistical methods were chosen as the methodological basis. In this research, the theoretical and empirical levels were used. The questionnaire with the closed questions directed on the construction of thoughts about the scientific activity was applied.

The study was conducted among 427 applicants for higher education Kharkiv National University of Internal Affairs, (Ukraine) through a closed questionnaire by e-mail roll-call polling.

During two months of continuing survey and data processing, the authors investigated the importance of the scientific component of the educational process of HEIs students and its basic elements.

4 Results

In the introductory part of the questionnaire, respondents were asked to rank the tasks that require automation to improve the efficiency of scientific activities of students. The list of tasks: management of experiments, activities of scientists and dissertation councils, preparation of scientific events, editorial and publishing activities, expert evaluation of scientific projects, work of postgraduate and doctoral studies. The results are presented in Figure 1. The percentage distribution is presented in the table 1.

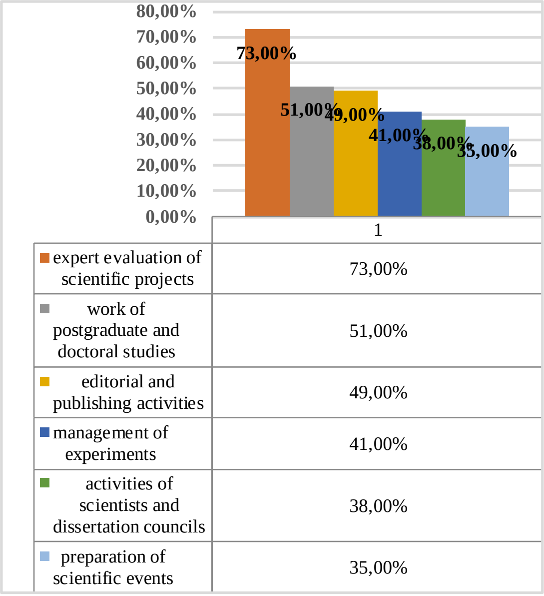

Figure 1 – Tasks that require automatization to improve the efficiency of scientific activities of students
(Source: respondents' answers.)

In the second question, the authors asked respondents to fill out the table 1 "Factors that encourage students to pursue science" from the scattered data. In the first block "Factor" the following items were presented:

1. Personal interest
2. Rewards for hard work
3. Acquisition of new knowledge
4. Employment prospects
5. Additional bonuses for admission to graduate school
6. The desire to contribute to society
7. Recognition, desire to become famous
8. Respect of teachers
9. Compulsion (from parents, teachers)
10. Making connections in the academic field
11. Formal encouragement from teachers

In the second block "Type of factor" the following options were presented:

1. Self-actualization factor
2. Financial factor
3. Career factor
4. Ideology factor
5. Complex factor
6. Leadership factor

The results are presented in Table 1.

Table 1 – Factors that contribute to the encouragement of students to scientific activities.

Factor	Factor's type	The number of students who have chosen the factor
Personal interest	Self-actualization factor	26,5%
Reward for work	Financial factor	21,4%
Acquisition of new	Self-actualization factor	16,5%

knowledge		
Job prospects	Career factor	14%
Additional bonuses for enrollment in MBA programs	Career factor	9,6%
The desire to be of use to the society	Ideological factor	9,2%
Recognition, desire to become famous	Financial factor	6,7%
Respect of teachers	Complex factor	5,5%
Compulsion (from parents, teachers)	Ideological factor	4,5%
Academic affiliation	Complex factor	2,8%
Formal encouragement from teachers	Leadership factor	0,2%

Source: respondents' answers

Third question: Demotivational factors.

The first place among reasons that prevent the involvement of students in research activities is the lack of interest in the topic of research Table 2. Every second student is not interested in the projects offered by the university (49.5%). The following reasons constitute a whole complex of reasons such as lack of experience, lack of confidence, and high demands for scientific work (36.6%). Lack of time is the main complex factor found during the survey – 33.6. Other factors in one way or another indicate a generally low interest in participating in scientific activities, whether it is irrelevant research topics or laziness. Strange was the response of some students about public disapproval of engaging in scholarly activities. Such fear was experienced by 1.4% of respondents.

Table 2 –"Demotivating" factors for scientific activity

Factor	Factor's type	The number of students who have chosen the factor
Lack of interest in the topic	Demotivational	49,5%
Lack of self-confidence, high demands for scientific research	Complex	36.6%
Lack of time	Complex	33,6%
Laziness	Demotivational	31,5%
Irrelevance of research	Demotivational	13,6%
Preference for a different subject	Demotivational	11,5%
Low level of knowledge	Demotivational	8,5%
"Others will do"	Demotivational	5,1%
Personal reasons	Complex	3,7%
Lack of encouragement	Complex	2,7%
Lack of supervisor	Complex	1,7%
Public condemnation	Demotivational	1,4%

Source: respondents' answers

The results obtained are the basis for the description of the ways to raise the level of students scientific training.

5 Discussion

In the 21st century, scientific literacy is an important competency that students should have. However, the scientific literacy of Indonesian students is recognized as low (Nainggolan, 2021).

In recent years, universities have promoted educational activities to spread science into society. The Faculty of Sciences of the University of Granada has developed various proposals that participate in both international and national frameworks, such as "La Noche de los Investigadores", "Semana de la Ciencia", "Aula Científica Permanente", "Café con Ciencia", " Ciencia y Sociedad "and others. These measures are proposed and guided by university professors from different fields of study. In these activities, undergraduate and graduate students of the university are offered the opportunity to participate voluntarily (Rufino et al., 2017).

Student impact in science would be an effective tool for gaining scientific and communication skills, as well as other abilities. These include developing short science protocols to learn how to organize lab assignments in a set amount of time. Students also realize the ability to synthesize basic ideas to convey essential scientific concepts in accessible language for non-specialists. In addition, public speaking skills are improved. Students acquire other abilities, such as the ability to confront doubts arising on scientific aspects, increase self-confidence, foster student-professor relationships, and take on the role of teacher.

Vasiljeva & et al. (2020), in Russian universities, calculate factor values and an integral measure of scholar performance, show that the individual rates of graduation of young faculty members exceeded those of senior faculty members. The disruptive factors associated with the scientific activity of teachers and researchers in Russian universities (divided into two groups of young scientists and senior scientists) were identified and systematized based on the level of dominant influence. The peculiarities of the influence of the emotional burnout factor on the scientific performance of university teachers were revealed.

Kurmalieva et al. (2020), based on the methods of C. Cameron and R. Quinn, analyzes the modern organizational culture of the management of research activities of students at Adygeya State University and point out the gap between the actual and desired views of the heads of structural units, as well as between them and the development strategy of the university.

According to the definition of Solovyev & Tumanova (2020), some tasks require automation to improve the efficiency of scientific activities of students. These tasks include management of experiments, activities of scientists and dissertation councils, preparation of scientific events, editorial and publishing activities, peer review of scientific projects, the work of graduate and doctoral schools, and several other tasks. For each type of automated activity, an approximate composition of functionality and software structure is defined.

Attendance of student scientific meetings and national and international conferences, and the publication of scientific results through the development and implementation of the WordPress digital platform make it possible to meet the information needs related to the scientific activities of students, although such needs should be evaluated throughout the years of various majors. The dissemination of the platform to other institutions of higher education can contribute to the training of research students in Cuba (Hernández-García & et. al., 2020).

Thus, the world academic science offers different options for the implementation of students' research activities as part of the educational process, and it is relevant to discuss their semantic components.

6 Conclusions

Improving the level of scientific training of students should be addressed in the following ways:

- revealing the potential of the most gifted students at an early stage of training;
- organizing favorable conditions for development and implementation of various forms of scientific creativity of students and young scientists; assisting in acquiring the skills of independent work and work in creative teams;
- ensuring the participation of students in scientific conferences, seminars.

Each method should correspond to one of the above-mentioned stages. At the first stage (the phase of initial adaptation), the development of students' understanding of the degree of professional education about the role of personal and professional qualities as future specialists in the framework of research competencies (diagnosis of natural inclinations, the direction of personality is determined).

At the second stage (the phase of complete adaptation), students form a set of ideas about themselves as future specialists, determining their potential capabilities. The personal position is formed in the process of activity, determines the socio-psychological aspect. At this stage, the bases of conceptual thinking are formed as a result of the comparison of individual values with others, including educational and professional ones.

At the third stage (the initial stage of individualization of the student's personality), the objective reality is cognized based on the logic of cognition, self-knowledge of the personality is carried out with the help of communicative communication with other subjects. The personality forms its disposition and determines personal-professional orientation. A set of future specialist's ideas about the value of the educational process is formed.

At the fourth stage (the phase of full individualization), the logic of building individual learning routes is developed. A personality-oriented developmental space is designed through the use of value-humanistic thinking. Students' problems are included in the socio-historical context through awareness of the significance of research value.

At the fifth stage (complex) – the phase of integration of students' experience at the individual level in dialogue and polylogue - research skills and abilities are formed, competence in the process of scientific organization of work acts as an integrator, which determines the level of the social significance of the future specialist. There is an intensive enrichment of the individual experience of students in the framework of joint activities. Also, realism in the research plan is formed.

At the sixth stage (complex) – the phase of personification of future specialist's values - students determine the vision of their future, including a career in the process of continuous professional education. At this stage, the values' set formation takes place, both on the individual, professional and universal level. The last stage, as a rule, is transitional.

An important direction for further research will be the identification of additional components of improving the scientific training of students.

The practical value of the study was to provide recommendations on how to improve the level of scientific training of students.

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THE IMPACT OF CONTEMPORARY CULTURE AND ART ON THE GENDER IDENTITY DEVELOPMENT

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Abstract: This research aims to establish the main directions of the development of gender identity as a cultural and artistic phenomenon in contemporary Ukrainian literary works; to identify the main dominant transformations of gender identities represented in artistic images. The study uses a comprehensive approach to the methodology of interdisciplinary research: synthesis and analysis, interpretative, descriptive, and structural methods. The main hypothesis in the work is the statement that in postmodern thinking the subject is reduced to the image, so the image becomes an important formant of gender identity, gradually transforming it under the demands of society and public ideology.

Keywords: gender, contemporary culture.

1 Introduction

Gender identity in the postmodern world consists of the assumption of a certain social role and the construction for such a role, image, stereotype, ideal, and the like. Such identity focuses on external characteristics, their internal conformity and leads to the creation of a recognizable image (Ortiz-Walters, 2010; Aheyeva, 2003). In modern society gender identity is significantly dependent on the imaging system of feminine and masculine content provided mainly by mass culture, it is from there that the ideal for modeling personal identity is offered. However, postmodern identity becomes a presentation of the self, it can constantly change, gives the choice to present oneself in different images, roles, characters, activities. This leaves a lot of room for change, for formation and transformation. Thus, there are changes in the conceptual apparatus related to the problems of gender, gender identity, and gender culture.

According to some specialists, the concept of "gender culture" can be represented by the main periods of evolution of characteristics and content: the period of theoretical conflict regarding the position of women in society, the active desire of women for equality (early XV century - mid-XIX century); the period of women's struggle for the right to be elected (XIX century - XX century) the period of raising the problem of discrimination of women at the level of theory, highlighting the reasons of differences in the position of women and men in society (second quarter of XX century) the period of disclosure of sexuality phenomenon, the differentiation of concepts (beginning of the 21st century) (Aheyeva, 2003, p. 82).

In modern Ukrainian literature, there is a constant reconstruction of gender identity: it turns out more changeable, flexible, dispersed. Art literature offers gender identity as a statement, a search, a form for imitation (Bashkirova, 2019). Exactly this is what makes the issue of finding gender identity in art and culture a relevant problem.

The postmodern discourse questions the concept of identity itself, since it appears as a myth and an illusion. According to Jean Baudrillard, the autonomous subject is falling apart and disappears (Kellner, 2001, p.278). A dismembered and discontinuous type of experience represents the fundamental characteristic of the postmodern culture, and can be found in personal experiences, as well as in the media texts.

The postmodern identity consists of constructing an image and assuming a social role. The postmodern identity is centered around leisure time, appearance, image, con-sumerism and is based on producing an image. The postmodern identity tends to be con-structed mainly of images of entertainment and consumerism, therefore it is unstable and always subject to change. However, there is a positive aspect suggesting that the indi-viduals can change their lives at anytime, that the identity can be reconstructed and that the human being can be changed and modeled according to personal choice. Identity becomes a game, a theatrical presentation of the self, allowing the individuals to present themselves to the others in a variety of postures, roles, images and activities. The post-modern self becomes a multiple one and is more open to changes. In the contemporary society, identity is strongly mediated by images provided by the mass culture, offering ideals for modeling one's personal identity. For instance, advertising, fashion or televi-sion constantly reconstruct the identity, producing a more fluid and changing one (Kellner, 2001, p. 305). In the postmodern culture of image, the scenes, the stories and the cultural texts provided by the media are meant to offer the individuals a variety of attitudes that can shape their personality. These images provide social role models, appro-priate and inappropriate patterns of behavior, style and fashion and a subtle impulse The postmodern discourse questions the concept of identity itself, since it appears as a myth and an illusion. According to Jean Baudrillard, the autonomous subject is falling apart and disappears (Kellner, 2001, p.278). A dismembered and discontinuous type of experience represents the fundamental characteristic of the postmodern culture, and can be found in personal experiences, as well as in the media texts.

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Aims. The establishment of the main directions of development of image transformations of gender identity in the Ukrainian cultural tradition involves the performance of several research tasks:
- to establish the concept of gender identity and the main aspects of the formation of gender identity in the context of the formation and formation of artistic tradition in the late twentieth and early twenty-first centuries;
- to identify a system of images in the works of contemporary Ukrainian authors that form the concept of gender identity in contemporary Ukrainian literature.

2 Literature review

The problem of gender identity has been considered in Ukrainian culture in recent years extremely actively. Gender is multidimensional, and studies of this direction are characterized by a wide range of problems discussed, such as the mutual influence of women's identity and acute social problems, global politics and its impact on women's drug addiction (Brennan, A. et al, 2020); national cultures and ways of expressing gender (Ginbar, 2017) axiological foundations of contemporary pedagogy, leadership, choice, and gender (Bolman, Deal, 2008; Cojocariu, 2014) dimensions of intercultural contexts in other cultures (Fritz et al, 2002; Leontiev, 2003; Čuhlová, 2019) psychological manifestations of gender, connections between emotions, social information and aggression (Smeijers, 2020; Prince et al., 2020); the problem of leadership in the context of gender politics (Priola, 2004). The gendered culture of specialists in the social sphere is investigated. Under the concept "gender culture of specialists in the social sphere" we understand a special system of implementation of professional skills and abilities, manifested through a set of developed relevant intellectual, value-semantic, motivational, and behavioral characteristics based on knowledge of the basics of gender theory, development of spiritual needs, assimilation of values, norms and rules of gender-role behavior, which corresponds to the principles of gender parity and democracy (Byeloliptseva, 2021).

Modern Ukrainian literature as a kind of culture also forms new semantic and attitudinal components of gender identity (Osnovy teoriyi genderu, 2004). Several scientists are studying the embodiment of gender identity, considering the correlation of female reader and female author in post-socialist literature (Aheyeva, 2003; Andrukhovych, 2015) formation of feminism through the prism of gender literature and criticism in a historical perspective (Osnovy teoriyi genderu, 2004); analyze gender models in Ukrainian women's prose by the example of novels by Oksana Zabuzhko (Burovyts'ka, 2020) determine the problems of correlation of gender, discourse and genre organization of the work in Ukrainian mass literature (Filonenko, 2011). Damean (2006) considers media discourse as a creator of female identity, where the focus is on middle-class women, on whom the models of femininity offered by media discourse significantly derive. It turns out that the ability to define one's own identity and to choose from a variety of models is narrowed. All of this is limited and induced by media discourse. If we accept the standards of femininity from the mass culture, the choice of models to follow is quite predictable. In contemporary Ukrainian literature, there is a way out of this vicious circle, artistic images of Ukrainian prose and poetry of our time provide different perspectives for expanding the circle of choice, and thus a deeper and more socially harmonized choice of gender identity as well. It is in this vein that the research work should be continued.

3 Materials and research methods

To fully understand the results and answer the questions addressed in the study, the research team resorted to many methodological developments and theoretical studies.

The study of gender identity in the artistic and cultural paradigm of modernity, the disclosure of the theme of gender within a literary work should be based on a comprehensive approach, which could take into account the multidimensional nature of fiction, the correlation of traditional, emotional and axiological, national principles in determining gender identity. A systematic approach (analysis and synthesis), deductive and inductive methods were used to work with theoretical material. Also, the method of interdisciplinary research, taken to determine the specific characteristics of the theme of gender, which manifested itself at different levels of knowledge (history of literature, theory of genres and stylistics, philosophy of literature, cultural studies) was applied in the work. The possibilities of the interpretative method, which was used for the analysis of artistic images as complex synthetic structures, were also taken into account. The study presents descriptive and structural methods to describe a literary work as an integrated functional unit, where the components correlate with each other, forming a compositional and ideological unity.

4 Results

The issue of gender identity as an artistic, literary, philosophical and cultural problem is actively raised, there is a constant internal discussion even dialogue between different hypostasis, types, and forms of gender identity, which offers and develops modern Ukrainian society. Therefore, the gender issue is directly or indirectly original and brightly presented in modern Ukrainian literature, in the works of such artists as Oksana Zabuzhko, Maria Matios, Liubko Deresh, Serhiy Zhadan, Max Kidruk, Eugene Polozhyi, and Sofia Andrukhovych.

The concept of "gender identity" is directly based on social and cultural representations of femininity and masculinity. Gender images in art and culture constantly function and are considered in the context of social roles, significance, sexuality. Fiction is no exception.

The problem of gender identity is presented openly, brightly, and aggressively in the works of O. Zabuzhko. In the beginning, it was certain destruction of stereotypes and ideas about gender, which was formed in the early '90s of the XX century in Ukrainian society. In the novel "Poliovi doslidzhennia z ukrainskoho seksu " the author all the time heatedly polemicizes with the audience, aims to refute the outdated provisions of patriarchal morality. The whole work is a construction and defense of her feminine universe, where aggressiveness, scandal, and outrage are, above all, an attempt to single out feminist issues, to make them visible and autonomous part of the contemporary Ukrainian cultural and artistic space.

And further, the Ukrainian literature of the XXI century is open to the question of dialogue between different gender mentalities, there is an active movement toward the harmonization of the world and relations between the sexes. All the transformations of gender roles associated with changes in the economic and political status of modern women, emancipation destroys the traditional notions of masculinity. In contrast to the established gender parity in Soviet literature, where the masculine always dominates, the world of contemporary Ukrainian literature promotes the deconstruction of such parties. It is the establishment and acceptance of the social independence of women, the theme of a strong woman and a weak man appears. According to Serhiy Zhadan, there are certain transformations of such a psychological collision, defenselessness, weakness - the love of the husband for the "businesswoman". In the XXth century in the artistic tradition and literature there is a blurring of gender boundaries, the vectors of identification of "masculinity" and "femininity" are changing. Ukrainian writers, regardless of gender, strive to find new answers to the questions of gender identity, the definition of the authenticity of men and women.

In the works of Serhiy Zhadan, gender identity is part of the worldview that emerges at the turn of 1990-2000. It is postmodern transitivity, uncertainty, a sense of catastrophe, and loss of reference points. Viewing traditions and standards, generates and viewing social roles and cultural stereotypes, all moving well through irony, a certain cynicism, and pain of acceptance. Such are the prose works, such as the short story "Kassa spravok ne daet" and poetry, such as "Slovari na sluzhbe tserkvi" "Paprika," and others. The woman in such works is independent, strong, such that she makes decisions and does not belong to herself. The characteristic of S. Zhadan's work is a combination of "flaccid radicalism", the spirit of consumerism, and irony with the ideas of all-around goodness, the strength of personality, the ordinary acceptance of man himself in the new world woven into the fabric of emotions. These little realized changes have been buried by critics under a pile of acute social, attitudinal, historical, axiological problems. However, no less significant changes manifested in Ukrainian literature and directly related to changes in the positioning of the gender theme. A similar trend can be observed in the fiction prose of M. Kidruk, that along with the techno-thriller "Bot" and several novels presents the gender context, which is an integral part of that natural, mysterious and interesting world of people, presented in the works of the author. His immersion in the world of man, his state of mind, detailed descriptions create a new identification of women. All the more so that the focus on the mass reader assumes a mass-cultural version of the social issues and psychological depth of the author's interesting.

S. Andrukhovych's novel "Feliks Avstriya" is also characterized by immersion in the inner world of man, his consciousness, and the changes that occur to the characters in a particular socio-cultural environment. This is a postmodern novel that takes the "daily" and the marginalized image of the simple maid Stepha the Black. The novel is full of mythology (Stepha is fire, Adele is water) towards Stepha and she dies in the fire. The apocalyptic mood of the novel is a constant leitmotif through the work: Steph's parents and Dr. Unger's wife die in the fire, and pictures of a worldwide flood are constantly mentioned. But the search of the heroines of the novel for themselves, for their own identity, among the presented alternatives and opportunities to choose their path, to realize themselves as individuals, is also a search for gender identity. The discovery of one's role in a complex world, the understanding of the destination, and the vision of life's path dies with the heroine. The presence of artistic constants (fire, water, mother), associated with the universality of the feminine, form the concept of a woman-universe, a separate individuality, and personality. Through such artistic constants consists of the concept of woman as a separate world.

The melodramatic character of Maria Matios' novels in the broad sense of the term is represented in the depiction of love relationships between men and women, but this melodramatic character in the genre of "social melodrama" is closely intertwined with those social problems and acute social problems that disturb public opinion.

The story of Maria Matios, "Uchora nemae nide" along with diagnosing the social malaise of society, emerges against the background of the classic melodrama plot "the minister is a journalist," where the priority becomes emotion, sensitivity, not reason, but the heart determines the behavior of the characters. Based on the codes and models inherent in mass literature, Maria Matios forms a complex set of philosophical, psychological, and social problems. The composition and stylistic solution complicate the simple formula of Cinderella, make the artistic understanding of the state and problematic issues of Ukrainian society and the changing roles of men and women in the course of civilizational changes productive.

There is a constant rethinking and reorientation to new gender identities. Thus, initiation models are transformed in Ukrainian modern literature, consistently presenting the motif of confrontation of "fathers", where the mythological roles of God and power are given through the generation. Such an initiation model of the return of the lost ancestral memory is presented in the work of Liubko Deresh "Namir!". The main character Petro reveals his singularity and the similarity of that singularity with his grandfather - such an artistic model at its center contains the idea of initiation, we can say a peculiar form of finding one's own gender identity. The protagonist undergoes initiation, thus crossing the border, sacralizing himself to receive a new hypostasis of being - "enlightenment". Once again, we have the realization of the semiotic opposition of fellow - strangers, where the isolation is indicative of a small group of "fellow" enlightened men and "stranger" women. This distribution is also conveyed through the image of space. The space for the insiders is the grandfather's study, the country house. The misunderstanding of their own and the strangers are also in the sphere of emotional and behavioral. Symmetrical is the behavior of uninitiated women in "fellow": both Baba and Gotsa Drala, Petro's beloved despite all their differences, prevent the men from going outside the ordinary world. Baba does not allow his grandfather to travel, and the girl refuses to go beyond reality with Peter. And this vividly demonstrates the commonality of the gender positions of Baba and the beloved, although one is a peasant and the other an artist. It is a deeply hidden, but vivid idea that the gender of the time cannot be determined only by occupation and social status, it is a multidirectional position. The gender inverse artistic model used in the novel "Namir!" by Liubko Deresh is deeply mythological but completely modern. Outlined in line with Jungian theory, the idea of expanding individual consciousness, following the hereditary line (Dematra-Cora), is embodied in the positive images of the male lineage, where the female line appears as a world of strangers and provokes the hero to personal rebellion against purely biological ties, not sufficient to enter the circle of "fellows".

The modeling of the female view of the world is presented in Eugene Polozhy's work "Dyadechko na im'ya Bog" (Uncle on the Name of God). It is primarily a demonstration of the Ukrainian mentality, traumatized by centuries of discord and suffering, the formation of the gender image of the "captive woman," the mother, enslaved and condemned to suffering. Abused Mother-Ukraine remains in contemporary Ukrainian literature, it is a permanent constant of Ukrainian mental consciousness and is embodied in the themes of earnings, slavery, and domestic violence. It is the theme of domestic violence and the tragic fate of Mother Ukrainian that is presented in this novel by Eugene Polozhyi.

The formation of new boundaries of gender identity is associated with the marginalization of heroines: prostitute emigrant offended single woman. This is primarily a transformation of the image of a girl-prisoner, who suffers dissent and must go to a foreign land in search of peace and a better life. Similar motifs can also be found in the poems of Serhiy Zhadan (poem "Slovniki na sluzhbi tserkvy"). The inability to realize one's own identity is a theme that opens up deformations of gender mentality, threats to one's own national identity, unfavorable social and political conditions for realization, colonial trauma, and the like. A peculiar reflection of such pain is also conveyed through the portrayal of physical suffering, childbirth, is an exclusively female experience. Thus, the novel "Dyadechko na im'ya Bog" depicts a "hellish" maternity hospital and an expensive European clinic. And in the maelstrom of wanderings in the note's literate creates a gallery of images of women, presenting a picture of the modern gender identity of the mother – a young monk who is preparing to become a mother; a good mother and a good wife, who was previously a prostitute; a mother suffering from domestic violence.

Along with repetitions of the traditional for the Ukrainian mentality image of the mother is built the image of a woman, must choose her destiny and be realized. Deconstruction of the myth of sanctity and devotion to motherhood is destroyed, determined by aggressive accusations and outrage, for example, in the novel by O. Zabuzhko "Musei pokynutyh secretiv", where readers are thrust into the image's corps of lazy, infantile, self-serving, and evil mothers. In the works of O. Zabuzhko child-free is presented in the context of feminist intensions – the right to own realization, freedom of choice, freedom from supervised gender roles, and independence in the formation of life priorities. The destruction of the mythologem of holy motherhood occurs consistently and is an important part of the plot. In general, the structure of gender identity, manifested in contemporary Ukrainian literature, can be presented as several components (Figure 1).

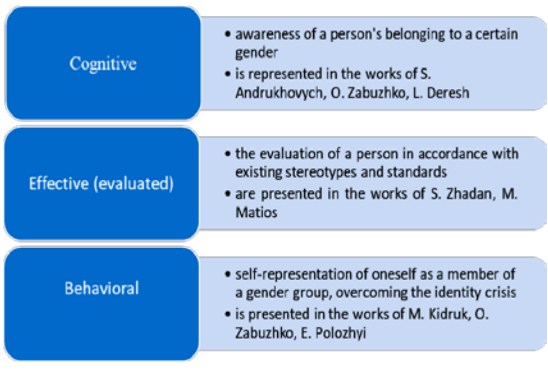

Figure 1 – Components of gender identity as clearly presented in Ukrainian contemporary literature (author's development) (*author's note*)

Ukrainian worldview positions, sensitivity to changes in gender identity, political, cultural, social, and general worldview realities are fully represented in modern Ukrainian literature. Non-acceptance and alienation is another characteristic of gender identity, which is presented in the Ukrainian contemporary literature and becomes more and more frequent with time. It is also important to keep in mind that gender identity from this position is not connected with family ties, it is a phenomenon of another higher-level (psychological, emotional, and mental).

5 Discussion

V. Aheyeva (2003, 2011, 2015) notes three stages in the development of feminist literary criticism in her study of the foundations of gender theory. The first stage is the era of European modernism, where the works of W. Woolf and S. de Beauvoir stand out, which defined many problems that are still relevant today. In our opinion, the social conditioning of gender identity remains one of the main components and problematic issues of contemporary art. At the second stage, the researcher (V. Aheyeva, 2003) associates with the era of socialist realism in Ukrainian literature, where gender issues were not prominent, pressed by the weight of collectivism, social and asexual. At the third stage, at the turn of the cultural epochs of the twentieth and twenty-first centuries, there was a revision of traditional definitions of civilization, approaches to the conceptual foundations of socio-cultural order proper, where the traditional was subject to substantial revision. In the maelstrom of questions of the relationship between the feminine and the muscular, the accents began to change steadily, so the question of gender identity, sexuality/creativity, sexuality/neuroticism came up so sharply. In our opinion, these questions in the literary creativity and culture of Ukraine are becoming urgent and vital, because they not only define the need to keep high standards of European culture, ultimately to get away from the policy of "race" in the formation of ideological image priorities. But they also determine the way to return to the roots of the Ukrainian mentality, which for many centuries were buried under the patriarchal imperial-Soviet pressure.

The concept of gender identity is presented as variable, under the main approaches adopted in the modern humanitarian paradigm, three main lines are highlighted (Il'yina, 2018; Popovich, 2016). These are the transhumanistic approach, where there is a denial of the social nature of intelligence, and preference is given to cybernetic intelligence; the second - the denial of any correction of gender identity; the intermediate approach, where the coexistence of biological nature and technology is accepted, work on the development of effective mechanisms of coexistence of man, technology and mechanisms of adaptation to the reality of modern society (Yanykina, 2015). In our opinion, the role of art and cultural mediation of fiction is also a significant social factor, should influence gender identity. The combination of man with his personality traits, value orientations, and the technology of the modern world should be humanized and labeled through artistic and cultural pursuits. Modern civilization must seek consensus in the construction of gender identity, relying on the core of culture, technology, and personal values.

6 Conclusion

In the modern Ukrainian artistic paradigm, there is a constant rethinking and reorientation to new gender identities, which is associated with sharp ideological, technological, and worldview changes of civilizational vectors.

The preservation of Ukrainian worldview positions, sensitivity to changes in gender identity, bear modernity, political, cultural, social, and in general worldview realities are well represented in the modern Ukrainian literature.

Under the concept of "gender identity," we understand the culturally and socially conditioned dimension of masculine and feminine, human and female principles. Gender images in art and culture are the result of comprehension of sexuality and social identity.

Rejection and alienation are some of the characteristics of gender identity, which is represented in Ukrainian contemporary literature, and over time is becoming a more and more noticeable trend. It is also important to consider that gender identity from this position is not tied exclusively to the family lineage, it is a phenomenon of another higher-level – psychological, emotional, mental.

The main images in the works of modern Ukrainian authors, forming the concept of gender identity in the modern Ukrainian literature are oppositions, indirectly from a full of contradictions and at the same time variable identity. This is the cultivation of the image of a woman-mother and manifestation of her antagonistic image of a child-free. Depiction of traumatized Ukrainian mentality through the images of a woman-prisoner, immigrant, victim of violence and proclamation of life stability and independence of a businesswoman and modern Cinderella-journalist, images of initiation in the honey of opposition "fellow-stranger", where more deeply there is an opposition in the relationship of feminine and masculine.

Further analysis of the problems of transformation of gender identity under the influence of cultural and artistic studies is relevant for modern literary, philosophical, cultural, and art studies in particular.

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THE GLOBAL AND UKRAINIAN EXPERIENCE OF SOCIAL REINTEGRATION OF HYBRID WAR VETERANS IN THE MODERN SOCIETY CONDITIONS

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Abstract: The purpose of the academic paper was to determine the social reintegration's features of the hybrid warfare's veterans under the conditions of modern society, to compare the reintegration practices in Ukraine and other countries. Methodology. The results attest to the fact that the social reintegration of veterans in Ukraine is based on projects and programs, including budget programs on financing various social reintegration measures. Psychosocial assistance to veterans and social cohesion in communities are based on the activities as follows: trainings on social cohesion, reintegration and fundraising, preparation of grant projects for social cohesion of communities; qualified psychological support for veterans and their families affected by the military conflict in Ukraine.

Keywords: reintegration, social reintegration, social support, reintegration of veterans, hybrid warfare.

1 Introduction

The social reintegration of the hybrid warfare's veterans requires detailed investigation due to the specifics of the conflict that goes beyond traditional military conflicts. The hybrid warfare envisages the application of various means of its conduct, involving the non–state subjects in the social–political, informational, and economic space. As a result, the social reintegration should involve the maximum number of citizens in order to integrate veterans into civilian life. Under the conditions of hybrid warfare, the prevalence of use of psychoactive substances, traumatic brain injuries, mental frustration, in particular, post–traumatic stress disorder increases among veterans and their families. "Survivors of armed conflict may experience traumatic stress, psychological symptoms, distress, or other behavioural health issues related to the disaster of war" (Decker et al., 2017). The veterans suffer from mental health problems requiring their adaptation as well as family adaptation (Monson, Fredman & Taft, 2011). These are specific problems for the health care system and social protection of the population, restoration of social justice (Yerramsetti et al., 2017).

The combatants face a range of social–economic challenges when reintegrating into the civilian life. The veterans lack the necessary skills and education for subsequent employment, depriving them of income, housing and guarantees to provide themselves and their families with basic necessities. The veterans face the consequences of psychological and physical trauma received during a military conflict and need social psychological support. In order to reintegrate the veterans, it is necessary to ensure their adaptation to the new social structure, namely: new social norms, community laws and beliefs. The reintegration requires correction of possible veterans' violent behavior, which could have been formed during participation in hostilities, training aimed at resisting difficulties and social conflict using non–violent methods. One of the challenges for the combatants is the unpreparedness of citizens to their return, as well as disapproval, alienation, marginalization (Hazen, 2005). These challenges lead to the risk of exclusion of the veterans from the society.

The purpose of the academic paper lies in determining the features of social reintegration of the hybrid warfare's veterans under conditions of the modern society, comparing the practice of reintegration in Ukraine and other countries.

2 Literature Review

In the scientific literature, social integration is considered as a situation of sharing norms, beliefs and goals common for community members, which are structured and implemented by social institutions using the social dialogue. Post–conflict reintegration means rebuilding, restoring norms, beliefs and social structure to re–establish the social, economic, political structures destroyed during the war (Hazen, 2005). The ILO Report on Socio–Economic Reintegration states that the veterans' reintegration into the civilian life involves not only employment, however, also productive employment with freedom, protection, security, and equality, transforming the veteran into a citizen (International Labour Office, 2009).

Since the early 2000s, there has been a growing need for theoretical substantiation and studying the practice of the veterans' social reintegration in connection with the military operations in Yugoslavia, violence between Palestine and Israel, the war between Georgia and Russia, military operations in Iraq, etc. (Monson, Fredman & Taft, 2011; Maglajlic & Selimovic, 2014; Creech et al., 2016; Decker et al., 2017; Flanagan et al., 2017; Pugh et al., 2018; Mitchell, Frazier & Sayer, 2020). The military conflicts specified led to the development of theoretical and practical investigations in the direction of social reintegration. Monson, Fredman & Taft (2011) study the adaptation of veterans to the civilian life after the wars in Iraq and Afghanistan. Decker et al. (2017) describe in detail the prerequisites for the conflict between Russia and Georgia, training and use of knowledge, values in social work with victims of the military conflict. Pugh et al. (2018) have revealed significant difficulties in the social reintegration among a national sample of veterans with traumatic brain injury (TBI) severity, who are significantly less likely to be employed due to trauma. The veterans without traumatic brain injury (TBI) severity have also reported about difficulties in the social reintegration, in particular, complicated family problems.

Semigina (2019), in her scientific work, studies social work features during the military conflict in Ukraine based on interviews using the concept of "hybrid warfare". The concept describes situations as follows: where the parties to the conflict use completely different means of warfare; irregular forces and non–state subjects, including criminal groups of "proxy, auxiliary, surrogate and affiliated forces" (Rauta, 2020), are involved in hostilities, and guerrilla warfare is combined with cyber warfare, propaganda, and economic warfare. This predetermines the lack of clear front lines and demarcations between non-peaceful and peaceful areas, with a focus on human rights violations and conflict of values (Semigina, 2019). The hybrid warfare combines spaces and spheres of battle (social–political, economic, information) (Rauta, 2020). As a consequence, the author claims that social workers and services are unprepared to work in emergencies and conflicts. Furthermore, ethnic and structural difficulties, in particular the conflict of values, exacerbate this problem.

For this reason, the hybrid warfare's veterans need social reintegration, which should include psychological assistance. According to the viewpoint of Marek & D'Aniello (2014), the veterans and their families have decreased levels of emotional well–being due to the stress of reintegration, in particular, through post trauma stress disorder (PTSD). Monson, Fredman & Taft (2011) argue that "post trauma stress disorder (PTSD) is the mental health condition most commonly associated with traumatic stress exposure and is documented to have a range of severe effects on relational functioning". Concomitant conditions of PTSD are depression, intimate aggression (Monson, Fredman & Taft, 2011), drug abuse disorder (Flanagan et al., 2017). Creech et al. (2016) have revealed a direct and negative impact of symptoms of post–traumatic stress disorder in women involved in the Iraq–Afghanistan conflict on family functioning, satisfaction with intimacy after return to work and subsequent non–participation in the conflict. Mitchell, Frazier & Sayer (2020) have found the identity disorder connected with decreased social support for 244 Afghan and Iraqi war veterans, more severe PTSD symptoms, less enjoyment of life, and greater reintegration difficulties at the initial stage. Specialists (therapists) should use a systematic approach in order to effectively address the issues of social reintegration (Marek & D'Aniello, 2014).

Demers (2011) explored the experiences of the reintegration of war veterans in Iraq and Afghanistan in the prospect of understanding the challenges of returning to the civilian life and the impact of war on mental health. On the basis of an electronic survey, a feeling of alienation from family, friends, and the experience of an identity crisis among the veterans after a military conflict was revealed. In order to ensure the social reintegration of veterans of Iraq and Afghanistan, social support was provided, as well as training of military–cultural competence of doctors, college consultants, social workers was conducted (Demers, 2011).

The scientific work of Hronešová (2016) examines the features and approaches to the distribution of material compensation for the veterans of Bosnia and Herzegovina after 1995. The author points to the fact that the veterans, thanks to economic and political resources, have formed powerful pressure groups; furthermore, social support is provided in exchange for voters' approval and public political support. The study has proved that additional social gaps and tensions occur in the case of transparent but not consistent material compensation to the veterans (Hronešová, 2016). This means that the social reintegration depends on the economic one, the mechanisms of which should be transparent and promote socialization, but not increase the pressure in the society.

Thus, the issues of social–economic and mental problems of veterans who participated in military conflicts are studied in the scientific literature. Scholars prove the impact of war on mental health, social reintegration, demonstrating the consequences of the return of veterans to the civilian life, proposing methods and measures of social work. Herewith, the issue of the social reintegration of the hybrid warfare's veterans is little studied.

3 Materials and research methods

The first part of the research describes the programs and projects of social reintegration in Ukraine, methods and measures of social cohesion for the inclusion of the combatants, methods of social and psychological support. Data of the International Organization for Migration (2019), Ministry of Veterans Affairs of Ukraine (2021a; 2021b) have been used to describe measures and amounts of funding for programs and projects of social reintegration of Ukraine's veterans.

In the second part of the research, a structured survey of the veterans was conducted using the Deployment Risk and Resilience Inventory–2 tool (DRRI–2). In particular, the scales of social support Section O: Postdeployment Social Support (Table 1) were applied using as a tool to assess the level of social support of Ukraine's veterans who participated in hostilities in the East (Vogt, Smith, King & King, 2012). The DRRI–2 post deployment social support subscales were included in the survey. The responses were presented in a 5–point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Then scores were summed among each of the two subscales. The social support subscale has 10 items (range 1 to 5), where better functioning after deployment was indicated in higher scores. Cronbach's alpha in this sample was 0,89 and 0,96 for the social support subscales (Table 1).

Table 1 – Section O: Postdeployment Social Support

Since returning...	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1. ...the American people made me feel at home.	1	2	3	4	5
2. ...people made me feel proud to have served my country in the Armed Forces.	1	2	3	4	5
3. ...my family members and/or friends make me feel better when I am down.	1	2	3	4	5
4. ...I can go to family members or friends when I need good advice.	1	2	3	4	5
5. ...my family and friends understand what I have been through in the Armed Forces.	1	2	3	4	5
6. ...there are family and/or friends with whom I can talk about my deployment experiences.	1	2	3	4	5
7. ...my family members or friends would lend me money if I needed it.	1	2	3	4	5
8. ...my family members or friends would help me move my belongings if I needed help.	1	2	3	4	5
9. ...if I were unable to attend to daily chores, there is someone who would help me with these tasks.	1	2	3	4	5
10. ...when I am ill, family members or friends will help out until I am well.	1	2	3	4	5

Source: Vogt, Smith, King & King (2012).

Employment. Employment was assessed using the question of whether the veterans are currently employed and looking for another job, whether they are employed and not looking for another job, whether they are unemployed and looking for a job, and whether they are unemployed not looking for another job. Two categories of employed were classified as "yes, employed", and the categories of unemployed – no, unemployed" (Pugh et al., 2018). Social–demographic features of the respondents included as follows: age, sex, marital status, status of surcharge for participation in hostilities. The questionnaire was sent online via email and social messengers (Viber, Telegram, Facebook). 512 veterans – participants in the anti–terrorist operation in eastern Ukraine were involved in the survey, of which 100% are men aged as follows: 54,5% – 20–25 years old, 18,2% – 26–30 years old, 18,2% – 31–35 years old, 9,1% – 36 years old and over. 54,5% of respondents were unmarried, 45,5% – married (Table 2).

Table 2 – Social-demographic characteristics of respondents

Age	Frequency	Percentage, %	Cumulatively, %
20–25 years old	279	54,5	54,5
26–30 years old	93	18,2	72,7
31–35 years old	93	18,2	90,9
36 years old and over	47	9,1	100,0
Total	512	100,0	

Source: the author's own research

4 Results

Programs and projects of social reintegration in Ukraine
The social reintegration of Ukraine's veterans is based on projects and programs. For instance, the Program of Social Cohesion and Reintegration of Veterans is being implemented in Kyiv, Dnipropetrovsk and Lviv regions (the largest number of veterans and at least 100 people are registered there); the International Labor Migration Organization with funding from the European Union has been implementing the program since January 2019. According to data of the State Service of Ukraine for War Veterans and Participants in the Anti–Terrorist Operation, the status of a participant in hostilities was granted to 378,115 persons (Ministry of Veterans Affairs of Ukraine, 2021). The project "Reintegration Support for Veterans of the Conflict in Eastern Ukraine and Their Families" (hereinafter – the Project) provides psychosocial assistance to the veterans and social cohesion in communities based on the activities (International Organization for Migration, 2019) as follows:

1. Trainings of social cohesion, reintegration and fundraising, preparation of grant projects of social cohesion of communities.
2. Implementation of social cohesion projects through the provision of grants of up to 12 thousand euros and the involvement of various groups in the active participation in social, cultural, educational, sports initiatives.
3. Qualified psychological support of veterans and their families affected by the military conflict in Ukraine (group and individual consultations).

For instance, the Project in Zhytomyr region will run from January 2021 to May 2022. The principal goals lie in involving the population in the social-economic reintegration of veterans, promoting the active participation of the veterans and their families in civilian life, improving the social and psychological well–being of the veterans. The Social Reintegration Initiative Group should comprise at least 15 people, including representatives of socially vulnerable groups (national minorities, people with disabilities, local authorities, representatives of various professions, communities' active residents). In case of absence of an initiative group, public organizations can be involved in the project, the purpose of which is to improve the life and well–being of the population.
The initiative group or public organization should have a plan of cultural, social, educational activities for social cohesion, and establish a social dialogue with local authorities. The major measures of social reintegration within the project are defined as follows: 1) study trips, festivals, concerts, exhibitions; 2) new social services (psychological relief room); 3) volunteer initiatives; 4) measures on adapting others to the veterans; 5) services of lawyers on protecting the rights of the veterans of armed conflict; 6) cooperation with law firms on provision of services to the veterans; 7) anti–discriminatory practices; 8) inclusive initiatives.

An important component of social support for the veterans is the provision of psychological assistance, including family and individual counseling, group thematic consultations, social dialogue sessions, stress coping workshops, art therapy sessions, psychological retreat for the veterans and their families with the involvement of international experts (Official website of Zhytomyr City Council, 2021).

In order to form and implement state policy in the field of social protection of war veterans, persons with special merits in interest of Ukraine, family members of veterans, persons covered by the Law of Ukraine "On the status of war veterans, guarantees of their social protection", the budget program "Leadership and Management of Veterans Affairs" is implemented (Ministry of Veterans of Ukraine, 2021a). The basic objectives of the budget program are as follows: 1) ensuring the rights and freedoms of the veterans and their families; 2) implementation of state policy in the field of veterans' social protection; 3) popularization and ensuring the formation of a positive image of a war veteran; 4) creation of a legal basis for improving the social protection of the war veterans (Ministry of Veterans Affairs of Ukraine, 2021a).

Within the framework of the budget program "Leadership and Management of Veterans Affairs", 119 966, 8 thousand UAH of expenditure were spent on organizing social protection (Table 3).

Table 3 – Dynamics of indicators by directions of application of funds within the framework of the budget program "Leadership and Management of Veterans Affairs" of Ukraine for 2019-2020

Performance indicators by directions of application of funds	2019	2020	Deviation, +/–
1. Number of staff units, persons	183	217	34
2. Number of prepared drafts of normative legal acts, units	25	3	–22
3. Number of persons who received the status of a participant in hostilities and was entered in the Unified Register of Participants in the Anti–Terrorist Operation, persons	378115	27293	–350822
4. Number of international events in which they took part, units	0	6	6
5. Number of created "veteran" communities	0	4	4
6. The degree of satisfaction of veterans and their families from the services received in the "veteran" communities ,%	0	95	95
Expenditures by directions of application of funds, thousand UAH	–	119966,8	–

Source: (Ministry of Veterans Affairs of Ukraine, 2021a).

The budget programs in the field of social protection of Ukraine's veterans are also as follows: 1) "Financial support of public associations of the veterans for the implementation of national programs (projects, events), affairs aimed at visiting military burials and military monuments and celebrating holidays, memorials, historical dates"; 2) "Measures on physical rehabilitation, social and professional adaptation, provision of sanatorium–and–spa treatment for the victims of the Revolution of Dignity, participants of the anti–terrorist operation, and persons who carried out measures to ensure national security and defense, counteraction and containment of the armed aggression of the Russian Federation in the Donetsk and Luhansk regions in order to return them to a peaceful life"; 3) "Provision of one–time financial assistance to family members of persons who were killed (died) during participation in the anti–terrorist operation, and to persons who became disabled due to injury, concussion, mutilation or disease received during the operation"; 4) other programs, including the provision of subsidies to veterans.

Table 4 represents the dynamics of indicators within the budget program for the implementation of measures of physical rehabilitation, social and professional adaptation, which bear evidence that only 1,96% of veterans, combatants were participants in psychological rehabilitation in 2019–2020; 1,98% of veterans received services on social and professional adaptation; 3,22% of combatants received sanatorium-resort treatment services from the total number of persons who received the status of a combatant and was entered into the Unified Register of Participants of the Anti-Terrorist Operation. There are no data for 2019 on the volume of funding for physical rehabilitation, social and professional adaptation, provision of sanatorium and resort treatment; consequently, it is difficult to assess the change in funding for social reintegration measures. However, in general, a culture of social reintegration is just emerging in Ukraine, and funding is insufficient to ensure the reintegration of all veterans and their full inclusion in the civilian life. This means that the pressure is increasing on the society, in particular, on non–governmental, public organizations and volunteers, family members in the context of providing social support (Table 4).

Table 4 – Dynamics of indicators by directions of application of funds within the framework of the budget program "Measures on physical rehabilitation, social and professional adaptation, provision of sanatorium-and-spa treatment for the victims of the Revolution of Dignity, participants of the anti-terrorist operation …" of Ukraine for 2019-2020

Performance indicators by directions of application of funds	2019	2020	Deviation, +/-
1. Measures for psychological rehabilitation of participants of the Revolution of Dignity and ATO, thousand UAH	–	62086,7	–
Number of persons-participants of psychological rehabilitation measures, persons	2278	5657	3379
Duration of staying in rehabilitation institutions, days	18	18	0
Average costs per 1 participant of rehabilitation, UAH	9340,5	10937,2	1596,7
2. Measures of social and professional adaptation of the injured participants of the Revolution of Dignity and participants of the anti-terrorist operation, thousand UAH	–	24852,2	–
Number of enterprises, institutions, organizations with which adaptation agreements have been concluded, units	706	640	-66
Number of persons who received adaptation services, persons	4318	3713	-605
Average costs on conducting adaptation measures, UAH for 1 person	6209	6889	680
3. Measures of social and psychological assistance by centers of social and psychological rehabilitation of the population, thousand UAH	–	20580	–
Number of social and psychological rehabilitation centres, units	5	5	0
Number of services on social and psychological assistance provided by the centers, units	76935	46329	-30606
Average costs of providing services to 1 person by the center, UAH for 1 person	141,7	381,7	240
4. Measures on sanatorium treatment, thousand UAH	–	96313,3	–
Number of combatants registered and being in need of treatment, persons	15250	15250	0
Number of combatants who received medical services, persons	5525	7518	1993
Total for the budget program, thousand UAH	–	207488,3	–

Source: Ministry of Veterans Affairs of Ukraine (2021b).

Social reintegration: results of a survey of Ukraine's veterans

From among the surveyed veterans, the participants of the anti–terrorist operation in the East of Ukraine, 36,4% receive an additional payment for participation in hostilities, while 63,6% do not receive.

Unemployed veterans are 9,1% of the respondents, while 18,2% are armed forces personnel, 54,5% are working and not looking for work, 18,2% are working, but looking for work (Table 5), (Table 6).

On average, Ukrainian veterans cannot feel at home after returning with a deviation of 1,0954 in this statement (Table 7). The average score for the statement "People made me proud that I served in my country in the Armed Forces" was 3,545 with a deviation of 1,0357; that is, in general, veterans find it difficult to agree that social support is a source of pride.

Table 5 – Distribution of employed veterans of Ukraine

Employed veterans	Frequency	Percentage, %	Cumulatively, %
Unemployed, not looking for a job	47	9,1	9,1
Armed forces personnel	17	18,2	27,3
Employed and not looking for a job	279	54,5	81,8
Employed, but looking for a job	93	18,2	100,0
Total	512	100,0	–

Source: the author's own research

Table 6 – The results of the survey on social support of the veterans

Questions	Average value	Standard deviation	Dispersion
In Ukraine, citizens forced, made me feel at home after returning	3,000	1,0954	1,200
People made me proud that I served in my country in the Armed Forces	3,545	1,0357	1,073
My family members and / or friends help me feel better when I am not feeling well	4,364	1,6742	1,455
I can reach out to friends, family members when I'm sick, need advice or help	4,182	1,8739	1,764
My friends and family members understand what I had to go through during hostilities	4,000	1,0000	1,000
I have friends, family, to whom I can tell about my experience of participation in hostilities	3,909	1,3751	1,891
Friends, family members would condemn me for money if I needed them	2,636	1,9244	1,855
Friends, family members will help me carry things in case of need	4,455	1,6876	1,473
If I could not work and do my daily business, friends and family members would help me	4,182	1,0787	1,164
If I'm sick friends, family members help me	4,727	1,6467	1,418

Source: the author's own research

The average value of veterans' assessment of assistance from relatives in case of bad feelings was 4,364 with a deviation of 0,67; consequently, in general, the participants of the anti-terrorist operation agree with the social support of relatives. The average value of assessing the statement on the possible appeal for help or advice was 4,182 with a deviation of 0,87. The average value of the assessment of understanding by family members of what the veterans had to go through was 4 points with a deviation of 1. The average value of assessing the possibility of telling friends, family members about their own experience was 3,909 with a deviation of 1,3751. The average value of the assessment of conviction by friends or family of a veteran for the need for money was 2,636 with a deviation of 0,92. The average value of the assessment of possible assistance to the veterans in the transportation of goods was 4,455 with a deviation of 0,68. The average value of the assessment of possible assistance in daily affairs was 4,182. The average value of the assessment of care in case of illness was 4,727 with a deviation of 0,64. Overall, the average score of social support was 3,9; consequently, the veterans agree with the statements about social assistance from friends and family members upon return.

From among the respondents, the following answers were received on the question “Do you need professional psychological support?”, namely: 9,1% answered – “sort of like no”, 72,7% answered – “no”, 18,2% answered – “yes, I need”. 27% of veterans received family or individual counseling services with a psychologist / therapist (Figure 1).

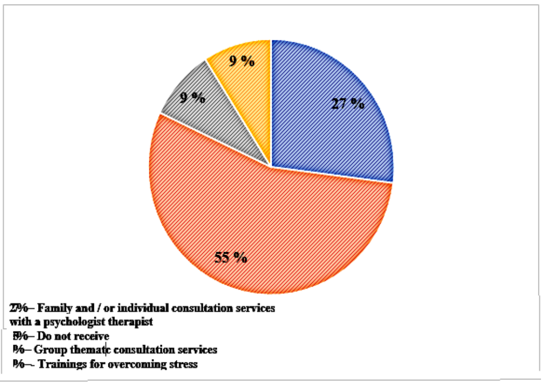

Figure 1 – Distribution of respondents’ answers to the question “Have you received any of the types of social and psychological support? For instance, in the social protection service”
Source: the author’s own research

At the same time, 55% of respondents did not receive social and psychological support, 9% received group thematic consultations, 9% – took part in seminars to overcome stress.

5 Discussion

The results of the present research can be supplemented by an explanation of why social reintegration is not widespread in Ukraine; measures on physical, social and professional adaptation are limited; they are provided to only a small proportion of combatants and veterans (2–3%). According to the investigation of Pugh et al. (2018), social support based on DRRI-2 subscales of the veterans with traumatic brain injury (TBI) severity is significantly lower compared to the veterans without TBI. This is due to the significantly higher level of difficulties of the veterans with TBI, who are more in need of social reintegration, compared to other groups of the veterans. Comorbidities of the veterans also determine the level of need for social support for veterans, which tend to be growing depending on social–demographic features and the presence of diseases, causing difficulties in employment of such persons. Accordingly, social reintegration measures should be aimed primarily at the most vulnerable groups of the veterans. The chances of employment among people with moderate / severe and unclassified TBI were significantly lower compared to those without TBI (Pugh et al., 2018). The group of comorbidities, experience in military operations and social–demographic characteristics also have a significant impact on employment (Pugh et al., 2018).

Maoz, Goldwin, Lewis & Bloch (2016), based on a survey of the veterans with application of DRRI–2 social support scales, have revealed that social support during hostilities is negatively connected with depression, anxiety and symptoms of post–traumatic stress disorder of the participants. Readiness to be involved into hostilities (physical, psychological) directly correlates with depressive, anxiety and post–traumatic symptoms. Family support during hostilities is directly linked to greater resilience to negative mental health symptoms. Stress factors after participating in hostilities are not significantly directly related to mental health. For instance, lack of family support and numerous stressors in the family are most significantly directly related to depression, anxiety and post–traumatic symptoms. Maoz, Goldwin, Lewis & Bloch (2016) have also revealed a significant link between the veterans’ environment (family, friends, stress) and psychological health (Maoz, Goldwin, Lewis & Bloch, 2016). These findings are consistent with the literature, confirming the importance of social support from family and friends: scientists have found a significant feedback loop between social support and post–traumatic stress disorder; poor family support and less cohesion in the family are connected with higher rates of post–traumatic stress disorder among the veterans (Pietrzak et al., 2012; Tsai et al., 2012; Woodward et al., 2018).

Flanagan et al. (2017) have established that social support of the veterans, including through good family relationships, has a positive effect on their reintegration: most of the participants, who had undergone the family relationship correction, had a higher level of success in treating severe symptoms of post–traumatic stress disorder; however, the veterans with poor family relationships showed little improvement in treatment (Flanagan et al., 2017).

The scientific work Baraldi (2017) is devoted to exploring the important role of civil society organizations in the social reintegration of the veterans in Bosnia, who have contributed to the transformation of combatants’ beliefs into the civilian life. For instance, the Center for Nonviolent Action in the Balkans conducted activities with the veterans in order to change their worldview after the war. The veterans were involved in public forums, trainings; they attended official events with the aim of forming them as peacekeepers through socialization, not violence. Members of the Veterans’ Association became members of the Center for Nonviolent Action after being involved in the events. Thanks to understanding of the veterans by population and the legitimacy of the activities, public organizations in Bosnia, have provided a solution to the problems of hybrid warfare. The veterans are actively integrated into Bosnia’s ethnic–national minorities (Baraldi, 2017). For comparison, there are only 4 communities for the veterans in Ukraine, which were created in 2020. As a result, the social reintegration of participants in the hybrid warfare in Ukraine is limited.

Therefore, in the course of the research, it has been established that social reintegration in Ukraine is generally entrusted to family members of veterans; while in other countries public organizations are actively involved in the social, professional adaptation of the veterans.

6 Conclusion

The social reintegration of the veterans takes place on the basis of projects and programs, in particular, budgetary programs aimed at financing various social reintegration activities. Psychosocial assistance to the veterans and social cohesion in communities is based on the activities as follows: trainings on social cohesion, reintegration and fundraising, preparation of grant projects for social cohesion of communities; qualified psychological support of the veterans and their families affected by the military conflict in Ukraine (group and individual consultations). The survey of Ukrainian veterans has revealed that the overall average score of social support was 3,9; consequently, the veterans agree with the statements about social assistance from friends and family members upon return. 72,7% do not need social and psychological support, while 18,2% are really in demand. It was found that 55% of the respondents did not receive social–psychological support; 9% underwent group thematic consultations, 9% took part in seminars for overcoming stress.

Further investigations should be directed towards studying the factors contributing to the social reintegration of the veterans of Ukraine and a comparison of these factors with the experience of other countries.

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Primary Paper Section: A

Secondary Paper Section: AN

DEVELOPMENT OF ACADEMIC MOBILITY AND PROFESSIONAL COMPETENCE OF TEACHERS OF HEIS

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Abstract: To identify a stage concept to improve professional competence through the development of academic mobility. Methodology. A sociological survey is a basic method in this research. Additional technique: analysis of the obtained results. Results. It was defined that academic mobility is characterized by the following indicators: change of country after defending doctoral dissertation; change of country for the preparation of doctoral dissertation; possible change of country when reaching academic maturity; regularity of visiting international conferences; long term assignment of guest professor in another country. The list of such indicators of the development of professional mobility of teachers in the organization of methodological work: the motive of independence, the motive of personal development, the motive of self-affirmation, the motive of stability, protection.

Keywords: HEIs, experience exchange, academic mobility, professional competence, teaching..

1 Introduction

Any change in social life leads to changes in the educational system. Indeed, it is difficult to view XXI century higher education without a global context. Globalization opens many opportunities for the development of higher education while becoming a challenge to national systems for the training of qualified specialists.

Modernization of higher education points to the need to provide a new quality of a modern teacher, one of the main characteristics of which is his mobility, which is manifested in a constant internal, personal-psychological, and external practical-activity readiness for changes, rapid response to them, social and professional mobility.

Institutions of higher education need a teacher, who is motivated for continuous professional improvement, capable of mastering technologies that provide individualization of education, achievement of planned results, demonstrates innovative behavior, ability to independently solve complex problems, manage, quickly adapt to changing conditions (Zastrozhnikova, et al., 2021).

The modern situation in the labor market, growing requirements for teacher competence, standardization, and intensification of professional activity lead to the need to form such personal quality of a teacher as individual professional academic mobility. The literature distinguishes between the vertical and horizontal professional mobility of a specialist. The first is more related to career growth, while the second is related to the employee's ability to perform effectively in a changing practice environment.

One of the aspects of professional mobility is the change in the workplace, types of activities, or their filling.

Relevance. Undoubtedly, the emergence of additional professional functions, implementation of new approaches, and mastering new pedagogical technologies, as well as the expansion of the student population require from the teacher additional costs of time and significantly increase his/her load. Therefore, the need to know how to implement academic mobility, in our opinion, is one of the reasons for the intensification of modern pedagogical activity.

On this basis, therefore, academic mobility of HEIs teachers is not only a territorial movement for the development and exchange of experience but also a complex synthetic activity associated with the rethinking of the structure of teaching.

2 Literature review

Academic mobility has many definitions. The Council of Europe describes academic mobility as the movement of people: students, teachers, and researchers for learning, teaching, and research. According to UNESCO recommendations, academic mobility refers to a period of study, teaching, or research in another country (not the country of residence of the student, teacher, or researcher) (Pokovnikova et al., 2020; Khominets, 2019).

Academic mobility plays an important role in the global scientific and technological competition. In the search for breakthrough technologies, more and more countries are realizing that they are playing in the global marketplace by competing for the best specialists. To a large extent, the flexibility of public policy and carefully designed programs aimed at scientists and scientific support determine the level of technological development of a country (Polkovnikova et al., 2020; Khominets, 2019). Academic mobility is the most common form of internationalization of education, determined by the political goal of country leaders. According to the Organization for Economic Cooperation and Development (OECD), in 2025 the number of foreign students will reach 80 million accordingly, there will be a need for a large number of teachers who are aware of the global scientific context (Afzali et al., 2019).

Rostovskaya et al., (2020) points to important aspects of modernity: academic mobility tends to grow in line with the relevance of educational objectives; developed leading countries around the world support their citizens through national academic mobility programs. National governments of most countries, which determine the importance of academic mobility in the development of the scientific, economic and socio-cultural potential of the country, actively provide targeted financial support to their citizens both in studying and conducting research abroad. As a rule, operators of such programs are national ministries of education and science or specially created agencies for academic mobility. Agencies of this kind organize and conduct a competitive selection of candidates and establish cooperation with foreign universities. They also provide organizational and financial support. In addition to traditional knowledge of academic mobility, the development of virtual academic mobility is facilitated by digital teaching technologies (Ilyashenko, 2020).

The topic of Smorchkova & Yakovleva's (2021) research is related to the implementation of digital technologies in the educational process. The digital transformation of the higher education system naturally leads to the professional transformation of HEIs teachers - changes in his/her functions and roles in the educational process. Under these conditions, the professional mobility of the teacher becomes the most important (Tolstikhina, 2020).

The monograph by Oliinyk et al., (2021) presents the results of international research activities on teacher education and professional development in the modern socio-cultural environment during the socio-economic changes in Ukraine and EU countries.

Academic teacher mobility, according to Likhacheva (2021) Likhacheva & Meretukova (2021), Gunawan et al., (2021), and its effective application in practice are truly relevant in contemporary education. The new society requires the opening of borders, the improvement of economic, educational, and scientific contacts, their international level provides the need to expand the activities of teachers. It is academic mobility that can develop education as a whole and its components in modern conditions. It will allow students to gain more knowledge, use it effectively in practice and deepen all competencies.

The issue of transnational academic mobility from an economic, sociological, and anthropological perspective has been explored by Chen (2017). The scholar challenges economic and political approaches to teacher mobility and theorizes academic mobility within a social and cultural framework and believes that more critical research is needed to understand mobility as a way to reconcile identities, social connections, and various aspects of globalization. Enriquez's (2020) article appeals to the claim that highly qualified academics who are educated in higher education and have acquired transnational identities offer almost seamless mobility. A national border or territory is not the only line that highly qualified scholars must cross as international mobility actors. Their high academic status is reduced to precarity and faces an epistemic injustice through immigration status.

Considering that most university faculty members have dynamic, real-time updates of personal profile and knowledge in the academic social network, as well as minimal individual detailing of faculty profile mapping, it is necessary to study academic teaching mobility as an element of professional competence (Sydorenko et al., 2020; Xiong et al., 2021).

Despite the considerable number of provisions considered, the question of the correspondence of academic mobility and professional competence of HEIs faculty remains unexplored.

Aims. This research aims to develop a step-by-step concept of improving professional competence through the academic mobility development.

Research tasks:

- to conduct a sociological survey of HEIs teachers to identify the stages of the concept of improving professional competence through the development of academic mobility.
- to determine the components of academic mobility in the context of pedagogical competence development.

3 Materials and research methods

Basic methodology: sociological survey.
Additional methodology: analytics (processing of results).
The research is based on the theory of internationalization of education in conditions of increasing globalization.
The sociological survey involved 570 HEIs teachers in Ukraine who agreed to the specified conditions of data collection.
Duration of the survey – 1 month.
Data collection – 2 weeks.
Data processing – 2 weeks.
Platform – Google-forms.
Data retrieval time – during training courses.
Special condition – teacher's participation in experience exchange programs.

4 Results

The survey consisted of thematic blocks, in each of which the respondents singled out key theses. In the block "Ability for self-development" respondents were asked to perform a ranking from a larger to a smaller position among the following indicators: change of country after the defense of the candidate's dissertation; change of country for preparation of the candidate's dissertation; possible change of the country at the achievement of scientific maturity; regular attendance at international conferences; a long trip of a visiting professor to another country. The results are presented in Figure 1.

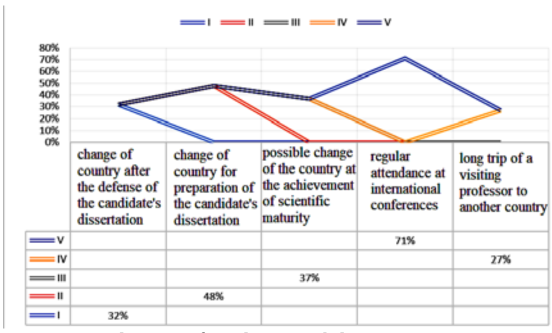

Figure 1 – Indicators of academic mobility
(Source: sociological survey)

In the "Goal-setting" block, respondents were asked to rank from higher to lower position among the following target indicators of professional development effectiveness:

- implementation of project activities is based on a set of methodological approaches - systemic, competency, personal-activity, axiological and the principles of determinism, continuity, dynamism, and prospects;
- mobility development is differentiated and individual, providing, on the one hand, improving the technology of project activities, and on the other - contributes to targeted activities for continuous self-development, self-reflection, and management of their professional growth; technology of realization of projective activity provides professional and personal growth, increasing professional mobility and performing diagnostic, prognostic and developmental functions;
- creating the conditions necessary for the development of professional mobility in the system of additional education.

The results are presented in Figure 2.

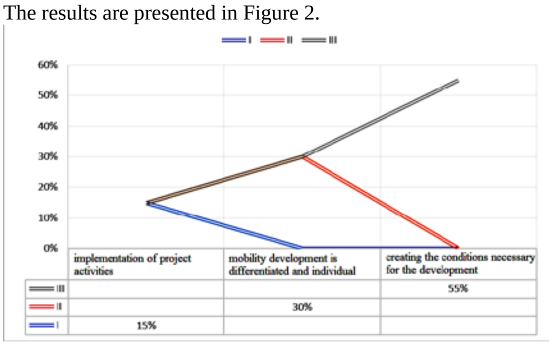

Figure 2 – List of target indicators of professional development efficiency
(Source: sociological survey)

In the "Analytics" block, respondents were asked to perform a ranking from a larger to a smaller position among the following indicators of interpretation of academic mobility: the ability to quickly adapt to different types of professional activities; readiness to quickly react on responses to the requirements associated with the development of new technologies and achieving the effectiveness of professional activities; flexibility of interaction with the subjects of the educational process; change in the formation of the employee due to changes in the workplace, activities, or labor operations; mastering the new professional status and roles. The results are presented in Figure 3.

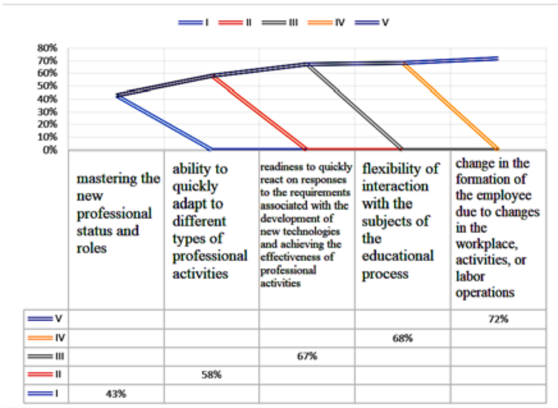

Figure 3 – Indicators of the academic mobility interpretation
(Source: sociological survey)

In the block "Dynamics" respondents were asked to rank from greater to lesser position among the following indicators of professional mobility of teachers in the organization of professional activities: the motive of independence, the motive of personal development, the motive of self-affirmation, the motive of stability, security. The results are presented in Figure 4.

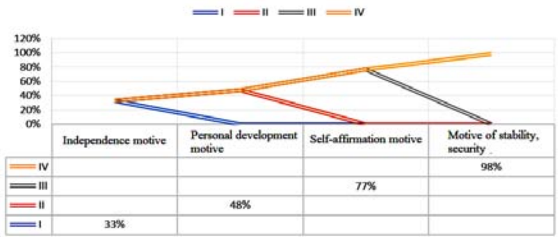

Figure 4 – Indicators of the teacher's professional mobility development in the organization of work
(Source: sociological survey)

In the block "Statics" respondents were asked to perform rankings from higher to lower position among such indicators-components of models of professional mobility development, carried out using project activities in the system of additional education and based on methodological approaches (systemic, competence, personal-activity, axiological) and methodological principles (determinism, continuity, dynamism, prospects), contains interrelated components (target, content-technological, evaluation-performance), performing diagnostic, prognostic and developmental functions. The results are presented in Figure 5; the decryption is given in the table.

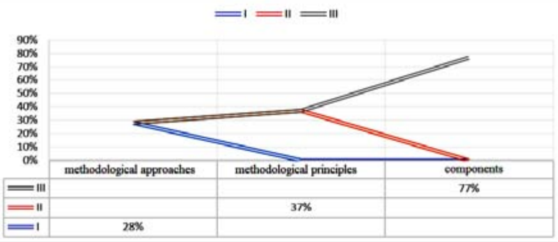

Figure 5 – Components of professional mobility development models
(Source: sociological survey)

Thus, the results obtained are the basis for scientific discussion and conclusion of the concept of academic mobility of HEIs teachers.

Based on the study we can outline the concept to improve professional competence through the development of academic mobility. Let us present it in the model of consecutive stages.

The first stage: the ability to self-development – the basis for the development of professional mobility of a teacher. Self-actualization, self-reflection, and self-assessment play the most important role in a teacher's professional activity.

The second stage: goal-setting – for the development of professional mobility it is important to have clear goals. A high level of professional competence is necessary for a successful career. Having professional competencies is a component of professional mobility, provides the teacher with productive professional functioning, and is a strategic aim of professional-pedagogical education and self-education.

The third stage: analytics – professionally mobile can be the one who can analyze his/her professional and pedagogical activity, take non-standard professional decisions in the process of solving professional and pedagogical tasks. Undoubtedly, the ability to promptly solve the pedagogical tasks of the educational process is a necessary condition for the formation of professional mobility.

The fourth stage: dynamics – the need for continuous professional growth, which indicates the possibility of further development of professional mobility.

The fifth stage: static – the need for a special organization of the process of professional mobility formation synthesis of the development of key professional competencies, abilities to solve professional and pedagogical tasks of the educational process, and improvement of the content of professional disciplines and the educational process as a whole. The problem of the formation of professional mobility from the perspective of the humanistic approach is considered in the aspect of the formation of attitudes that provide personal orientation on professional self-realization.

5 Discussion

The global scholarly discussion of the topic in question allows for a thesis description of the practice of introducing the concept of "academic mobility" into HEIs.

The idea of the "globalist scholar," as Morozov & Guerin (2021) argue, is a key concept for rethinking the role of scholars at the edge of global and local levels. The authors express their perspective on the figure of the globalist scholar from different contexts including South Africa, Australia, the United States, the United Kingdom, Chile, Germany, Cyprus, Kenya, and Israel, and conclude that teacher mobility depends on the policy, research, and practice.

Spivakovska & Kotkova (2017), summarizing the practical experience of implementing academic mobility within the international cooperation of Kherson State University and Pomeranian Academy (Poland), analyze the concept of academic mobility, through individual pedagogical characteristics of each of its participants.

Greek & Jonsmoen (2021) explore the issue of internationalization in higher education by exploring the impact of transnational academic mobility on university communities. In Norway, how academic mobility is represented are informal interaction, collaboration, language practices, and internationalization. However, to realize the full professional potential of academic diversity, significant institutional and personal adjustments are required. In the North (Cohen et al., 2021) the processes under consideration have certain opportunities and constraints on academic spaces of faculty mobility.

Shelkunova & Artyukhova (2019) present a theoretical analysis of the concept of "academic mobility" and focus on the components of academic mobility of teachers at Siberian Federal University.

Analysis of the results of the study conducted by Zagvyazinskiy et al., (2020) demonstrates a low level of involvement of students of Siberian universities in academic mobility programs against the background of their high degree of readiness to implement such programs.
Leung & Theo's (2018) research describes two qualitative research projects, one on scholars from the People's Republic of China working in Germany and the Netherlands, and another on ethnic Chinese teachers in Indonesia. The results demonstrate the impact of academic mobility on social shifts, redefining, reworking, and reconciling clearly defined ethnocultural, national, gender, and religious identities.

The distinction between negative, positive, and Epistemic degrees of freedom helped Laakso (2020) analyze the conditions of teacher academic mobility in Africa. Semi-structured interviews of social and political scientists at the main national universities in Botswana, Cameroon, and Zimbabwe, representing different experiences of political development, show that the international connections that allow academics to move are crucial to their work and allow them to be critical not guarantee decent working conditions or support decolonizing curricula. The lack of connections reinforces self-censorship. However, their position can be particularly vulnerable. The space for critical expertise is affected not only by national policies and the material conditions of universities but also by the internationalization of higher education and research. This is why all aspects of academic freedom must be protected through international cooperation.

In Kyrgyzstan, issues of academic mobility are based on a deep interest in traveling abroad for study and internships (Amiraliev, 2021).

The identification of problems in the development of academic mobility as a soft power tool was addressed by Zhakyanova &

Kanagatov (2021). Academic mobility through the prism of the concept of "soft power" acquires a new interpretation and provides an opportunity to improve the tools and mechanisms of interstate cooperation. Based on statistical data, analysis of secondary data the conclusion is made about the need for a conceptual study of academic mobility in Kazakhstan; existing grounds for the need to create a new image on the world stage, meets the national interests of Kazakhstan and modern realities. Now the implementation of Kazakhstan's "soft power" has many problems related to legal, financial, and economic aspects. Although the current regulatory documents on the organization of academic mobility of teachers in the Kazakhstani context have been motivated mainly by sufficient empirical material reflecting the experience of practical implementation activities, there is a lack of fundamental work on this research problem.

International academic mobility in East and Southeast Asia is a complex and dynamic phenomenon whose evolution is closely linked to the changing face of economic, political, and social development (Wang, 2017).

6 Conclusions

Therefore, academic mobility is one of the most important projects of international and educational activities, it has the goals of improving the quality of higher education; increasing the effectiveness of research; improving competitiveness in the international market of educational services and labor; improving professional competencies by studying and updating the experience of leading HEIs, achieving international composition of education standards; attraction of protected intellectual potential based on bilateral agreements.
An important area of further research will be the identification of additional components of academic mobility and factors of their development.
The practical significance of the study was the presentation of the "five-step concept" to improve professional competence through the development of academic mobility.

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THE AESTHETIC LOGOSPHERE OF THE SCHOOL AS A FACTOR IN THE ARTISTIC CULTURE FORMING

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Abstract: The socio-cultural situation of the present actualizes the problem of emotional and sensory perception of the world. The formation of aesthetic sense places increased demands on the educational process, and the child-centeredness of pedagogical science is one of the most crucial trends in the development of modern scientific cognition. This article aims to substantiate the pedagogical conditions for the formation of the artistic culture of adolescents within the aesthetic logosphere of the modern school and their experimental testing in practice.

Keywords: adolescents, aesthetic logosphere, artistic education, artistic culture, language, pedagogic conditions.

1 Introduction

The socio-cultural situation of the present actualizes the problem of emotional and sensory perception of the world. The formation of aesthetic sense places increased demands on the educational process, and the child-centeredness of pedagogical science is one of the most crucial trends in the development of modern scientific cognition. This tendency (in current conditions of society's sustainable development) has become not only a theoretical but also an acute social problem concerning the basics of human life activity because the child "is a potential future" (Jung, 2001). The essence of man in this context can be conceptualized as a result of the interaction of different spheres of human studies: philosophical-anthropological, psychological, pedagogical, and artistic, the art of the word, in particular, the so-called logosphere.

The interdisciplinary concept of "logosphere" is formed based on most of the philosophical and literary studies aimed at studying the processes of knowledge of the world, as well as the features of speech impact on thinking, spirituality, and worldview of an individual or social group (Mikhal'skaya, 1996). Logosphere as a thinking and communicative environment allows us to understand different aspects of society and its culture through the word as an aesthetic phenomenon. The aesthetic logosphere reflects students' emotions and feelings, transforming them into moral and ethical values (Carr, 2016; Stichter, 2018). The key aim of the aesthetic logosphere is to take a person out of the sphere of his inner world into the real world, the world of interaction with other people (Poryadchenko, 2019).

The peculiarity of global cognition (using the word art) lies in the fact that the word fixes not only specific objects of life, which can be perceived but also feelings, moods, etc. Through the word, a person can comprehend the versatility of another person, the complex world of his feelings and emotions. The ascension to the art, especially at school age, is one of the most significant factors necessary to create an atmosphere of mutual understanding, self-knowledge, and self-improvement. However, modern school practice shows that the cultural experience of students consists of many, often contradictory, layers, among which the spectacular synthesis of arts prevails, formed in the developed industry of advertising, mass culture, information technology.

Students are weaned off the artistic and aesthetic code of the word. Their greater trust is in the visual image rather than the literary one. It leads to the destruction of the ability to perceive and create the expressive not only in art but also in life: language replaces its surrogate, the phenomenon of art becomes blurred, making it difficult for a child to separate art from its low-quality imitation. Therefore, it is impossible not to note that today's teenagers in the majority have a low level of linguistic culture, are unable to see and understand beauty, and have a low artistic and aesthetic taste, which is reflected both in their appearance and communication with other people.

2 Literature Review

The modern educators (Aprill, 2001; Bastos, 2007; Davenport, 2000; Gibson, & Larson, 2007; Hausman 2009; Hausen, 2001, etc.) consider art as a mediator between different spheres of knowledge, which, in turn, builds aesthetic logosphere of the educational process. Art and aesthetic activities in the educational process provide more confidence in one's abilities and contribute to the free creative expression of each student's identity, forming certain attitudes of life and promoting the realization of their creative potential (Oxtoby, 2012). Different types of art stimulate reflection on the purposefulness of human life, according to Goldblatt (2006). The arts provide cognitive development and aesthetic experiences for students (Eisner, 2002). They are closely related to various activities in society, as well as traditions and values. Simultaneously, during the acquisition of the aesthetic experience, there is a need for a creative expression of the individual (Gadris, 2020; Paris, 2019; Torrance, 1986;). Familiarizing students with different types of art ensures the development of the aesthetic literacy-the ability to perceive the aesthetic characteristics of objects, phenomena, and the language of art (Gale, 2005), which serves as a tool for establishing a conscious connection to the world around us (Greene, 2001).

The teaching of different types of art plays a key role in the education of everyone, regardless of age, ability, socio-economic and socio-cultural level. Today's visually-oriented world provides the younger generation with the opportunity to use their creativity and imagination and to build successful relationships with the world around them: the emphasis should be on the development of basic human values and on the awareness of the fact that art covers and ways to solve problems in different spheres of life based on visual thinking (Zimmerman, 2010). Overall, this creates an authentic mental activity for students. It primarily involves the conscious, critical, and creative application of the knowledge gained and the skills formed in practice. Art provides a holistic understanding of culture and its impact on the formation of young people's lives through interdisciplinarity, critical dialogue, culture-making, global discourse, and the development of evaluative judgments based on artistic and aesthetic activities (Hausman, Ploof, Duignan, Hostert & Brown, 2010). In addition, students' performance in mastering various art forms in hands-on activities enhances their artistic expression.

Understanding the communicative images of art and certain cultural images is an important component of modern education. The process of cultural creation through art can be seen as a dialogue. It generates a new understanding of the world as a whole and the individual's place in it, in particular. In this case, the educational process through art is accompanied by internal reward in the form of creation and perception of various aesthetic forms, contributes to a positive transformation of the individual's consciousness, and deepens its understanding of the modern globalizing society. In this way, art integrates the collective experience of culture into one with the educational process (Hausman, Ploof, Duignan, Hostert & Brown, 2010), contributing to a positive emotional attitude toward the world around us, evoking feelings of pleasure and creating space for hope and possibility (Bastos, 2007; Housen, 2001). Addressing the specificity of art as a means of developing the intellectual capacity of the younger generation, Ohio State University art education professor Efland (2002) notes that works of art are cognitive guides that guide students to apply individually acquired knowledge.

This article aims to substantiate the pedagogical conditions for the formation of the artistic culture of adolescents within the aesthetic logosphere of the modern school and their experimental testing in practice.

3 Materials and research methods

In this research was exploited the mixed research design, based on quantitative (experiment) and qualitative methods (analysis and synthesis of the data collected in a statistically valid manner as well as for determining the initial provisions of the work; study and analysis of philosophical, pedagogical, psychological literature with elements of induction and deduction to characterize the state of development of the research problem and determine the pedagogical conditions for the formation of the artistic culture of adolescents; pedagogical observations, analysis of activity products to specify the state of the adolescents' artistic culture; monographic method – to interpret the results obtained in a coherent logical way). The results of the ascertaining experiment were calculated and processed using the methods of mathematical statistics.

Participants. The experimental study covered 1,300 adolescents. It includes 450 middle school students and 860 high school students from Kyiv, Lviv, Lutsk, Poltava, Rivne. The participants gave their voluntary informed consent for their participation in the research.

4 Results

In-depth work on the word as an expressive means of artistic culture, the study of elements of poetics contribute to the organization of learning and cognitive activities of students, accompanied by emotional tension. A balance of emotional and intellectual spheres will help the student feeling and experiencing the word, not just fix it as external information, using the old passive language techniques in response.

The basis of the process of formation of students' artistic culture should be the aesthetic logosphere of the school, where the word functions as an aesthetic phenomenon, based on the representation of the three genera of literature and provides dialogic (polylogical) contact of students with the phenomena of the art of the word. The aesthetic logosphere appeals to the personal experiences of students. It is transforming the norms and values of not only poetics but also the highest human ideals in children's lives. Its purpose is to bring the child into the outside world, in which an encounter with other people will take place.

The aesthetic logosphere of the school counts on the interaction of man with the linguistic environment, which helps her move from sensual perception of the world to intellectual' creative activity and recognizes the cultural value of language through the prospect of unlimited disclosure of the meanings of the word, which each of the perceivers comprehends individually. After all, the art of the word is not a passive product of social development; it is an active beginning aimed at dynamizing the world. Therefore, the aesthetic logosphere is a phenomenon of the pedagogical process, in which word exists as an aesthetic phenomenon, enters into object-subject relations with culture, based on full representation of three types of literature: epic, lyric, drama and their use both in literature lessons and in other classes – language, history, ethics, aesthetics, etc., as well as in out-of-class work.

The aesthetic logosphere has many planes in which students communicate. It assumes and relatively "stationary" static form (lessons in the basic subjects) and "moving" of which there are many both in the basic classes and in extracurricular time: the literary studio, school drama theater, the circle of the art word, etc.

The linguistic conditions of the school: the speech of textbooks, manuals, the students' environment, the teachers' speech, everything that the student can see and hear should aim at transforming the individual from the "lower" level to the "upper" one. At the center of such a pedagogical process phenomenon should be the creative *individuality and personality* of the student because there are no two identical people.

The performance criteria of such a process cover four groups: content, emotional-value, creative and humanitarian.

Content group provides normative knowledge, skills, and abilities in the sphere of word art; students' ability to express their opinions; students' erudition in the sphere of word art is also taken into account.

Indicators: linguistic literacy (mastering of norms of pronunciation, spelling, lexical, syntactic, stylistic categories) possession of the system of literary-theoretical knowledge, concepts, terms; linguocultural competence; possession of speech behavior and speech etiquette; understanding of syntagmatic (cine) and paradigmatics (infinity) of artistic texts; adequate perception of the artistic work (its poetics).

Emotional value group refers to the development of students' emotional and sensory sphere; reflects the depth of students' penetration into the aesthetic essence of works, understanding themselves in the context of artistic culture, readiness to understand and accept the experiences of another.

Indicators: ability to understand and use norms of linguistic literacy to express emotional state; imagery, the emotional coloring of own statements; a sense of surprise, curiosity; ability to aesthetic experience (empathy) awareness of the uniqueness of the singular in general and, in particular, of own self (perception of the other as an aesthetic value).

Creative group provides for the individual activity of the individual, which is associated with quality work in the field of art and turns out to be in search, finding, and responsibility for his/her word and its consequences.

Indicators: ability to independently set and solve creative tasks; originality, unpredictability, and uncommonness of their performance; appropriateness of text interpretation; the desire to express their worldview, their view of the world; readiness for self-education; joy as a sign of artistic and generally spiritual creativity; ability to conclude independently.

Humanitarian groups allows you to determine the extent to which the inheritance of mankind's cultural experience, transmitted in the process of training and education, as well as consider the person as a complex personality, capable of active action based on established universal values. It is most closely associated with the idea of responsibility for the real, and not just desired consequences of one's actions. Being focused on the intellect, the ability of students to apply knowledge and implement logical and artistic constructions aimed at obtaining a new spiritual experience of being, its accumulation, and translation.

Indicators: apparent possession of the strategy of using the acquired knowledge, abilities, and skills; development of axiological thinking; awareness of the dialogic nature of art; development of cognitive skills; ability to use knowledge from related fields; developed level of reflection, associated with the qualitative transformation of consciousness; formed worldview (not just as a simple stay in the world, and the fundamental self-determination in it); humanistic orientation of the individual (tolerance of other views) understanding and recognition of the dignity of every person and his/her ability to be different.

The specified criteria are interconnected, have prognostic character, they are reference points of humanitarian direction, which are subject to modification. On their basis, they are stable for all age groups of students because the motivation of creative behavior consists of early childhood, only its quality changes, which depends on the dynamic functional structure of the personality.

Qualitative and quantitative analysis of the students' artistic culture formation through word art at the beginning of the experiment showed a generally low level. It was mainly due to the lack of a systematic approach to solving the problems of the students' artistic culture formation through the word art. Most of the completed creative works and tests, in essence, are not artistically independent, they have poorly realized possession of the strategy of using the acquired knowledge, skills and abilities, and awareness of the dialogic nature of art partially traced such a sign of the established artistic culture as a humanistic orientation of the individual.

The conducted lessons, interviews, surveys allowed us to conclude that the most formed in younger students is the creative criterion of readiness to perceive the poetics of literary works.

Adolescents also have a rather high value of the indicators of the creative group, which allows us to conclude that the use of only the traditional system of pedagogical influence, which focuses primarily on the development of the rational and reproductive type of thinking, is ineffective for students of this age.

We have developed principles of organization and functioning of the school aesthetic logosphere which order a variety of linguistic planes and are united by different types of connection, the purpose of which is to transmit to students organized and aesthetically directed speech information, the basis of which is the factor of word poetics. These are the principles of linguoculturology; aesthetic actualization of linguistic units; polylingualism; children's linguistic creativity.

The principle of linguoculturology covers a special type of interrelation of language and culture, manifested both in the sphere of language and culture. The junction of linguistic and cultural studies passes through the text.

The principle of aesthetic actualization of language units is based on the consideration of the fact that grammar emerged in the course of cultural and cognitive intensions, which were instilled by the epoch of Humanism and Renaissance. The human being, in a certain sense, is identical to the language she speaks. Therefore, this principle provides for the study of grammatical structures on the examples of fiction, awareness of their meaning, focusing students' attention on the phonetic, morphological, syntactic, orthoepic analysis of texts, will help not only to correctly express their opinion but also to adequately perceive the other's statements.

The principle of multilingualism promotes students' understanding of themselves as part of the universal community through knowledge of several languages and, consequently, several cultures. For the language to appear before students as a cultural phenomenon, it is necessary to read literary classic works in the original language, introducing them correctly in the course of classes; to improve the skills of expressive reading, through which students understand not only the plot but also the meaning of the text; to develop skills of working with the dictionary; to focus students' attention on the properties of words related to their expressiveness. Students will understand the value of otherness and will be able to identify and appreciate their generic origin, moving consistently from culture to culture, from language to language.

The principle of organizing children's language creativity in the development of artistic and aesthetic thinking of schoolchildren, encouraging them to be active. Taking into account that speech creativity is differentiated and grows with the child's development, we have developed a set of creative exercises, which also become more complicated gradually, coming into contact with the existing experience of students.

The tasks take into account the criteria of formation of artistic culture, based on the above principles and provide for the fact that their rhythm and nature should be similar to the nature and rhythm of life of the students themselves – not boringly monotonous, but changeable, syncopated, where short texts alternate with long ones, prose with poems, purely national with international, serious with funny, etc. (Forms of engaging students in creativity – competition and game assignments, creative exercises, school theater, correspondence weeks, literary quiz days, etc.). The program-methodological support prepared by the authors included the study of the word as a phenomenon of artistic culture, which contributed to the avoidance of dogmatism and stereotypical thinking, the search for their unique voice, the formation of a highly educated personality.

The pedagogical conditions for the students' artistic culture formation are the organization of aesthetic contemplation; creating situations of aesthetic experience, the depth of which can only be assumed; aesthetic practice aimed at developing the emotional-sensory sphere and acquiring aesthetic experience. As for the aesthetic experience, it provides the development of the ability to pose relevant questions, make aesthetic judgments, to compare and interpret certain phenomena.

The first condition was the organization of aesthetic contemplation, whose tasks include: enriching their perceptions with sensory and figurative information; sharpening emotional receptivity of students; forming skills of aesthetic evaluation; awakening intuition, refinement of perception of the art of speech; preparing the child for empathic entry into the world of art. The developed cycles of creative tasks "Word and Nature"; "I Look and Feel"; "I Sing about the Object World" are aimed at forming the ability to penetrate the meaning of things, both ordinary and artistic, noticing their unique beauty.

The second condition is the creation of situations of aesthetic experience, providing the formation of empathy skills with the heroes of artistic works and the development of the ability to respond to the aesthetic manifestations of the objective world. The most important prerequisite for success here is the conscious perception formation of the best examples of highly artistic works by young students. The aesthetic experience is inevitably associated with empathy for the heroes of works, and through them, for real people.

The third pedagogical condition is the organization of aesthetic practice of adolescents, whose task is: the involvement of students in the artistic and aesthetic activities, development of essential forces of students, through which they not only transform the external but also develop themselves.

To this end, we have prepared and tested the methodological support of the experiment. In particular, a workbook with a printed basis "Poetry of grammar", where we tried to vividly realize the principle of aesthetic actualization of linguistic units, which in this case is dominant. The textbook of the basic subject "Art" and methodological recommendations to it. Its content, which is based on "decentralization", says that all cultural regions of the world are given credit, without the primacy of one over the other, recognizing their equality based on differences, and providing a "minimal" that includes information and tasks on the masterpieces of art.

Examples of written creative work show the students' conscious use of figurative statements, dialogues; oral responses, conversations are characterized by emotionality, improvisation, revealing such dialogue tendencies as principled equality of partners, waiting for and anticipating an answer, and so forth. Pupils showed their ability to operate with new knowledge, to use figurative expressions in creative tasks (written and oral), to depict landscapes, portraits, and to compose dialogues, fairy tales, and poems. And the main thing – the children understood that every word is a diverse world. Pupils understood that words help to represent individual features of people, to present those pictures which literary works tell about more vividly. Performing the proposed tasks, the younger students came to understand that words can express shades of feelings, moods, it helps to get closer to understanding the nature of human feelings (the control group worked with the traditional methodology, Table 1).

Table 1 – The general level of artistic culture formation of elementary school pupils through the word's art

The general level of artistic culture formation of elementary school pupils	Levels %					
	Experimental group			Control group		
	high	medium	low	high	medium	low
At the beginning of the experiment	2,2	34,5	63,5	2,8	37,2	59,9
After the formation experiment	46,9	50,6	2,5	6,1	44,6	49,3

(Author's source)

Compared to the pre-study experiment, the vocabulary has significantly expanded, and the language barrier in expressing students' judgments has decreased using the rich vocabulary of the works they have read.

The primary school students (Table 2) increased their interest in learning about the history of both distant civilizations and their people, and they became aware that the context of "here and now" imprints the vision of "there and then." In this case, the artistic text fulfilled the most important of its functions – it actualized certain aspects of the individual, who, referring to himself, begins to search for his place in the world, determines and chooses his values.

According to the data of the transcripts of the lessons, interviewing teachers, methodologists, who monitored the formative stage of the study, the students of the experimental classes were ready to meet with other people, is the cultural beginning of human existence, a step toward dialogue, in which individuals create each other, and without losing individuality and dignity, treat another person not as an object, but as their companion in the course of life.

Table 2 – General level of adolescent's artistic culture formation through the speech art

General level of adolescent's artistic culture formation	Levels %		
	high	medium	low
At the beginning of the experiment	23,00%	52,00%	25,00%
After the formation experiment	35,00%	54,00%	11,00%

(Author's source)

5 Discussion

This study is a modest contribution to the ongoing discussions about the efficiency of different aspects of art in forming the artistic culture of adolescents. Our results are in good agreement with other studies (Carr, 2018; Gadris, 2020; Mahgoub, 2016; Paris, 2019; Simecek & Ellis, 2017; Sotiropoulou-Zormpala & Mouriki, 2019) have shown that aesthetic logoshpere in the conditions of modern school can substantially improve the quality and efficiency of the educational process in the direction of forming adolescents' artistic culture.

The enrichment of the modern school's logosphere through aesthetics and art shows that this integration contributes to children's necessary learning and life experiences through the use of various multimodal learning and cognitive situations (Sotiropoulou-Zormpala & Mouriki, 2019). What is necessary to do is to form the students' capacity for self-knowledge and self-improvement, which in general implies an inner need to work with one's self as a great aesthetic idea of humanity (Gadris, 2020). And it is the desire to satisfy such a requirement that drives one to become human.

The aesthetic logosphere provides knowledge that is acquired by the senses and appeals to the emotions of the individual, contributing to his or her self-improvement (Paris, 2019). It can open up unrealized knowledge and lead to unexpected personal growth. Poetry occupies an important place in shaping the school's aesthetic logosphere. However, despite the obvious cultural and aesthetic value of poetry, the question of how this should be reflected in the curriculum in schools remains unresolved. As a consequence, the aesthetic value of poetry gives way to a focus on its instrumental exploration in schools (Simecek & Ellis, 2017).

Overall, the aesthetic logosphere, relating to the ability to emotionally perceive the world and develop aesthetic consciousness (Mahgoub, 2016), provides a holistic intellectual, social, emotional, and spiritual development of the individual (Rendón, 2008).

6 Conclusion

The study examines the educational potential of the aesthetic logosphere of the school as a system of pedagogical conditions that ensure the formation of the artistic culture of adolescents. Thanks to the educational logosphere, enriching and improving it, each teenager finds the highest spiritual aesthetic values, develops the ability and the need to comprehend the beautiful in real life. The effectiveness of the teenager's artistic culture formation in the aesthetic logosphere depends to a large extent on the degree of manifestation of creative self-realization of the personality. With full creative freedom and stimulation of children's self-expression, today's educators must nurture rich artistic creativity, integrating art into life and thereby educating each child's personality through art.

Thanks to the sound principles and conditions of functioning of the aesthetic logosphere, schoolchildren are forming an aesthetic position, which directs their creativity in all spheres of social practice, involves the ability to be involved with others, stimulates moral and ethical actions. Analysis of the theory and practice of the problem under study allowed us to conclude that relevant at the present stage is the theoretical justification of pedagogical conditions for the formation of students' artistic culture. Among these conditions are: the organization of aesthetic contemplation; creating situations of aesthetic experience, the depth of which can only be assumed; aesthetic practice aimed at developing the emotional and sensitive sphere and acquisition of aesthetic experience. In general, one of the key skills is the ability of students to art-interpretation activity, which ensures the effective formation of their artistic culture and also contributes to the implementation of the main educational objectives of the general education system by taking into account the socio-cultural status of art, through artistic images and words influences the inner world of adolescents.

The practical value of the findings consists in the development and implementation of a set of educational activities based on traditional and innovative forms and methods of art and aesthetic education aimed at shaping the artistic culture of adolescents in the aesthetic logosphere of the modern school.

The results of the study can be used in the practice of art and aesthetic education of adolescents, as well as in the creation of methodological materials for teachers, in the training of future teachers, and the system of postgraduate teacher education.

As a promising direction for further research in this area, we see the study of content and organizational features of the aesthetic logosphere of the modern school in the formation of spiritual and moral values of adolescents.

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Primary Paper Section: A

Secondary Paper Section: AM

THE INNOVATIVE DEVELOPMENT OF SOCIALIZATION OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS ON THE INTELLECTUAL DISABILITY EXAMPLE

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Abstract: Of particular relevance are issues whose solution is aimed at preparing the individual for life in conditions of constant change, to provide opportunities for social development, full existence in society. At the same time, new parameters of the course of the socialization process are set, which put before the personality increased requirements for the formation of adequate models of its social behavior and system of values under the new circumstances, assimilation of social experience, adequate reproduction of social relations. The new conceptual foundations of social structure, as stated in the UN Declaration on Social Development, consist in the ability of modern society to develop based on tolerance, tolerance, condemnation of discrimination, respect for human diversity, equality of opportunity, solidarity, and security. These approaches are conditioned by the definition of the main goal of social development – the creation of “society for all”, which provides protection and full integration into society of all segments of the population, including persons with disabilities. This integration is based on the concept of a holistic approach, which opens the way to the realization of rights and opportunities for each person and, above all, provides equal access to quality education. The principle of accessibility, which is a leading principle in the holistic approach of modern social policy and is formulated based on respect for human rights, was stated in the UN General Assembly resolution of December 12, 1997 [19] as a priority – the promotion of equal opportunities for people with disabilities. The aim and object of this article are to determine modern approaches to the socialization problem of children with special educational needs, the disclosure of new innovative technologies. Research methods: analysis of scientific literature, expert survey. Practical significance consists in studying the issues of further socialization of graduates with special needs after graduation from a special educational institution, development of new conceptual provisions to optimize the preparation of persons of this category for independent life in modern society.

Keywords: children with special educational needs, education system, development strategy, child-centeredness, inclusive education.

1 Introduction

Socialization of a child in the conditions of a special educational institution should be considered as the creation of conditions for her social growth and development. At the present stage, there is a need to revise the system of the educational process to ensure the socialization of schoolchildren with special needs. [1]

Socialization should be considered as the most important task of a special school, the leading direction of corrective and educational work, which is carried out in conditions of special organization of the pedagogical process, i.e. organization of its content, methodology, organizational forms.

Providing socialization of students should provide for stages (from elementary school to adolescence and adolescence), continuity, consistency (close links between the stages of socialization in which the child is in a special educational institution), continuity, systematic and integrated implementation of appropriate remedial and educational work.

Socialization should be considered in the context of the formation of the child's personality based on the identification and development of his or her capabilities (aptitudes, aptitudes, abilities) and individual psychological features (positive qualities).

Improvement is required in the organization of vocational and labor training of students based on increasing the effectiveness of vocational guidance work at school and vocational and labor practice at work. [3]

It is advisable to involve parents in coordinated action with teachers for targeted socialization of their children, as only the efficiency of the social formation of children depends on coordinated cooperation between school and family.

Today there is an increase in the number of children with intellectual disabilities who study in general education schools with inclusive classes.

To realize the right of children with special educational needs to education at the place of residence, their socialization, and integration into society, inclusive classes are mandatorily created at the request of parents. At present, the number of such classes is 17,698. They are created in 6 thousand 496 schools of the country.

“The Ministry of Education and Science receives information that the heads of schools refuse to accept parents of children with special educational needs. We emphasize that parents have the right to apply to the school with a written application, and the head of the institution has no right to refuse. First and foremost, we must think about the child and his or her needs. And for the school it should be a task, not a problem,” said Larisa Samsonova, head of the expert group on inclusive education of the MoES. [7]

Educational services are provided to children with SEN by schools in inclusive classes, using person-centered teaching methods and taking into account individual characteristics of educational and cognitive activity of such children.

The number of children with SEN in one class should not exceed three people.

We note that for each child, an educational institution receives funds from the state budget to local budgets to provide state support to individuals with SEN. For these funds based on the conclusion on a comprehensive assessment of child development, issued by the IRC, the child is provided with educational aids and additional psycho-pedagogical and corrective-developmental services. Thus, in 2020, 504.458 million UAH were allocated for inclusive education.

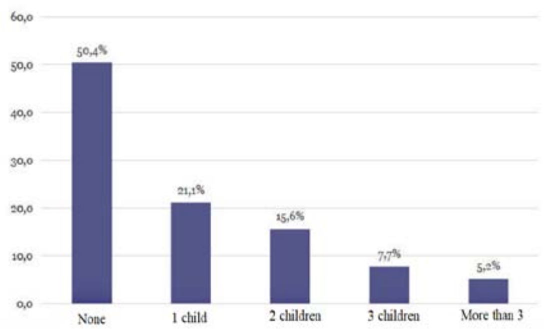

Figure 1 – The number of students in inclusive classrooms
Source: Developed by the authors.

As shown in the figure 1, statistics show that the number of students in inclusive classrooms increased by almost 72% (from 4,180 to 7,179) between 2019/2020.

During the same period, the number of schools with inclusive instruction increased by almost 73%, from 1,518 to 2,620 institutions.

It is significant that since September 1, 2020, 6 thousand children with special educational needs went to inclusive groups of pre-school institutions.

As part of the study, an expert survey was conducted among employees of educational institutions to determine the criteria for the socialization of children with special educational needs in inclusive classes.

An expert survey is a method of collecting information based on opinions about a phenomenon or process by a group of competent specialists, who are called experts. [11]

The base of the study is the Rivne IRC "Strumok".

We interviewed 13 – teachers working with children in inclusive classes, 10 – teacher's assistants, and 7 parents of children with special educational needs, the total number of respondents is 30 people.

2 Results

While conducting the expert survey, there were five questions. The first question was: How do you determine if a child with special educational needs has socialized in an inclusive classroom? This question aimed to find out if a child with special educational needs is socialized in an inclusive classroom and if school officials pay attention to it. During the analysis of the question, the following answers were most often found:

- the child makes friends, wants to go to school;
- displays of deviant behavior decrease;
- the child takes an active part in the learning process;
- feels comfortable in an inclusive class;
- asks for help;
- responds adequately to others;
- has skills of self-care;
- the child perceives information.

Hence, after getting answers to the first question we found out that employees of educational institutions pay attention to the process of socialization of a child with special educational needs, but unfortunately, they do not have clearly defined and prescribed criteria of socialization of a child with special educational needs.

The second question was: Do children with special educational needs take part in learning activities in the classroom? The purpose of this question was to find out whether children with special educational needs are included in the work during lessons, or the educational process is adapted to the needs of all students, including those with special educational needs because this is one of the components of inclusive education.

We got the following answers to this question most often:

- children answer the teacher's questions;
- within their abilities they perform individual tasks with an assistant;
- go to the blackboard, perform tasks and exercises in a notebook;
- work in pairs with other students during the lesson;
- do homework taking into account their special needs.

But we also got mixed answers to this question, which did not coincide at all with others:

- to interest children with special educational needs it is necessary to prepare additional material;
- children participate in the work at the lesson, but not actively;
- children with special educational needs in most cases prefer to be unnoticed.

After processing this question and the answers to it we can conclude that children with special educational needs necessarily need outside help from a teacher's assistant or classmates while working in class, and to really interest a child it is necessary to prepare additional materials. The next question was: Do children with special educational needs have friendly relationships with their classmates? How does this manifest itself?

This question was asked to find out if classmates support and accept pupils with special educational needs, consider them members of the team because it gives the child self-confidence and fosters sensitivity and understanding in other children. After all, the role of the school team is that it contributes to the development of self-knowledge, creates conditions for socio-psychological development of the personality, teaches to assert their views and beliefs, is the environment in which a person learns their advantages and disadvantages, their "I", their individuality, realizes the need for communication, joint activities, assimilates social norms. There were the following answers to the question:

- classmates help children with special educational needs to perform tasks if they don't understand or don't have time;
- participate in joint games at recess;
- there are no open conflicts or bowling in the inclusive class;
- children react adequately to each other;
- children with special educational needs have friends in their class.

Thus, we can see that according to the employees of the educational institution children with special educational needs do have friendly relations with their classmates, have common interests, and this is very important in the process of socialization of a child. We also asked the following question: Do children with special educational needs have problems in learning? The purpose of this question was to identify and find out the problems which children with special educational needs have in the process of learning because a child should learn to feel no worse than others, to be able, despite the features of their physical condition, freely and accessibly receive information, because the basis of inclusive education is an individual approach to each child, taking into account all their individual characteristics (abilities, development characteristics, types of temperament, gender).

We received the following most frequently used answers to this question:

- for children with special educational needs, it is necessary to repeat the material several times;
- select additional didactic material;
- children with special educational needs have difficulty remembering the material;
- have difficulties in independent performance of written works;
- children have difficulties in mastering the standard program.

Therefore, we can see that a child with special educational needs has quite a lot of difficulties and problems in learning, but with the joint efforts of the teacher and the teacher's assistant, these difficulties can be overcome.

The last fifth question was: Do students with special educational needs take part in educational activities (holidays, competitions, contests)? How does this happen? This question was posed to find out if children with special educational needs are involved in educational activities because they need to be included in the children's community. This would help to free children with special educational needs from social isolation, promote healthy interaction with other children, and to develop a positive, patient, tolerant, loyal attitude towards them on the part of others.

We received the majority of such answers to the posed question:

- on their own initiative kids with special educational needs can take part in any activities;
- children take part in competitions, festivals, fairs;
- children sing songs, participate in staging.

Thus, we can see that children with special educational needs take part in educational activities only on their own initiative, and with the help of a teacher's assistant, they are actively involved in school life to socialize among their peers.

3 Discussion

Inclusive education is a natural stage in the development of the educational system, which is associated with the rethinking of society and the state attitude towards persons with disabilities, with the definition of their right to receive equal opportunities with others. In real-time and space, this pedagogically managed process acquires specific signs and forms of implementation in individual communities, countries, and regions, while having universal humanitarian origins and orientation. Inclusive education as a scientific category and as a pedagogical process, practically started, marked by an essential scientific and exploratory meaning and significance for pedagogy. Involvement of persons, in particular children, with disabilities “I to the general educational environment at the initial stages of development of society had a spontaneous, non-formalized nature. [10]

Thus, we can conclude that inclusive education is an important process that needs to be developed, improved, and implemented, which needs the support of the state, specialists, parents, and teachers thanks to which socialization of children with special educational needs will take place actively. To solve the problem of socialization of children with special educational needs more successfully, it is necessary to “first of all” provide quality vocational training in educational institutions, to introduce modern, prestigious professions, and not only those offered by the school.

It is necessary to socialize children with special educational needs into the general education system as much as possible, to involve parents in active participation in the education of children at all stages of preparing them for independent life, introducing them to cultural values and skills of living together. The transfer of culture through family and other social institutions, primarily through the system of upbringing and education, and later through the mutual influence of people in the process of communication and joint activities, serves as sources of socialization of the individual. The experience associated with the period of early childhood, with the formation of basic mental functions and elementary forms of social behavior is important.

Integration of children with special educational needs into collectives with their peers teaches them to be active, take initiative, make conscious choices, reach agreement in solving problems, make independent decisions. Treating such a child as an individual implies acceptance of his or her individual characteristics, respect for his or her honor and dignity.

Curricula, individual programs should be developed taking into account the child's characteristics: his/her interests, learning style, developmental level, temperament, and character traits.

The physical and learning environment of the group is adapted accordingly. A child with special educational needs has the opportunity to gradually move forward, and the main thing in this process, so that teachers do not require the child to do everything as her classmates. More attention should be paid to the social-emotional sphere. Such an approach will promote the development of positive self-esteem, independence, and autonomy of a child with special educational needs.

Therefore, having conducted an expert survey among employees of an educational institution and having analyzed the results, we will develop criteria of socialization of children with special educational needs.

4 Conclusions

The structure of the socialization process coincides with the chronology of individual development: birth, infant age, early childhood, preschool age, school childhood, adolescence, adolescence, adolescence, maturity, old age. Each of these stages has its own leading way of socialization, which finds expression in leading activities: play, learning, entering the system of family, group, professional, ethnic, industrial, and other relationships. The way of development of a child with special educational needs lies through cooperation, social assistance of another person who is initially her mind, her will, her activity. This provision coincides quite well with the normal way of development of the child.

The main characteristics of the personality of a child with intellectual disabilities lie in the development of higher mental functions; therefore, pedagogical management of a child's development must occur through the creation of conditions for the introduction of components of social experience into the child's personality structure, contributes to the formation of his or her own picture of the world in the unity of consciousness, attitude, and behavior. The process of social adaptation is based on acquainting children with social reality.

At the same time, it is important to take into account the child's age-specific neoformations, since these criteria are social by nature, and their priority development is provided in the process of socialization.

Thus, socio-pedagogical activity in an educational institution should be implemented as a technology of transformation of the social situation of a child's development into pedagogical, educational, educative, learning, and developmental with a focus on the main tasks of social adaptation consisting in the values formation and generally accepted norms of behavior necessary for life in society, communicative and social competence.

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PROBLEMS AND PROSPECTS OF MEDIA EDUCATION AS A COMPONENT OF THE SUSTAINABLE DEVELOPMENT CONCEPT

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Abstract: Media education ensures the preparation of a person for life in an information society and the information culture formation. The latter involves the development of competencies and skills in order to analyze, verify, and determine sustainability, reliability of information provided to the media in the media space. It has been noted that media education is fragmented; an insufficient level of skills and competencies, fragmentation of media education is observed. It has been established that the major prospect of media education is aimed at expanding the audience of the media thanks to social networks eliminating borders between countries and providing citizens with access to the most relevant information about political, economic, social-cultural events and problems on a global scale.

Keywords: media education, media competence, media literacy, media, ICT skills of teachers, sustainable development.

1 Introduction

The role of media education lies in preparing a person for life in an information society, as well as the information culture formation; it involves the development of competencies and skills in analysis, verification and determination of sustainability and reliability of information spread by the media in the media space.

The emergence and establishment of digital technologies within a social scale leads to rethinking of media education in two aspects. The first aspect is related to the authorial nature of digital and social networks. This specificity turns the viewer into a prosumer; it involves combining critical thinking and responsibility. The second aspect centres on spreading digital media at the individual and social levels. This means that media education is expanding its presence beyond traditional media (Rivoltella, 2019). Information and communication technologies (ICT) provide the development of new strategies for media education on the Internet, which are similar to traditional media, especially in their desire to influence people, their beliefs, thinking, attitudes, and perception. For this reason, the curricula of higher educational institutions (HEIs) should include a critical analysis of this new reality for training new generations (Gómez-Galán, 2020).
The purpose of the academic paper lies in revealing current challenges and prospects of media education as part of the sustainable development concept.

2 Literature Review

As defined by UNESCO, media education is “training theoretical and practical skills for mastering modern mass media, which are considered as part of a specific, autonomous area of knowledge in pedagogical theory and practice” (UNESCO, 2011).

Challenges and prospects of media education are considered in the context of the development of democracy, information technology (Freberg & Kim, 2018; Salomaa & Mertala, 2019; Gómez-Galán, 2020). Masterman (2018) disputes about democratic control over the media: control over the media makes it possible to identify how democratic countries really are, an indicator of the level of trust in the media. For instance, in the United States, media education is developing slowly, despite the high level of democracy (Kubey, 2018). By comparison, England is a leader in promoting media education among the European countries (Piette & Giroux, 2018). A project approach to media education is implemented in Portugal (Dias-Fonseca, & Potter, 2016).

Kubey (2018) examines the problems of individual countries in the development of media education policies and national curricula (the USA, England, and Israel). Buckingham (2007a) argues that media education is able to move beyond the traditional instrumental approach through innovative training technologies, to overcome the “new digital gap” 1) by applying and expanding conceptual approaches to education; 2) appealing to the creativity of technology; 3) studying the potential of new forms of integrated media culture. Moreover, Buckingham (2015) draws attention to the necessity for a well-targeted critical policy in the field of media education in connection with the problems of new digital social media, which not only provide democracy and self-expression, the implementation of creative potential, but also carry certain risks for young people. On the other hand, Buckingham (2007b) argues that “the potential of digital media is a tool to increase digital literacy”. “Media competence of the individual as a target function of higher education is a complex set of knowledge, skills and mental qualities, the list of which depends on many factors” (Al Nadzhar et al., 2018). At the same time, access to information through digital technologies raises the problem of forming its value, veracity, truthfulness, credibility in information and media (Jenkins, 2007). For instance, the investigation conducted by Fischman, DiBara & Gardner (2006) has found that students lack a set of standards in order to differentiate between professional and amateur websites, although the former are perceived as more reliable. Seiter (2005) argues that “media” are becoming more like a shopping mall, a larger public relations network than an information resource.

Jenkins (2007) identifies three key issues of digital media education, namely: 1) the problem of youth participation in access to new media technologies: the availability of a computer and access to the Internet at home contributes to the formation of a wider range of digital skills and competencies, as well as digital media literacy; 2) the problem of transparency: the experience of young people in the use of media and technology forms their subjective perception and attitude to certain phenomena, processes, which is not always true; 3) problem of ethics: independent formation of ethical norms by young people for management of a complex social environment, in particular, on the Internet. The influence of ICT on children and youth is as strong as the impact of traditional media on citizens’ consciousness. Therefore, critical thinking and information perception presented in the information space is extremely important as a skill of young people and the society as a whole. The lack of these skills creates problems of consumption, addiction, cyber bullying and distorted perceptions of reality (Gómez-Galán, 2020).

Al Nadzhar et al. (2018) highlight the problem of manipulative information disseminated in the media space, which requires teachers to train students to critically analyze it. For an objective perception of information, a person should possess the competence of verification, assessment of sustainability, reliability, critical perception, and search for differences in the truthfulness and falsity of information. Martín & Tyner (2012) argues that formal education should be integrated into the curriculum of the media to acquire digital skills through a critical approach.

Simons, Meeus & T'Sas (2017) identifies three clusters of skills in the field of media competence, namely:

1. Using media (n = 3): competencies reflecting the technical instrumental use of media.
2. Understanding media (n = 6): competencies in the field of (critical) understanding of media, including analysis, evaluation and reflection on media content.
3. Contributing medially (n = 3): competencies related to the creation and the communication of media messages as well as to participation using media”.

"Media education – as well as education in general – should not be limited to critical assessment of the media. Media education programs "should respect the individuality of a person, including his or her special family upbringing, which should be aimed at forming her own opinion" (Christ, 2020).

Scientific media education is the ability to rely on media knowledge and science in order to select, understand, evaluate and respond to how scientific facts are represented in various media genres (Reid & Norris, 2016). Scientific media education should be part of formal and non-formal education for critical evaluation of any media, understanding of the social-cultural and economic context (how and why media are created to disseminate news and entertainment content); use of the media as a legitimate and productive source of scientific education (Storksdieck, 2016).

Thus, in the scientific literature, the problems of media education are considered in the context of the democracy development, information technologies, and the countries' challenges in the development of policies in the sphere of media education and national curricula, the "new digital gap".

Key challenges in digital media education relate to access to new media technologies, transparency and ethics. An important direction of investigations is studying the media competence of students and teachers, scientific media education and its objectives.

3 Matherials and research methods

Eurostat and OECD data have been used in the research in order to identify challenges and prospects for media education in various countries. The indicator Share of individuals having at least basic digital skills, by sex in EU-27 in 2019 (Eurostat, 2021a) has been used to identify the achievement of the sustainable development goal in providing the population with basic digital skills necessary for using technologies as a tool for media education and the development of media literacy.

The indicator Individuals – internet activities in EU-27 (in 2020,% of all individuals) has been applied to identify the basic actions of users on the Internet. OECD (2021) data on deficit / surplus Basic, Complex Problem Solving Skills and Technical Skills in different countries in the education sphere in 2020 have been used to identify problems in the transfer of these skills in the learning process to students.

Secondary data of OECD Teaching and Learning International Survey (TALIS) 2018 on professional development in the context of media education have been used in order to assess the level of ICT skills and the need for their development, as well as the development of creativity and critical thinking. In total, the answers of 38 081 interviewed teachers to the following questions have been processed, namely:

1. Question 23 "Were any of the topics listed below included in your professional development activities during the last 12 months?" with answer options "yes" – 1 or "no" – 2:
23 e) ICT (information and communication technology) skills for teaching;
23 k) Teaching cross-curricular skills (e.g. creativity, critical thinking, problem solving);
2. Question 27 "For each of the areas listed below, please indicate the extent to which you currently need professional development. Please mark one choice in each row" with answer options 1 – No need at present, 2 – Low level of need, 3 – Moderate level of need, 4 – High level of need:
27 e) ICT (information and communication technology) skills for teaching;
27 k) Teaching cross-curricular skills (e.g. creativity, critical thinking, problem solving).

The survey involved teachers from the countries as follows: 7,4% – Brazil, 7,4% – China, 7,0% – Croatia, 4,4% – Denmark, 9,3% – Portugal, 10,2% – Vietnam, 5,8% – Slovenia, 7,7% – Sweden, 16,1% – UAE, 21,9% – Turkey, 2,9% – Canada (Table 1).

Table 1 – Distribution of respondents (teachers) who participated in the TALIS survey, 2018

Indexes	Number of respondents, persons	%	Cumulatively, %
Brazil	2828	7,4	7,4
Chinese Taipei	2800	7,4	14,8
Croatia	2661	7,0	21,8
Denmark	1670	4,4	26,2
Portugal	3551	9,3	35,5
Viet Nam	3884	10,2	45,7
Slovenia	2200	5,8	51,5
Sweden	2933	7,7	59,2
United Arab Emirates	6118	16,1	75,2
Turkey	8342	21,9	97,1
Alberta (Canada)	1094	2,9	100,0
Total	38081	100,0	

Source: OECD (2018).

From among the respondents, female teachers – 56,3% and male teachers – 43,7% (Table 2).

Table 2 – Distribution of respondents (teachers) who participated in the TALIS survey by gender, 2018

Indexes	Number of respondents, persons	%	Cumulatively, %
Female	21453	56,3	56,3
Male	16627	43,7	100,0
Total	38080	100,0	–
Missing	1	–	–
Total	38081	100,0	

Source: OECD (2018).

4 Results

The concept of EU's sustainable development (Goal 4 – Quality education) provides the population with basic digital skills needed to use technology as a tool for media education and media literacy. The principal goal of "The European Skills Agenda" is to increase the proportion of the population aged 16-74 with basic digital skills to at least 70% in 2025. However, currently, in some EU countries (Norway, the Netherlands, Iceland, the Czech Republic, Finland, Great Britain, Sweden, Germany, Denmark), this figure is 70% or more (Figure 1).

It should be noted that possession of digital skills does not mean the ability to analyze, critically perceive information according to the criteria of sustainability and reliability. The difference in the deficit of technical and process skills is significant (critical thinking, training, monitoring).

The basic types of the population's activities of EU countries on the Internet are represented in Table 3. The most popular citizens' activities are as follows: video calls, traditional calls, and searching for information about goods or services, participation in social networks, Internet banking, and search for health information.

It should be noted that possession of digital skills does not mean the ability to analyze, critically perceive information according to the criteria of sustainability and reliability. The difference in the deficit of technical and process skills is significant (critical thinking, training, monitoring).

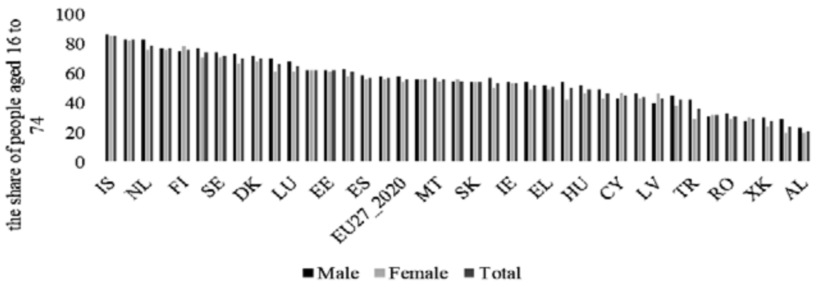

Figure 1 – Share of individuals having at least basic digital skills, by gender in EU-27 in 2019
Source: Eurostat (2021a)

The basic types of the population's activities of EU countries on the Internet are represented in Table 3. The most popular citizens' activities are as follows: video calls, traditional calls, and searching for information about goods or services, participation in social networks, Internet banking, and search for health information.

Table 3 – Citizens' internet activities in EU-27, 2020, % of all individuals

Indexes	Internet use: telephoning or video calls	Internet use: participating in social networks (creating user profile, posting messages or other contributions to Facebook, twitter, etc.)	Internet use: finding information about goods and services	Internet use: Internet banking	Internet use: search for health information
Belgium	68	79	78	75	51
Bulgaria	59	55	50	13	29
The Czech Republic	52	59	77	70	62
Denmark	70	85	90	94	72
Germany	65	54	87	65	70
Estonia	63	65	81	80	58
Ireland	67	61	72	69	60
Greece	57	59	69	37	52
Spain	78	65	78	62	67
France	48	42	62	66	50
Croatia	57	57	71	50	58
Italy	65	48	48	39	46
Cyprus	85	78	78	52	61
Latvia	61	67	71	76	49
Lithuania	64	61	73	68	57
Luxembourg	76	60	68	71	53
Hungary	68	74	76	51	63
Malta	63	72	77	60	64
The Netherlands	83	71	89	89	76
Austria	60	60	67	66	56
Poland	55	55	63	49	43
Portugal	55	63	68	47	49
Romania	56	65	46	12	28
Slovenia	52	67	77	52	58
Slovakia	63	64	78	58	56
Finland	78	75	85	92	77
Sweden	73	73	88	85	67
Iceland	74	94	94	96	69
Norway	79	88	91	94	74
Switzerland	69	53	81	73	67

Source: Eurostat (2021b).

Particular attention should be paid to "participating in social networks", which is the most popular activity on the Internet in advanced countries. It is a well-known fact that social media pages are created on social networks in order to disseminate information about political, social, economic and cultural life due to the fact that social networks are free platforms for spreading information with a high level of privacy. For instance, the official account of The New York Times Magazine on Instagram has collected 398 000, the news agency The Guardian amounts 4 600 000 subscribers on Instagram (Figure 2).

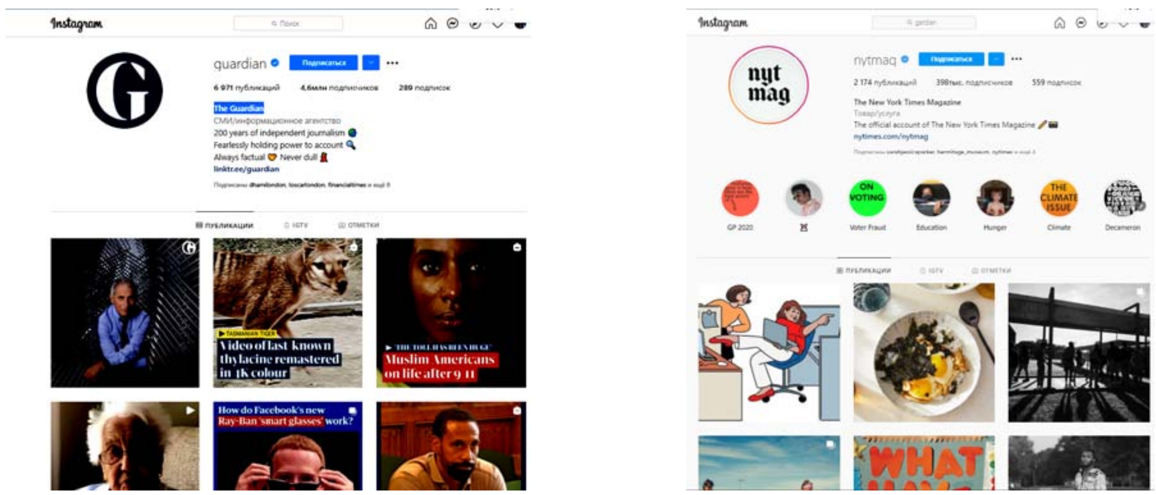

Figure 2 – The official media page of The New York Times Magazine and The Guardian
(Internet source)

The information space has ensured an expansion of the media audience: users from all over the world can follow political, economic, social-cultural events. Therefore, the issue of developing skills in order to critically perceive information provided by the media is exacerbated, forasmuch as due to the annual growth of the number of social networks and, accordingly, users, their influence on the consciousness of citizens is growing.

In the context of sustainable development, EU aims to provide basic digital skills. For this reason, it is advisable to assess the level of competence in different countries. According to data represented in Table 4, there is a shortage of teachers' critical thinking skills (average in countries 0,17) in the educational sphere of different countries; consequently, the educational sphere requires the development of these skills by professionals. Skills of active learning, learning strategies and monitoring are also in deficit (averages 0,16; 0,20 and 0,17, respectively). Thus, the problem exists in the transfer of critical thinking skills from a teacher to a student: a teacher with a deficit of critical thinking skills with a lower level of probability will form this competence in a student.

Table 4 – Basic, Complex Problem Solving Skills and Technical Skills in different countries in the field of education in 2020

Skills*	Basic Skills (Process)	Basic Skills (Process)				Complex Problem Solving Skills	Technical Skills
Country		Critical Thinking	Active Learning	Learning Strategies	Monitoring		
Australia	0,318	0,308	0,285	0,364	0,315	0,243	0,028
Austria	0,312	0,304	0,28	0,364	0,301	0,242	0,025
Belgium	0,185	0,18	0,166	0,213	0,181	0,142	0,016
Chile	-0,041	-0,034	-0,036	-0,052	-0,04	-0,034	-0,004
The Czech Republic	0,003	0,008	0,005	-0,006	0,006	0,009	0,003
Denmark	0,172	0,164	0,158	0,202	0,165	0,132	0,015
Estonia	0,278	0,282	0,25	0,294	0,284	0,228	0,032
Finland	0,117	0,118	0,111	0,129	0,111	0,097	0,014
France	0,453	0,426	0,409	0,541	0,434	0,337	0,039
Germany	0,079	0,082	0,072	0,081	0,081	0,067	0,01
Greece	0,117	0,114	0,107	0,135	0,113	0,09	0,01
Hungary	0,323	0,309	0,288	0,378	0,318	0,242	0,024
Iceland	0,17	0,168	0,155	0,19	0,168	0,135	0,016
Ireland	0,322	0,322	0,284	0,358	0,323	0,267	0,034
Italy	0,214	0,204	0,195	0,254	0,203	0,162	0,016
Latvia	0,176	0,171	0,161	0,202	0,172	0,138	0,015
Lithuania	0,006	0,011	0,008	-0,004	0,009	0,011	0,003
Luxembourg	-0,193	-0,182	-0,173	-0,224	-0,191	-0,142	-0,017
Mexico	-0,082	-0,075	-0,074	-0,098	-0,081	-0,059	0
The Netherlands	0,243	0,246	0,226	0,261	0,24	0,196	0,024
Norway	0,069	0,071	0,064	0,069	0,071	0,057	0,009
Poland	0,337	0,321	0,304	0,401	0,322	0,256	0,023
Portugal	0,562	0,541	0,509	0,652	0,546	0,43	0,046
The Slovak Republic	-0,059	-0,055	-0,052	-0,072	-0,058	-0,042	-0,005
Slovenia	-0,088	-0,088	-0,079	-0,095	-0,09	-0,072	-0,01
Spain	0,427	0,411	0,387	0,497	0,411	0,325	0,034
Sweden	0,419	0,4	0,372	0,489	0,416	0,315	0,033
Switzerland	0,195	0,186	0,174	0,232	0,189	0,148	0,016
Turkey	0,045	0,035	0,038	0,072	0,036	0,023	-0,001
The United States	0,007	0,01	0,009	0,001	0,008	0,009	0,001
European Union	0,234	0,227	0,212	0,27	0,228	0,182	0,02

Source: OECD (2021).
** Positive values indicate a shortage of skills, negative – an excess*

As a result, teachers also need professional development of critical thinking skills. Consequently, data of OECD Teaching and Learning International Survey (TALIS) 2018 on the professional development of 35 454 educators in 48 countries indicate to the fact that 61,5% of teachers have undergone training on developing ICT skills in order to use them in their own professional activities; 54,6% have undergone training on developing skills in creativity, critical thinking, problem solving, etc. Herewith, on average, within EU, a very low deficit of technical skills (average value 0,02) is observed, as well as an insignificant deficit in complex problem solving skills in media education (average value is 0,13).

The professional development of teachers is important for the formation of the young generation's ability to think critically and use digital skills for the objective perception of information. The results of the OECD survey (2018) indicate to the fact that teachers in various countries have studied disciplines at HEIs relating to the professional development of ICT skills (the average answer is 1,34 to question 23 with a deviation of 0,473). Along with this, the average value of the answer for the inclusion of subjects in the curricula of HEIs for development of "cross-curricular skills (e.g. creativity, critical thinking, problem solving)" is 1,41 (that is, closer to "yes" with a deviation of 0,492) (Table 5).

Table 5 – Average value and deviation of respondents' answers to questions on professional development of ICT skills and cross-curricular skills

Indexes	Areas prof.dev. ICT skills for teaching	Areas prof.dev. Teaching cross-curricular skills	Prof.dev needs ICT skills for teaching	Prof.dev needs Teaching cross-curricular skills
Responses received	35454	35392	37075	37002
Missed	2627	2689	1006	1079
Average value	1,34	1,41	2,50	2,44
Standard deviation	0,473	0,492	0,993	1,016

Source: OECD (2018).

The survey also gives testimony to a low level of teachers' necessity to develop ICT skills that are needed in teaching students (the average answer is 2,5 with a deviation of 0,993); low level of necessity for development of "Teaching cross-curricular skills" (average answer value 2,44 with a deviation of 1,016).

61,5% of respondents state that subjects for the development and formation of digital skills have been included in their curricula; 31,6% claim the absence of such disciplines during training (Table 6). 54,6% of surveyed teachers have indicated that the subjects of cross-curricular skills for their further activities are included in the curriculum, while 38,3% of teachers have given negative answers.

Table 6 – Areas prof.dev.: ICT skills for teaching, Teaching cross-curricular skills

Indexes	Number of respondents, persons	%	Cumulatively, %
Areas prof.dev. ICT skills for teaching			
Yes	23432	61,5	61,5
No	12022	31,6	93,1
Total	35454	93,1	100,0
Missed	2627	6,9	
Total	38081	100,0	
Areas prof.dev. Teaching cross-curricular skills			
Yes	20807	54,6	54,6
No	14585	38,3	92,9
Total	35392	92,9	100,0
Missed	2689	7,1	
Total	38081	100,0	

Source: OECD (2018).

The answers of teachers from different countries on the need to develop ICT skills and Teaching cross-curricular skills are reflected in Table 7. 19% and 21,9% believe that there is no need for the professional development of these competencies; 27,5% and 28,9% have indicated a low level of the necessity; 34,1% and 30,1% claim about the average level of the necessity; 16,8% and 16,8% have indicated about a high level of need.

Table 7 – Prof.dev needs ICT skills for teaching

Indexes	ICT skills for teaching			Teaching cross-curricular skills		
	Number of respondents, persons	%	Cumula-tively, %	Number of respondents, persons	%	Cumu-latively, %
No need at present	7243	19,0	19,0	8121	21,3	21,9
Low level of need	10457	27,5	46,5	11021	28,9	47,9
Moderate level of need	12983	34,1	80,6	11449	30,1	78,0
High level of need	6392	16,8	97,4	6411	16,8	97,2
Total	37075	97,4	100,0	37002	97,2	100,0
Missed	1006	2,6		1079	2,8	
Total	38081	100,0		38081	100,0	

Source: OECD (2018).

Therefore, the results of studying media education as a component of the sustainable development concept make it possible to single out the principal problems as follows: 1) the gap between the technical and digital skills of EU population and process-based, in particular, critical thinking, monitoring, learning strategies, despite the achievement of the goal of providing the population with basic digital skills (more than 70%) by the most advanced EU countries; 2) 43,5% and 48,1% of teachers, respectively, feel the need in the development of ICT skills and Teaching cross-curricular skills; by the way, the curricula of HEIs do not contain subjects for the formation of these skills among teachers during their studies at HEIs in 31,6% and 38,3 % of cases, respectively.

The core perspective of media education lies in expanding the audience of the media through social networks eliminating borders between countries, providing citizens with access to the most relevant information about political, economic, social-cultural events and problems on a global scale. However, within EU, it has been revealed that the basic type of citizens' activity on the Internet is participation in social networks. Consequently, this reduces the level of manipulative influence of the national media, which for various reasons can distort the information provided on foreign resources. This also increases the transparency level and to some extent solves the problem of accessibility (gap because of the access) of information for various social groups.

5 Discussion

The need for professional development of ICT skills and cross-curricular skills of teachers has been revealed in other studies. Reid & Norris (2015) argue that the educator should have administrative support to participate in comprehensive workshops on media and resources, the possibility to develop effective, complex critical thinking competencies for working with media. Furthermore, Reid & Norris (2015) pay particular attention for the necessity to reduce the academic load on teachers in order to integrate media literacy into traditional disciplines, which, as it has been found in the present research, are often absent from the curriculum (in 38,3%). Teachers are convinced of the value of media education (Reid & Norris, 2015) and they have a desire to develop professionally (as this research shows, 48,1% have an average or high level of need for the development of cross-curricular skills). For this reason, disciplines related to media education should be included in the curriculum.

In addition to providing traditional training of media literacy to teachers, Reid & Norris (2015) point to the need for formal and informal additional training resources for teachers in order to combine two core approaches to media education: protectionism and culturology (Reid & Norris, 2015).

Gómez-Galán (2020) highlights the basic trends in the evolution of media education, namely: adaptability, media usage habits, media literacy requirements, media education teachers' competencies, changes in culture and the society as a whole. Consequently, this gives rise to the challenges as follows: assessment of the information reliability; the international nature of media activities, their expansion through social media; the problem of developing critical literacy, visual and digital literacy; expanding groups of educators to increase teaching practice, the need for lifelong learning; internationalization of media education. This partly correlates with the results of our research, in particular, in the context of the internationalization of media through social media and the growth in the number of social media users; in the context of continuous professional development of teachers and improvement of their skills.

The basic challenges of media education are as follows: lack of resources, in particular, for the development of media competence; insufficient level of cooperation and coordination (Christ, 2020); insufficient level of skills and competencies; fragmentation of media education and its dissemination into separate groups (as we have revealed, not all teachers during study subjects of ICT skills development and critical thinking skills during training) (Kubey, 2018); changes in media culture affect media education, in particular, the problems of inequality, polarization, discrimination, racism, social exclusion, migration (Gómez-Galán, 2020).

Taking into account the problems and challenges outlined, it is advisable to develop the critical and reflective teaching staff that makes students, accustomed to traditional messages, think critically, analyze, think, and draw conclusions. Along with this, teachers on their example should form creative freedom, motivation for media education (Buckingham, 2015; Christ, 2020). This requires the renewal of the teacher's role as an organizer of knowledge, assistant, advisor. The role of the teacher has changed due to the digitalization of media education, and the teacher is perceived as a subject of information transfer. The formation of a critical perception of information as a skill becomes a priority in the context of sustainable development. EU declares that technology should be perceived as a tool, not as a learning goal. As the research has revealed, more than 70% of citizens possess basic digital skills in the most advanced countries, however, the deficit of critical thinking significantly exceeds the deficit of technical skills in the use of technology.

6 Conclusion

The research has found that media education, as part of the sustainable development concept, faces the core problems as follows: 1) the gap between the technical, digital skills of EU population and process skills (critical thinking, monitoring, learning strategies). Although the most developed EU countries have achieved the goals of providing the population with basic digital skills (more than 70%), the deficit of critical thinking exceeds the deficit of technical skills in the use of technology; 2) the need of teachers for the development of ICT skills and cross-curricular skills has been revealed (43,5% and 48,1%, respectively); 3) curricula do not contain subjects for the formation of ICT skills and cross-curricular skills of teachers during training at higher educational institutions (31,6% and 38,3% of cases, respectively). All the outlined points to the fact that media education is fragmented; consequently, lack of skills and competencies of media education is observed.

The major perspective of media education lies in expanding the media audience through social networks that eliminate borders between countries, provide citizens with access to the most relevant information about political, economic, social-cultural events and problems worldwide. Within EU, it has been revealed that the main type of citizens' activity on the Internet is participation in social networks. This reduces the level of manipulative influence of national media, which for various reasons can distort the information provided on foreign language resources. Along with this, it increases the level of transparency and solves the problem of accessibility (gap because of the access) of information for different social groups.

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THE PRAGMATIC ASPECTS OF ENGLISH EUPHEMISMS AND DYSPHEMISM'S OF THE SOCIAL MEDIA POLITICAL DISCOURSE

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Abstract: The article aims to gain insight into the pragmatics and algorithms of the use of English euphemisms and dysphemisms in political discourse and promulgated in social media. The research methods are based on the socially-oriented approach to the analysis of discourse, politeness theory, and principles of linguistic pragmatics; the consideration of theoretical aspects involves the use of inductive and deductive methods; the use of semantic-stylistic and semantic-component methods of analysis allows to establish the semantic components of euphemisms and dysphemisms.

Keywords: political discourse, political euphemisms, dysphemism, English language, tropes, social media.

1 Introduction

The political discourse is integral to the successful functioning of social media, as it is the socio-political side of society that correlates with the management, development, and transformation of society. It is presented as a part and variable component of social relations, it puts forward political ideas and programs of action, dictates the policies of social groups, governments of nations, and contributes to the emergence and development of political projects in each society (Pauline et al., 2020; Crespo-Fernandez, 2014).

The political discourse largely depends on the choice and implementation of linguistic strategies and tropes, used within clearly thought out strategies and goals, which are also important tools for making sense of events, situations, and actions. The main goals of politicians, public figures, and entire parties, in general, are to attract as many supporters-voters as possible into their ranks, and this means trying to change, to transform public opinion in their favor, to induce potential voters to sympathy and sympathy. Crespo-Fernandez (2021) notes that a powerful weapon for politicians is rhetoric, the speech manipulation of the mass consciousness. It involves an abundant (but moderate) use of artistic and stylistic means, figurative expressions as tools to achieve ideological goals, realizes the intentions of attracting the audience to their side through the appeal to emotion, evaluation, cultural and national perception.

Euphemisms and dysphemisms are very effective and popular in modern media as elements of manipulation, social media being no exception, their research is relevant and necessary for understanding the trends of modern political discourse and programming of political rhetoric transformations, the pragmatics of social media genre system development.

In modern rhetoric, dysphemisms and euphemisms are quite standard tropes that are used in political discourse to interpret, manipulate the realities of social life and events in the necessary context for the politician, to criticize opponents, discuss controversial issues and comment on complex and unclear events (Ruiz, 2017; Herbert, 2016) the pragmatics of tropes in political discourse is to form a parallel reality, distort facts, events, actions. Euphemisms and dysphemisms are the results of secondary nomination, a tool of persuasion in the structure of manipulation of ideological attitudes (Ruiz, 2017), and the exercise of public control over political processes. The pragmatic purpose of dysphemisms and euphemisms in political discourse is to shape the image of a politician, the image of a political party, or assessments of social and political events, such tropes are often used to enhance the effect of what is said. The intention to use can be the pursuit of several political goals, among which are most often accusations, denunciations, criticism (dysphemism) and influence, uniqueness, relevance (euphemism). It opens up a large field for the implementation of research on the evolution of dysphemisms and euphemisms in political discourse.

The political discourse is a breeding ground for the formation of euphemisms and dysphemisms in social media. Both tropes play an important role in the public space, they illuminate political life, contribute to the formation of positive impressions of politics and negative impressions of opponents and their activities. That is why constant research attention should be paid to the directions of emergence, transformations, and changes in the English-language environment of the corpus of euphemisms and dysphemisms related to political topics and presented in the social media.

Aims. This research was aimed at determining the mechanisms of the formation of English dysphemisms and euphemisms of political discourse, as seen in social media.

In accordance with the aim the following research tasks were planned to be carried out:

- to identify the basic principles of action in the political discourse of ephemeral and dysphemisms mechanisms;
- to establish productive models of creation and frequency of use of dysphemisms and euphemisms.

2 Literature review

The pragmatics of political discourse formation in modern social media has been investigated in linguistics, sociology, and comunicativism in many positions: The idiostyle of individual politicians and their influence on branding development has been analyzed (Tereszkiewicz, 2021) patterns of contemporary English-language political discourse formation and the problem of populism have been determined (Breeze, 2020; Chilton, 2017) presented a cognitive analysis of media texts and political speeches of famous politicians and public figures (He, 2021; Aslanidis, 2016) considered the role of euphemisms and dysphemisms in the formation of medical discourse (Herbert, 2016) the study of trends in the formation and development of artistic and stylistic means, ethical aspects (Bonikowski, Noam, 2016).

Many researchers (Ruiz, 2017; Crespo-Fernández, 2021) interpret political discourse as a form of social interaction, contributes to the legitimization of power, shapes its sociopolitical contexts, and imposes social control involving media, and uses ideological work.

Many definitions of dysphemisms and euphemisms are presented in the scientific literature, but the study relies on those that define the main features of these tropes related to political discourse and social media possibilities. Rawson (1981) described euphemisms as powerful means of linguistic origin, unconsciously and regularly used by speakers and deeply embedded in communicative processes. The Oxford Dictionary (Euphemism, 2016) states that euphemisms are indirect figurative expressions that soften and replace overly harsh and crude expressions and concepts.

Political euphemisms have their own definition, they are defined according to their genre and thematic affiliation (Zhang, Lei, 2019; Pastukhova, 2016) and define language compounds that are intended to form a positive image of politicians, parties and their actions and the like.

The problems of the manipulative influence of artistic and stylistic means on the formation of modern political discourse, constantly influencing public opinion, acting at the level of social media, require further consideration.

3 Materials and research methods

The research uses a comprehensive approach to methodology. The theoretical aspects of the problem under study involve the use of inductive and deductive methods for analysis. The method of interdisciplinary research helps to identify the main trends and specifics of euphemistic and dysphemistic mechanisms formation. The use of semantic-stylistic and semantic-component methods of analysis allows to establish the semantic components of the investigated tropes. The data for the study are taken from speeches, public statements of politicians, articles, reports and interviews published in social media with multimedia function (YouTube, Skype, Livestream) media platforms (YouTube, MySpace), as well as taken from research materials and compilations. The sample covers 8 years (2013-2021), Comprising a total of 114 texts containing video, audio and print texts, in which 265 euphemisms and dysphemisms used in social media are highlighted. We analyzed texts (45 units) where euphemisms and dysphemisms were used. A homogeneous sample was formed for the purpose of thematic and structural unity and to minimize the variants of the variable in the semantic components. We are aware that the study cannot be exhaustive. Small samples, which were taken, does not allow to quantitatively assess the reliability of the data. However, the basic principles of data compilation and their representativeness for analysis were presented, admissible in discourse studies. The sampling of euphemisms and dysphemisms meets the basic requirements of analysis in discourse studies. A decisive parameter in the research is to ensure the thematic homogeneity of the selected units. This sufficient number of units and examples makes it possible to show the main patterns, thematic groups and trends in the formation of dysphemisms and euphemisms.

4 Result

In modern rhetoric and text linguistics, there are a sufficient number of definitions of the concept of "euphemism", and given the pragmatics of its use in modern political discourse, such definitions are multidimensional.

The define political euphemism as a tool to control the transmission of information, the service of political goals, in general, the pragmatic aspects of the existence of euphemisms lie in the possibility of transformation of political discourse. Euphemisms and dysphemisms are used to hide unpleasant and disturbing news, when one wants to embellish the truth, to weaken the effect of the real facts, while dysphemisms, on the contrary, are designed, to create a higher level of sound, to transform public opinion and be a tool for changing public opinion, especially within social issues and political events.

In these terms, euphemisms can be presented as a threefold mechanism (Figure 1).

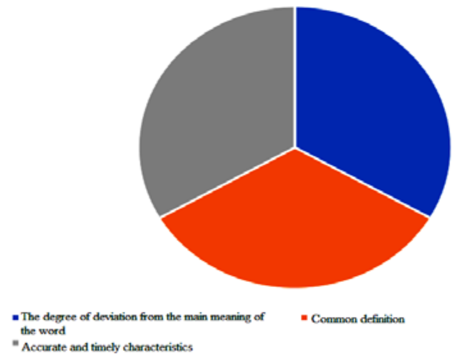

Figure 1 – The euphemistic mechanism
(Author's source)

1. The degree of deviation from the main meaning of the word. The use of a certain trope (dysphemism, euphemism) depends on how much the author of the text wants to avoid its meaning and connotations associated with the main word, fact. For example, this is done to lessen the severity of the problem, the level of tension, and discontent in society. Politicians have often tried to avoid the term "medium-range missile" by referring to it as a "medium-range missile". The American politicians use the euphemism "rescue mission" instead of "invasion" and others. In the Panama military conflict, the name "Operation Just Cause" emerges, and the war in Iraq is referred to as "Operation Iraqi Freedom".

2. The pragmatic use of euphemisms is also dictated by an attempt to soften the impression of what is said, the intention to create a system of hints within taboo or socially acute topics. Thus, "prostitute" from the mouths of politicians speaking on social media becomes "commercial sex worker," "accommodating women. And the topic of military aggression in the air "air attacks," if necessary, becomes "air operations" (Holder, 1996).

3. Labeling and timely characterization can be expressed as either a euphemism or a dysphemism. But this is an important aspect of the creation, successful functioning of tropes of this type. For example, the name genocide is often replaced in social media by "ethnic cleansing," it is recognizable and commonly used. And "killing people on your own side" is often called "friendly fire" in the news media and criminal chronicles.

A dysphemism in the media space is primarily a stylistic figure, which is the opposite of a euphemism. It is associated with the use of pejorative vocabulary, designed to show disdain for the described subject, it is devoid of journalistic correctness of expression vulgar and deliberately colloquial or slang used with the pragmatic purpose of humiliating, show the author's negative attitude, anger, and irritation of the presented and described.

In the media industry, dysphemism is used to express criticism, denial, negative attitude towards a person, phenomenon, or fact. In general, dysphemism is an effective way to create a negative image of a politician, event, public organization, even the state in figurative form, using several different types of tropes, showing the negative aspects, and mocking them.

The purpose of using dysphemisms in media and political communications is to represent a negative, emphasized disdainful attitude towards the object of speech, the desire to brightly highlight its features and comic in behavior, situations, actions. The range of used for this linguistic material is determined by the stylistic breadth and lack of restrictions: it can be both normative lexicon, and colloquial expressions, and slang, and argot, and profanity, in particular. For example, to avoid names of unpopular professions and economic changes, for example: "economic crisis" is replaced by "economic downturn" (Worst Economic Downturn, 2001).

In academic practice, it is common to distinguish a number of functions and pragmatics of the use of dysphemisms as a type of pejorative vocabulary. It is the statement of characteristics that are taboo in normative communication – considered indecent or immoral; the emotional and evaluative effect of dislike, disapproval; a negative view of an individual and its impact; explication of discontent and anger satire on the unacceptability of the existing situation; the depiction of negative aspects of the character, situation; emotion of anger and discontent; amplification of negative in an image or situation; litany as a basis of tropeistic image of low value. For example, "the Fourth World" refers to the world's poorest and most underdeveloped countries; Trump labels the coronavirus as – *foreign virus, Covid-19 is an enemy; an invisible enemy, a dangerous threat, a global battle (*Trump's Covid-19 Speeches, 2020*).*

The main function of dysphemism is critical thought about events, persons, satire, deliberate humiliation of the object of criticism, the intensity of anger, frustration and rejection of the existing situation, then negatively assessed by the author of the journalistic work, leads to negative consequences. With a certain amount of irony were expressed about the activities of the Trump administration at the expense of the expression "un-Bush like program/statement".

As shown in the figure 2, the pragmatics of the presentation of political discourse in social media necessitates the use of dysphemisms. Dysphemistic complexes are presented in social media through a number of models: dysphemism + litotes; dysphemism + comparison, dysphemism + hyperbole, dysphemism + metaphor, dysphemism + personification.

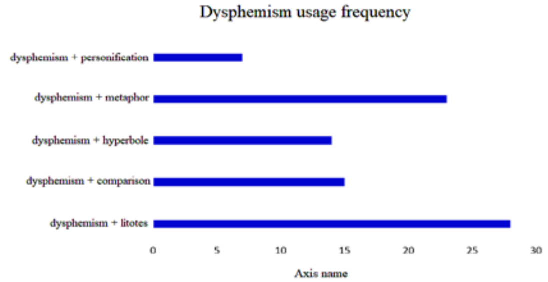

Figure 2 – Dysphemism usage frequency (author's note)
(Author's source)

As the research shows, the most popular in political discourse are dysphemisms-metaphors (23 units) and dysphemisms-litotes (28 units). They serve in political discourse to soften and weaken the negative meaning of several problems and the names associated with them. These are, first of all, the themes of unpopular professions, the theme of violence and war. For example, many euphemisms and dysphemisms have been created for the concept of "terrorist" (bomber/attacker/assailants/captors/group/guerrillas/gunmen/extremists/insurgent / militant/misguided criminals/fighters/hostage-taker/radicals/rebels/separatists).

As shown in the figure 3, euphemistic complexes are also used in political discourse. They may consist of the following models: euphemism + litotes (17 units), euphemism + comparison (10 units), euphemism + hyperbole (12 units), euphemism + metaphor (21 units), euphemism + personification (4 units).

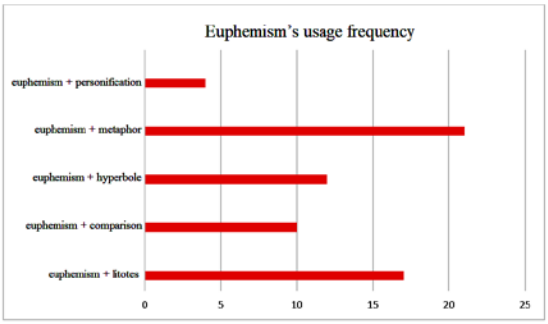

Figure 3 – Euphemism's usage frequency (author's note)
(Author's source)

The formation of the image completeness occurs due to the enhancement of euphemisms and dysphemisms themselves by additional artistic and stylistic means. Tautologies can also be an important part of euphemisms and dysphemisms. Other tropes are not second-hand but are also used in the political discourse of social media.

1. Tautologies are quite popular on Twitter. For example, D. Trump uses them in his expressions: Under the last administration, more than 10 million people were added to the food stamps rolls. Under my administration, 7 million Americans have come off of food stamps... In 8 years under the last administration, over 300.000 working-age people dropped out of the workforce. In just 3 years of my administration, 3,5 million working-age people have joined the workforce.
2. The political discourse is often represented by hyperboles as well.: Our military is completely rebuilt, with its power being unmatched anywhere in the world; reduced state of awareness (Holder, 1996); «Worst economic downturn in 50 years» ('Worst Economic Downturn' in 50 Years); unprecedented effort.
3. The usage of metaphors in the structure of euphemism or dysphemism is also quite regular, e.g., rest in eternal glory; The American patient should never be blindsided by medical bills (it's not allowed to put the eyes down); American leadership.
4. The usage of the comparison in the structure of dysphemisms and euphemisms is also productive: Although he never wound up as a street person, his life was a journey of terror and fear» (Brown, 1991), un-Bush like programme/statement.
5. Dysphemisms and euphemisms + personification. They are designed to denote professions and are also used to express high emotions and pathos. For example, blue-collar boom; our hearts weep for your loss.
6. Litotes are also used to increase the effect, e.g., freedom in our hemisphere (Tweeter); torturous – "alternative procedures" (Bush Jr. authorship) (Mariner, 2006); prison – correctional facilities.

The use of euphemisms and dysphemisms is also very popular in social media. This is dictated by the need to adhere to the rules of political correctness, the requirements for using social media and the need to form a positive image.

5 Discussion

The broad field of euphemisms and dysphemisms leads to several broad interpretations of these concepts proper. Many studies (Keating, 2021; Encarnación, Benítez-Castro, 2021) also perceive abbreviations in certain contexts as euphemistic forms. These are, for example, entities such as AIDS, ISIS (the Islamic State of Iraq and Syria). In our study we did not include abbreviations in the list of euphemistic components, because abbreviations are not products of secondary nomination, they are complex abbreviated words formed from initial (initials) letters, perform only the functions of informative compression and economy in the speech stream.

Pastukhova studied euphemisms in the social and political sphere in English-language political discourse (Pastukhova, 2016) and determined that these tropes are used in significant numbers in political discourse. They are notable for the wide range of issues raised, softening the fervor of discussions in the social sphere, and defining the sharp corners of world development (Chilton, 2017). According to the results of our research, a sufficient number of euphemisms and dysphemisms used in political discourse are also presented in social media. Euphemisms and dysphemisms are characterized by a wealth of forms and mechanisms of influence. Within social media, the issue of violence, death, and torture, and the private lives of politicians, public figures, and politicians are actively subject to euphemization.

As this research shows, the presentation of political discourse in social media demonstrates the tendency for civil society to move closer to the political institution of power.

6 Conclusion

The conducted research shows that in social media the use of euphemisms and dysphemisms is popular, it is an important part of the construction and definition of political discourse. Such tropes act as ways of softening taboo topics and names, careful naming of unpopular professions, occupations, morally condemned social statuses, difficult situations, aggressive actions of politicians – they serve to transform the image positions of politicians and political parties, famous persons, public organizations, projects and the like.

The pragmatics of using dysphemisms and euphemisms is also dictated by their organization, the presence of several productive models that allow for the use of dysphemisms and euphemisms, litotes, hyperbolas, metaphors, personifications, comparisons, as well as tautology in the complex. It primarily contributes to avoiding the use of profanity, violating linguistic standards and the rules of broadcasting. Such tropes mechanisms make the problem search more attractive, more acceptable, or, on the contrary, reinforce the aversion to acute problems, deviations from standards.

In general, politically correct speech contributes to creating a positive impression, fulfilling the main goal of political propaganda – to convince the audience, to make the necessary decisions for politicians, power institutions, political and social currents.

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GLOBAL TRENDS IN THE DEVELOPMENT OF BUSINESS SERVICES AND THEIR EFFICIENCY LEVEL

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Abstract: In today's quarantine conditions, under the impact of the changing organization of trade relations, the development of the global business services market and the renewal of the procedure for international trade order remain a controversial issue. The structure of the global economic space is transforming, as are consumer priorities, imposing pressure on the efficiency of various services market sectors. The renewal of the conceptual framework, international trade regulation have become a forced step in the context of restoring the efficiency of trade relations and business activities of the subregions in the phase of recovery from the Covid-19 pandemic crisis and the severe restrictions on socio-economic interaction; these aspects foreground the need for research on the issues specified.

Keywords: *global services market, business services, foreign trade in services, foreign trade efficiency, business transformation, globalization, tourism and hospitality.*

1 Introduction

The current globalized business services market is characterized by a significant pace of transformation and updating in the conceptual framework of the trade organization. It is driven by activating e-commerce, promoting extensive use of digital tools for managing processes of service delivery and international exchanges liberalization. These tendencies are the result of the need to restore trade relations in the phase of recovery from the global socio-economic crisis caused by the Covid-19 pandemic. The change of market management tools has promoted the transformation of market structure, in particular, favourable development environment for some sectors (e.g. for digital, electronic, telecommunications or IT services) was created. Certain sectors (such as tourism and hospitality) were unprofitable in the stage of implementing restrictions on interstate socio-economic cooperation.

Scholars continue to discuss ways to stabilize the operation of the business services market. This has given rise to the latest models and concepts for managing its structure and business processes. It is an uncontroversial fact that there is an urgent need to restore trade in business services, especially in tourism and hospitality, which form a significant share of national budgets, affecting the level of investment attractiveness of countries and generally determine the competitiveness of the country in the global services market.

As is argued by scholars, the competitiveness of the services market, in particular the areas of hospitality and tourism, depends on human capital. In this case, it is not primarily the employees, but the entrepreneurs themselves, who are charged with the responsibility of maintaining a balance between the efficiency of the business decisions taken and their own benefits from the provision of services in certain sectors. Therefore, the structure of the service market is composed of customers – end-consumers and entrepreneurs – who sell services and stimulate solvent demand, manage service quality and reinvest the revenues into industry development (Peters et al., 2018). Yet, the Covid-19 pandemic has been an unprecedented event for the global economic space, which triggered long-term socio-economic destabilization. This has not been the first crisis for the tourism and hospitality market (Duan et al., 2021), but its impact appeared to be unpredictable. It has been proven by many contemporary researchers that economic crises precipitate unpredictable and destructive effects on the tourism services market. In particular, economic destabilization causes considerably greater losses for tourism and hospitality than predicted in the initial stages of the crisis exacerbation (Perles-Ribes et al., 2017).

Current world tendencies have given rise to modern scholars' views on the prospects for recovered activity in the commercial services market. More specifically in the tourism and hospitality sectors (Burini, 2020), on viable instruments to stimulate entrepreneurship in outlined economic management sectors and methods to increase consumer demand are discussed. On a short-term horizon, spreading of the concepts such as “Tourism in your city” or “Tourism in your region” (Richards, 2017) can become an effective tool to revitalize the operation of the tourism and hospitality business. However, this strategy is only effective in the context of renewal of national tourism and hospitality sectors; in the global dimension, it lacks development prospects, as it effectively prevents participants from competing in the global services market.

Thus in the economic recovery phase of the Covid-19 pandemic, the business services market is actively transforming. The hospitality sector and today's tourism destinations will no longer resemble those that existed before the pandemic; the interests, priorities, needs and behaviour of service consumers have also changed (Richards, 2020). Therefore, this study aims to clarify current tendencies in the transformation of the business services market, in particular by focusing on the most susceptible economic sectors - tourism, hospitality as well as hotel and restaurant business. The proposal development for managing the operation efficiency in the context of continuous restriction of social interaction and stabilization of market processes after the crisis is also an objective of the given research.

2 Literature review

Fundamental analysis of the subject proposed in the scientific article leads to the conclusion that the problematics and effectiveness of the modern business services market have gone through sufficient research. Among these are development tendencies in its tourist as well as hotel and restaurant segments, combined with the effectiveness of methods used to stimulate business activity and restore international trade in services in terms of exacerbation of socio-economic crisis that arose in the midst of the unprecedented Covid-19 pandemic.

The research on the development tendencies of commercial services market can be divided into two directions – market analysis in the context of determining the value of service consumers and customer-oriented approach level of modern services (Zeithaml et al., 2020) or market analysis in the context of investigating the performance of economic entities providing services and the balance level between their personal interests and business objectives (Peters et al., 2018).

Scientists who are engaged in research in the first direction believe that the modern business services market is based on one of three paradigms – positivist paradigm (the value of services to the consumer only depends on his perception as the customer), interpretivist (the value to a consumer is determined by realizing the essence of subjective needs through the application of self analysis and inductive logic; therefore, the value of the same service to each consumer is different) (Creswell & Poth, 2018) or socio-constructivist (the value of service to a consumer is determined according to the subjectivity of needs, but taking into account the aspect of social impact on consumer commitment to certain services; accordingly, a set of values and public preferences are formed under the condition of social interaction (Koskela-Huotari & Siltaloppi, 2020).

Scholars who carry out their research in the second direction will specify that, in today's business services market, a large share of activity is generated precisely by the dynamic activities of enterprises, primarily at the expense of small and medium-sized enterprises (hereinafter referred to as SMEs). Therefore, scientists have proved that the competitiveness of industries (including tourism and hospitality) changes according to the motivation of entrepreneurs, the preferred activity organization model, as well as the level of service quality provided by economic entities to modern consumer (Peters et al., 2018). Increased demand for services recovers business activity in the market, increases consumer satisfaction, and contributes to the profitability of enterprise performance- in other words, the quality of service primarily affects the entrepreneur's own quality of life. Considering the findings of the researchers, it was concluded that the efficiency of service market operation is equally determined by both customer satisfaction and the business entity. Moreover, the business process performance and entrepreneur's living standards are interdependent indicators (Morrison, 2006; Peters et al., 2009). In addition, decisions to expand business and service offers, specifically in such sectors as tourism and hospitality, are advisable to take into account with the expected quality of life in the future (Peters & Buhalis, 2013).

Issues, actively studied by scholars, include the response of the tourism and hospitality industry to lockdown conditions, the specifics of the relaxation of lockdown restrictions (Kuščer et al., 2021) and tendencies of restoring normal market operation mode, trade, in particular. Scholars predict that the transformation of the service market (first of all, tourism services) is inevitable under the pressure of changes in the social life order, which also contributes to changes in the consumption patterns and recreation, work, mobility, and socialization organization of citizens in general (Romagosa, 2020). It has been outlined that the personal lifestyle of service consumers is renewed according to the new culture, values and traditions (Wen et al., 2021). Therefore, changes in the structure of tourism sector and the efficiency of business services market operation are essential.

In addition, scientists have also studied the issue of responsible entrepreneurship (Eichelberger & Peters, 2020), which is particularly important for tourism and hospitality sector. Excessive service supply in the designated sectors may have a negative impact on the overall market operation efficiency. It is advisable to support economic entities who understand the value of service in crisis and are able to bear responsibility for the quality of the consumer's holiday. This, in turn, is an important measure in the context of post-pandemic stabilisation.

Another research direction among scholars has been the analysis of changes in the framework of infrastructure support of commercial services market and the dynamics of its digitalization. The digital business process management tools have greatly simplified the customer communication mechanism in the service sales process and ensured continuous interaction with customers, and created an opportunity to receive feedback and quickly determine the level of consumer satisfaction. Digital technologies increase the innovativeness of services. Meanwhile, global digitalization addresses the implementation specifics of most important business functions, including human resource management, knowledge management or logistics (Eller, 2020). Besides, in the context of analyzing consumer cognition of digital technology as a service element, tourists' attitudes towards the use of artificial intelligence devices in the areas of hospitality and airline service provision have been investigated. It is determined that modern consumer prefers electronic cooperation with airlines rather than that with the entities of the hotel and hospitality sector. Therefore, the study reflected that the expected performance and effort of using artificial intelligence in hospitality services are higher than actual (Chi et al., 2020); accordingly, when social impact is limited, service quality and market efficiency may decrease.

The aim of the study. This article is an original study on the current operation tendencies of the global business services market, the performance of its individual segments in the recovery of business entities in different regions of the world, as well as practical aspects of the organization of international trade in services in the phase of aggravation (2019-2020) and the crisis recovery stage (2010-2021). It is appropriate to conduct a detailed analysis of the overall tendencies and practical operation mechanism of the commercial services market, the level of performance of its separate sectors, their infrastructure maintenance along with dynamics of market processes development in the stages of aggravation of the pandemic and gradual recovery from the crisis within the framework of the determined objective. On the basis of conducted analysis, it is prudent to highlight not only the areas of concern, but also methods to optimize the operation of the market space, which is essential in an attempt to create favourable conditions for further development of the global commercial services market.

In order to achieve the specified aim, the article was written using statistical-analytical method, comparative method, analysis and generalization, as well as tabular and graphic simulation are carried out.

3 Materials and research methods

The comparative method and generalization have been used in order to identify the characteristics of modern commercial services market, to compare its current development status with that achieved before Covid-19 pandemic, and to systematize the obtained data. The use of these methods allowed to distinguish various aspects of the commercial services market operation, to reveal the characteristics and current development tendencies of its individual market segments (in particular, tourism, hospitality along with hotel and restaurant businesses), to summarize global tendencies of business process management in the designated business areas and the characteristics of the development of service trade.

Through a detailed analysis, the current practice of different approaches and tools to manage the operation efficiency of the commercial services market was outlined. The analysis determined that the conceptual provisions and regulatory mechanisms should help to stimulate solvent demand and expand service supply after a prolonged socio-economic crisis. In order to determine the development stability of regional commercial service markets, modern comprehensive analysis approaches, in particular the XYZ analysis method, were used. The analysis summarized that the European region and North American markets had a stable pattern of services exports before the pandemic. Consequently, the recovery of business activity within them will be more rapid than in the Asian, Middle Eastern, African, South and Central American markets, where supply is volatile or seasonal.

Statistical analysis method has been applied in the process of analyzing the dynamics of business services markets development region-wise, as well as tendencies of interstate trade in services.

At the same time, an analysis of the efficiency of the commercial services market has been carried out through the use of tabular, graphical and analytical modelling. The impact of the Covid-19 pandemic on its dynamics was determined; a study of changes in the quantitative and qualitative structure of the market, due to significant business transformations and digitalisation of the business sector during the pandemic was carried out.

4 Results

In the context of ensuring the national social development and sustainability of economic growth, services and service processes are of prior importance. Therefore, for years, the mechanisms, tools and concepts for the development of the global commercial services market have been continuously improved. The high market operation efficiency before the global crisis of 2019/2020 is related to the active dematerialization of production, intellectualization of labour and informatization of business processes. In general, the outlined tendencies increase not only the demand and actual value of service, but also add value of services to modern consumer, who perceives services as tools to manage the quality of life.

The current development status of the world services market depends on the pace of post-crisis stabilization, the dynamics of the recovered socio-economic growth of the global economy, and the ways and stages of eliminating barriers to international trade. The main tendencies that emerged from the unprecedented crisis in the midst of the global Covid-19 pandemic were the destabilization of international politics and an increase in the national economies' autonomy level or their complete closure, significant tension in international relations, dynamic digitalization of business for which most business entities (primarily the SME sectors) were not prepared due to a lack of proper infrastructure and the necessary staff digital capacity. Thus, the efficiency of the global commercial services market has plummeted.

Global export and import figures for commercial services reveal the existence of market leaders. The European continent (in particular the UK, Germany, Ireland, France, the Netherlands), Asia and North America have the highest levels of export and import activity (World Trade Organisation, 2021) (Table 1).

Table 1 – Export-import performance in the commercial services market during 2010-2020, USD billion

Region	2016	2017	2018	2019	2020	Growth rate 2020/ 2019, %
EXPORT OF SERVICES						
World	5 015,2	5 457,9	6 012,2	6 150,2	4 913,8	-20,1
Europe, incl. leading countries in the sector	2 394,5	2 620,1	2 928,8	2 967,0	2 470,5	-16,7
United Kingdom	355,1	365,5	410,7	401,4	338,8	-15,6
Germany	288,6	314,7	344,0	341,1	305,2	-10,5
Ireland	149,1	182,4	222,1	247,4	262,3	6,0
France	258,5	373,2	302,3	293,6	245,0	-16,5
Nether-lands	188,9	218,9	258,2	273,8	185,9	-32,1
European Union	1 800,8	2 002,8	2 244,8	2 288,7	1 919,7	-16,1
Asia	1 235,6	1 343,4	1 509,7	1 559,8	1 226,2	-21,4
North America	873,6	936,0	971,9	990,4	786,2	-20,6
Middle East countries	192,3	206,2	222,2	250,3	177,9	-28,9
South and Central America, Carib-bean	151,3	160,2	165,8	165,3	104,3	-36,9
Africa	88,8	102,8	114,2	118,4	77,8	-34,3
IMPORT OF SERVICES						
World	4 833,7	5 228,7	5 687,8	5 851,3	4 596,4	-21,4
European continent	2 089,7	2 267,9	2 510,4	2 634,1	2 170,8	-17,6
Germany	315,3	344,7	371,2	369,4	307,1	-16,9
Ireland	220,1	231,9	341,8	332,1	295,7	-11,1
France	236,8	246,8	273,6	269,9	231,6	-37,4
United Kingdom	223,9	228,1	260,8	272,7	201,2	-26,3
Nether-lands	183,3	216,3	259,2	265,3	169,0	-36,3
European Union	1 668,5	1 829,4	2 028,6	2 138,5	1 783,5	-16,6
Asia	1 433,0	1 540,4	1 683,7	1 674,6	1 301,1	-22,3
North America	628,5	674,3	699,1	725,3	551,8	-23,9
Middle East countries	270,7	285,1	299,7	315,5	218,4	-30,8
South and Central America, Carib-bean	170,5	186,3	189,2	182,8	126,5	-30,8
Africa	133,3	149,9	172,3	179,1	134,1	-25,1

Source: compiled by the author according to the data (World Trade Organization, 2021).

Data from the Table 1 reflects the deterioration of trade activity in all regions of the world. The service market of South and Central America has been the most unprofitable. The market of the European continent countries', in particular, the member states of the European Union, suffered the least losses, which indicates its integrity and resilience to unforeseen threats.

The service market is multisegment, which is related to expanding consumer needs and dynamic business transformations. The World Trade Organization (WTO) currently provides the best classification of commercial services, which divides their entirety into two categories (WTO, 2021):

- factor services – are those that are incidental to the international movement of factors of production; they originate from the mobility of capital and labour (more specifically, financial services, such as income, investments, royalties and licence fees, wages paid to non-residents, etc.);
- non-factor services – are independent of the movement of production factors; the World Bank distinguishes transport, travel and other non-financial services.

With the outbreak of the crisis and the implementation of severe quarantine restrictions in 2019-2021, the performance of the global services market in each direction has plummeted. Before the Covid-19 pandemic, the tourism sector was characterized by an active pace of development and growth dynamics, which, in turn, suffered the greatest losses during 2019-2021 (Figure 1).

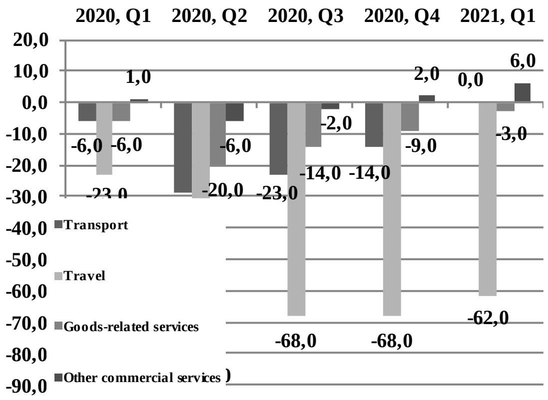

Figure 1 – Tendencies in the global business services market during the period of greatest severity of the Covid-19 pandemic, quarterly growth in %
Source: constructed by the author according to the data (World Trade Organization, 2021).

With the beginning of the second quarter of 2020, international travellers' expenditure has decreased by 81.0% and transport – by 29.0%. The decline in the transport sector was similar to the drop during the financial crisis of 2009 (World Trade Organization, 2021). However, the crisis of tourism, hospitality along with hotel and restaurant business has become unprecedented for the global community.

The area of other commercial services has the higher level of stability. It includes construction, personal, cultural and recreational, financial services, etc. (Figure 2).

The modern travel industry is not only providing high-quality recreational, leisure and hospitality services. It is also an opportunity to create new jobs, stimulate the renewal and improvement of transport infrastructure and road construction. Travel industry enables creation of real prerequisites for the growth of consumer product manufacturing in countries with high development indicators of the travel industry and occupation of prior positions in the structure of export-import activity in the market. It also provides development of means of communication and the spread of digital technologies, which in the context of the pandemic have been recognized as elements of infrastructure support for most service industries.

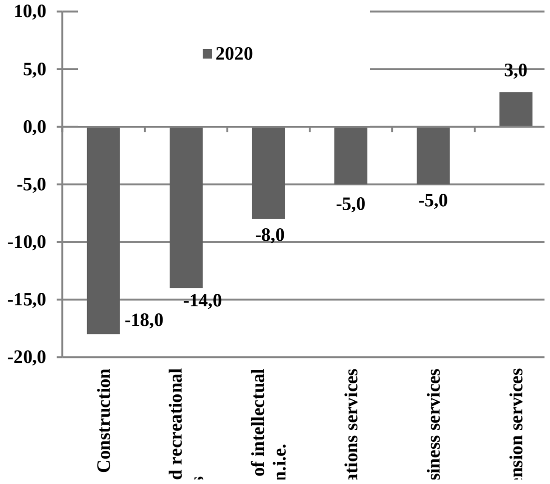

Figure 2 – Change in performance of selected service market sectors in 2020 compared to the corresponding period in 2019, annual growth in %
Source: constructed by the author according to the data (World Trade Organization, 2021).

The epidemic has dramatically changed the dynamics of industry development. The pace of international travel growth and increased activity in the tourism and hospitality service markets is slow, as tourism development indicators have dropped to a critical level in 2020. The recovery remains quite volatile and erratical, with considerable uncertainty about the prospects for the future functioning of the service markets in certain regions of the world. Domestic tourism development is gaining some stability, especially in those countries that have strong infrastructural support for the industry and are relatively resilient to external threats. The development indicators and transformation dynamics of tourism industry in the crisis conditions are reflected in the Table 2.

Table 2 – Tourist services market tendencies by region during 2019-2020

Region	International tourism revenues, USD billion.		Volume of international travel			
			Absolute value, mio. units		Relative variation, %	
	2019	2020	2019	2020	2019/ 2018	2020/ 2019
World	1 465,0	535,0	1 466,0	399,0	3,8	-72,8
Europe	571,8	233,4	746,3	235,9	4,2	-68,4
Asia	441,3	132,5	360,4	56,9	4,0	-84,2
America	322,8	126,6	219,3	69,9	1,5	-68,1
Africa	38,9	14,0	70,1	18,1	2,0	-74,2
Middle East	90,5	28,4	70,0	18,2	6,8	-74,0

Source: compiled by the author according to the data (World Tourism Organization, 2021).

Thus, the tourism markets of Western, southern and the Mediterranean Europe, and South and Central America performed slightly better than those of Asia, the Pacific subregion, Africa and the Middle East, with the negative growth rate of up to 80,0% in 2020 (and almost 100% according to the scores in the first half of 2021).

Services play a key role in the structure of the balance of payments of each of the world's regions, in particular before the global socio-economic crisis in 2019, they accounted for 24.4% (composite index for all world economies), including 21.0% for highly developed countries and 28.8% for developing countries. Before the Covid-19 pandemic, it was the tourism and hospitality industries that could be refered to as generating the highest profits in the services market of each of the world's regions (Table 3).

Table 3 – The place of tourism services in the balance of payments structure by individual world regions during 2019-2020

Region	Absolute value, USD billion		Share in structure, %	
	2019	2020	2019	2020
World, total exports:	25 159,0	22 566,0	100	100
Total export of goods	19 015,0	17 583,0	75,6	77,9
Total export of services, incl.:	6 150,2	4 913,8	24,4	22,1
international tourism (revenu amount from international tourism and international touri traffic)	1 715,0	637,0	6,8	2,8
Europe, total exports:	10 709,0	9 665,0	100	100
Total export of goods	7 609,0	7 027,0	71,0	72,7
Total export of services, incl.:	3 101,0	2 639,0	29,0	27,3
international tourism (revenu amount from international tourism and international touri traffic)	686,0	276,0	6,4	2,9
Asia and the Pacific, total exports:	8 400,0	7 962,0	100	100
Total export of goods	6 840,0	6 734,0	81,4	84,6
Total export of services, incl.:	1 560,0	1 228,0	18,6	15,4
international tourism (revenu amount from international tourism and international touri traffic)	485,0	145,0	5,8	1,8
Americas, total exports:	4 310,0	3 666,0	100	100
Total export of goods	3 145,0	2 775,0	73,0	75,7
Total export of services, incl.:	1 164,0	890,0	27,0	24,3
international tourism (revenu amount from international tourism and international touri traffic)	375,0	143,0	8,7	3,9
Africa, total exports:	509,0	398,0	100	100
Total export of goods	414,0	340,0	81,4	85,5
Total export of services, incl.:	95,0	58,0	18,6	14,5
international tourism (revenu amount from international tourism and international touri traffic)	47,0	17,0	9,2	4,2
Middle East, total exports:	1 196,0	757,0	100	100
Total export of goods	999,0	700,0	83,6	92,5
Total export of services, incl.:	156,0	57,0	16,4	7,5
international tourism (revenu amount from international tourism and international touri traffic)	123,0	57,0	10,3	7,5

Source: compiled by the author according to the data (World Tourism Organization, 2021).

Market transformation continues, and even vaccination cannot immediately renew the tourism growth rates, especially the growth of international tourism. Increased responsibility and service security in the tourism and hospitality industries are important elements of stabilization policy. However, only a continuous cooperation of states, in particular a coordinated response to mobility restrictions, the coordination of security protocols and communication with consumers, will increase the level of credibility to the industry as well as predict potential losses and formulate methods to minimize them in advance.

Despite crisis tendencies, the momentum of transnational tourism helps to create optimal conditions for infrastructure development. Transnational corporations (hereinafter referred to as TNCs) have reflected the maximum sustainability during the pandemic, and their dependence on market fluctuations is lower than that of SME entities. In the hotel and hospitality sector, TNCs appear in the form of hotel chains or networks, whose extensive structure facilitates the effecient development of the service industry.

Notwithstanding the intensity of hotel chains' development, their territorial structure of accomodation is uneven, as it is formed according to the financial solvency of various states in the world, the investment resources volumes attracted to national economies, alongside the overall level of national development. Therefore, current tendencies reveal that the main entities of the hospitality sector is highly concentrated in stable and major economies. The market leaders are: (Atamanchuk & Yavorovenko, 2019):

- The US with preponderance of national hotel chains;
- the share of hotel chains in the EU tourism industry is lower; France has the largest hotel chains – 3,819 hotels (accounting for 21% of all hotels), where the leaders by number of hotels are national operators Accor Hotels (1,603

units), Louvre Hotels Group (820 units); the United Kingdom – 3,538 units (8.5%); Germany – 1,944 units (8.5%); and Italy – 1,491 units (4,2 %).

As one of the system-forming segments of the global commercial services market on the road to recovery of the tourism services market, the WTO has identified key sustainable development guidelines. These include three vectors: optimizing the use of environmental resources, respecting and taking responsibility for the socio-cultural authenticity of the host communities, and balancing between the interests and benefits of each participant in the global tourism market (Figure 3).

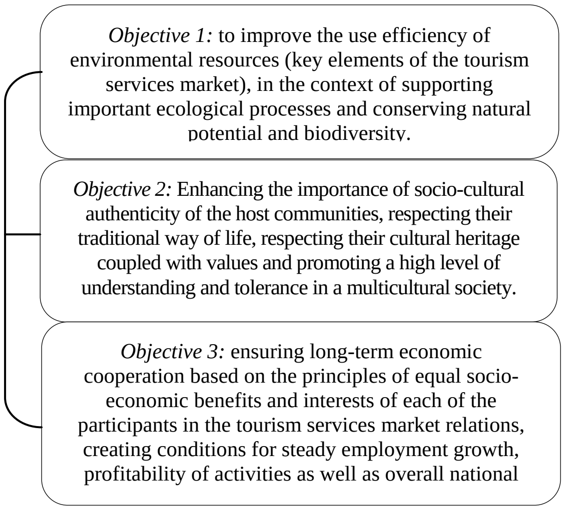

Figure 3 – Sustainable development objectives of the tourism services market
Source: compiled by the author according to the data (World Tourism Organization, 2021).

According to the analysis results, the regions are divided into two groups, X and Y. To the group X belong regions that were stable in exporting a diverse mix of commercial services and were active players in both national and global markets before the crisis. Group Y includes regions that, before the global crisis, were characterised by high levels of volatility in services, with some fluctuations in export activities or regions where demand and supply of commercial services have certain seasonality.

The graphical results of the XYZ-analysis are shown in Figure 4.

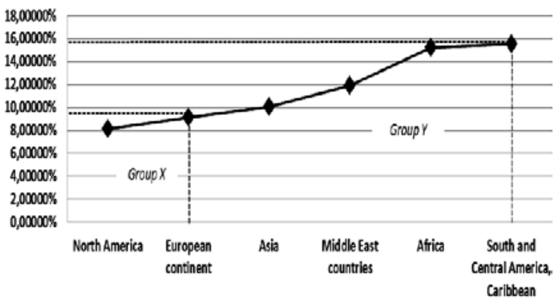

Figure 4 – XYZ-analysis results
Source: compiled by the author according to the data (World Trade Organization, 2021)

The prognosis for the recovery of the export activities of Group X regions (that is, the European continent and North America market), the stabilization of services market functioning, and the intensification of economic activity over the coming years has a high positive potential. However, Group Y regions (that is, markets of Asia, the Middle East, South and Central America, and Africa) are also promising, although more resources and time are needed for the business activity to recover than compared with the Group X regions.

Therefore, the sustainability of tourism service market depends on the environmental, economic, social and cultural aspects of tourism development. Maintaining a balance between these three dimensions ensures the stability and long-term sustainability of the industry.

The functioning of the global business services market depends significantly on the condition, stability and resilience to external threats of each of its segments. Given the contribution of the tourism and hospitality sectors to the revenue structure, it is advisable to focus the regulatory potential on restoring business activity in these areas to the greatest extent. However, the further development of the global business services market is also significantly affected by the level of volatility, which is characteristic of market space in individual regions during 2016-2019, before the onset of the crisis. By using XYZ analysis (Table 4), the stability of the regional services market can be determined.

Table 4 – XYZ-analysis of regional services market

Region	The value of the variation ratio	XYZ-analysis group
North America	8,15145%	X
European continent	9,12787%	X
Asia	10,01868%	Y
Middle East countries	11,92835%	Y
Africa	15,20692%	Z
South and Central America, Caribbean	15,48702%	Z

Source: compiled by the author according to the data (World Trade Organization, 2021)

5 Discussion

The study identified that the functioning of the global business services market depends on the level of favourable socio-economic conditions and the presence of crisis phenomena. During the Covid-19 pandemic, entities that provide services to businesses and the public were unable to cope with the global crisis and significant restrictions on socio-economic interaction, which has led to the decline of market activity, especially in such sectors as tourism and hospitality.

As a result of processing the scholarly studies on the issues outlined, the work significance of certain authors is worth highlighting. Among them are Zeithaml V. A., Verleye K., Hatak I., Koller M., Zauner A. (Zeithaml et al, 2020), Creswell J. W., Poth Ch. N. (Creswell & Poth, 2018), Morrison A. (2006), Peters M., Frehse J., Buhalis D., Kuščer K., Eichelberger S. (Peters et al., 2018; et al., 2021; Eichelberger et al., 2020; Kuščer K. et al., 2021) et al.

We believe that the main factors which affect the conjuncture of the global business services market, can restore the activities of economic entities, as well as have a positive impact on interstate cooperation and trade in service sector are the following:

- First, demand creation and sales promotion, permanent cooperation with the customer. Referring to the works of contemporary scholars (Creswell & Poth, 2018), it can be concluded that customer outreach is a determinant of the overall market performance; customer behaviour is not always predictable, but modern concepts of customer interaction take into account all personal requirements of citizens, their reactions and interests. We believe that the most customer-focused (Zeithaml et al., 2020) and socially efficient is the interpretivist paradigm (Creswell & Poth, 2018). This concept takes into account the importance of cooperation with customers and determines the importance of customers in the pattern of trade relations and service processes. Analysis/self-analysis and surveys are the main tools for communication between parties and methods for investigating the nature of needs (Jutbring, 2018). As the evidence from practice suggests, their application can determine the parameters of service value, which are different for all citizens, as well as the relative level of importance, which will also vary for different consumer segments (Drennan, 2012) or situations. Client engagement, in our view, is particularly relevant in the tourism and hospitality sectors, the trust in which tends to be recovering. However, the consumer of tourism services is already very different from that before the onset of the pandemic - the perception and value of travel has changed, there are both additional obstacles and incentives to renew behaviour. Current tendencies as a whole have a positive effect on consumers, they increase the level of culture, tolerance, responsibility and awareness of actions in society;

- Second, the recovery of business activity in the commercial services market. Researchers determine that the performance of modern entrepreneurs depends on their motivation, the chosen model of business organisation, and the level of service quality they can provide to the modern consumer (Peters et al., 2018). Furthermore, responsible entrepreneurship (Eichelberger & Peters, 2020) is undoubtedly an indispensable business form in the modern business services market structure (especially in tourism and hospitality sectors). However, in our view in a post-pandemic environment, maintaining the supply and marketing of services is determined by the level of coherence of the socio-economic processes of regions (states) and the efficiency of their cooperation. It is worth prioritising the processes of facilitating interstate cooperation and establishing a mechanism for international trade in services, taking into account the restrictions imposed and regional/national market characteristics.

6 Conclusion

Through the research on the current tendencies of the world business services market, it is concluded that the efficiency of some market activities has decreased (specifically tourism and hospitality) The results of the research also demonstrate that there is no dynamic recovery in the business activity of enterprises that provide services to business and community. This is reflected in the negative values and growth rates of performance index.

The development strategy of the service market is now inefficient and needs to be updated in line with the conditions of the economic space, which have been formed under the pressure of crisis and business transformations. The policies of national and subregional bodies implementing regulatory market policy do not promote trade stimulation and market recovery. On the one hand, this is due to a decline in the rate of development of business entities, and the decline in the solvency of a modern consumer and the overall repositioning of values, on the other.

Thus, in the post-pandemic context, it is advisable to orient further research towards the development of latest mechanisms for regulating supply and demand in the business services market.

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Primary Paper Section: A

Secondary Paper Section: AE

THE PROBLEMS OF SOCIETY'S GLOBALIZATION: PECULIARITIES OF LEGAL SOCIALIZATION AND PUBLIC EDUCATION

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Abstract: Globalization is a complex phenomenon, which affects the way of life of the community, the cultural, educational component of the life of society, legal culture, and legal socialization. As an all-consuming phenomenon, it implies an impact on all spheres of social life, on all states, and the individual. Globalization leads to a deepening heterogeneity of society. Not always a fair distribution of the benefits of globalization, the development of new technologies and, accordingly, the frequent misunderstanding and rejection of these technologies by part of society, generate the threat of new conflicts, which can only be prevented and solved by law as the most effective regulator of social relations.

Keywords: legal socialization of personality, socialization, globalization, education, social behavior, legal activity, social environment.

1 Introduction

Socialization is one of the leading concepts of modern philosophy, psychology, law, social pedagogy, interest in which is due to the need for a systematic scientific analysis of the formation of personality in the latest conditions of social development. The classical scientific position with the focus of the researcher's attention mainly on the educational aspects of socialization has a long tradition, interprets legal socialization as a subject-object process and, today is represented by several scientific schools and concepts. Academic discourse on legal socialization is gradually deprived of paternalism characteristics of the twentieth century and is directed to the study of compliance of socialization conditions with the individual characteristics of a modern person. By socializing, a person forms his/her own opinion, acquires abilities, and is determined with individual needs and values. Therefore, we believe that legal socialization does not exist without individualization in law. It combines social factors with personal factors.

The worldwide process of globalization covers all aspects of society, connects national states into a single social system. The emergence of a new world model requires a global approach and consolidation of the international community to develop effective mechanisms of legal socialization and civic education. The educational priority is to teach a conscious, active, and democratic-minded person who can live and act competently in a society that is constantly renewed and evolving. In a globalized society, traditionally established stereotypes inherent in the popular consciousness are changing, there is a change in the motivational factors of social behavior. As a result, we observe the loss of social identity, social disorientation of a person. At the same time, globalized society turns socially active people into "citizens of the world."

The development of a modern state based on the rule of law is impossible without functioning in its system of effective mechanisms of legal socialization; effective components of upbringing and education as a means of forming human democratic values, implementation of acquired knowledge of rights in various types of activity.

2 Literature Review

The world scientific theory and pedagogical practice have accumulated considerable experience in the issues of legal socialization and civic education, implementation of the tasks of general and special education with wide propaganda of democratic values. Increased attention to the study of legal socialization Tyler T. explains the need of modern society to create a viable and sustainable social system (Tyler, 2003; 2006; Kozlovets, 2020).

Fine A. and Trinker R. defined legal socialization as the process by which people form values, attitudes, and beliefs about laws, institutions that create law, and individuals who apply that law (Fine & Trinker, 2020). Mazerolle L. legal socialization is seen as a process of consensus between the individual and society, where the responsibility of the citizen is ensured both by his initiative and through the use of state coercion (Mazerolle & others, 2021). Makhmudova A. and Mikhailina T. explore the problems of legal socialization, analyze ways to combat legal negativism, legal infantilism, then deviations, the consequence of which is deliberate criminal behavior. Corren N. and Perry-Hazan L. focus on the challenges of enforcing epidemiological safety rules in enclave communities in the COVID-19 pandemic, noting the need for "bidirectional" legal socialization that involves compromise (Makhmudova, 2019; Mikhailina, 2017; Corren & Perry-Hazan, 2021).

Granot Y. and Durkin A. examine the legal socialization of adolescents, considering this period critical in terms of the formation of an individual's relationship to law enforcement and other agencies that represent the state in their person. Conditions of legal socialization of children became a subject reflected in the works of Halsey M., Wolfe S., McLean K., Pratt T. (Helsey, 2018; Wolfe, McLean & Pratt, 2017; Brown, 2017). Tyler T. and Trinkner R. focused on elucidating the relationship of legal socialization to other processes of personal development, as well as research on the role of family, school, and juvenile justice in legal socialization (Tyler & Trinkner, 2017). Geller A., Fagan J., Lizakowska S., Fajczuk O. break down many social issues that negatively impact the legal socialization of children and adolescents, including assessing the influence of the media in the process of identity formation (Geller & Fagan, 2019; Lizakowska & Fajczuk, 2019).

The issue of trust in law enforcement agencies is actively discussed in scientific schools. Baz O. and Fernández-Molina E., citing empirical data, explore the problem of the legitimacy of power and authority of law enforcement agencies. Kaiser K. and Reisig M. link the legitimacy of state agency decisions to an individual's assessment of the legal system, exploring the nature of legal cynicism and disrespect for the law (Kaiser & Reisig, 2019; Bell, 2017; Baz & Fernández-Molina, 2018).

Cohen A., Pope A., Wong K., Ajaps S., Obiagu A., Muetterties C. civic education is seen as a purposeful activity of the state aimed at the formation of the younger generation's sense of patriotism, devotion to the homeland, a process that can develop a sense of belonging to the global community. Civic education promotes awareness of the need for state processes in conjunction with the development of civil society. In the aspect of the state, the problem of legal socialization and the continuity of civic education are issues that are considered justifiably key (Cohen, Pope, & Wong, 2021; Ajaps, & Obiagu, 2020; Muetterties, 2021).

Global changes and advances in the world affect all areas of society, including the legal (Ergashev & Farxodjonova, 2020), and the globalization process is multidimensional (Kozak, 2014). Researchers have found that the most notable among the changes in society and the state are changes in the axiological basis at the level of individual identity (Palahuta, Zharovska, Kovalchuk & Skliar, 2020), noted the role of teachers in children's perception of values and normative rules of behavior (Fine & Rooij, 2021). Akkari A., Maleq K., Burlacu S., Gutu C., Matei, F., Moos L., Wubbels T, Bossio E., and other scholars analyze the impact of globalization on educational processes in their research (Akkari

& Maleq, 2019; Burlacu, Gutu & Matei, 2018; Moos & Wubbels, 2018; Schäfke, Mayoral Díaz-Asensio & Stagelund Hvidt, 2018; Torres, 2017; Torres & Bossio, 2020).

The research problem is widely reflected in the scientific works of lawyers, scholars of state, psychologists, and sociologists. At the same time, the theory of legal socialization, which aims to create effective mechanisms of public education in the spirit of respect for the law, continues to be at the stage of its scientific comprehension and active development.

The study aims to identify the problems of legal socialization and civic education at the stage of the global transformation of society. The analysis will allow further formulation recommendations for improving the mechanism of legal socialization. It also will allow finding ways of effective implementation of international programs for civic education and upbringing, aimed at the development of citizens' general competence, competitiveness, and social and legal activity.

Research tasks:

1. to determine the level of legal knowledge of students of different specializations;
2. to find out the problems of legal education at the level of secondary education institutions;
3. to evaluate the level of legal and civic engagement of students;
4. to assess the level of citizens' trust in state authorities;
5. to clarify the public reaction to new social and legal phenomena that appeared as a result of science and technology development.

3 Materials and research methods

In the process of research, an interdisciplinary approach was applied, general scientific and special methods of scientific knowledge were used:

- dialectical method applied to reflect social phenomena in specific concepts and legal categories;
- formal-logical method – to eliminate the contradictions that arise in the process of researching legal socialization as a legal phenomenon.
- statistical method – to analyze the consolidated array of data collected as a result of the study;
- concrete-sociological method is effective in the processing of empirical material;
- normative-dogmatic method – to analyze individual normative documents.

The authors conducted a sociological study of the level of integration of student youth in the legal life of society by interviewing students of 2–6 years of study at Ukrainian higher educational institutions (HEIs) of IV accreditation level. The research period covered 2019–2021. Questionnaires developed by the authors were used to conduct the survey. The focus group consisted of 2423 students from universities in Kyiv, Lviv, Vinnytsia, Volyn, and Zakarpattia regions. To analyze the differences in the legal socialization of students divided into two groups: students of law and related specialties (1219 people) and students of non-legal specialties (1204 people). The average score of the surveyed students was 82.6 out of 100. The equals of the indicators were considered on a 5-point scale, where 0 – the lowest level, 5 – respectively, high. The margin of error of the results, given the number of respondents, is 2–3.5%. The questionnaire is designed to be anonymous and quick to fill out. The question is divided into separate blocks:

Block 1. General information about the respondent (questions concern the collection of general data about the respondent, HEIs in which the respondent studies, place of residence, specialty, year of study, academic performance, etc.);

Block 2: Assessment of the student's knowledge of constitutional rights and duties and the effectiveness of legal education at the level of secondary education institutions (the questionnaire in this block contains a question about the evaluation on a 5-point scale of the level of legal knowledge of respondents, the effectiveness of law courses and the effectiveness of legal outreach work at the secondary level of civil education, work on the prevention of offenses, etc.);

Block 3. Assessment of legal and civic engagement of students (contains questions that help to find out the level of legal and civic engagement of citizens (on the protection of legal rights and interests, countering and responding to offenses, monitoring political news and events in Ukraine and the world, readiness for military service, participation in community projects, participation in elections, etc.)

Block 4. Assessment of the level of young people's trust in the state authorities (the question in the block relates to identifying the level of citizens' trust in the president, parliament, national police, courts, local government, etc.);

Block 5. Public reaction to the emergence of new social phenomena (includes the question of attitudes toward the legalization of surrogacy, euthanasia, same-sex marriage, therapeutic cloning, chemical castration, and other innovations).

4 Results

The task of legal socialization is the formation of citizenship as an integrated quality of the individual, enabling the person to feel moral, politically, and legally competent and protected. The main purpose of civic education (at the present stage of the development of statehood) is to prepare young people for life in the global world, as well as the recognition and acceptance of those values that act as the main for a civil democratic society. In our research, we evaluate the effectiveness of the conducted work on legal socialization and civic education, we find out the level of legal awareness and activity of students in different regions of the country. Also, we estimate the level of patriotism of youth, attitude towards the changes in the society which became a result of inevitable and tireless globalization. In this research, we discover and analyze other indicators which show the integration of a person into the political, legal, economic, cultural life of the society.

The total number of students who participated in the survey – 2423 people, of which men make up 47.6%, women – 52.4%. To achieve objectivity, in particular, in questions of political content, students from five leading Ukrainian HEIs were invited to participate in the survey: Kyiv National University of Trade and Economics, National University "Lviv Polytechnic," Donetsk National University named after Vasyl Stus, Volyn National University named after Lesya Ukrainka, Uzhgorod National University. All respondents not only presented the HEIs in which they study but also the respective regions of the country. Students who permanently reside in the respective region were selected to participate. The exception was the Donetsk National University named after Vasyl Stus, where young people represented two regions at once – Donetsk and Vinnytsia regions. Detailed information about the study participants is presented in Table 1 and Table 2.

Table 1 – The study participants is presented

Regions of Ukraine and higher education institutions whose students took part in the survey	The total number of students in HEIs who participated in the survey Women / Men
Kyiv region, Kyiv National University of Trade and Economics	**448** 243 / 205
Faculty of International Trade and Law	279
Faculty of Economics, Management and Psychology	37
Faculty of Trade and Marketing	24

Faculty of Information Technologies	35
Faculty of Restaurant, Hotel and Tourist business	38
Faculty of Finance and Accounting	35
Lviv region, National University of Lviv Polytechnic	562 307 / 255
Institute of Law, Psychology and Innovative Education	297
Institute of Architecture and Design	60
Institute of Humanitarian and Social Sciences	64
Institute of Applied Mathematics and Fundamental Sciences	48
Institute of Civil Engineering and Engineering Systems	49
Institute of Telecommunications, Radio Electronics and Electronic Engineering	44
Vinnitsa region, Donetsk National University named after Vasyl Stus	427 201 / 226
Faculty of History and International Affairs	42
Faculty of Chemistry, Biology and Biotechnology	54
Faculty of Information and Applied Technologies	47
Faculty of Philology	51
Faculty of Law	213
Faculty of Foreign Languages	20
Volyn region, Volyn National University named after Lesya Ukrainka	408 236 / 172
Faculty of International Affairs	25
Faculty of Philology and Journalism	38
Faculty of Chemistry, Ecology, and Pharmacy	32
Faculty of Geography	27
Faculty of Law	204
Faculty of Culture and Arts	18
Faculty of Medicine	40
Faculty of Geography	24
Zakarpattia region, Uzhgorod National University	578 283 / 295
Faculty of History and International Affairs	61
Faculty of Law	226
Faculty of International Economic Relations	66
Faculty of Economics	59
Faculty of Tourism and International Communications	42
Faculty of Mathematics and Digital Technologies	48
Faculty of Medicine	76
Total number of students who participated in the survey	2423
Total number of men/total number of women	1270 / 1153

Table 2 – Distribution of respondents by year of study at HEIs

Year of study	Number of students who took part in the survey
I	–
II	200
III	660
IV	998
V–VI (master's degree)	565

A person who is in the polyactive globalization processes must be competitive, educated. This person must possess the latest ways of perceiving and transmitting information, be practically prepared in a professional aspect, as well as have an appropriate level of legal culture. Among the factors that hinder the effective development of the person is a low level of legal awareness. Compliance with the law requires legal education, bringing to a wide range of people information about the rights and freedoms belonging to them, about the availability of legal tools to protect legal rights, about the possibility of solving difficult life situations legally, using the opportunities that exist both within and outside the state. Effectively conducted legal educational work ensures that citizens are aware of their legal status, develops implementation and protection skills of subjective legal rights with the help of legal mechanisms.

The results of our survey aimed at finding out the legal awareness of young people showed that the level of legal knowledge of second-year students of all specialties is relatively low. This fact proves the insufficient effectiveness of legal education work carried out based on schools. The gradual growth of legal competence is observed in the third and subsequent years of law students, logically for the profession chosen by young people. At the same time, with each subsequent year of study, students of non-legal specialties do not demonstrate the minimum knowledge of the law necessary for a citizen, according to the increase in the level of legal awareness we do not observe (see Figure 1).

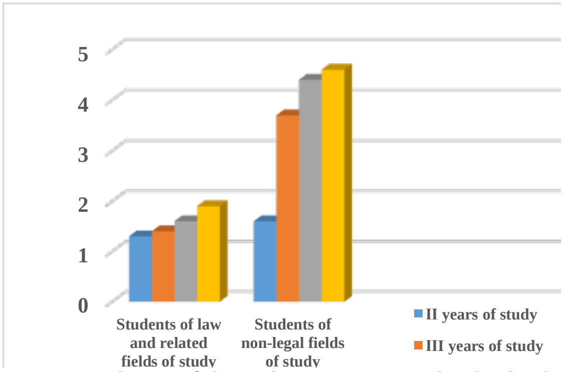

Figure 1 – Indicator of the student's constitutional rights level according to their own statement

When asked if there was any work on the prevention of offenses (seminars round tables with the participation of law enforcement officers and famous lawyers; educational hours; law weeks; thematic conversations on legal education, etc.), 47% of the surveyed students gave a positive answer. The effectiveness of meetings with representatives of the national police was particularly noted. 32% of respondents remembered legal education measures as episodic and insufficiently informative. 11% denied any legal awareness or prevention activities initiated by school administrators or teachers. We believe that under such conditions, it is difficult to achieve a positive result on civic education at the level of secondary education institutions to:

- form a systematic understanding of the state and law,
- to deepen knowledge of social and legal norms, to maintain law and order, to prevent offenses,
- to foster respect for the law and intolerance for illegal behavior,
- to teach people to use the acquired legal knowledge in practical life and so on.

Citizens with a high threshold of information uncertainty are less adaptable to the crisis conditions of life. The growing pace of development of a globalizing society requires from a person civic and legal activity, constant improvement of knowledge, skills, competencies that will allow acting in the interests of personal, civil, and social development. A human in his development should be guided by the demand, which is carried out by the labor market. Independence, knowledge of the basics of law and economics, reckoning on their strength is the key to the independent development of man in the context of globalization.

Among the manifestations of the transformation of the legal life of society in the context of globalization is the need to obtain legal information by the newest and classic channels. On the one hand, the informatization of knowledge implies the development of digital culture and the ability to quickly transmit information to all corners of the globe. It is possible to get the latest information instantly is a significant priority of legal education in the era of information society.

However, different types of information sources can cause conflicts in the effects of legal socialization. Depending on the author and source of the information, different interpretations of legal norms, all kinds of political manipulation, or misconceptions may be contained. Information technology, as a new, vast resource, can also spread false information at an accelerated rate, creating social chaos. According to the social networks that are widely used and discussed in our society, their presence changes some traditional dimensions of human life. The question of academic credibility and moral character become central to the debate about the validity of the messages, methods, research, data, analyses, and stories that get disseminated online. In addition, information resources can become a means of warfare (fakes, misinformation, manipulation). According to this aspect, we should talk about information warfare as a powerful factor of national and social destabilization. The European Commission in March 2018 conducted a global survey "Society, Culture and Demography. Digital Society and Technology", where respondents demonstrated the importance of quality media: respondents perceived traditional media as the most reliable source of news (radio 70%, television 66%, print 63%). Internet news sources and websites with video content were the least reliable sources of news, with trust rates of 26% and 27%, respectively.

Our survey showed that the majority of respondents were in a life situation where they had to assert their legal rights and interest. Only 38% of survey participants indicated that they have managed to assert their rights independently, without involving third parties in resolving the dispute. 18% applied for protection of the violated right to the competent public authorities. 44% conceded in their interests, rather than using the human rights guarantees that exist in the state. 94% of the respondents claim to have witnessed an offense by accident, of which 11% tried to stop the unlawful actions themselves, and another 5% reported the unlawful actions to the relevant state authorities.

We also pay considerable attention in our study to the political activity of today's youth. About 60% of respondents regularly monitor the political situation in Ukraine and the world through the media, social or other networks. Civic education is aimed at awakening civic consciousness, the development of a sense of social responsibility and patriotism. Figures 2–3 provide information on the readiness of young people to perform military service in peace and active hostilities. The overwhelming majority of respondents (81% of men and 37% of women) are ready to perform military service even in conditions of military clashes. An important indicator is that the profession chosen by students does not significantly affect their decision to defend their homeland in the event of an external threat.

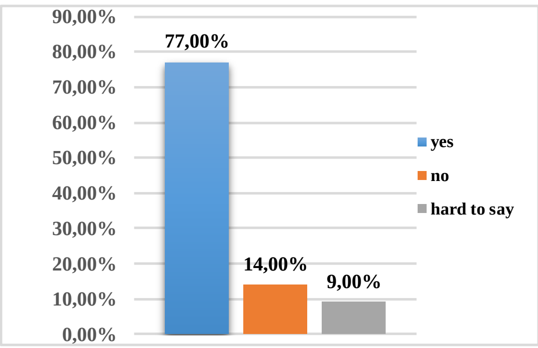

Figure 2 – Are you ready to perform military service under peace conditions

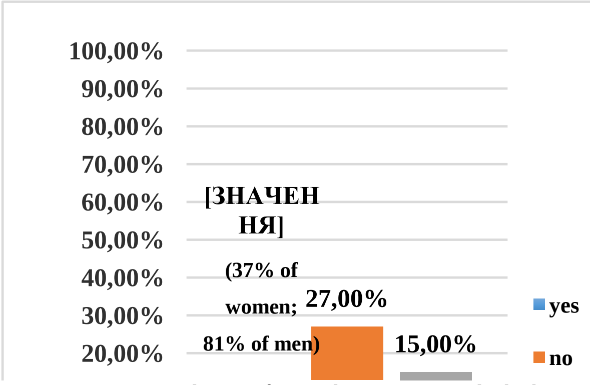

Figure 3 – Are you ready to perform military service under high-intensity battlefield conditions?

Citizens of the state can apply the rules of law only with the help of public authorities. To determine public activity, there is a need to establish public confidence in individual authorities.

The survey demonstrated a clear dependence of the assessment of the legitimacy of the body on the knowledge of the peculiarities of its functioning. Non-legal students, when asked about assessing the work of Parliament as a legislative body (on a 5-point scale), demonstrated a fairly high level of approval of the work (the average score of 3.6). In contrast, law students critically evaluated the work of the legislature (average score 2.1) (*see Figure 4*).

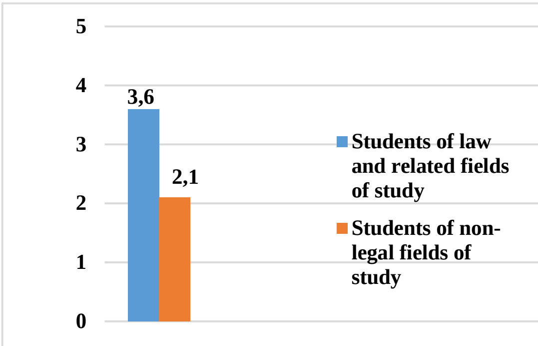

Figure 4 – Evaluation of the legislature's work

On the question of how to improve the work of parliament, students of nonlegal specialties gave vague answers, the most common of which had a politically declarative nature (reducing the number of MPs, the adoption of good laws, reducing corruption, and theft by the authorities). As for future lawyers, they were more clearly and motivated while defining the shortcomings in the work of the Verkhovna Rada of Ukraine (lack of proper expert evaluation of legislative norms, conflicting legislation, non-compliance with the regulations and procedures for adoption of acts, the dominance of a significant amount of "legislative spam," violation of the procedure of personal voting).

The level of trust in the President of Ukraine does not show the existential discrepancy between the future received profession and the level of legal awareness. However, a decrease in the level of trust in the President is observed here. In September-November 2019, almost four months after his election (V. Zelensky's inauguration took place on May 20, 2019), respondents, generally 67%, approved of his work. However, in June 2021, this indicator of trust decreased to 41% (*see Figure 5*).

The trust rating always falls after the election; it is a natural socio-political indicator. However, we cannot explain such a considerable decrease in trust only by that.

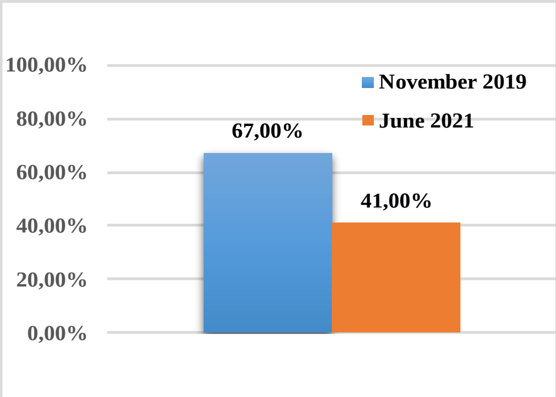

Figure 5 – Level of trust in the President of Ukraine (%)

The National Police of Ukraine acts as a central body of executive power, which serves society by ensuring the protection of human rights and freedoms, combating crime, maintaining public safety and order. Distrust of this body is observed, in particular, among non-lawyers on a five-point scale, the average score is 2.3, and among law students – 2.7. (*see Figure 6*). The above does not allow us to state that the margin of error is significant, but here we observe an unusual situation. When, in assessing the work of all other authorities, we observe the dependence "high level of legal awareness – the lowest score of trust and legitimacy of the authorities," then for the National Police of Ukraine, the situation is the opposite. Future lawyers assessed the work of the law enforcement system slightly better (+ 0.4 points).

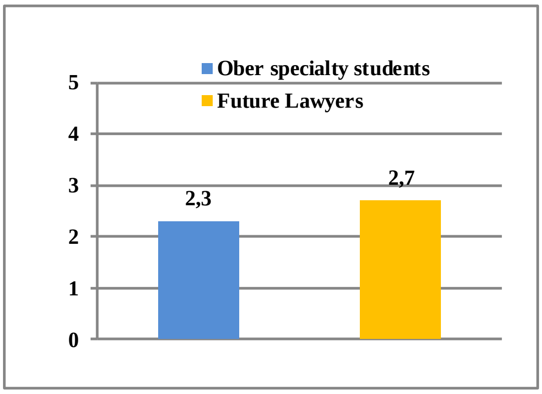

Figure 6 – Evaluation of the public trust level in the National Police of Ukraine

According to the trust rating, the judicial system occupies the lowest level among all the organs for which the survey was conducted. We define the level of legitimacy as critical (students of non-legal specialties have an average score of 1.8, and students of legal specialties have an average score of 1.6 at the maximum 5-point system (*see Figure 7*).

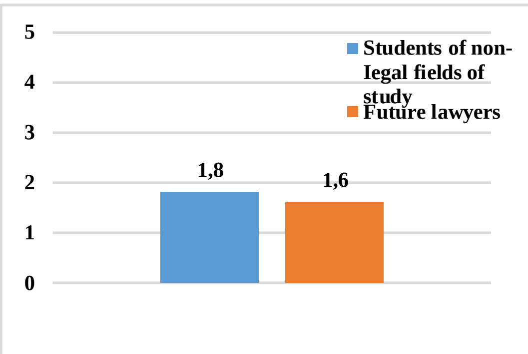

Figure 7 – Assessment of the citizens' trust level in the judicial system

The last ones are motivated by their assessment of the corrupt nature of the judiciary, the considerable time required to consider cases, and the lack of openness and communication in the judicial system.

And lastly. Council local governments have the highest confidence level. Non-legal specialties score 4.1 in 2021 (4.3 in 2019), legal specialties score 3.8 (3.7 in 2019) on a five-point scale. This is explained by the fact that these bodies are closest to the public (*see Figure 8*). The functioning of self-government can be successful only when there are elements of civil society and self-organization. The positive assessment of the activities of local self-governments allows us to indicate the intensification of the creation of a civil society in Ukraine.

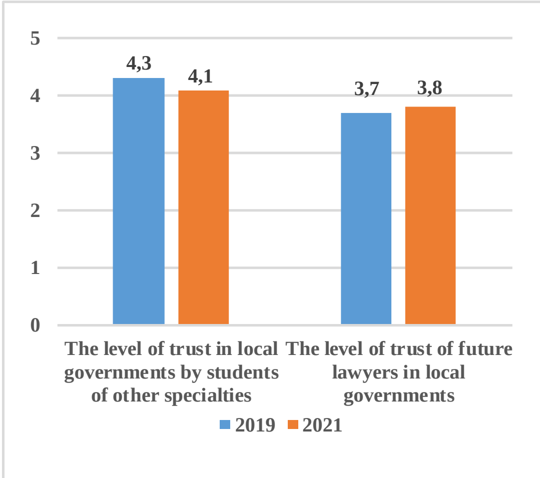

Figure 8 – The level of trust in local governments

Globalization of space indicates the emergence of new social phenomena. This is connected with the development of the scientific sphere, in a particular technology, medicine, biology, etc. The law is called to provide legal fixation of the necessity for social relations. Therefore, often there are exclusive relations that require legal regulation. The peculiarity of such relations is that in the current system of law can not be social analogs, which could be used by similarity. The new relationships have a unique character. For example, the latest reproductive ways of procreation, including through surrogacy, regulations of genetic information, issues of sex change/correction and problems of expanding the gender binary approach, debatable aspects of the right to modify one's body, posthumous reproduction, the right to easy death, organ and tissue transplantation, Internet relationships and the like.

Public reaction to such changes can be ambiguous. In some places, the new possibilities run counter to the moral and ethical values of the individual or civil society. To what extent global legal changes contradict societal attitudes are explored through questioning.

Commercial surrogacy has been completely legal in Ukraine since 1997, the state allows any person to undergo the surrogacy process.

Respondents were asked about their opinion on the legalization of certain somatic options. Thus, when asked how young people assess the legalization of commercial surrogacy, their thoughts were distributed categorically: only 12% of students support, 6% fully support; categorically do not support 43%, and rather do not support 23%. Others could not make up their minds (see Figure 9).

In regards to the need for the legalization of cloning, the students shared their attitude to such medical activity based on the type of cloning. Ukraine has a ban on human reproductive cloning, namely prohibiting the creation of a person genetically identical to another living or deceased person by transferring the nucleus of a somatic cell of another person into a female sex cell devoid of its nucleus, in this case, there is no regulation on reproductive cloning. The students approved of this legislator's position. It does not conflict with their moral views (76% support the current legal norms, 13% do, and 11% could not make up their minds).

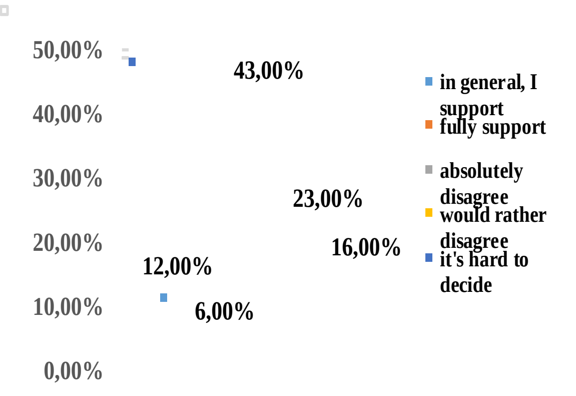

Figure 9 – What is your opinion on the legalization of surrogacy

On therapeutic cloning, the students were familiarized with the essence of this method as such, which has huge potential as a means to replace damaged tissue and organs, can act as an opportunity for a person to a decent standard of living, it is also indicated that the medical motivation of the absence of organ rejection is also important. Also, the information material presented points out the threat of the uncontrolled transition of therapeutic cloning to reproductive cloning. After reviewing all aspects of this type of cloning, the students decided thus 58% were in favor, 13% were undecided, and 29% were opposed (*see Figure 10*). Therefore, we see a lack of coherence between the normative regulation and the legal public position, at least among student youth. The above indicates the need to intensify and discuss this issue in legal circles and at the level of public authorities.

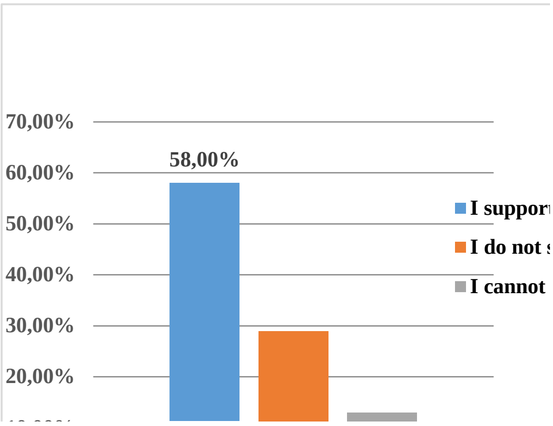

Figure 10 – How do you feel about therapeutic cloning?

And finally, our question concerned another bioethical problem of legalizing chemical castration as a means of coercive action by the state as a sanction for crimes committed against minors, juveniles, and persons who have not reached puberty. In Ukraine, there is no such type of punishment as opposed to many civilized states. The results are impressive: 94% of respondents supported the idea of chemical castration, and only 2% of respondents were against it (*see Figure 11*). Therefore, the demand for such prohibited regulation points to the need for lawmakers to return to this issue since there have already been legislative attempts to regulate this problem and protect the violence's victims.

All in all, in conclusion, we can state the dissonance in the social and public position of young people and the legal regulation of the latest opportunities that have arisen as a result of the globalization of social reality. Such uncertainty and ambiguity provoke abstract manifestations of legal socialization, deforms legal consciousness.

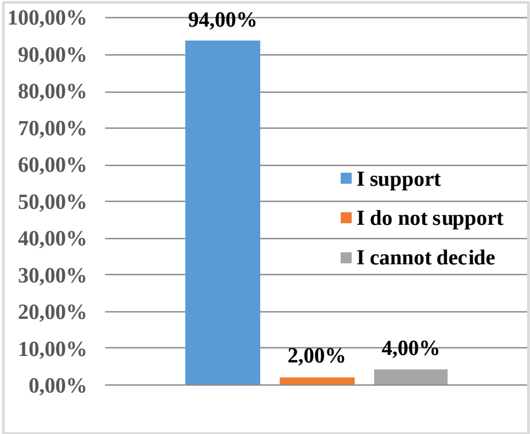

Figure 11 – What is your opinion on the legalization of chemical castration?

5 Discussion

The modern individual in his life is not limited to a single sphere of legal relations. Nowadays, a person represents himself in many spheres, in particular as a citizen, public subject of law, participant of territorial relations, employee or employer, taxpayer, the user of services, family member, and so on. Therefore, legal norms of various orientations are in demand. A person has to understand them, but also to be able to implement them by applying to the competent public authorities, to be able to protect their rights, freedoms, and legitimate interests. We agreed with many scientists and public figures on the need to introduce a special course on global citizenship education into the system of national education. The benefits of global citizenship education (GCE), according to Torres C., are manifested in a triad: GCE supports global peace, encourages measures of economic, social, and cultural inequality and can reduce global poverty, provides a solid foundation and guidelines to support civic virtues, will lead to a more democratic society (Bossio & Gaudelli, 2018; Bossio & Torres, 2018; Torres, 2017; Robiolle Moul, 2017; UNESCO, 2015).

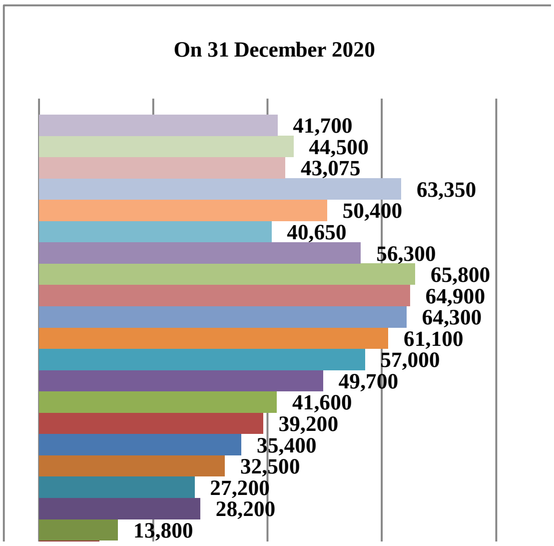

Figure 12 – The data from the official source of the ECHR

The data obtained from the official source of the ECHR (ECHR, 2021) showed that, in general, in the XXth century the society became more aware of its rights, national and international mechanisms of their realization. Since the beginning of the XXI century, the number of appeals to the European Court of Human Rights has grown rapidly. For comparison, in 1999, the number of appeals was 8,400. From 2010 to 2013, the figures reached more than 60,000 cases. By 2020 there were 41700 appeals (*see Figure 12*). At the same time, our research showed a relatively low level of legal knowledge of citizens, as well as the inability of a significant part of the population to defend their legal right or interest in a legal way (only 18% of respondents applied to the public authorities for help to restore the violated right, 44% were passive and not using any existing legal guarantees at the initial stage). Conclusions we got agreed with the data collected as a result of large-scale researches within the frames of the World Justice Project under the direction of Andersen E. More than 100 000 people from 101 countries took part in the researches. The results of the project testified to the lack of basic legal knowledge of the vast majority of the population, about the low legal activity of citizens, as only 1/3 of respondents said they were aware of the legal nature of their problem, 29% asked for qualified legal assistance, and only 17% (which is about 1/6 of the project participants) sought the protection of violated rights in the public authorities (Andersen, 2019).

Low legal activity may be a consequence of the distrust of citizens to the state authorities. Zharovska, I. conducted comprehensive studies of the legal nature of state power, which as of 2013 showed a high level of distrust of citizens towards state authorities in Ukraine: towards the President is more than 68%; Parliament – 86%; Government – 1%; courts – more than 72%; police – about 61% (Zharovska, 2013). Our poll 2019–2021. Also, revealed distrust at the level of 33–59% for the president, 54% for the parliament, 66% for the court, and 50% for the national police. In general, we can observe a slight increase in the level of legitimacy of state authorities. Therefore, in the aspect of the problem of the development of the legal activity of citizens the position of Tiler T. that lawmakers should work so that legal systems become worthy of civil respect is actualized (Tyler, 2003; 2006).

The globalization of society, the development of technology has led to many innovations in the law. The emergence of the newest human rights (euthanasia, sex change, organ transplantation, cloning, same-sex marriage, artificial insemination, child-free family, independent of state interference living on religious, moral views, use of virtual reality, etc.) causes mixed reactions from society and often becomes a cause of conflict. Acceptance of innovation requires the modern man to be independent and alternative in the choice of lawful behavior, respect for dissent. Herts A. and Maksymenko N. caution that society's perception of such phenomena as transplantation and the development of transplantology, in general, largely depends on the quality of legislation and public awareness of the benefits and risks of new techniques (Herts, 2015; Maksymenko, 2007). Our research showed a low level of citizens' awareness of therapeutic cloning, transplantation, surrogacy, and other newest social and legal phenomena, which threatens the emergence of new conflicts within society.

6 Conclusions

Legal socialization and civic education with their characteristic educational and educational components should be aimed at the formation of such characteristic personality traits as goodwill, education, tolerance, law-abiding and active citizenship. Our research allows us to state that there is a low level of legal knowledge among students, a social group on which the future of the state in Ukraine directly depends. Several problems of legal education at the level of secondary and higher education have been revealed, which require an immediate response from the state. The national system of education needs to update the educational program in terms of introducing special courses on global civic education, the establishment of control over the implementation of many international programs on legal education (including relevant educational programs from the UN and UNESCO). The strategy of implementation of legal socialization includes work in the following main directions:

- preparation of normative documents (programs, decisions, recommendations) on legal education of population at the international and national levels;
- practical creation of the available resources and effective methods of public education and civic education, to ensure legal awareness of the population;
- building of powerful information (with involvement of mass media) and creation of targeted research base;
- establishment of control over the state bodies and institutions in the sphere of legal education.

The low level of trust in the state authorities was revealed. Among the determinants that contribute to distrust, we consider the following:

- violation of the democratic procedure of formation of state authorities;
- ignorance of most citizens of the tasks and functions of these or those state authorities;
- mentality inherited from the authoritarian past with distrust of the authority's characteristic of a citizen of the "post-socialist state";
- widespread corruption;
- low level and quality of life of the population.

The emergence of fundamentally new social and legal phenomena such as the newest human rights is a fact, which has many real manifestations. As a result of the conducted survey, we can state that the public perception of legal regulation of the institute of the fourth generation of human rights both in Ukraine and abroad is problematic. It is necessary to develop the new generation of human rights in the direction of recognizing the high status of the person, endowed with the highest value – freedom, recognition of the right to human individuality, which implies respect for the special needs of the person, giving her the possibility to be unlike others, striving to achieve the unity of legal, moral and religious norms.

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Primary Paper Section: A

Secondary Paper Section: AO

GENDER PROBLEM IN CONTEMPORARY DESIGN AND ADVERTISING

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Abstract: This article examines gender and how it is taught in higher education institutions, design, and advertising. It is important to establish a connection between gender images in advertising and design education presented in the structure of the academic discipline of art and design. In modern art education, design and advertising are recognized as one of the leading directions, where there is a significant social constant amidst several differences between creativity and creativity. The result of the research is an expansion of scientific and practical ideas of students about gender issues, the positive influence of gender stereotypes on modern creativity in design through the introduction of new educational components. In the further perspective, there is a continuation of practical research to promote in-depth knowledge of the characteristics of gender, gender issues presented in advertising and design.

Keywords: advertising, advertising area, gender images, design, gender stereotypes, gender markless.

1 Introduction

Gender as a content component in the learning content of design and advertising should be an obligatory component as an outstanding distinction of democratic and free art, high-tech society. Drawing on contemporary research on gender issues in design education and the theory and history of advertising (Ivanova, 2016), several innovative pedagogical methods have been developed in pedagogy, in particular on the consideration of stereotype theory, gender stereotypes, archetypes, and images. All this intends to prepare modern gender-sensitive professionals who could produce a quality product, to use their creative potential in design and advertising. Thus, gender literacy as a pedagogical component of design education plays an important role in postmodern pedagogy, which (in a certain way) changes for the better the concepts of modern university education and its subjectivity (Lysytsia et al., 2020; Kiki-Papadakis, Chaimala, 2016). Meanwhile, creative practices remain ambivalent and personal, which is the essential core of advertising creativity of the new artistic world, dictating the need to change managerial and teaching concepts (Findik, Ozkan, 2013). This fact determines the relevance of introducing gender issues in the realities of modern design education in higher education, conducting practical research on the feasibility of introducing gender issues in education in the field of advertising and design.

The modern advertising sphere needs to be aware of gender issues and clearly define gender features, which are the continuation of semiotic positive oppositions of man-woman, female-male (he - she). It leads to the need for a comprehensive consideration of the gender aspects of advertising, advertising design, which can be realized in a multitude of multiple projections and is rooted in the endless conflict of feminine and masculine principles as primordial archetypes.

The overwhelming majority of advertising products are directly or indirectly aimed at appealing to the semiotic binary opposition of Male-Female, correlate with other archetypes, and find their embodiment in stereotypes and etalons of various degrees of conceptualization and translation of gender identity and social role. Orientation in this system of images, etalons, and stereotypes is vital for the successful activities of a designer in advertising, so the introduction of new topics, modules, educational components to the practice of teaching design and advertising is a promising step in the process of training a professional specialist.

The problem of comprehensive consideration of gender issues in the framework of training courses in design and advertising science has remained unnoticed by researchers. Such comprehensiveness is possible within the framework of developmental courses, academic disciplines devoted to professional skills improvement, creative growth, self-improvement, etc.

Aims. The research aimed to consider ways of implementing gender issues in the teaching of advertising and design

Based on the issues of the study, the following research objectives were planned:

- to establish the main thematic and content components of gender issues within the advertising studies curriculum disciplines;
- to determine students' achievement and gender literacy as the foundation of the modern advertising and design professional;
- students' assessment of the introduction of gender-sensitive topics to design education.

2 Methods

Students of art and advertising specialties of the Kharkiv National Economic University named after S. Kuznets, Faculty of International Affairs and Journalism (Ukraine) and the University of Latvia (LU), the Faculty of Education, Psychology, and Art (FEPA) during the second semester of 2019/2020 academic year (from February to June), were involved in the experiment. These are students of the 2nd year of the first (undergraduate) level of higher education, combined in 2 groups of 22 people (EG1, EG2). A separate discipline (a set of students' free choice disciplines), "Fundamentals of advertising, gender issues," was added to the curriculum, where gender issues were addressed during the classroom training, practices, laboratory, and independent work, self-organization methods, and interactive ways of learning were involved.

To fully understand the problem and perform the research assignment, the research team resorted to several methodological developments and theoretical studies as references, to answer the question of the implementation of gender issues in the territory of design education and advertising science, considered in the study. These experimental results are presented in the form of a description of statistics. The questionnaire data were taken into account.

The pedagogical experiment involves the project in III stages. Before the first stage and at each following stage, the level of awareness of art students on gender issues and how the gender theme works in design and advertising is determined, the survey and evaluation of the respondents' progress are carried out. At the final stage, a questionnaire is implemented, where data are collected on the attitude of respondents to the proposed discipline, assessment of the relevance and professional need of applicants for education in a qualified assessment of gender issues. All participants in the experiment voluntarily agreed to participate in the experiment. The answers are given voluntarily, and the research team guarantees the confidentiality of the surveys. The personal information obtained by the research team will not be made public.

Before the beginning of the experiment (Stage I), as well as at other stages, testing was conducted on the respondents' awareness of gender issues, gender stereotypes, etalons, archetypes, etc. The work on the formation of teaching and visual corpus of materials for the course was carried out. The visual part of the discipline was formed according to the needs and requests of the students, the thematic blocks, and the hourly distribution of practical classes and projects activities were adjusted.

At the II stage, were applied methods of observation and an interview. The research group collected and analyzed data, training materials, which are subsequently planned to be used as answers to the questions posed by the research.

At the III stage, there is a final analysis of the results. The data are processed and used so that they can be the basis for determining the effectiveness of the introduced experiment and the answer to the problematic research questions.

3 Literature review

Sociological, philosophical, historical, and communicative theories have actively considered the gender aspect (World Economic Forum, 2019; Sociological Analysis of Advertisement, 2019). It can be presented as gender pedagogy, where it is assumed to work on the development of several teaching methods that rely on communicative and interactive teaching practices (Cortese, 2004; Mason, 2006; Sim, Pop, 2014). The involvement of interactive teaching methods in dealing with complex and problematic material is also an important area of the development of gender education (Synorub, 2019; Karpushyna, 2019).

The research community has paid much attention to the following:

- the consideration and history of gender stereotypes regarding muscularity models and their evaluations in society (Bennett, 2007);
- problems of women and men's evaluation of gender, environmental issues, and political realities in the economic field (May et al., 2021);
- consideration and analysis of gender stereotypes in television advertising and the need for marketers and advertising professionals to have a balanced approach to the topic of gender (Khalil et al., 2020).

Contemporary research on gender is a logical extension of the critical analysis of advertising gender stereotypes, where special attention is paid to false, demeaning, and discriminatory feminine models (Sociological Analysis of Advertisement, 2019; Crittenden et al., 2020). The following range of modern gender representation problems in advertising should also be considered:

- the image of women as an object of consumption, the influence of digital technology on the formation of gender themes (Sun et al., 2010),
- the problems of creating gender images
- the use of gender stereotypes without prior analysis of their further impact on society and assessments of society, individual social groups.

The relevance of gender issues for advertising production, the need for a future specialist to navigate the multitude of gender stereotypes and know the pragmatics, evaluations, and the further impact of the product on the evaluations of society. It requires intensified practical research. It is necessary to answer the research question: how effectively and correctly to introduce gender issues in the educational space of art specialties.

4 Results

In our opinion, the important stage of the research is to establish the content and role of gender issues in improving the quality of the educational process in the art industry, as gender issues should be an important part of design courses and academic disciplines in advertising studies.

At the beginning of the experiment, the research team assessed the students' awareness of the main gender stereotypes and gender issues in general. Respondents were asked to find gender positions in the advertising works presented in the tests, evaluate them, and determine the prospects for effectiveness and evaluation of a given advertising product (Table 1).

Table 1 – Preliminary testing. Assessment of gender awareness in control groups of students (*author's elaboration*)

Control groups of students	Unsatisfactory	Satisfactory	Good	Excellent
G1	2 %	55 %	40 %	5 %
G2	1 %	54 %	29 %	16 %

As the results show, a small number of respondents received unsatisfactory results. The majority of students had satisfactory knowledge of gender issues and were not able to assess the role and influence of gender issues on the perception of the advertising product at a professional level.

During the 1-st and 2d stages, a new student-selected discipline was implemented. All of this involved the use of interactive teaching methods, demonstrations of materials on the history of gender issues and theory. There were attempts to create their product and adjust the proposed samples. At the end of stage I, coinciding with the middle of the first semester, a control testing of the respondents' level of success in gender problems was conducted.

As we can see, the achievement in the experimental groups after passing half of the planned training discipline "Fundamentals of advertising: gender issues" has increased. The largest number of positive evaluations is in EG2 - 20%, also in EG1, the mark "excellent" received 5% more respondents. There were no unsatisfactory evaluations in both groups in general. Stage II involved the implementation of guest lectures and master classes in the teaching process (Table 2).

Table 2 – Mid-term. Assessment of the gender awareness level in the control groups of students (*author's elaboration*)

Control groups of student	Unsatisfactory	Satisfactory	Good	Excellent
G1	0%	48 %	41 %	11 %
G2	0%	49%	31 %	20 %

Stage II. The final assessment of the students' performance consisted of several indicators. These were the results of academic performance. The control tests allowed to measure their level.

Thus, student performance is an indicator of proficiency in the knowledge arsenal, the ability to analyze and self-analyze. The variety of techniques that the student uses in his design works and advertising projects is also an indicative criterion. Their skills, proficiency in a wide range of knowledge on the history of gender, and willingness to discuss the most complex programs were also taken into account.

At the final stage, all respondents were offered a poll with the question: Was this topic useful for you? There was also a separate question about the need to continue on these educational programs of the course. Closed answers needed to choose "yes" or "no". The results are presented as a percentage (Table 3).

Table 3 – The f inal survey. Assessment of gender awareness in control groups of students (*author's elaboration*)

Control groups of student	Unsatisfactory	Satisfactory	Good	Excellent
G1	0%	44 %	42 %	14 %
G2	0%	44%	32 %	24 %

During the course of this discipline, students were asked to focus on achieving a range of skills and competencies; to assess how important the opportunities were to the respondents. There were 7 topics and 1 additional question for respondents to consider (Table 4).

Table 4 – A survey on the participants' evaluation of the thematic blocks of the discipline "Fundamentals of advertising: gender issues" (author's elaboration)

Topics	G1 yes	G2 yes
Gender and Information Processing	75%	70%
Gender and stereotypes	70%	58%
Feminine stereotypes	60%	72%
Masculine stereotypes	55%	58%
Beauty stereotypes and patterns	74%	82%
Decorative effect and sexuality in advertising	82%	74%
Limited social roles	61%	48%
Should the course be continued further?	75%	83%

Based on the results of the questionnaire, we can say that the performance at the final stage of the study of disciplines has improved. The number of marks "excellent" increased by 10%; there are no students in the group who are not able to navigate gender issues. The introduction of a new discipline on gender issues allows students to realize themselves as a specialist and an expert on certain trends in the development of society.

Knowing and being able to correctly use the principles of gender in the evaluation of the advertising product and their design solutions contributes to the growth of academic achievement and further professional activity, facilitates the solution of problematic issues, improves the ability to perceive and analyze. All of this together activates autonomy in decision-making. This is a complex systematic process, where both the right approach to the problem and the system are important.

5 Discussion

Researchers have considered and analyzed the impact of modern advertising on the formation and functioning of gender stereotypes in the public consciousness (Naisbayeva et al., 2018). They argue that gender images, both traditional and formed and dominant recently in advertising and design practices, become permanent in the consciousness. When forming advertising and design projects, we should be aware of this and should be able to operate with it. In our study, 75% and 83% of respondents expressed a positive attitude towards the gender education component introduction and the need for continued gender education. Gender stereotypes affect the specifics of shaping the advertising sphere. The application of gender themes as one of the factors of market segmentation and the use of gender images, benchmarks, stereotypes are the main factors that ensure the communicative and commercial success of the advertising product (Bennett, 2007; Sogorin, 2015). The introduction of gender education as a component of social and media literacy of future professionals is also part of research experiments in the modern pedagogy of higher education (Ivanova? et al., 2020; Salgur, 2013; Ko? et al., 2013). These positive results obtained during the introduction of new necessary, socially significant topics helped to form those skills and abilities that were necessary for the further development of modern professional advertising and designer. As our study showed, students' performance during the educational process has increased, awareness of the system of gender issues that determine the basic conditions for the formation of a successful advertising message properly organized design work has improved. Such gender-marked archetypes, images, and factors that will always represent the endless correlations, confrontations, and interactions of masculine and feminine principles, as well as determine strategies for forming a system of gender-marked stereotypes in contemporary advertising space, should be considered.

6 Conclusion

The active use of gender in advertising and design solutions related to gender are an integral part of the modern world. The future design and advertising professional should become familiar with the existing stereotypical models that have been formed in a given culture over the centuries, and those innovations that occur with changes in society. Gender stereotypes change is a long and complex process, where shifts in the architecture of world perception, the convergence of polar elements can still be systematically outlined and presented in the modern paradigm of art education and contribute to the further effective work of advertisers.

The conducted experiment confirmed the effectiveness of the introduction of gender issues in the process of teaching design and advertising disciplines. It contributes to improving the quality and modernity of the learning process. In the experimental groups, the academic performance increased by an average of 9%, and a positive attitude towards the introduction of gender topics, in general, was 75% and 83% of the respondents. It suggests that students are interested in and positively evaluate the introduction of new educational components aimed at self-development and improvement of learning skills.

The practical significance of the research is to establish a positive impact on the overall performance of students, the introduction of courses with gender issues in the curriculum. It also contributes to the formation of modern democratic ethical and moral attitudes, activation of the social position of education applicants.

The problem of further research and implementation in educational practice of advanced methods and materials in the field of gender, strengthening the field of gender education, the study of the conditions for creating high-quality and gender-sensitive products at the current stage of advertising development remains open. It, in general, should contribute to the creation of a quality and effective product and devoid of negative influences.

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Primary Paper Section: A

Secondary Paper Section: AJ, AL

THE KEY COMPETENCIES OF FUTURE SPECIALISTS IN THE FRAMEWORK OF THE SUSTAINABLE DEVELOPMENT CONCEPT

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Abstract: The article aims to identify key competencies of specialists in the context of the sustainable development concept. The method of cluster analysis was used to assess the key competencies of specialists in the context of sustainable development. The research used the OECD Skills for Jobs database (2021), which contains estimates of surplus (score from -1 to 0) and deficit (score from 0 to +1) of different skill groups of specialists in 44 EU countries, OECD, and other countries.The key competencies of specialists in the context of sustainable development include systemic, strategic, critical thinking, creativity, cooperation, integrated problem solving, empathy, interdisciplinarity. The assessment and analysis of workforce competencies across countries and the productivity of the employed prove the importance of skills development for sustainable economic development.

Keywords: *sustainable development, eco-education, competence, competencies, skills of specialists, education for sustainable development*.

1 Introduction

Education for sustainable development (ESD) is a component of the worldwide process of promoting sustainable economic, social, environmental development, the basis of which is eco-education (EE), developed in the second half of the last century. In this context, EE and ESD should be combined in the area of efficient use of natural resources by people. In the first phase of the development of eco-education, EE and ESD mainly focused on the term's nature, ecology, ecological crisis, finding solutions to overcome it (Sims et al., 2013). Later, however, the idea of assisting in the development of competencies of students, students on environmental issues emerges. This idea began to develop in the nineteenth century by educators and philosophers focused on environmental issues (Mathar, 2015).

Education is key in transforming values in the context of sustainable development. Higher education plays an important role in working toward such change because of its impact on future professionals. Higher education institutions play an important role in shaping the competencies of future professionals important for sustainable development by shaping new knowledge, fostering the development of relevant competencies, and raising awareness of sustainable development issues. In recent years, many HEIs have taken steps to develop higher education with a focus on sustainability (HESD) (Rieckmann, 2012). Recently, a growing number of HEIs have adopted sustainability strategies, thus confirming their commitment to the concept by signing dozens of declarations, including sustainability in practical research, management. 100 institutions of higher education have signed international declarations, universities have committed to the implementation of sustainability in their activities, education, and practical research in the field of sustainable development. For example, in the permanent consumption sub-industry, some universities are initiating creative projects to change campus life and influence the attitudes and behaviors of staff, faculty, and students toward sustainability. In addition, initiatives in Central and Eastern Europe show major changes in sustainability issues integrated into curricula, plans, especially in the context of intensive coal mining, urban planning (Adomßent, et al., 2014). However, despite the declaration of intentions and development of sustainability policies at the national, regional, and international level, there are few achievements in terms of holistic integration of education in the concept of sustainable development, in particular in curricula to develop competencies of future professionals (Fadeeva, et al., 2010). The integration of competencies in the concept of sustainable development into curricula can be seen as a suitable step to ensure it. However, the difference between the intentions and the actual activities of the curriculum leaders to integrate competencies is evident in only a few universities. Moreover, the wording and content of the proposed competencies differ (Staniškienė, et al., 2020).

Thus, the purpose of the article is to highlight the key competencies of specialists in the context of the concept of sustainable development.

2 Literature review

The recent research in higher education in the context of sustainability has presented the results of learning practices and competencies that educational programs seek to develop in students to shape them as professionals towards sustainability (Sipos et al., 2008; Svanström et al., 2008; Mochizuki et al., 2010; Wiek, et al., 2011). However, there is a great deal of debate regarding the required set of competencies for permanency because of the diversity of definitions of the term's sustainability, resilience, competence, and competence in the educational setting (Mochizuki et al., 2010). Despite the distinction of different concepts such as abilities, skills, abilities, knowledge, learning outcomes, and competencies, the existence of some criticism on the use of these terms, there is a need to define competencies in the context of sustainability to facilitate their integration into instructional programs (Wiek, et al., 2011). Wals (2010) proposes the elements of sustainability competencies or Gestaltungskompetenz, a term used by German sustainability educators that is based on Gestalt, which is thinking. The term expresses students' sustainability abilities and competencies and is defined as the ability to shape future scenarios, solve problems through engaging, active participation in modeling and transforming society towards sustainable practices (Barth, 2007).

In Germany, the development of "Gestaltungskompetenz" ("formative competence") (Michelsen, 2014) is discussed as a major educational goal. "Formative competence" includes a set of core competencies that are expected to ensure active, reflective, and cooperative participation in the direction of sustainable development. Those who possess these competencies can, through their active participation in society, change and shape the future of society and guide its social, economic, technological, and environmental changes toward sustainable development. According to De Haan (2010), this "formative competence" includes the following key competencies: competence in anticipation thinking, competence in interdisciplinary work, competence in cosmopolitan perception and change of perspectives, competence in handling incomplete and complex information, participator encouragement, competence in dealing with individual position dilemma, competence in self-motivation and motivating others, competence in reflection on individual, and cultural models, competence in independent action, competence in ethical action capacity for empathy and solidarity.

Wals (2010) proposed the following types of sustainable development competencies: the ability to think prospectively, combat uncertainty; the ability of interdisciplinary cooperation and work; competency of open perception, cooperation, transcultural understanding; competency of participation; competency of planning, implementation, implementation; ability to feel sympathy, empathy, solidarity; ability to motivate oneself and other team members, leadership; the ability of remote display of individual and cultural notions.

The development of certain competencies in future professionals is especially important to develop sustainability literacy (Stibbe, 2009), to activate students to ensure the transformation of personal and work life or activities (Sipos, et al., 2008). The use of different types of pedagogies and approaches, teaching strategies will contribute to the development of competencies necessary for sustainability work. Critical and creative thinking skills, problem-solving skills, action competence, collaboration, and strategic thinking about the future should be prioritized, which creates a responsible attitude among professionals and empower them to make strategic changes (Wals, 2010).

There are four key implications for studying the development of ESD competencies amongst student teachers can be drawn from this research:

- The development of teaching and learning processes and evaluation strategies towards the improvement of ESD learning is an essential step to contribute to better teacher training in this area at the university level.
- Future research needs to develop evaluation tools that can provide information on student competence mobilization in a context close to their professional practice. It would enable the exploration of the ESD competencies of student teachers and the opportunities and challenges they face when trying to promote these in schools.
- Interdisciplinary work and practice, critical thinking, creativity, values clarification, management of emotions, social interaction, and teamwork need to be enhanced through teacher education studies to integrate ESD in in-service teaching.
- Envisioning alternative future scenarios and developing future-thinking competency amongst students promotes the challenging of existing worldviews and assumptions in ESD, fosters responsibility and commitment, and leads to innovation and action strategies for change. (Cebrián et al., 2015).

ESD includes holistic and transformational education, which is focused on educational content and results, pedagogy on the learning environment. In particular, the content should include the problems of environmental development and the ecology, the problems of poverty, old consumption in educational programs (Rieckmann, 2018).

In the context of the concept of old-growth, the OECD project "Identification and selection of competencies" classifies the competencies of teachers into three groups: interactive use of tools, devices; interaction in heterogeneous groups (ability to interact with others, teamwork, collaboration, management skills, and conflict resolution); acting autonomously (ability to develop and implement plans, personal projects, protection of rights, interests, needs) (Mochizuki? et al., 2010).

The results of Sims et al. (2013) research indicate the importance of experiential, interdisciplinary, and inter-institutional learning, problem-based learning for the real-life community and natural environment issues, as well as partnership building with colleagues, students, and community organizations. The results of Staniškienė et al. (2020) showed that the relevance of competencies for the old development is still underestimated in most educational programs. The analysis showed that the competencies for development related to critical thinking and cooperation are widely integrated, while the competencies related to self-consciousness or pre-determined and normative aspects are mostly absent.

Faham et al. (2017) based on the literature and viewpoints of subjective experts, sustainability competencies included three classes of competencies:

a) Understanding of the sustainability;
b) Skills: critical thinking in sustainability, creative thinking in sustainability, systemic thinking, empathy, and interdisciplinary collaboration;
c) Attitudes: commitment to sustainability, respect for the past, present, and future generations.

The results of Rieckmann (2012) show that twelve key competencies are crucial for sustainable development, and the most relevant skills of systems thinking, strategic thinking, and critical thinking can be identified.

Thus, the literature generally identifies key competencies of professionals in the context of sustainable development, the main ones being: systems thinking, strategic thinking, critical thinking, creativity, collaboration, integrated problem solving, empathy, and interdisciplinarity. However, there is a lack of research on linking the role of competencies in sustainable development.

3 Materials and research methods

Methods
The method of cluster analysis was used to assess the key competencies of specialists in the context of sustainable development. The cluster analysis is a generalized name for a fairly large set of algorithms used to create a classification. In this research, the attributes of the ball scores of the specialists' competencies, namely the excess or deficiency of competencies. In the process of countries' classification according to the competencies, distances between clusters are calculated, reflecting the degree of similarity, proximity of objects (countries) to each other according to the whole set of used attributes. The measure of closeness and the degree of objects' similarity are presented as the inverse of the distance between objects based on Euclidean distance:

$$d_{ik} = \left(\sum_{j=1}^{m} \left(x_{ij} - x_{kj} \right)^2 \right)^{\frac{1}{2}} \quad (1)$$

Where d_{ik} – distance between i th and k th objects;

x_{ij} and x_{kj} – numeric values of j th variable for i th and k th objects accordingly;

m – the number of variables used to describe the object.

Data
The research uses the OECD Skills for Jobs (2021) database, which contains surplus (-1 to 0) and deficit (0 to +1) estimates of various skill groups in 44 EU, OECD, and other countries (Argentina, Brazil, Bulgaria, Cyprus, Malaysia, Peru, Romania, South Africa) for 2020. In total, the database provides skill assessments for the following skill groups:

1) Basic Skills (Content);
2) Basic Skills (Process);
3) Social Skills;
4) Complex Problem Solving Skills;
5) Technical Skills;
6) Systems Skills;
7) Resource Management Skills. A clustering of the region was carried out according to the skills assessments.

At the second stage, a polynomial model of the relationship between skills scores in different countries and the labor productivity of an employed worker was constructed, to estimate which GDP per person employed between 2015 and 2020 was used (average growth).

4 Results

There was made a tree-structured diagram to determine the number of clusters of countries (Figure 1). The figure shows this diagram. It allows schematically identify three groups of countries' clusters by assessments of surplus/deficiency of skills in various sectors of the economy:

1) the first group with a deficit within 0.6 – 1 points;
2) the second group with a deficit of skills 0.4 – 0.6 points;
3) the third group with a deficit of skills 0.2 – 0.4 points.

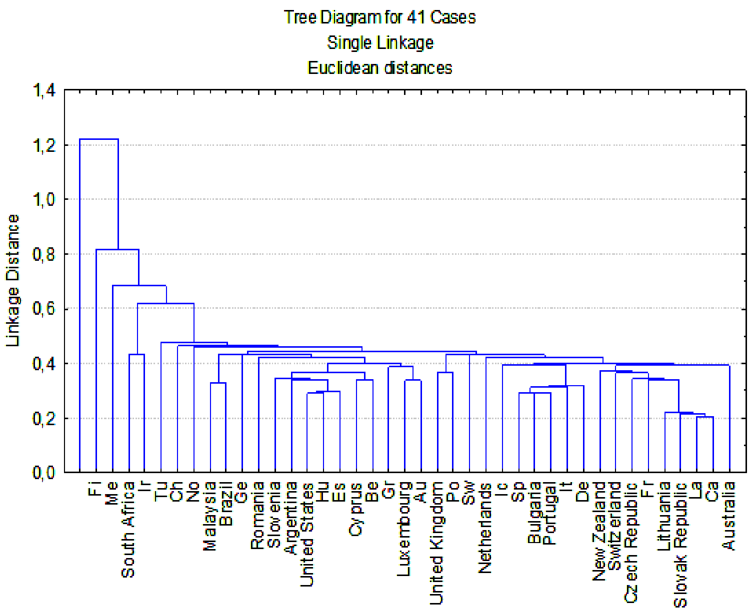

Figure 1 – The tree-structured diagram
Source: author's elaboration based on OECD (2021a).

The diagram of the average values of competency surplus/deficit scores for each country within each cluster (Figure 2) indicates that there are significant differences between countries in the development of the skills needed for sustainable development.

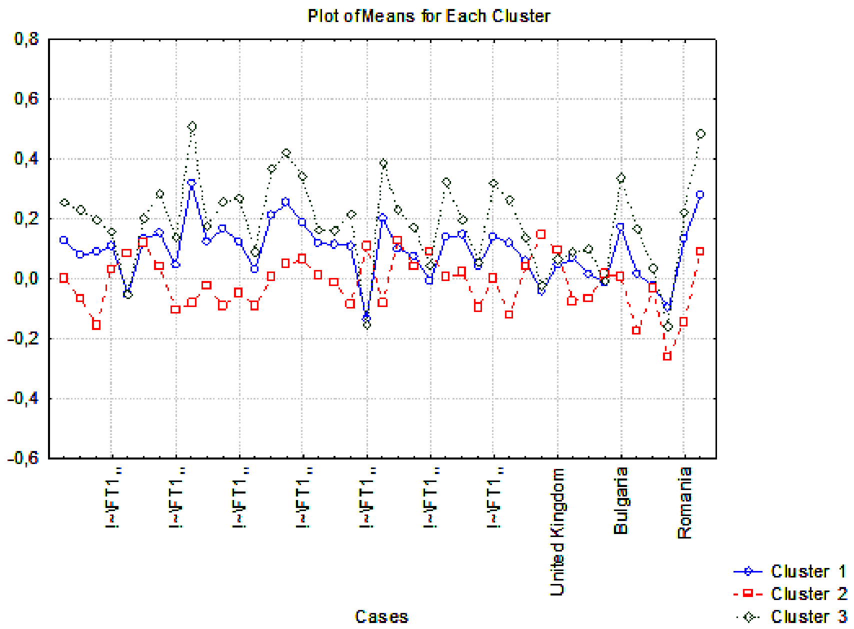

Figure 2 – The average skills score diagram for each country within each cluster
Source: author's elaboration based on OECD (2021a).

Table 1 shows the Euclidean distances between clusters, indicating significant differences in the values of surplus and deficit skills assessments across country clusters. For example, the similarity between cluster 1 and cluster 2 is low: the Euclidean distance is 0.1685; between cluster 1 and cluster 3 is 0.1132; between cluster 2 and cluster 3 is 0.2669.

Table 1 – Euclidean distances between clusters. Distances below diagonal. Squared distances above diagonal

Euclidean distances	No. 1	No. 2	No. 3
No. 1	0,000000	0,028411	0,012829
No. 2	0,168556	0,000000	0,071289
No. 3	0,113265	0,266999	0,000000
Clusters members			
No. 1	Australia, Austria, Belgium, Canada, Czech Republic, Estonia, France, Germany, Greece, Latvia, Lithuania, Luxembourg, New Zealand, Norway, Slovak Republic, Sweden, Switzerland, United States, Cyprus, Romania		
No. 2	Denmark, Finland, Iceland, Ireland, Italy, Netherlands, Portugal, Spain, Bulgaria, South Africa		
No. 3	Chile, Hungary, Mexico, Poland, Slovenia, Turkey, United Kingdom, Argentina, Brazil, Malaysia, Peru		

Source: author's elaboration based on OECD (2021a).

To estimate the dependence between the influence of specialists' competencies on productivity, which determines the stable economic development, the linear dependence model was built (Figure 3). This dependence explains the constancy of economic development of the country depending on the skills of the labor force by 5,45%, which indicates the presence of other significant factors of influence on the provision of stable productivity.

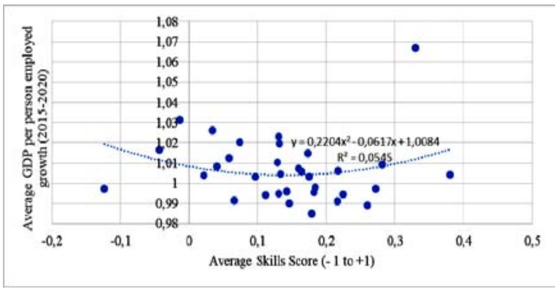

Figure 3 – The dependence between estimates of skill surplus/deficit (average of all skill groups) and countries' labor productivity (average of GDP growth per person employed between 2015 and 2020)
Source: author's elaboration based on OECD (2021a; 2021b).

At the same time, the estimated polynomial model also confirms that there are three groups of countries with different estimates of surplus/deficit competencies, which have different effects on the productivity of the employed in different countries. Consequently, the mean value of the competency deficit estimate of the first cluster is 0.13506 (insignificant skill deficit) with a mean value of 0.44% growth in the productivity of the employed between 2015 and 2020. The average value of the second cluster's competency deficit score is 0.2801 (significant skill deficit), with an average value of employment productivity growth of 0.73% during 2015-2020. The average value of the competency surplus assessment of the third cluster is -0.0134 (virtually no surplus skills), with an average value of employment productivity growth of 1.07% during 2015-2020. Hence, the assessment and analysis of workforce competencies in different countries and the productivity of the employed prove the importance of skills development for sustainable economic development.

5 Discussion

In the process of receiving formal education, the student receives a primary low level of competence (basic process and content skills), characterized by varying degrees of mastery of specific knowledge, skills, and abilities. The main thing at this stage is the formation of primary competencies, i.e., formation of the need to study and preserve a healthy natural environment around oneself from an early age, formation of the ability to perceive nature as the essence of our life and oneself as an organic part of the nature. The initial (2nd) level of generalization of specific knowledge is weakly involved. New facts and phenomena are memorized and serve as a basis for the formation of reflexive behavior. The intermediate level of competence is acquired in college and further on at the bachelor's level, where basic concepts and abilities to trace general interrelations between human activity and environmental behavior in general and concerning a specific area of human activity are formed. As a result, a person becomes able to apply inductive methods of matching specific knowledge, which leads to the formation of a higher level of generalization, the understanding of the essence of specific phenomena is formed. However, inductive methods are fundamentally unsuitable for obtaining a true general idea of the essence of the observed phenomena.

In the vast majority of cases, incomplete induction, which is used to conclude about, for example, the consequences of environmental disasters, is intuitive in nature, where the process of inference is not logical in the full sense. The result is a system of knowledge in which new phenomena or theories are poorly aligned with a person's knowledge system. Such a system is "unstable" and prone to collapse. "Stopping" the student at the 2nd level of competence formation inevitably leads in the future to "rolling back" to a lower level of competence, as gradual destruction of the "unstable" system of knowledge leads to loss of life reference points, deformation of worldview or contributes to the transformation of the system of knowledge into an orthodox system.

The next, high level of competence is acquired at the second and third stages of higher education in masters and post-graduate courses. The knowledge system, formed, as a rule, as a result of quality but classical education, based on memorization of many facts, is "flexible" but "passive". At this level, it is most important to form the skill of systematizing incoming information and aligning it with the existing multi-level knowledge system. Without this type of skill, there will be a decrease in its competence over time, and such knowledge cannot guarantee the planned and consistent implementation of managerial decisions in the field of sustainable development.

Formation of the system of sustainable development competencies can take place based on deep ecological education, the obtaining of which is seen today in the concept of "Lifelong learning". At the same time, eco-education must be comprehensive and continuous in nature: from the development of a child's reflex to systematic professional development of managers of enterprises, ministries, and departments in the field of assessing the impact on the environment and its protection. Taking into account that in modern conditions of comprehensive informatization and development of distance education, (when education is no longer a process of transferring knowledge in the traditional form through a teacher in a classroom, and the emphasis is shifted to the ability to learn and to independent mastering of knowledge) the task of the teacher, including as a developer of materials online learning, development of the need to seek knowledge and formation of a worldview that allows perceiving, is to generalize and analyze information through the lens of the ecological danger of the phenomena and processes that occur in the world.

6 Conclusion

The key competencies of specialists in the sustainable development context include systemic, strategic, critical thinking, creativity, cooperation, integrated problem solving, empathy, interdisciplinarity. The study identified three groups of country clusters according to assessments of surplus/deficit competencies of specialists in different industries:

1) the first group with a deficit within 0.6 – 1 point;
2) the second group with a deficit of skills 0.4 – 0.6 points;
3) the third group with a deficit of skills 0.2 – 0.4 points.

The constructed dependence of the employees' productivity on the skills' level explains the constancy of the economic development of the country depending on the skills of the labor force by 5.45%, which indicates the presence of other significant factors of influence on the provision of stable productivity. There are three groups of countries with excellent estimates of surplus/deficit competencies, which have different effects on the productivity of the employed in different countries. Consequently, the mean value of the competency deficit score of the first cluster is 0.13506 (insignificant skills deficit) with a mean value of 0.44% growth in employment productivity during 2015-2020. The average value of the second cluster's competency deficit score is 0.2801 (significant skill deficit), with an average value of employment productivity growth of 0.73% during 2015-2020. The mean value of the competency surplus assessment of the third cluster is -0.0134 (virtually no surplus skills), with an average value of employment productivity growth of 1.07% during 2015-2020. Thus, the assessment and analysis of workforce competencies in different countries and the productivity of the employed prove the importance of skills development for sustainable economic development.

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Primary Paper Section: A

Secondary Paper Section: AM

FORMATION AND DEVELOPMENT OF UKRAINIAN COMMUNICATIVE VOCABULARY

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Abstract: The study aims to establish the level of sociolinguistic sensitivity to the use of homonymic borrowings as a source of “professional competence” of a teacher-philologist, as well as to consider the dynamics of development of ideas about Ukrainian communicative vocabulary and terminological apparatus in the teaching profession; also, to determine the main stages in the implementation of communicative activities of a teacher in teaching. The result is an increase in dynamic representation, moving away from the conservative, on the use of terminology in the standards of professional communication of the teacher and the high level of possession of borrowings as a source of homonyms.

Keywords: speaker evaluation; competence; professional discourse, homonyms, borrowings, terminology.

1 Introduction

The problem of the ways of formation and establishment of the dynamics of changes in the Ukrainian communicative vocabulary is multilevel, concerns many levels of interaction between language and society, and accordingly, today is actively discussed in the circles of linguistic, pedagogical, sociological, etc. (Delgado-Cruz et al., 2021; Kristiansen 2009; Klymenko et al., 2008).

An indicative relationship has been established between everyday discourse, normative language resources, and attributes of a teacher's communicative behavior, which are also indicators of professional competence and integral to the ideological framing and high level of national language development (Stott, Drury, 2017). The formation and dynamic development of the terminological apparatus of the Ukrainian language is also connected with many economic, historical, and socio-political factors, which are necessary conditions for the harmonious development of scientific knowledge and the construction of educational strategies in the European community. Even today, the rich stock and constant development of communicative vocabulary is a functioning indicator of a powerful ideology. It also indicates a linking power and scientific discourse at the level of the national state's high status. It also determines the prestigious and highly qualified way of communication (Taranenko, 2015). In dynamics of development of communicative behavior of highly qualified personnel also lies prospects of development of national language and status of the state – and it is an open problematic for modern researches of linguistics of branch, sociolinguistic researches.

Considering the relationship between standardization and the principle of diversity is also a separate scientific problem, which, in a harmonious combination, produces the basis of sociolects, professionalism, and terminological borrowings (Kristiansen, 2011), also forming the basis of “professional competence” of the teacher.

Communication, in modern society, is an integral part of life, which cannot be avoided; it is the core of successful communicative activity and realization of professional opportunities of a specialist. In pedagogical professional work, teachers constantly communicate with administration, students, and among themselves to obtain information to establish the level of knowledge and skills, pedagogical purpose, and development of strategic and tactical issues of the educational process. From such positions, communication can act as an instrument of the professional linguistic, educational component, in general, that contributes to the intellectualization of young people. It is an essential lever that determines the success of negotiation, advocacy, and learning (Rababah, 2020). It is this aspect that has determined the relevance of implementing business communication standards in professional discourse.
Teaching activities in the preparation of future teachers-philologists provides a high level of professional competence, part of which is sociolinguistic sensitivity to the use of homonymic borrowings; the dynamics of professionalism of the teacher at the communicative level, one factor is the addition of terminological apparatus, the ability to orient in the lexical-semantic system of language.

This research aims to establish the level of teacher's professional development, the use of Ukrainian communicative vocabulary, its formation, and dynamics of development.
Based on the aim, it is planned to perform the following research tasks:

- to determine the main stages in the implementation of communicative activity of the teacher in the educational process;
- to establish the level of sociolinguistic sensitivity to the use of homonymic borrowings as a source of “professional competence” of a teacher;
- to identify the presence or absence of dynamics in the development of ideas about communicative vocabulary in the teaching profession.

2 Literature review

A review of the literature on the consideration of Ukrainian communicative vocabulary shows that there are several experimental studies devoted to the consideration and analysis of dynamics and peculiarities of functioning of business communication standards in professional discourse, their changes, and influence on the level of teacher's qualification assessment, use of terminology, homonymic borrowings as an indicator of professional competence (Tkachyk, et al., 2017; Zenina, 2012). Reference, original, fashionable, status samples of texts are considered and how they are further reflected in the communicative behavior of broadcasters, reflected in professional communication, imply education, professional standards, image, etc. (Simonok, 2015). Most of the results of experiments (Androutsopoulos, 2006) relied on speakers' evaluations of the speaker's performance (“matched guise”) in the terminology (Agheyisi, et al. 1970), in which the audience evaluated different types of speech and different stylistics of the message by several descriptors (professionalism of the speaker, level of education, caring, ethics, etc.).

At the forefront of contemporary research is the thesis of the benefits and importance of implementing modern communication tools in the educational process as indicators of prestige and, also, a high level of professionalism (Voinea, 2012; Hansson et al., 2018). Experimental research of this type also presents ratings, numerical and percentage results of factor analysis to determine the evaluation of various communicative action factors.

There are a couple of researches (Yablons'ka-Yusyk, 2018; Karpilovs'ka, 2012) that have considered the reasons for borrowing at the present stage of language development, are^

- the lack of an equivalent for naming this concept in the recipient language;
- the rapid development of high technology;
- attempts to avoid polysemy and homonyms;
- absence of an appropriate exact name in the borrowing language (differentiation of shades of meaning);

- the need to express positive or negative connotations is an equivalent lexical unit, which does not exist in the recipient language.

Several studies, with a focus on communicative vocabulary and the features of the dynamics of its development, concern the communicative behavior of highly professional specialists in areas that require the use of a special terminological apparatus and constant work on its improvement and adaptation. These are primarily studies in advertising, management, and PR (Moss et al., 2005), the medical industry (Ebbels et al., 2019), political-economic discourse (Gillespie, 2020), and pedagogical activities (Veera, et al. 2018; Rababah, 2020).

The issues of using borrowings as a source of homonyms replenishment of the Ukrainian language, enrichment, and transformation of the terminological apparatus used by the teacher remain unresolved. Also, consideration of the training of future teachers on the introduction of active familiarity with homonyms and the problem of borrowings as a source of enrichment of the terminological apparatus requires separate attention.

3 Materials and research methods

The study of a teacher's communicative activity in the educational process and establishing the level of sociolinguistic sensitivity to the use of homonymic borrowings as a source of "professional competence" of a teacher is based on the systemic, integrated, and technological approaches. The systematic approach means the consideration of a professional teacher's communicative behavior as a system of actions, where the teacher's professional level and students' needs in increasing the level of awareness of linguistic terminology and the use of homonyms in this field are taken into account first. All these are components of professional competence also affect the level of sociolinguistic sensitivity.

The integrated approach in the introduced study makes it possible to consider the learning process as a non-linear and multi-vector one. The integrated approach makes it possible to represent the introduction of borrowings in terminological resources and the use of communicative vocabulary as integration in the application of teaching and learning methods, ways of using various forms, and methods of presenting educational information. The technological approach defines the educational process in the sequence of pedagogical operations due to the logic of the pedagogical experiment.

Experimental research was conducted during the 2020/2021 academic year. The data was collected from teachers of linguistic disciplines, disciplines in the field of Ukrainian philology, who worked with students who studied at the Faculty of Philology (Uzhhorod National University, Faculty of Philology, Department of Ukrainian Language). All teachers (4 people) participants in the experiment are certified teachers with a specialty in "linguistics" – 2 people and "Ukrainian language" – 2 people. Respondents were chosen in such a way that their pedagogical experience ranged from 7 to 14 years of scientific and pedagogical experience. 2 teachers (Lecturer 1 and Lecturer 2) introduced new curricula to teaching, which included:

- consideration of homonymic borrowings in linguistic terminology;
- increasing the total volume of modern terminology;
- use of illustrative material, and consideration of problematic issues.

The other 2 instructors (Lecturer 3 and Lecturer 4) stuck to last year's curriculum without introducing new topics or significant terminological digests. Also, all participants expressed an interest in improving their qualification level and pedagogical skills. They are proactive and active employees who regularly participate in non-formal education activities and internships in various Ukrainian and foreign higher education institutions.

Students who participated in the experiment are students of the second (bachelor) level of higher education (2nd year), in general (64 people), who studied at the specialty "Ukrainian language and literature" and "Ukrainian language and literature in general secondary education institutions with minority languages." All of them had experience in studying linguistic disciplines.

All participants of the experiment voluntarily agreed to participate in the research project. All respondents were ensured anonymity, and privacy rules were observed.

The research data were obtained during the phased implementation of the pedagogical experiment (3 stages). At the preparatory stage, the first interviewing of the teachers participating in the experiment was conducted. Also, with the introduction of teaching, familiarization with the teaching materials in the updated disciplines, teachers were consulted on their readiness and attitude towards using homonymic borrowings in modern linguistic terminology within the academic disciplines. Teachers worked with the research team to develop curricula. In the beginning, inside and at the end of the study, there was also a survey of students about their attitude to the introduction of modern linguistic terminology, a separate consideration of the phenomenon of homonyms and borrowings in the Ukrainian language, constituting the figure of a professional teacher.

4 Results

At the 1st stage of the pedagogical experiment, there was a process of planning, consulting, formation of training materials, and organization of the educational process with step-by-step monitoring of the level of sociolinguistic sensitivity to the use of homonymic borrowings as a source of "professional competence" of a teacher and establishment of changes in assessments of communicative vocabulary and use of terminology in the teaching profession. All this constitutes the main goal of the teachers' work during the development of modern educational approaches to the formation of the professional competence of the teacher-teacher. The whole process of conducting the study was planned and divided into stages of implementation of communicative activities of the teacher in the educational process.

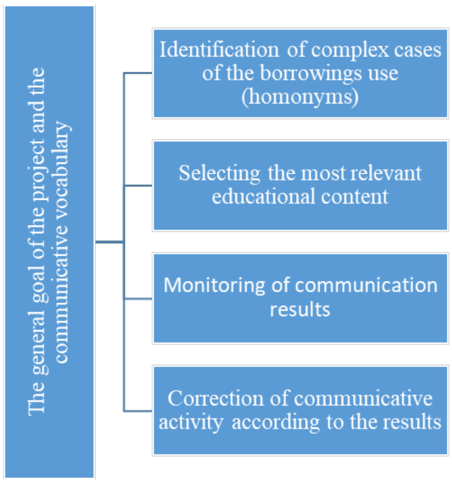

Figure 1 – The main stages of the teacher's communicative activity in the dynamics of development (author's note)
Source: Developed by the authors

At the initial (1st stage), the research group and teachers selected teaching material with the necessary amount of terminology taken, and the cases of homonyms in linguistic terminology were emphasized. The complex cases were explained and the problem of polysemy in terminology was highlighted. The illustrative and educational materials for linguistic topics were also used.

Students united into groups (G1, G2 – “Ukrainian language and literature”; G3, G4 – “Ukrainian language and literature in establishments of general secondary education with teaching languages of national minorities”) there were from 20 to 22 people in the groups. After that, a preliminary survey of respondents was conducted on their expectations from the subject and their attitude towards the modern linguistic terminology of the homonyms problem and the related image of the teacher, his professional level, and qualification. The results are presented as a percentage.

Table 1 – A preliminary survey to assess the speech performance of a teacher (author's note)

	Unsatisfactorily	Satisfactorily	Good	Excellent
Lecturer 1	5	20	40	35
Lecturer 2	10	17	43	30
Lecturer 3	5	20	42	33
Lecturer 4	12	18	42	28

Source: Developed by the authors

At the preliminary stage of the experiment, all teachers were evaluated positively. The negative perception of teachers and their professional competence, in general, is 7.5%.
At the 2nd stage of the experiment, two teachers introduced the active use of homonymic borrowings as a source of “professional competence”; the formation of ideas about communicative vocabulary in the teaching profession. All the teachers' actions were accompanied by comments, repetitions of difficult places, and clarifications. This stage also included a survey to evaluate the teacher's speech activity, the level of students' satisfaction with their work, and the course content.

Table 2 – Interim survey to assess the speech activity of the teacher (author's note)

	Unsatisfactorily	Satisfactorily	Good	Excellent
Lecturer 1	3	22	35	40
Lecturer 2	5	22	38	35
Lecturer 3	3	22	40	35
Lecturer 4	11	19	40	30

Source: Developed by the authors

As we can see, the sociolinguistic sensitivity of future teachers is determined by the attitude towards the active use of homonyms from the arsenal of borrowings. The results show a positive attitude towards the content of the course. The professional competence of Lecturers 3 and 4 slightly increased (by 2%). In Lecturer's groups 1 and 2, the number of excellent grades increased by 5%.

The final stage of the project showed the results of interviewing the teachers participating in the experiment. Teachers were asked a set of questions at the beginning and the end of the experiment, and their answers were compared.

Table 3 – The results of the interview on the dynamics of the development of ideas about communicative vocabulary, terminology, and borrowing in the teaching profession (author's note).

Lecturer	Question	The answer to the beginning	The answer at the final stage
Lecturer 1	How do you feel about the use of loan terms and homonymic problems in terminology?	Positively. I use the terminology all the time. I talk about it 2-3 times a school year because of time constraints.	I enjoyed actively working with the terminology. In addition to simple memorization, the material was presented systematically with a historical perspective, and students were able to recognize the reasons for homonyms.
Lecturer 2	How do you feel about the use of loan terms and homonymic problems in terminology?	Positively. It's a nice way to break up the monotony of learning the theoretical component of linguistics disciplines.	It was effective. In my opinion, we should implement such an experience and increase the amount of target material on linguistic topics.
Lecturer 3	How do you feel about the use of loan terms and homonymic problems in terminology?	It's a useful practice. I give terminology materials and problem questions twice a year. Kindly create a report presentation on this topic.	It is good, but I don't think focusing on the problem of borrowings in linguistic terminology contributes significantly to the study of linguistic disciplines.
Lecturer 4	How do you feel about the use of loan terms and homonymic problems in terminology?	That is fine. I talk about homonyms- borrowings at the beginning and the end of the course to give students a chance to feel their progress.	That's a good thing. But I still think working with text to learn grammar is better.

Source: Developed by the authors

As we can see, teachers 3 and 4 were skeptical about the study of the practice of borrowings and homonyms in linguistic terminology. Lecturers 1 and 2 considered it necessary to continue actively using the topic of terminological borrowings and homonyms as an indicator of the high professional level of a teacher and the training of a qualified specialist. All teachers positively evaluated this practice.

At the 3rd (final) stage, the final student survey was conducted, which made it possible to determine how, if at all, the attitude towards the level of qualification of the teachers participating in the experiment would change according to their evaluation of the professionalism of the teacher's speech activity and the content of the educational courses.

Table 4 – Final survey on the evaluation of teacher speech activity (author's note)

	Unsatisfactorily	Satisfactorily	Good	Excellent
Lecturer 1	2	20	37	41
Lecturer 2	3	20	39	37
Lecturer 3	3	21	40	36
Lecturer 4	9	21	38	32

Source: Developed by the authors

At the initial stage, students gave an overall positive assessment, showed sociolinguistic sensitivity, which generally increased, and the negative perception of the work of the teacher and the content of the discipline amounted to a total of – 4.4%, the largest number of assessments are “good” and “excellent”. At the final stage, students showed an increase in the overall positive attitude towards the work and the level of competence of the teacher (Lecturers 1, 2) by an average of 6.5%, while Lecturers 4 and 3 increased the positive attitude and perception of a high level of professional competence by 2.3%.

The survey showed that more than 50% of the students who took part in the experiment are inclined to continue the experience of introducing in linguistic research the problems of borrowings and homonyms in terminology, as it positively affects the level of their training, and the vast majority of the respondents (in total more than 90%) positively assess the professional level of teachers and their pedagogical skills.

5 Discussion

Ukrainian communicative vocabulary is a dynamic structure, reflecting even minor and short-term changes in geopolitical and socio-psychological spheres of society, as stated in several contemporary studies (Karaman et al., 2011; Yablons'ka-Yusyk, 2018). The process of globalization contributes to a rapid increase in the lexical composition of the language due to borrowings from other languages, the terminological apparatus of linguistic disciplines is no exception, where sometimes there are also complex homonymic cases.

In the study of ways to improve the competence of professional communicators in the medical industry, the use, and adaptation of terminology for successful communication with patients, management, as well as the difficulties encountered in the implementation of the educational process was considered in a research experiment (Zenner et al., 2021). An increase in the level of sociolinguistic sensitivity to the use of professional terminology in medical practice and the transformation of perceptions of the communicative vocabulary and terminological apparatus in the medical profession as a formation of its positive image, a sign of high status and prestige of the language of communication were found. In our study there is also a positive trend: 90% of the participants in the presented research experiment positively evaluated the work on borrowing homonyms in linguistic terminology, and 50% of the respondents expressed their desire to continue the practice of addressing complex terminological collisions and changes in modern terminology in the future.

Many studies (Karaman et al., 2011; Zenina, 2012) present the fact that the Ukrainian language has long been open to borrowings. S Karaman notes that the vocabulary of the Ukrainian language is heterogeneous because it was formed under the influence of many languages and at different epochs was replenished with borrowings, which in the process of historical development were “built into” the lexical composition of the language. The researcher claims that there are about 15 percent of borrowings in the Ukrainian language. That's why, in our opinion, such important work is the enrichment of terminological vocabulary at the expense of borrowings, an active explanatory activity in this direction not only increases students' appreciation of teaching professional competence but also helps to bring up qualified specialists. This is evidenced by the results of the experiment, where the overall positive evaluation of the linguistics teacher was 95.5%, and the evaluation of the teacher's professionalism in the groups where special attention was paid to terminological problems and homonymic borrowings was 6.5% overall.

6 Conclusion

The conducted study shows that research into the dynamics of communicative vocabulary development in the activity of a teacher-philologist requires active use of modern terminological apparatus in the field of linguistics. The results of the experiment showed a positive attitude to the use of homonymic borrowings as a source of “professional competence” of a teacher. 90% of the respondents-students and all the teachers-participants of the experiment consider it expedient to systematically introduce the issue of borrowings in terminology into the educational process as a form of enriching the professional arsenal of a teacher. It testifies to the respondents' awareness of the dynamics of communicative vocabulary development in the educational context.

The main stages in the study of a teacher's communicative activity and enhancement of his/her professional level, training of qualified specialists are identification and consideration of complex cases of using borrowings (homonyms) selection of the most relevant educational content; constant monitoring of communication results in the learning process; regular correction of communicative activity per the results.

The study presents a comprehensive approach to the study of the ways of formation and dynamics of development of the Ukrainian communicative vocabulary to enrich the arsenal of modern linguistic terminology and the problem of homonyms and borrowings. In the future, it is possible to fruitfully implement the approaches described in the research to the content, methods, and forms of presentation of educational material, to form different levels of professional competence in parallel as well as to determine the influence of the figure itself and the qualification level of the teacher on the formation of a motivated future teacher.

The problem of meta-linguistic socialization of young people, their professional orientation, and gradual increase in the professional competence of the teacher, which in general affects the quality of education, requires further research.

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Primary Paper Section: A

Secondary Paper Section: AI

MANAGEMENT OF HEALTHCARE INSTITUTIONS IN THE CONTEXT OF CHANGES AND REFORMS

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Abstract: The weakness of healthcare system management in Spain and the Czech Republic was revealed, despite the National universal health coverage policy or strategy adopted in both countries, in particular those referring to the use of ICT or eHealth to support universal health coverage. The absence of a National eHealth policy or strategy in both countries was found to be responsible for the low level of digitalization and the emphasis on hospital-based home care activities. Digitalization in Spain and the Czech Republic has only led to the introduction of an electronic prescription system and the creation of hotlines and online consultation platforms. The implementation of legislation, which has limited the development of telemedicine, has been introduced.

Keywords: healthcare institutions, changes in medical administration, healthcare digitalization, healthcare institution's management, the strategy.

1 Introduction

The spread of the COVID-19 pandemic has been a driver for change, transforming the management of healthcare institutions since the economic crisis of 2008 lost substantial amounts of funding due to budgetary constraints. The new common policy framework "Health 2020: a European policy framework supporting action across government and society for health and well-being", approved in 2012 (World Health Organization, 2021d), referred to the main challenges in healthcare management common to EU member states: high share of public budget to spending in the field, lack of cost effects in the context of a positive impact on health outcomes, lack of cost containment in many countries due to the need for social protection, increasing supply of healthcare providers

These problems determine the necessity of using a multisectoral approach to healthcare management, the need to establish cooperation between countries, to improve leadership and collective management, in particular, through the introduction of technology in the field of social marketing, information, and communication networks between the parties involved.

At the same time, current spending on the healthcare system remained stable in the EU countries (the average for 2008-2018 was 7.3% of GDP in the Czech Republic, 11.1% of GDP in Germany, 11.4% of GDP in France, 7.1% of GDP in Hungary, 8.8% of GDP in Italy, 6.3% of GDP in Poland, 7.2% of GDP in Ukraine) (World Bank, 2021b). The domestic private spending on healthcare in selected countries increased between 2008 and 2018 compared with the 2000-2007 period (e.g., the average difference was 3.95% in the Czech Republic, 1.93% in Hungary, 3.25% in the Netherlands, 1.29% in Poland, and 3.7% in Ukraine) (World Bank, 2021c). Such trends may be associated with the transfer to the private sector of medical financing, in particular, through the development of the health insurance sector, the approach of new EU member states to the policy of medical institutions management of the most developed countries. For example, the number of EU member states on comprehensive health policies has grown from 12 in 2010 to 27 in 2016. The number of countries that have introduced strategic management plans rose from 7 in 2010 to 13 in 2016 (World Health Organization, 2021a). "Health 2020, the new European health policy, aims to improve the health and well-being of populations, reduce health inequities and ensure people-centered health systems" (World Health Organization, 2021b).

The spread of the pandemic revealed weaknesses in the management of healthcare institutions, the main of which are decentralized management, lack of funding (primarily due to the introduction of technology to improve the quality of medical services), reduction of beds, reduced capital expenditures, low level of digitalization and development of telemedicine.
This article aims to assess the impact of changes and transformations on the state of management of healthcare institutions, in particular, the evaluation of management transformations during the pandemic in the following areas: digitalization, financing, management strategies.

2 Literature review

The two most important topics of change and transformation of the management system of healthcare institutions are discussed in the literature: 1) digitalization and integration of IT solutions in healthcare facilities, pharmaceutical industry, supply chain, development of eHealth; 2) the spread of the COVID-19 pandemic and the challenges in healthcare. In addition, these two topics are considered to be interrelated. Therefore, there is a lack of development of telemedicine to the pandemic, even in the U.S., EU countries, and China, which has forced the government and healthcare providers to respond quickly by introducing monitoring technologies and innovative staff practices through information and communication media (Fasano et al., 2020).

Digitalization has posed managerial challenges to the health system, related to the need for changes in system development strategies, the potential for remote management of health facilities, the need for digitization roadmaps, and the structure of health system digitalization, (Gjellebæk et al., 2020; Zhao et al., 2021; Beaulieu et al., 2021; Odone et al., 2019). Despite the significant potential of digitalization, the introduction of technology also poses several challenges related to medical staff training, attitudinal changes, communication, sharing of experiences, documentation, and funding. As stated in the Joint Declaration of the European Commission and WHO/Europe "Partnerships for health in the WHO European Region" (2010), the main challenges for European countries are the increasing costs of the health system due to an aging population, the need to increase the protection of the population from various diseases, increasing costs for innovation and medical technology. The current economic crisis of 2008-2009 intensified these problems, harmed public finances and the financing capacity of healthcare institutions.

Due to these problems, researchers suggest experimental approaches to the implementation of technology, big data, artificial intelligence (Glauner, et al., 2021), which offers both development opportunities (potential to solve communication, communication, exchange problems of medical institutions through IT -solutions) and leads to significant risks due to the digitization of healthcare (Lapão, 2019). And yet, it is digitalization that is seen as a driver of the transformation of the paradigm of healthcare delivery, changing the mechanisms of patient involvement and participation in the system, increasing the level of resilience of health facilities to external negative action factors (such as the spread of a pandemic). It is digital technologies that form the value and added value of medical services (Kokshagina, 2021), simplifying many business processes and transferring routine functions to robotic technology, significantly reducing the burden on medical staff in the context of a shortage of medical staff. The development of eHealth is the formation of innovative work processes, the transition of managers, staff, patients from routine processes to more global issues related to the health of the population. Development involves building the digital skills of medical personnel, patients during the practice of technology use by stakeholders (Gjellebæk et al., 2020). Digital platforms are fundamentally transforming the processes of experience sharing, knowledge sharing between staff, communication, and workflow (Moro Visconti et al., 2020).

Despite an increase in publications related to discussions about technology integration, there is still a low level of digitalization of the health field with a high potential to integrate digital solutions at different managerial levels (Gjellebæk et al., 2020; Beaulieu et al., 2021). This is due to the lack of knowledge, skills of medical staff in the use of technology, holding back the development of eHealth (Zhao et al., 2021). Therefore, one of the future transformational changes is to train the medical workforce, facilitate, encourage the government to collaborate with stakeholders when integrating technology (Gjellebæk et al., 2020). Staff training is slowed by the lack of financial resources needed on a long-term basis to implement diagnostic, infrastructure technologies (Moro Visconti & Morea, 2020). Establishing collaboration is important for the synergy of knowledge about the potential of technology based on problem-oriented thinking: only medical personnel must understand the internal problems of medical institutions. For example, Gjellebæk et al. (2020) note the need for a middle management strategy to effectively transform medicine. Middle management personnel have the most decisive role in digitalization, as they are responsible for stimulating, engaging medical personnel in collaborative technology development processes, vertical and horizontal use (Garmann-Johnsen et al., 2020). Therefore, it is relevant to involve workers, patients in the development of digital solutions, also involve spending money and time for patients and staff to test technologies (Garmann-Johnsen et al., 2020).

Scholarly publications, discussing the transformation of management in the face of a pandemic, highlight crisis management strategies (Hick et al., 2020) and response plans, preparedness, resource allocation (Economou et al. 2015), strategic crisis management and crisis management policies, innovative coping mechanisms, health facility management tools (Correia, et al., 2015), regional crisis management models (Wheeler et al., 2015).

The traditional approach to understanding the healthcare crisis involves interpreting it as a state in which it is impossible to achieve effective problem solving and the negative effects of the crisis state on the level of public health (Small et al., 2017). The crisis has also been viewed as ineffective management due to a lack of funds and limited healthcare reforms (Economou et al., 2015). This study proposes a problem-oriented approach to treating the crisis as an opportunity to introduce managerial change and transformation through active implementation of interventions in various subsystems (primarily digital) that, in the absence of a crisis, could only be implemented in the long term. The most illustrative examples are the problem of financing, cooperation on a centralized management basis, and the integration of technology. During the pandemic, the transformative measures were implemented in these areas at a rapid pace and the limitations in the development of telemedicine not only in the infectious disease's subsystem but also in cardiology, diabetology, neurology, oncology, and psychology were lifted. Through the establishment of collaborations with scientific organizations, international institutions, and online crowdfunding platforms, resources have been raised to fund the crisis. This research looks at the health crisis as a potential for transformation, identifying weaknesses in governance, an opportunity for transformation, a digitalization engine despite legislative and financial limitations.

3 Materials and research methods

This article uses a qualitative research methodology using content analysis and the World Health Organization's Health Systems Response Monitoring (HSRM) database to collect and systematize information on Spanish and Czech governance policies in the face of a pandemic. To assess the effectiveness of governance, the following key aspects of the health system in a pandemic are examined:

1) digitalization and development of telemedicine;
2) financing;
3) strategic management.

To assess the effectiveness of management changes, we used indicators of health system financing in Spain and the Czech Republic for 2000-2019 to trace the dynamics of compliance with the defined objectives of optimization of costs for the medical sector, defined in the new common policy framework "Health 2020", and the actual level of financing of the systems.

4 Results

Digitalization

Spain
The Spanish healthcare system was practically absent during the spread of the pandemic, which led to an increase in the workload of medical personnel, a lack of logistical support. As a consequence, patients with other diseases were affected. In March 2020, routine surgery and non-urgent medical consultations were discontinued as a response to the increase in new cases. In primary care facilities, non-urgent consultations were also delayed, and emergency care was suspended (except for patients with respiratory symptoms). In the direction of digitalization, only an electronic prescription system was introduced to provide patients with chronic diseases with automatic renewal of their prescriptions without visiting the doctor. Hotlines and online consultation platforms were created to assist patients with treatment plans (non-urgent).

Czech Republic
In the Czech Republic, there were also no significant numerical changes during the pandemic. Consequently, general practitioners (the main primary care providers working with a single assistant not responsible for monitoring the number of people seeking care) were advised to counsel patients by telephone and to make appointments using protective equipment only. Preventive care and other types of care were postponed until March and April 2020. The Czech Republic has seen an expansion in the use of electronic prescriptions, other electronic patient interaction tools (e.g., a new system of medical certificates that allow admission to work, electronic sick leave).

Health insurance funds expanded funding schemes for providers to include reimbursements for remote medical consultations (telemedicine, e-mail, telephone) in the practice of most outpatient specialists. General practitioners reported an increase in telephone contact with patients, with the average daily number of contacts in those physicians who did not close or significantly limit their practices declining by 15%. New financial reimbursement rules also granted dentists the right to conduct telemedicine consultations with their patients. However, most of the statutory financial reimbursement rules were temporary and remained in effect until June 30, 2020. Primary care providers and/or regional health authorities were the first point of contact. Telephone hotlines have been set up to provide information to the public, including chatbots to answer frequently asked questions.

Financing

Spain
Since May 8, 2020, according to the new decree, a funding mechanism has been formed for emergency healthcare costs from the European Regional Development Fund 2014-2020. In the amount of up to €3.2 million. These funds were used for the purchase of medical equipment, tests, personal protective equipment, payment of additional workforce, research, development and innovation programs or the development of epidemiological surveillance applications.

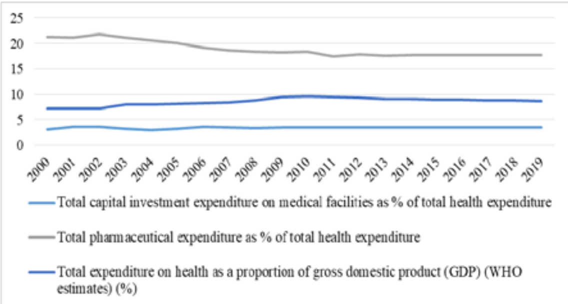

Figure 1 – Main indicators of healthcare financing in Spain, 2000-2019
Source: World Health Organization (2021c; d; g).

On June 16, 2020, the Spanish government approved €16 billion in earmarked funding for autonomous communities responding to the effects of the COVID-19 pandemic. The bulk of the fund, €9 billion, is dedicated to healthcare, €2 billion for education programs, and €5 billion to compensate for losses from reduced economic activity. These funds were not accounted for as regional public debt. The autonomous communities allocated the financial resources within their territories on their own.

To relieve the burden on the budget due to rising healthcare costs through COVID-19 on March 12, 2020, the government has adopted several special measures. In particular, a reserve fund of €100 million was replenished to finance the needs of the Ministry of Health, which provides the mechanism of the National Budget for the financing of urgent needs. In addition, according to the mechanisms of the financial system, the government allocated a total of €557.4 million to cover the urgent needs in the context of the response to the crisis. Private hospitals during the crisis and their services have been paid at public rates under the standard procurement mechanism. To date, however, the amount and schedule of the corresponding payments have not been determined. On March 31, 2020, the government approved an additional tranche of €300 million as part of an emergency economic action plan aimed at mitigating the effects of COVID-19. The distribution of this amount is based on the following criteria: population (80%), number of cases (15%), number of patients in the ICU (5%).

Czech Republic

The Czech healthcare system is built on compulsory health insurance and includes a wide package of benefits. COVID-19 healthcare costs are paid by health insurance funds through direct contracting with healthcare providers without additional co-payments. At the end of April 2020, the parliament approved the government's proposal to increase funds from the state budget to finance social health insurance for certain categories of economically inactive populations (children, students, the unemployed, the elderly, etc.). Consequently, in 2020 there has been an additional CZK 21 billion (€778 million) to the budget, and in 2021, an additional CZK 50 billion (€1.85 billion) to the budget. Consequently, there is a loss of revenue to the social health insurance system of about CZK 8.5 billion (€313 million) compared to the social health insurance system's spending plan.

Czech healthcare providers are financed by monthly payments from the health insurance funds, and all payments are calculated annually based on the actual health services provided and the conditions set out in the contracts. The social insurance funds have not stopped paying in advance, even though the volume of services provided has decreased due to the postponement of routine care, treatment, and preventive care. Thus, most providers received prepayments based on 2018 data and therefore did not feel a temporary decrease in cash income, even though their activities were temporarily reduced. For providers not covered by prepayment funding (typically dentists), the Social Security funds also temporarily imposed prepayments; most of these temporary measures were eliminated by June 30, 2020.

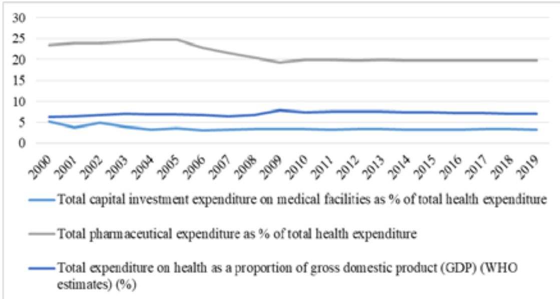

Figure 2 – Key indicators of healthcare financing in the Czech Republic, 2000-2019
Source: World Health Organization (2021c; d; g)

At the same time, there were concerns in the Czech Republic about the implementation of the 2020 annual payment settlement. Providers were concerned that health insurance funds would only pay for the volume of contracted services rendered. The Ministry of Health instructed providers to postpone routine care and surgeries to allow for the admission of expected COVID-19 patients. In June, the Czech Parliament passed legislative changes that allowed the Ministry of Health to publish an amendment to the 2020 Reimbursement Directive, the so-called Reimbursement Directive, which compensates providers for financial losses incurred by them due to a reduction in the volume of health services provided because of the COVID-19 pandemic.

The Ministry of Health estimated that providers' losses amounted to CZK 30.8 billion. The Ministry of Health proposed a rather generous compensation scheme for healthcare providers of all segments. The loss reimbursement directive was issued on July 1, 2020. To fully settle payments for 2020 contracts, which are indexed at about 12% over 2019 payments, a minimum level of hospital activity in 2020 was set at 79-82% of provider activity in 2018 (depending on the number of patients treated from COVID-19). For long-term care facilities, bed-day reimbursement increased by an average of 5% (plus another 1% to offset the cost of protective equipment). For outpatient facilities, reimbursement for services provided throughout 2020 increased by an average of 10%. The reimbursement directive also incentivized providers to expand activities to compensate for losses associated with the March-April 2020 reduction in the volume of healthcare services provided. In 2020, CZK 3 billion was allocated to compensate for volumes of activity that exceeded 79-82% of activity in 2018.

The Czech Republic was centrally administrated during the pandemic. Therefore, during the state of emergency in the spring, protective equipment and medical equipment (e.g., artificial lung ventilation apparats) were purchased centrally by the Ministry of Health and the Ministry of the Interior from the state budget. The Ministry of Health was also responsible for resource allocation, distributing protective equipment to health authorities, COVID19 testing laboratories, and all healthcare facilities directly administered by the Ministry of Health. The Department of the Interior distributed protections to all other public and private entities, including senior citizens, people with disabilities, mostly, with the help of regional officials. At the same time, healthcare providers themselves are responsible for ensuring the necessary amount of protective equipment and its financing. As of July 1, 2020, the reimbursement amount for services provided for the outpatient sector, the reimbursement of bed days for providers of long-term care services was increased as per the Reimbursement Directive, and the planned budget reimbursement to hospitals was indexed to account for their expenses related to the purchase of protective equipment.

The budget reserve was increased by CZK 59.3 billion (€2,19 billion) as part of an amendment to the "State Budget Act," which was adopted to prevent the spread of the epidemic and respond to its consequences. This made possible to apply flexible solutions to channel funds to ministries, if necessary.

Management strategies
Spain: planning for aid delivery
Since March 14, 2020, following the introduction of a high alert regime, the Minister of Health has been given temporary authority to decide on the optimal allocation of technical resources, including those of the armed forces, the private health sector, and the business sector (hotels and, if necessary, resources from mutual insurance and accident and occupational disease assistance systems). Private hospitals treating patients with COVID-19 under the private insurance scheme also accepted patients from overcrowded public hospitals or arranged treatment for patients without COVID-19 to relieve hospital beds and facilitate physical distance.

In addition, health departments had the authority to convert public or private buildings (such as sports stadiums) into outpatient and inpatient care facilities. Specifically, as of March 31, 16 field hospitals had been deployed. For example, a temporary military hospital with 1,300 beds was deployed at the IFEMA exhibition center in Madrid. Also, in several regions, to relieve overcrowded hospitals were converted into hospitals for patients in recovery. It should be noted that the Spanish government has approved legal provisions to simplify subcontracting procedures for public sector institutions to ensure a rapid administrative response to the spread of the virus. The need to retrofit public or private buildings in Spain is primarily due to the steady reduction in bed capacity in the country's public hospitals for a limited budget (Figure 3).

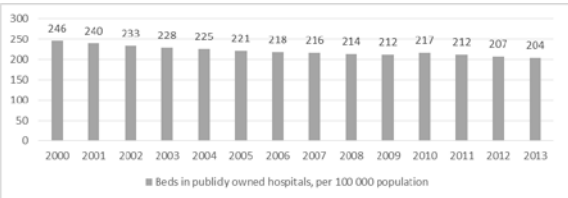

Figure 3 – Beds in publicly owned hospitals, per 100 000 population in Spain
Source: World Health Organization (2021h).

The rapid growth of new cases in a short period has meant that the healthcare system in some areas has struggled to respond to the needs of patients. In several areas, especially in Madrid, long queues of patients were formed, waiting for places in emergency departments, hospitals, and ICU, as well as for access to the necessary machines. Medical triage and further provision of care were delayed. No measures to rationalize medical care were introduced; instead, field hospitals were equipped to free up beds in hospitals, perform medical triage, and provide first aid to patients with moderate symptoms.

Czech Republic: planning for aid delivery
In the Czech Republic, a plan has been prepared to transfer standard beds to ICU beds, as well as to reassign staff in case of a worsening epidemiological situation (as of early May, there were about 300 COVID-positive patients hospitalized in the Czech Republic). On April 29, the Ministry of Health announced plans to place COVID-19 patients who require hospitalization in selected large hospitals at the regional level to free up smaller hospitals, allowing them to handle only patients without COVID.

Spain: national strategic management
As of January 7, 2020, the Spanish Ministry of Health, through the Center for Coordination of Health Emergencies (CCAES), activated the COVID-19 response protocol in collaboration with the regional Spanish Health Departments. On February 4, the Interregional Council of the National Health System (the highest governing body of health) defined a framework for collaboration between the national and regional health departments, strengthening coordination and surveillance mechanisms in the context of responding to the epidemic.

In the following weeks, the Prime Minister held a meeting with regional representatives to decide jointly on areas and methods of work as the situation evolved. The Royal Decree of March 14, declaring a state of high alert, assigned full responsibility for the implementation of the response to COVID-19 to the Government of Spain. The Prime Minister delegated several powers to the Ministers of Defense, Interior, Transportation, Mobility and Urban Development, and the Minister of Health, according to their areas of responsibility; these activities were coordinated by the Minister of Health. Activities outside the areas of responsibility of these ministries were also coordinated by the Minister of Health. Furthermore, according to the Royal Decree, all health departments that received private funding (as well as their managers and employees) were under the direct authority of the Minister of Health. The regional and local public administrations, however, retain the functions of managing the organization of health services. The royal decree also obliged the Minister of Health to guarantee territorial interaction and equality in the provision of health services. To improve coordination of epidemiological data collection, since March 15, each regional health department send reports to CCAES on the following set of indicators: epidemiological indicators (new cases confirmed, number of cured deaths), facility load indicators (the number and workload of beds, intensive care units, the number of medical workers in the service, especially ICU doctors, anesthesiologists, and resuscitators, including residents of the fourth and fifth years of study, as well as any other health workers who, if necessary, can be called to the service, including retirees and doctors/nursing staff of the first years of study).

The data on the availability of personal protective equipment and the need for diagnostic kits are also collected.

Czech Republic: national strategic management
The implementation of the response to the COVID-19 epidemic in the Czech Republic is led by the Ministry of Health (including the Chief Medical Officer, who is the Deputy Minister of Health), the Central Management Group for COVID-19 (led by another Deputy Minister of Health) and the Central Crisis Headquarters. Each of these bodies has a specific range of responsibilities. The Central Committee for Epidemiology (Ústřední epidemiologická komise), established in 2006, is a permanent working body of the government. It is responsible for the control, coordination, and management of public health, including the preparedness of other ministries in case of serious infectious diseases. The Committee is responsible for developing and updating the Czech "Pandemic Action Plan" (last updated in 2011), which mainly focuses on influenza.

In connection with the COVID-19 outbreak, the committee was convened by the Minister of Health for an extraordinary meeting on February 27, 2020. The state of emergency is the basis for combining the resources of the Central Committee for Epidemiology and the Central Crisis Staff.

The state of emergency imposed by the Czech government on March 12, 2020, allowed the government to purchase goods and services without using standard public procurement procedures, to approve legislative proposals on an expedited basis.

The Central Management Group for COVID-19 (Centrální řídící tým COVID-19) was established as an advisory body to the government on March 30, 2020, and as of June 30, 2020, the group became part of the Ministry of Health as an advisory body. The group is empowered, among other things, to introduce measures developed by the government to combat COVID-19, including monitoring and regulation of laboratory capacity, ICU and artificial lung ventilation apparat's capacity, and the so-called "Smart Quarantine" system, which includes some measures to facilitate the tracking of potential cases.

5 Discussion

This study reveals weaknesses in the management of the healthcare system in Spain and the Czech Republic, despite the National universal health coverage policies or strategies adopted in both countries, in particular, those that refer to the use of ICT or eHealth to support universal health coverage. At the same time, in both countries, no National eHealth policy or strategy exists. In comparison, in Germany and Italy, both financing and digitalization of health have been intensified with the adoption of a National eHealth policy or strategy exists (World Health Organization, 2021f). In particular, Germany during the pandemic saw an increase in tele- and video consultations, the lifting of restrictions on telemedicine, the launch of the virtual hospital, and the launch of the "CovApp" online resource for patient assessment (a new online telemedicine tool to help patients assess symptoms and address COVID-19 issues). With the pandemic in Germany, the level of digitalization of healthcare management has increased. The German government has approved a draft "Hospital Futures Act" to develop the digital infrastructure of hospitals over the coming years. These measures show how premeditated digitalization strategies improve the quality of health facility management in times of crisis. In Italy, during the pandemic, the technological component of governance was also strengthened. In Italy, for example, COVID-19, the technological solution for tracking health conditions in the context of prevention and treatment, providing care, and responding to other medical problems, has been introduced. Technological solutions have been implemented not only to deal with the spread of COVID-19 but also in the fields of diabetology, cardiology, oncology, neurology, and psychology. The Italian government decides to integrate Artificial Intelligence to connect research institutes and local health institutions. In Italy, digitalization has expanded services such as phone calls (20%) or video calls (29%), with the ability to exchange documentation using email or instant messaging platforms. Some of the applications are specifically designed for teleconsultation and monitoring (13%), and many Web-based platforms have enabled collaboration among healthcare market operators (38%).

The Czech Republic and Spain have achieved a high level of automation in certain areas of medicine thanks to their implemented National health information system policies or strategies: 1) Spain has introduced an electronic prescription system, hotlines, and online consultation platforms; 2) the Czech Republic has expanded the use of electronic prescriptions and other electronic tools for patient interaction (e.g., a new system of medical certificates that allow patients to start work, electronic sick leave).

Spain and the Czech Republic also have no national telehealth policy or strategy in place. For example, a similar strategy has been approved in Italy, which allowed both the expansion of funding and the digitalization of medicine during the pandemic. At the same time, public funding for eHealth programs was available in Spain, the Czech Republic.

6 Conclusion

This research found a lack of practical digital changes in the health systems of Spain and the Czech Republic during the spread of the pandemic, which led to an increase in the burden on the medical staff, lack of logistical support. One of the revealed managerial problems is the reduction of hospital beds in the countries due to the lack of funding, which led to an increase in costs during the crisis for the organization and equipment of hospitals that do not specialize in infectious diseases. The weakness of healthcare system management in Spain and the Czech Republic was revealed, despite the National universal health coverage policy or strategy adopted in both countries, in particular, those referring to the use of ICT or eHealth to support universal health coverage. The lack of a National eHealth policy or strategy in both countries was found to be responsible for the low level of digitalization and the emphasis on hospital-based patient care activities. Digitalization in Spain and the Czech Republic has only been accompanied by the introduction of an electronic prescription system and the creation of hotlines and online consultation platforms. Legislative acts, which have limited the development of telemedicine, have been implemented. Thus, digitalization as a way of change and transformation is limited by the lack of strategies and funding.

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COPIES OF THE ICON OF MOTHER OF GOD CZESTOCHOWA IN ROMAN CATHOLIC CHURCHES OF GALICIA

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Abstract: The academic paper contains information about the history of origin, iconography, symbolism, artistic and stylistic features and technique of execution of the miraculous icon of the Mother of God Czestochowa, as well as its copies in Roman Catholic churches and chapels of Galicia in the XVIII – the beginning of XXI century. A comprehensive art analysis has been carried out in the scientific work as follows: iconography of the icon of the Mother of God Czestochowa, as well as its copies, establishing the type of this icon in the magnificat cycle of the Mother of God, identification of unique features of the original icon and its copies, research of symbolics, in particular, the symbolics of colour (determining basic colours and their meaning), as well as performing technology.

Keywords: Mother of God Czestochowa, miraculous icons, copies, Roman Catholic churches, Galicia.

1 Introduction

Studying works of sacred art, in particular, the original miraculous icon of the Mother of God Czestochowa and its copies in Roman Catholic churches and chapels in Galicia is relevant, forasmuch as it is the spiritual heritage of Ukrainian and Polish culture. Due to historical circumstances, numerous copies of the icon of the Mother of God Czestochowa were moved and taken abroad during the Second World War and subjected to a thorough restoration. Considering that the icons were not kept in museums, but were placed on altars in existing churches, their investigation became much more complicated. In total, more than fifty icons were found. There are almost thirty copies of the icon of the Mother of God Czestochowa in Ukraine (in Vynnyky, Darakhiv, Dobromyl, Dolyna, Drohobych, Zboriv, Zolochiv, Kolomyia, Kopychyntsi, Koropets, Kosiv, Kuty, Ladychyna, Lashky, Lopatyn, Navy, Lviv, Lviv, Liuboml, Medenychi, Navariia, Nastasiv, Novyi Yarychev, Otyn, Peremyshliany, Pidhaitsi, Rashtivtsi, Rozdol, Sniatyn, Sokal, Tlumach, Tuliglovy, Khodachkov, Chornushovychi, etc.). And in Poland, there are more than twenty copies of the icons of the Mother of God Czestochowa (transported from Brody to Opole, from Buchach to Trzemeszno Lubuskie, from Zbarazh to Prałkowcy, from Kolomyia to Skomelna (Skomielna Czarna). Three icons were transported from Lviv: to the Church of the Carmelite Fathers in Krakow (Kraków), in Ksheshuv (Krzeszów) and in Shamotuly (Shamotuły). Also, icons were transported from Navariia to Uraz, from Nadvirna to Legnica, from Tver to Sarby, etc. The iconography and symbolics of these icons correspond to the Czestochowa original, however, the artistic style and technique of execution are different. Most of the icons are painted with oil, not tempera paints prepared by ancient technology based on egg emulsion.

2 Literature Review

The first fundamental attempts to scientifically process the monuments of sacred art in the Roman Catholic churches of Poland and the eastern lands of the ancient Polish-Lithuanian Commonwealth, including Galician ones, were first conducted by the Institute of Arts of the Polish Academy of Sciences in the XIX – XX centuries. A collective multi-volume edition of Polish scholars (in 23 volumes) under the editorship of Jan K. Ostrowski "Materials on the History of Sacred Art in the Eastern Lands of the Ancient Polish-Lithuanian Commonwealth" was extensively studied. («Materiały do dziejów sztuki sakralnej na ziemiach wschodnich dawnej Rzeczypospolitej». Redakcja naukowa Jan K. Ostrowski). Information about copies of the miraculous icon of the Mother of God Czestochowa can be found in works of (Betlej, 2012; Brykowski, 2006; Krasny, 1995; 2002; 2004; Ostrowski, 1993; 2012; 2015; Pencakowski, 1993; Petrus, 1996; Quirini-Popławski, 2007), as well as in the publications of (Witkowska, 1995; Niedźwiedź, 2005). Historical information about the Mother of God Czestochowa and its copies are represented in their works of (Kukiz, 2000; Czapliński, 2006; Puzych, 2011; Chavaha, 2016). The publications and editions specified are valuable taking into consideration that they present historical information about a copy of the icon of the Mother of God Czestochowa in the ancient territory of Galicia. A monograph (Demianchuk, 2015) was used to cover technical and technological issues of modern icon painting on the basis of ancient technology.

The purpose of the research is to analyze published scientific works covering information on the history of origin, iconography, symbolics, artistic style and technique of the miraculous icon of the Mother of God Czestochowa, as well as its copies in Roman Catholic churches and chapels of ethnographic territory of Galicia in the XVIII – the beginning of XXI century.

3 Materials and research methods

In the course of studying the icon of the Mother of God Czestochowa and its copies, a set of methods has been applied, in particular, those that are usually used in the investigation of works of sacred art, namely: art history (historical and artistic analysis), philosophical (induction, deduction) and theological (influence of church dogmas and canons on the formation of artistic image). Using the iconographic and artistic-stylistic method, an attempt has been made to investigate the principles and methods of depiction and analyze the execution manner, etc. A technological method has been applied to study chemical features and physicochemical processes.

In total, more than fifty copies of the icon of the Mother of God Czestochowa were found in Roman Catholic congregational churches and chapels in Galicia. However, only fourteen icons were represented in the academic paper. Furthermore, a modern technique and technology using the ancient egg-tempera technique on a wooden base, similar to the ancient technology for the production of the icon of the Mother of God Czestochowa was presented. The present research will complement previous publications of (Betlej, 2012; Brykowski, 2006; Krasny, 1995; 2002; 2004); Kurzej, 2011; Ostrowski, 1993; 2012; 2015; Pencakowski, 1993; Petrus, 1996; Quirini-Popławski, 2007; Witkowska, 1995; Niedźwiedź, 2005; Kukiz, 2000; Czapliński, 2006) on this topic and help better understand the specifics of sacred painting.

4 Results and Discussion

4.1 Iconography and symbolics of the icon of the Mother of God Czestochowa

The miraculous icon of the Mother of God Czestochowa is preserved in the Basilica of the Assumption of the Blessed Virgin Mary on Jasna Gora in Czestochowa – the main centre of religious life in Poland. This world-famous miraculous icon is also called "Yasnogurska Panna", "Black Madonna", "Queen of the Polish Crown", "Queen of Poland", etc. The origin of the icon from Jasna Gora in Czestochowa has not been fully studied yet. It has been established that it was created in the V century; however, most historians postpone the date of creating this image to a later time – to the XI, XII and even XIII centuries (Czapliński, 2006). The authorship is attributed to an unknown Byzantine or Italian master. Initially, the icon was kept in Belz

Castle, to which it was delivered as a marriage dowry. After that, in 1241, during the assault of this castle by the Tatars, it was transferred to the fortress walls where a Tatar arrow hit it. Therefore, a characteristic mark was left on the image, on the right cheek of the image of the Mother of God from which blood flowed. The Tatar army retreated due to the protection of the Mother of God and the sudden appearance of a thick fog. Since that time, the icon of the Mother of God with the Child Jesus in her arms has been revered as a miracle-working (Puzych, 2011). In 1382, Prince Władysław Opolczyk founded the monastery of the Pauline Fathers in Czestochowa and gave them the icon of the Mother of God with the Child Jesus in 1384. This icon has been drawn using the tempera technique on a lime board (120,2 x 81, 6 cm). The holy faces on the icon are not traditionally oriental. The expression in the eyes of the Virgin Mary and the cut marks on Her face are deeply sick. The face of the Mother of God, full of kindness and gentleness, sorrow and contemplation, radiates maternal tenderness. It is well designed, the nose is elongated and delicate, the lips are small closed, and the eyes are olive green, directed at all of mankind. The Blessed Virgin Mary is dressed in a red dress, which can be seen only on the right sleeve lined with gold. The golden ornamental border is on the omophorion of the Mother of God. The red colour of the dress and the red lining on the omophorion symbolizes the hidden martyrdom of Mary, in confirmation of the words of Simeon: *"And thy own soul a sword shall pierce, that, out of many hearts, thoughts may be revealed"*, which took place during the Passion of Christ (The Holy Bible: St. *Luke 2: 35*). The head and shoulders are covered with the omophorion, in particular, a blue cape symbolizing heaven, eternal peace, and chastity (purity of mind and body). The clothes of the Mother of God are traditionally painted in blue as the Ever-Virgin. The blue omophorion can be seen in numerous Roman and Byzantine icons and mosaics. It should be noted that the blue (light-blue) colour in the Old Testament signified fidelity to God's Commandments. The fabric was of blue (light blue) colour covering the Arch of the Covenant. Consequently, the cloak of the Mother of God is blue, because She is the Arch of the New Testament, which has carried the Son of God. On the omophorion of Mary, a six-pointed star is located above Her brow. This star is a symbol of the Incarnation, the Birth of the Savior and the Motherhood of Mary, Queen of Heaven and Earth. The star is a reminder of Mary's name (in Hebrew: מירים – Miriam – means "Virgin" and "Star of the Sea"). Therefore, Mary's omophorion on the icons, in addition to blue, also has a blue-green colour. In addition to the star, which is observed on numerous Byzantine icons such as the Hodegetria, the omophorion of the Virgin is decorated with golden stylized lilies, which are also called Andegaven (fr. fleur de lis). The child Jesus is depicted in full shape, blessing with his right hand and holding the Holy Scriptures in his left. He is dressed in a red (carmine) tunic with a gold border, which symbolizes the royal grandeur. In iconography, the robes of holy kings and princes were traditionally painted in this colour. The red colour is also a symbol of martyrdom and redemption. All robes are covered with many golden ornamental crosses, signifying the Glory of God. The figure of the Child Jesus is majestic; the head with an open forehead and thick curly brown hair is turned to the right of the Mother of God. Golden halos around the heads and gold on clothes symbolize God the Light and God's glory. On the icon, the golden background was interpreted as "unapproachable light" – peculiar only to God (Figure 1).

a b

Figure 1 – Miraculous icon of the Mother of God Czestochowa (a) without gold covered robes and (b) in gold covered robes and crowns
Source: Photo of the Original Black Madonna Icon

Among similar images, the icon of the Mother of God from Jasna Gora is distinguished by four incisions that remained after the desecration of the image on April 16, 1430 (Czapliński, 2006). Under the patronage of King Vladislav Yagello (Władysław Jagiełło), the icon was restored, and at the end of 1434 solemnly transferred from Krakow to Czestochowa. This place became especially important for the Poles during the Swedish invasion on April 1, 1656, when King Jan II Kazimierz (*Jan II Kazimierz*) took the oath known to the Yasnogursk icon known as the Marriages Lvivski (*Śluby Lwowskie*). They were re-executed on 26 August 1956 in Yasnogorsk marriages to the Polish People (*Jasnogórskich Ślubach Narodu Polskiego)* (Czapliński, 2006). It should be noted that the icons, recognized as miraculous, were crowned. The case with the Czestochowa icon of the Mother of God was in like manner, on which, according to research, crowns appeared at the end of the XV – the first quarter of the XVI century (Niedźwiedź, 2005).

This icon belongs to the main iconographic type of the Virgin Hodegetria (Greek: Οδηγήτρια), which points to Jesus Christ. The Virgin Hodegetria (Spiritual Guide) is the first iconographic type of icon in terms of frequency of depiction. The Mother of God is depicted on the icon, holding the Baby Jesus on her left hand, and pointing to Him with her right hand. The Mother of God shows all mankind the true path to Christ and God the Father and eternal salvation. In addition, the Mother of God "conducts" our prayers to the Son; for this reason, she is called the Spiritual Guide (Demianchuk, 2016). There are numerous well-known icons in Galicia belonging to this iconographic type (Kholm, Dominican, Ulashkiv, Ternopil, Terebovlia, Goshiv, Pohon, Pidkamenets, Patslav (now in Poland), Maria-Povchanska (now in Hungary), Krynivska and Krynopilska).

4.2 Copies of the icon of the Mother of God Czestochowa in Galicia

Copies of the Czestochowa icon of the Mother of God in the Roman Catholic churches of Galicia in the XVIII – early XXI centuries, as well as the original, belong to the main iconographic type of the Virgin cycle – Hodegetria, however, they have their own artistic and regional features. It has already been mentioned that the ancient icon of the Mother of God Czestochowa was painted with tempera paints based on egg emulsion on a wooden base; however, its later copies, in the overwhelming majority, were painted with oil paints on canvas and metal.

Famous copies of the icon of the Mother of God Czestochowa were in many Roman Catholic churches in Galicia, in particular, in *Bolekhiv, Buchach, Vynnyky, Zbarazh, Kolomyia, Lviv* (seven icons), *Navariia, Nadvirna,* etc. As a rule, in Roman Catholic churches and chapels, the icons of the Mother of God were kept in the centre of the main altars, which testified to the great reverence of the Mother of God and conviction in Her intercession before the Lord God.

The famous Galician copies of the Czestochowa Icon of the Mother of God with the Child Jesus in her arms include the icon that was kept in the central part on the altar in the congregational church of *the Assumption of the Blessed Virgin Mary in Bolekhiv*. The wooden gold covered altar, made in the Baroque style, was restored in 1870, 1919, and in 1929 it was restored by Valentyn Yakubiak (Walenty Jakubiak) (Krasny, 2002: 38). The icon of the Mother of God is made on a board, the face and hands are painted with oil paints, the rest of the parts are covered with imitation of metal robes, carved in levkas soil and gold covered prior to 1737. There was an inscription on the reverse side of the icon (Krasny, 2002: 38; il. 21). Another copy of the Czestochowa icon of the Mother of God with the Child, painted in the early twentieth century, was kept in the congregational church of *the Exaltation of the Holy Cross in Brody.* Currently, the icon is in the congregational church of *the Painful Mother of God in Opolu*, Poland (Ostrowski (ed), 2015: 17; il. 15).

The icon of the Mother of God with the Child, which resembles the Czestochowa Icon of the Mother of God, is kept in the central part of the main altar of the congregational church of *the Assumption of the Blessed Virgin Mary in Buchach.* The basic wooden altar with a high plinth and decorative end was part of a complex of five altars and a pulpit, decorated in the same style, approximately in 1761-1770. The image of the Mother of God with the Child is painted with oil paints on canvas pasted on a board. It was created in the XVIII century (?) in wooden robes covered with silver, against the background of carved paludamentum, crowned with a crown. There is a ringraph below with the coats of arms of Poland, Lithuania and Russia (Ostrowski, 1993: 19; il.. 21, 42). There are halos and crowns, twelve stars (symbolizing the twelve generations of Israel, the twelve apostles, etc.) and other rocaille ornaments around the heads of the Blessed Virgin Mary and the Child Jesus, against the background of the icon. In 1945, this icon was moved to *Tshemeshno Lubuskogo* (Trzemeszno Lubuskie koło Sulęcina), however, it is considered lost after the fire of the congregational church in 2017 (Trzemeszno…, 2017).

The famous copy of the Czestochowa icon of the Mother of God with the Child was kept on the major altar (made in 1781) in the *Church of the Assumption of the Blessed Virgin Mary in Vynnyky.* This icon, known as the Vynnyky's Mother of God, was painted with oil paints on canvas prior to 1738. In 1766, the miraculous transfer of the miraculous icon of the Mother of God to the church took place. In 1785, gold and silver ornaments were requisitioned from a miraculous image by order of the Austrian authorities. Instead, wooden gold covered ones were made (Kostel Voznesinnia.., 2020). In 1927, the icon was repainted with the addition of new robes and frames made of acanthus ornament (Krasny, 1995: 167; il. 401–402). On November 27, 2016, in the congregational church, Archbishop Metropolitan of Lviv Mechislav Mokshitsky coronated the miraculous icon of the Mother of God Vinnykivska and announced the rise of the Church of the Dignity of Sanctuary (Figure 2) (Chavaha, 2016).

a b

Figure 2 – Copy of the miraculous icon of the Mother of God Czestochowa in Vynnyky (a) and the moment of coronation by Archbishop Mieczyslaw Mokszycki (b)
Source: Photo of the Original Black Madonna Icon

It has been established that the copy of the Czestochowa Icon of the Mother of God, known as the icon of the Mother of God of Zbarazh, was painted in the XVI century (Kukiz, 2000: 50). In 1575, the congregational church, where the icon was placed, was burned by the Tatars (Historia Parafii..). It was painted with oil paints on a copper sheet in the XVII century and decorated with silver gold covered robes which were presented to the icon by King Mykhailo Korybut Vyshnevetsky (Michal Korybut Wiśniowiecki). This icon is identical in style to the Czestochowa original however it differs in detail. The faces of the Virgin and Child Jesus have a clearer colour. The Mother of God of Zbarazh has no cuts on her face (Kukiz, 2000: 50). Since September 30, 1972, the miraculous icon of the Mother of God of Zbarazh has been kept in the church in Pralkovce near Peremyshl (w Prałkowcach k. Przemyśla) (Historia Parafii..).

One more copy of the Czestochowa icon of the Mother of God with the Child was kept in the central part of the main altar in the congregational *Church of the Assumption of the Blessed Virgin Mary in Kolomyia.* This icon, called as the Mother of God, the Queen of Heaven, is now the Kolomyia – Pokutska Mother of God, painted in 1635 with oil paints on a copper plate, at the expense of Mykhailo Stanislavsky (Michała Stanisławskiego) for the Dominican Church in Kolomyia. The icon underwent changes after 1833, and was restored under the direction of Professor Mariia Lubrychynska (Marii Lubryczyńskiej) in 1993-1994. The central part of the image is covered with gold covered wooden robes, representing the figure of the Virgin Mary standing on the clouds. There are metal crowns on the heads of the Virgin Mary and the Child Jesus, surrounded by a shining halo. The background is covered with maroon fabric, decorated with twelve winged angels' heads carved in wood and gold. Currently, this icon is kept in the congregational church in Skomielna Czarna in Poland (Brykowski, 2006: 146; il.: 141–143).

We learn about the icon of the Mother of God of Lopatyn from the scientific work of T. Kukiz "Lopatyn. History and sights" (Kukiz, 2004: 64). The initial history of the holy picture was represented by its buyer, Maciej Niestojemski from Rytkov near Berestechko. In 1754, a copy of the icon of the Mother of God was brought to him from Czestochowa. On September 1, 1754, his daughter noticed tears on the Face of the Virgin Mary, which were seen by all the family members, as well as by the pastor, Father Rutkowski, and other people. After these events, Maciej Niestojemski saw a strange dream in which the Mother of God told him to give the holy picture to the church in Lopatyn (Kukiz, 2004: 64–65). In 1756, this holy picture (originally called the Mother of God Rytkowska) was transferred to Lopatyn. The transfer of the icon was described by Father Shylarsky (o.Szylarski) (Kukiz, 2004: 66). On February 23, 1759, after the church commission had conducted a detailed study of this icon, it was recognized as miraculous by the Archbishop of Lviv Vladyslav Liubensky (Władysław Łubieński). At that time, the "Testimony of the Miracles and Graces of the Blessed Virgin Mary Lopatinska by 42 sworn witnesses sworn in" was published (Kukiz, 2004: 67). On May 12, 1759, the icon was transferred to the major altar by Father Sukhotsky (ks. Suchocki). In 1769, the Book of Miracles was established in the parish, in which 158 received graces were recorded. In 1769, Father Toma Drozdovsky (ks. Tomasz Drozdowski) published the book "Further Miracles and Graces of the Mother of God Lopatynska" («Dalsze cuda i łaski NMP Łopatyńskiej»). In 1785, the icon was moved to the new church and placed on the main altar by Father Andrii Kholonievsky (Andrzej Chołoniewski). According to Father Toma Drozdovsky, precious clothes, crowns and frames, as well as other liturgical things, were taken from the church during the Austrian ruling (Kukiz, 2004: 68–69).

In 1944, the icon of the Mother of God of Lopatyn was transferred to the congregational church in Woitz near Nysy (Wójcicach k. Nysy). In 1984, after the desecration (attempts to tear off the silver robes) and the theft of the crown, the icon was damaged. The first restoration work was carried out by Father Edward Kukhazh (ks. Edward Kucharz) of the parish of Our Lady, Health of the Sick in Opole, who replaced the destroyed wooden board on which the canvas was glued with a wood-fibre board. In 1985, the icon was given to the Institution of Conservation of Works of Art of the Academy of Fine Arts (Zakładu Konserwacji Dzieł Sztuki ASP) in Krakow, headed by Professor Sofia Medvetska (Zofia Medwecka). A thorough restoration and conservation was carried out the same year; the images were duplicated on a plate from polymethacrylate, using a duplicating wax resin. Conservation work was carried out by Beata Kuduk (Kukiz, 2004: 68–69). The icon of the Mother of God Czestochowa was painted on a canvas 70,5 x 50 cm. New, silver, gold covered crowns with precious stones were made. On September 23, 1985, these crowns were consecrated by Pope John Paul II in Castel Gandolfo. The act of coronation of the icon of the Mother of God of Lopatyn took place on August 10, 1986 in the congregational church in Woitz. The coronation was performed by Cardinal Henryk Gulbinowicz, with the participation of Bishop Alfonsa Nossola and the local pastor, Father Kazimierz Kwiatkowski (Kukiz, 2004: 70; il. 1,2,9).

The Lviv copies of the icon of the Mother of God Czestochowa with the Child Jesus are also valuable. One of them was preserved on the major altar (the end of the XVII century) in *the Church of the Archangel Michael of Monastery of the Discalced Carmelite.* The icon was painted with oil paints on a board approximately in 1613 by Frantsysk Shniadensky (Franciszek Śniadecki) at the turn of the XVII–XVIII centuries and decorated with silver gold covered robes. Nowadays, this icon is kept in *the Carmelite Fathers Church in Krakow* (Betlej, 2012: 144; il. 592). The artistic style of this icon is slightly different from the original Czestochowa icon of the Mother of God. This is especially true of the Face of the Child Jesus addressed to the Mother. A copy of the icon of the Mother of God Czestochowa is slightly different in artistic plan, which was kept on the side wooden partially gold covered altar (the third quarter of the XVIII century) in the *Church of St. Mary Magdalene.* The icon was painted with oil paints on canvas and decorated with wooden gold covered robes of the early twentieth century (Ostrowski, J. K. 2012: 298; il. 963). Another copy of the Czestochowa icon of the Mother of God with the Child was kept in the *Church of All Saints of the Benedictine Sisters Monastery in Lviv* (Kurzej, 2011: 91–154). It was painted with oil paints on a metal plate at the turn of the XVIII-XIX centuries (Ostrowski (ed), 2015: 49; il. 165). Currently, this icon is kept in the *Benedictine Sisters Monastery in Kreshuv (Krzeszów),* Poland. A large carved and gold covered copy of the icon of the Mother of God Czestochowa is preserved on the side wooden partially gold covered altar of 1774 (under the same name) in *the Metropolitan Basilica of the Assumption of the Immaculate Virgin Mary in Lviv*. It was made by applying the combined tempera-oil technique on wood. Both the robes of the Virgin and Child Jesus and the crowns on their heads, as well as the background of the icon are carved and gold covered. The icon of the Mother of God Czestochowa in a frame made of columns was brought in 1869 by Franciszka Witkowska from Czestochowa. (Adamski, Biernat, Ostrowski, & Petrus, 2013: 88 il.: 68). Another copy of the Mother of God Czestochowa in a gold covered frame topped with an arch is kept on the major wooden altar of the *Sanctuary of St. Anthony in Lviv.* It was painted in the XVIII century and covered with silver and gold plated robes (Pencakowski, 1993: 44; il.. 148). One more copy of the icon of the Mother of God Czestochowa was kept in the central part of the wooden altar in 1897 in *the chapel of the Holy Family and the monastery of Franciscan Sisters of the Family of Mary (now the chapel of God's Perpetual Help and St. Joseph at the Monastery of the Barefoot Carmelites) in Lviv.* Currently, the icon is kept in the monastery of the Franciscan Sisters of the Family of Mary in Shamotuły. This icon was presented to the church by Bishop Joseph Weber (Józef Weber). It is decorated with embroidered robes made by Sister Salomea (s. Salomea) and Sister Eva Vishnievska (s. Ewa Wiśniewska). Gold metal stars are placed on the background of the icon (Krasny, 2004: 129; il.: 339).

A copy of the Czestochowa icon of the Mother of God with the Child was kept on the major wooden altar of the Holy Trinity in the congregational church of *the Assumption of the Blessed Virgin Mary in Navariia near Lviv.* The icon of the Mother of God is painted with oil paints on wood in the XVI century, in textured robes (sukience tekturowej) gold covered in the XIX century. This icon underwent at least two conservation works; the first was performed in 1929, the other – in the postwar period (Ostrowski, 1993: 58; il.. 217). Nowadays, this copy of the icon of the Mother of God Czestochowa is kept in the congregational church of *St. Michael the Archangel in Uraz (W podwrocławskim Urazie) near Wrocław, Poland,* in a single-nave late Baroque church.

The miraculous icon of the Mother of God of Nadvirna, which was kept on the main neo-baroque altar in *the Roman Catholic Church of the Assumption of the Blessed Virgin Mary in Nadvirna*, is also valuable This icon is a copy of the icon of the Mother of God Czestochowa painted in the first half of the XVII century, in a rich carved frame and wooden gold covered robes, with artificial stones of the early XIX century. This icon was restored several times, in particular in 1786, when the silver robes with stones were given to the Austrian authorities as a contribution to cover the funds (Petrus, 1996: 102; il. 294). Then the face and arms of the old damaged icon were moved to a new base decorated with wooden robes. According to the inscription on the robes, it was restored by Władysław Lisik in 1932 (Petrus, 1996: 102). Currently, this icon is kept in *the Peter and Paul Cathedral Church in Legnica, Poland*. It is believed that this icon is the oldest miraculous icon of the Hutsul region. It was established from the historical translation that this icon was kept in the castle chapel, which belonged to the Hungarian Kuropatvov family (Kuropatwów). At the end of the XVI century, a Roman Catholic parish was founded in Nadvirna, and an icon of the Mother of God with the Child Jesus, which was already famous for miracles at that time, was placed in the church. The background of the icon is decorated with Andegaven lilies (fr. fleur de lis). The lily motif can also be found on the icon the Mother of God Czestochowa (golden lilies on a dark background) (Chudotvorna ikona…, 2020).

4.3 Modern copies made by applying ancient technology

The tempera technique was used in ancient icon painting based on egg emulsion. This is a unique phenomenon in which, water molecules and vegetable linseed oil are combined with the help of egg yolk and an emulsion is formed. Pigments are added to it and, thus, the egg-tempera paints are created. Painting is performed by the pouring method, which consists in applying thin layers of paint to the icon, forasmuch as the application of thick layers leads to the formation of cracks. This technique was widely used in the XIII century. Icon painters used earth pigments, complementing the palette with new elements and discovering new properties of existing ones. Three colours should be considered as basic ones, namely: red, blue and yellow. While mixing them, one can get purple, orange, and green. Furthermore, a method of applying paint to paint in thin layers, the so-called "glazing", is used in painting.

Well-preserved works of past centuries convincingly confirm that the ancient technique of painting was passed down from generation to generation. This knowledge became a strong theoretical and practical basis of the iconic technology of Lev and Andrii Demianchuk, whose creative method is based on the experience of famous theorists and practitioners of art (C. Chennini, D. Kiplik, etc.). The author's technology is presented in Andrii Demianchuk's monograph (Demianchuk, 2015: 17–136). The copies of the icons of the Mother of God Czestochowa can be the examples (Figure 3).

a b

Figure 3 – Modern copies of the icon of the Mother of God Czestochowa (58 × 46 cm.), Lev and Andrii Demianchuk, 2006 (a) 2007 (b) Office of the Roman Catholic Archdiocese of Lviv
Source: Photo of the Original Black Madonna Icon

The process of creating icons has its own features. The icon consists of a number of consecutive layers as follows: the first layer (the base of the icon) is a wooden board made of solid hardwood (oak, beech, maple); the second is a linen cloth pasted on a board; the third is a levkas primer made of finely ground chalk powder with fish or rabbit glue and linseed oil (up to 20 thin layers), on which the pattern is transferred; the fourth is the application of several layers of alcohol varnish (shellac) and polishing; the fifth is carving of halos and icon background; the sixth is the application of several layers of oil varnish mixtion and the process of gold covering with gold leaf; the seventh is the icon painting, using natural dyes-pigments, prepared on a natural egg emulsion; the eighth is varnishing (covering varnish for egg tempera which protects an icon from external influences).

5 Conclusion

Within the framework of the research, fourteen copies of the icon of the Mother of God Czestochowa were considered, which were stored in Galicia (Bolekhiv, Buchach, Vynnyky, Zbarazh, Kolomyia, Lviv (seven icons), Navariia, Nadvirna), although more than fifty such icons were found in Western Ukraine. The icon of the Mother of God Czestochowa, as well as its copies, belongs to Odigitria – the basic iconographic type of the Virgin cycle. A unique feature of the original icon is the presence of cuts (as a result of profanation) on the face of the Virgin. However, these cuts were not depicted on all copies.

The symbolics of the ancient icon had a canonical character. In the symbolics of colour, great importance was attached to the so-called "transcendental" colours, which had to imitate the Divine light – gold and silver, the analogues of yellow and white in painting. In general, a spectral colour palette was used, namely: three chromatic and their derivatives. In technologically complex painting (using the glazing method), colours were superimposed in thin transparent layers.

The iconography and artistic stylistics of the icon of the Mother of God Czestochowa has an expressive oriental origin; in most of its Galician copies, the influence of Western painting is felt, in particular, by Italian masters of the Proto-Renaissance. The same applies to the technology of their implementation. The icon of the Mother of God Czestochowa is made using the ancient egg-tempera technique on a wooden base; however, its copies are mostly painted in oil paints on canvas and metal. The comparative analysis of technologies shows that the techniques with application of an ancient egg-tempera emulsion are better more appropriate. The iconography and artistic and stylistic features of numerous Galician copies of the icon of the Mother of God Czestochowa differ from the Roman original. Along with this, they adhere to the established norms of the church canon and a high level of skill of execution is traced there. It should be noted that the theological fundamentals are laid in them and canonical iconographic rules developed in the IX–X centuries, as well as the national regional artistic traditions based on the Holy Scriptures.

The investigations of the vast majority of copies of the icon of the Mother of God Czestochowa have revealed that they come from the name of the place where they were kept. The principal reason for the distribution of copies of this miraculous icon in Roman Catholic churches and chapels in Galicia was the cult of the Virgin and deep conviction in Her intercession before the Lord God. Therefore, the icons of the Mother of God were in the central part of the temple on the altar. The icons, which were recognized as miraculous, were decorated with gold and silver robes and crowns, as a sign of the royal dignity of the Blessed Virgin Mary and the Child Jesus.

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FUNDAMENTALS OF MULTICULTURAL EDUCATION FOR A MODERN FOREIGN LANGUAGE TEACHER IN THE SYSTEM OF THEIR PROFESSIONAL AND PERSONAL DEVELOPMENT

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Abstract: The purpose of the research lies in comprehending the role of a foreign language teacher in the process of learning a foreign language by foreign students by comparing the views of teachers and students on certain aspects of the educational process. The data obtained as a result of the survey conducted reveal the importance of learning English for foreign students, their motivation and the difficulties they face. Along with this, the data obtained point out to the great complexity of the English language curriculum and the ways of its adaptation to the foreign students' needs. At the same time, the results of the survey determine the important role of the professional culture of a second language teacher in the context of the integration of students into the Ukrainian academic environment.

Keywords: polyculturalism, multiculturalism, modern teacher, globalization.

1 Introduction

Our world is changing rapidly. The Organization for Economic Co-operation and Development (OECD) identifies three major challenges that modern society will face in the next decade, namely: environmental, economic and social. Climate changes, economic crisis, population growth, migration processes and increasing social and cultural diversity are transforming countries and communities (The Future of Education and Skills, 2019). These current trends are already affecting our personal lives, as well as the life of the society as a whole (Jin, 2019). Education is not an exception. Scientists are talking about such processes as globalization and internationalization in this area. It becomes open, global and international (Roga, 2015). According to the data of the OECD, in 2016, the number of international students pursuing higher education worldwide was over five million, compared to two million in 1999. Both students and higher educational institutions have become academically mobile; they both aim to compete in the global marketplace (Education at a Glance, 2019). Universities open departments, faculties and programs for foreign students. Young people from all over the world would like to take part in them and study outside their home countries (Mikuláša, 2019). For them, this is an opportunity to acquire new skills that cannot be taught at home; it is a chance to gain international educational experience, become more competitive and, as a result, move closer to labour markets. In addition, students want to join the social and cultural life of the host country, expand their knowledge concerning other societies and improve their language skills. Meanwhile, universities also benefit from accepting foreign students economically, culturally and politically. For host countries, mobile students can be a significant source of income; they can contribute to the development of economic and innovation systems (Imai, 2019).

The Ukrainian higher education system has a long history of relationships with international students, commencing from the Soviet Union (USSR) to the present day. For instance, in 1990, the number of foreign students in the USSR reached 126,5 thousand people and allowed Soviet universities to officially take the third place in the world after the universities of the United States and France in the number of foreign students (Vershinina, 2015). Since May 2005, after Ukraine joined the Bologna Process, this trend has become more evident and has allowed Ukrainian universities to be part of the international educational community (Chaika, 2021).

A good example is the National University "Kyiv-Mohyla Academy". This is a leading university in Ukraine, where students from Europe, the USA, Asia and the Middle East study. They participate in a variety of training activities of the program, from bachelor's, master's, and doctoral programs to short-term and summer / winter schools. At the same time, the university offers a variety of fields of training – from engineering and economics to the humanities. All these programs are available in Ukrainian and English. In addition, according to the type of program and its curriculum, foreign students study Ukrainian or English as a foreign language, especially in reference to the humanities. These departments have a great amount of foreign students. In this case, English teachers deal with multicultural audiences; they work with students from different countries and representatives of culture; this situation raises certain proving and acute issues.

As it has been stated above, internationalization is prevalently considered as a positive factor that is important in preparing to participate in a globalized and multicultural society; it increases the level of tolerance and understanding. However, this may be a desirable consideration. What do we really know about students' attitudes, feelings, and willingness to be open to new cultures (Abraham, 2018)? This is a major issue of concern.

On the one hand, teachers and students from different cultures generally form a multicultural environment, where both face some dissonance in behaviour, towards which they have different attitudes and perceptions. If their feelings and views on the situation do not coincide, misunderstandings and conflicts occur, and clashes in culture may arise when a person has expectations of a certain type of behaviour and gets something completely different (Zhao, 2016). Herewith, studying in Ukraine, students find themselves in a context where they have to use three languages, namely: native, Ukrainian and English. At the beginning of the first year of study, students who are not native English speakers and have English in the curriculum, according to their type of program, take a preliminary test in English in order to check their proficiency in basic English. The results of testing in 2017 and 2018 showed that only 20% of students succeeded, and 80% of first-year students obtained the level of a beginner. This situation leads to a complete inability to communicate for both sides of the educational process, especially at the beginning of training. On the other hand, new materials, teaching methods and different pedagogical strategies create another problem for international students. According to students' viewpoints, they suffer from misunderstandings, prejudices and, as a result, anxiety. Motivation is another issue that concerns foreign students. There is a group of students considering the host country not only for the purpose of studying, but also as an opportunity to start working abroad. All of these factors lead to problems, such as: absenteeism, failure to complete project work and doing homework.

Thus, internationalization is a controversial issue. It brings not only opportunities but also obstacles. Obviously, the internationalization of higher education creates learning challenges concerning language barriers, different teaching cultures and different learning styles (Theodoridis, 2015). This is a challenge for both students and teachers, forasmuch as the pedagogical systems of the host and native countries are different; universities have their own assessment criteria that are completely new, and teachers use different approaches, strategies and methods.

In this context, the importance of multicultural education and competence is obvious (Shannon-Baker, 2018). Multiculturalism has always been discussed along with diversity. Ignoring this issue can cause particular problems, such as lack of opportunity to live together, alienation and confusion about identity through cultural differences related to language, religion or race. A Social – multicultural perspective is crucial for social peace and tolerance in the society with different cultural groups, forasmuch as it can broaden the horizons and offer new opportunities through its experience (Yildirim, 2016). From this point of view, the purpose of language education and, consequently, the role of a foreign language teacher are changing. Previously, the major objective was to provide students with certain knowledge and skills. Currently, significant goals of teaching foreign languages include the formation of a benevolent and tolerant attitude towards the values of other cultures, motivation to improve the level of a foreign language and the use of a second / third foreign language as a means of obtaining information that allows expanding one's knowledge in other subject areas (Gizatullina, 2018).

Thus, it is important to educate multicultural teachers (Gorski, 2016), who are competent to manage cultural diversity in the classroom and who are able to teach young people from different cultural backgrounds (Ludwikowska, 2018). However, one should not forget about the professional identity of a foreign language teacher (Pinho, 2015), forasmuch as it also requires particular attention. As individuals, teachers come face to face with people who are different from them and only such qualities as openness, benevolence and wide opportunities can help absorb everything new and be respectful and considerate in a situation of linguistic and cultural diversity.

Consequently, a variety of types of competencies required for global communication and collaboration is increasing (Almazova, 2019; Akhmetshin, 2019). There are three main components, namely: professional, multicultural and personal competencies, shaping the professional culture of a modern foreign language teacher; and they can prepare them for successful cooperation and avoid intercultural conflicts (Sydorenko, et al., 2021). Such teachers help students in the process of their integration with the educational system and the university environment. It should be noted that the issue of integration has also been widely studied in recent scientific articles. It is examined as one of the forms of acculturation (Ahtarieva, 2018), as an intercultural attraction of domestic and foreign students (Rose-Redwood, 2018), and as a process of expanding the institution's activities outside its educational system (Sakhieva, 2015).

In the present academic paper, integration is discussed in a narrow context, and not in its global and general sense. The process of adaptation to the new educational environment of the university is considered under this term, in particular, adaptation to the process of teaching and learning English in a new framework, to new criteria and pronunciations. It is a process of joining a new system without losing national identity, a process that helps international students achieve academic success and make it interesting and effective.

In general, the integration and issues of foreign students from the point of view of internationalization of education are of topical interest (Waters, 2018, Yao, 2017).

2 Literature review

The review of the literature covers some important issues. In particular, these issues are as follows: foreign students are considered as an object for understanding the global landscape of higher education (Börjesson, 2010), the process of integration with university life (Güvendir, 2018), problems of cross-national communication and relations between foreign and domestic students (Lee, 2018, Amos, 2018, Ranson, 2018) the issue of creating a friendly university atmosphere with recognition of the foreign students' diversity (Marangell,2018), processes of adaptation of foreign students (Wang, 2018, Jamaludin, 2018), the role of mentors in these processes and in the process of promoting the results of leadership development for foreign students (Shalkaa, 2019, Thomson, 2016), issues of academic and social support (Martirosyan, 2019), psychological well-being of foreign students and their psychological, academic adaptation to the university [Aldawsari, 2018, Starr-Glass, 2017, Chavoshi, 2017], motivation of foreign students (Cowley, 2018, Chue, 2016) and the impact of education abroad and its significance for the foreign students' future career (Nilsson, 2016).

However, previous investigations have been mainly focused on studying the viewpoints of teachers or international students on this issue. For instance, researchers have discussed the successful integration process of international students and its facilitation (Cowley, 2018), the views of teachers on international students and their challenges, and vice versa, on the academic, social and cultural needs of international students (Wu, 2015); and only a few have studied it from both points of view. A good example is Claudia P. Nieto's study, where the author has explored the relationship between cultural competence and the learning of foreign students (Nieto, 2019).

Summing up, the review of the literature has shown that there are no prepared answers to the questions such as: What is the role of integration in forming the professional culture of a foreign language teacher? What does the professional culture of a foreign language teacher currently mean in the context of international and global education? What is the role of foreign students in its formation?

Therefore, the purpose of the present academic paper lies in understanding the place and role of a foreign language teacher in the process of integrating foreign students with a foreign language of instruction in order to find out the difficulties of teachers when working in a multicultural classroom, as well as to reveal what difficulties foreign students face in the process of integration with the educational environment of the Ukrainian university and points of convergence and divergence in the perception of teachers and students of learning a foreign language.

3 Materials and research methods

In the present academic paper, a research inductive approach was applied. It was aimed at identifying the challenges faced by teachers when teaching English as a foreign language in a multicultural classroom, the difficulties faced by foreign students in learning a foreign language, the points of convergence and divergence in the perception of teachers and students of learning a foreign language at university and essential elements of professional culture of a foreign language teacher in the context of integration of foreign students into the Ukrainian academic environment. The questionnaire is considered the most appropriate tool for the research, forasmuch as it may provide with an understanding of the issues faced, make maximum use of respondents' time, and facilitate data analysis.

Quantitative analysis of the data was carried out by applying a descriptive statistical method and calculating reiterations of participants' answers to closed-ended questions, critical analysis and interpretation. Secondly, the qualitative analysis of the participants' answers to the open-ended question and their comments was carried out by means of their classification, definition of general models and topics in the answers, grouping and their coding. The descriptive statistical method was used to quantify frequencies and critically analyze them. The analyses helped answer research questions 1 and 2. Next, Stage 2 also involved the analysis piece, which connects to the results identified in stage 1, using the correlation method and the comparative method in order to answer research questions 3 and 4.

The research was conducted online among students and teachers of the "Kyiv-Mohyla Academy" National University. Two groups of people were involved to collect the data for the present research. The survey involved 31 foreign language teachers teaching English at the university and 63 foreign students studying under undergraduate programs. All respondents voluntarily participated in the survey; they were informed of the purpose of the reach and guaranteed anonymity.

Teachers have been teaching at the university for several years, and their teaching experience has ranged from 2 to 25 years.

Among the participants, 2 (6,5%) teachers were men and the other 29 (93,5%) were women. They all had experience teaching in a multicultural classroom. Some respondents taught academic groups, which consisted mainly of domestic students and a few foreign students per semester, and some taught multinational academic groups, which included only foreign students.

A group of foreign students, participating in the survey, involved 63 students studying for a bachelor's degree at the Department of International Relations of the Institute of Humanities. Of these respondents, 39 (62%) were first-year students, and 24 students (38%) were in their second year of study. Participants were from different countries, among which Asian countries predominated. Among first-year students aged 18-24, there were respondents from China (59%), Turkmenistan (28%), Uzbekistan (10%) and Kyrgyzstan (3%). Second-year students aged 19–27 represented China (88%), Jordan (4%), Equatorial Guinea (4%) and Tajikistan (4%).

In order to address the research questions outlined, a survey was conducted, in which two questionnaires were developed, namely: one for teachers and the other for foreign students.

The questionnaires consisted mainly of multiple-choice questions and 1 open-ended question; by the way, most of the multiple choice questions included a multiple answer option and contained a "Comments" or "Other" field; consequently, the respondents could share their viewpoint or opinion on the issue and indicate their option. The questionnaires included similar questions for teachers and international students in order to explore interesting questions from both perspectives. This helped identify points of convergence and divergence in the perception of teachers and students of foreign language learning at the university, the problems they face in the process of teaching / learning a foreign language and their causes, as well as possible ways to solve these problems, which would facilitate the process of learning a foreign language at university and make it more effective. The questionnaire for the faculty was compiled in Ukrainian and English; it contained 9 questions and included 6 thematic sections, in particular: the respondent's experience in teaching in a multicultural classroom, a synopsis in English, effective ways of teaching English in a class, problems in teaching foreign students, the importance of the cultural aspect in teaching foreign students, possible ways to improve the proficiency of foreign students at English lessons. The questionnaire for foreign students was compiled in three languages, they are Ukrainian, Russian, and English, in order to avoid misunderstandings or misinterpretation and to maximize the reliability of the data obtained.

The need to use questionnaires in several languages was determined by the results of a screening test conducted at the beginning of the school year, which showed that the majority of foreign students did not pass it and had an insufficient level of English proficiency. Therefore, it determined the need to use questionnaires in several languages. Students from the countries of the former USSR, that is, Turkmenistan, Uzbekistan, Kyrgyzstan and Tajikistan, received a questionnaire in Russian, forasmuch as their proficiency in Russian was at the appropriate level. Students from Jordan and Equatorial Guinea mastered English at a sufficient level; consequently, they were offered a questionnaire in English. The questionnaire consisted of 10 questions and included 6 thematic sections as follows: motivation to learn English, a synopsis in English, effective ways of teaching English in a class, problems and challenges in the process of learning English and their causes, the importance of the cultural aspect in training foreign students, possible ways to improve the proficiency of foreign students at English lessons.

An online survey was applied to collect data using Google Forms, which is an efficient and convenient tool for data collection and processing. E-mail was distributed to 32 teachers, thirty-one completed set of answers was collected; that is, the response rate is 97%. The data obtained are displayed in a Google Spreadsheets. The level of filling in the questionnaire was 95%.

The data analysis was focused on the analysis of quantitative and qualitative data in closed and open questions, addressing two issues, in particular: issues faced by teachers in teaching English as a foreign language to international students; problems and challenges faced by foreign students while learning a foreign language.

These results helped identify the problematic areas faced by teachers and foreign students in the process of teaching / learning English as a foreign language at the university, and to answer the research questions.

4 Results

The present survey was conducted in groups of students studying English in higher educational institutions of Ukraine.

The results of the survey revealed the importance of learning English for foreign students: about 90% of respondents indicated this viewpoint. However, the reasons that motivated the students were different: the majority of students, about 73%, studied English for their future careers; about 50% justified their motivation by meeting the requirements of the university curriculum. It is worth noting the interest of students in learning English: about 35% chose the option "I'm interested in English / learning English".

It is important to emphasize that interest did not diminish over time: first- and second-year students showed approximately the same results. However, there were students with low motivation: about 8% of respondents noted that if they had the opportunity, they would not study this subject, and 6% claimed that they studied English mainly through the will of their parents (Table 1).

Table 1 – The level of students' motivation to learning English

Question	Answers	Quantity (percentage)
Is it important for you to learn English?	Important	56 (89%)
	Not important	1 (2%)
	If I had the chance, I would study the language	5 (8%)
Why do you study English?	I must meet the requirements of the curriculum	28 (44%)
	This is important for my future career	46 (73%)
	I'm interested in English / learning English	22 (35%)
	My parents force me to do this	6 (9.5%)

Source: Developed by the authors

The above data showed the importance of learning English for foreign students. Most students were motivated by a future career, which can be characterized as both instrumental and integrative motivation: getting the best opportunities for work, communication and integration in any environment.

A significant number of students chose a purely instrumental and external motivation: compliance with the requirements of the curriculum and the will of parents. A significant percentage of students were intrinsically motivated, claiming that they were interested in learning English. It should be noted that while answering the above question, students could choose several answers: in some cases, students chose two or three factors that had motivated them. In general, the research revealed that the foreign students under study were more instrumentally motivated, which, on the one hand, is good due to the high level of motivation and their focus on getting better career prospects. On the other hand, the predominance of this type of motivation could have possible negative consequences for the educational process: due to the fact that students with motivation of tools realized the importance of language, they did not make as much effort, nor they spent that much time on learning the language as compared to the internally motivated students.

According to the survey, one of the most pressing basic challenges is that the proficiency level of English with foreign students did not correspond to the English language curriculum of the university. In order to find solutions to this and some other problems, both teachers and students were offered several options on how to improve the situation (Table 2).

Table 2 – Possible ways to improve the process of learning English for foreign students from the perspective of students and teachers

Question	Answers	Students	Teachers
What would you be willing to do in order to improve your English learning process?	Individual communication with the teacher	17 (27%)	11 (22%)
	Participation in a conversation club	38 (60%)	15 (29%)
	Participation in various events dedicated to British culture	39 (62%)	15 (29%)
	Doing more homework	7 (11%)	1 (2%)
	Conducting an additional distance learning course in English	7 (11%)	9 (18%)

Source: Developed by the authors

Students and teachers emphasized the importance of developing speech and communication skills through organizing a conversation club and organizing events dedicated to British culture. Such agreements for students can be useful forasmuch as representatives of different cultures will be attracted; this will force them to communicate and work together, preventing them from communicating with each other. Consequently, this will help them communicate more with domestic students and foreign students from other countries (Gardner,1972). It is of interest to note that students, who previously had noted speaking as a problem area, expressed a desire to improve this situation. However, they also found the necessity to interact with the teacher in a one-on-one format by participating in an individual interview.

5 Discussion

The data obtained, as a result of the survey conducted, gave an idea of the role played by the professional culture of a foreign (English) language teacher in the context of the integration of foreign students into the academic environment.

First of all, the research has clearly shown that teachers and students' perceptions of several issues, such as the level of complexity of the English curriculum and aspects of its adaptation, the most interesting and effective forms of work, the importance of cultural features, etc., differ significantly. This discrepancy has proven that an important element of the teachers' professional culture is the ability to critically and unbiasedly assess the needs and features of each academic group. Although being an expert in this field and possessing extensive experience, the teacher must have a certain amount of self-criticism in order to be able to understand the foreign students' needs, compare them with his / her own experience and develop a productive form of work based on a modern context.
Another important aspect of the foreign language teacher's professional culture was the development of skills to determine the motivation of students in order to understand its nature and be able to use it correctly, organizing the effective academic integration of students. The ability to distinguish between different types of motivation, awareness of the relationship between its types and to distinguish the dominant in the student is of vital importance. Based on the survey data, teachers should influence students using a combination of approaches when aiming to achieve the desired outcomes (Mahadi, 2012). In order to stimulate instrumental motivation, the teacher should emphasize the possible positive results of learning a foreign language, as well as inform students about the requirements of the curriculum (they will not acquire knowledge in these disciplines unless they learn and speak decent English); in order to encourage intrinsic and integrative motivation, the teacher should provide information focused on the future profession of students, provide additional and more complex tasks for those students who seek to master English, etc.

Information about the language, providing a critical assessment of the knowledge level by foreign students and the correspondence of the curriculum and the requirements for their abilities, is another important point of a foreign language professional culture of a language teacher. Ignoring by teachers the problem of mismatching the students' knowledge level and requirements can lead to insufficient participation in the lesson, lack of motivation and interest, a high level of absenteeism, failure to complete home and class assignments and, as a result, lack of productivity, which, in general, leads to the student's inability to integrate into the academic environment in the field of learning English. The results of the survey have showed that, despite the fact that the level of the current English curriculum was appropriate for foreign students, teachers were aware of the importance of its adaptation. Most did not recognize the importance of adapting tests and tasks, consistent with the results (Unruh, 2015); they would rather adapt classroom activities. The results of the research have revealed that, in general, teachers tend to underestimate the problems faced by foreign students, especially in comparison with domestic ones; their academic needs can often be disregarded; consequently, teaching seems to be organized with a focus on domestic students or uncultured, as formulated in the scientific work of some scholars (Almazova, 2016).

Measures such as conducting diagnostic work in order to understand students' weaknesses, spending more time explaining the format of homework, tests, project work, more time spent on training with exam materials, etc., may at least reduce stress and anxiety among students and promote more productive work (Rubtsova, 2018).

In the context of the above conclusion, tolerance and patience in case of poor academic performance would lead to discrimination of the students on the basis of poor proficiency in the field of a foreign language. In this context, the most useful measure is the individualization of the language learning process, emphasizing the intellectual abilities of each student and the uniqueness of the thought and way of thinking of each student, which according to (Benediktsson, 2019), leads to the successful development of students' communicative competence, despite the primary level of students' language proficiency.

6 Conclusions

The ability to identify the most problematic aspects in the process of learning English objectively plays a decisive role in the integration of foreign students into the academic and social environment.

As the research has shown, the teacher, when working with international students, should pay special attention to the development of such perceptive skills as listening, problems with which may not be as vivid, but can negatively affect all learning and integration processes due to the inability of students to understand both the learning material and the teacher's instructions.

According to the research conducted, the ability to critically assess the forms of work used by the teacher and choose those that may be difficult to implement, but effective for the academic

and social success of students, can play a crucial role in the process of students' international integration. An example of this is group work, which, according to the survey, was desirable for students – respondents and much less appreciated by teachers – respondents. Their desire to participate in group work proves their willingness to communicate not only with representatives of their culture, but also with others. After all, due to the low level of language proficiency, foreign students tend to communicate with their compatriots, forming an isolated group.
Although the group work may seem challenging, it helps achieve several goals at the same time: (i) giving international students more time to think, (ii) giving them a wider range of ideas and opinions, and (iii) reducing stress and anxiety, forasmuch as the student has support and is less afraid of making mistakes and completing the task, achieves self-organization, (iv) providing mutual assistance, (v) helping representatives of different cultures to work together, providing them with the opportunity to communicate in real life in a foreign language – the language other than the mother tongue, or in other words, preventing them from communicating with each other in their local languages. The formats of role-plays and discussions, as well as project work, are much more effective and desirable for international students than teachers tend to think.

Another important quality that a foreign language teacher should develop when working with foreign students is the ability to involve foreign students in the discussion and in the lesson, in general.

Both students and teachers consider lack of language proficiency as the biggest obstacle to attracting international students to the discussion.

An integral aspect of the foreign language teacher's professional culture is cultural awareness and the ability to apply this awareness in practice. This idea does not imply the need for detailed knowledge of all cultural features, but rather an awareness of differences in educational practice existing in other countries, differences in behavior and taboos based on religious views, etc.

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Primary Paper Section: A

Secondary Paper Section: AM

TRANSFORMATION PROCESSES IN NON-FORMAL EDUCATION: A PROJECT OF INTERREGIONAL COOPERATION OF THE UKRAINIAN OPEN UNIVERSITY OF POSTGRADUATE EDUCATION

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Abstract: In the context of reforming the Ukrainian educational system and integration of Ukraine into the European educational space, the need for the development and implementation of modern approaches to the organization of educational institutions of different levels is actualizing. The principles of non-formal education are revealed through a project of interregional cooperation for professional development of teachers. The project is considered as a form of social interaction based on openness, accessibility, horizontal ties and attitudes, during which a community of progressives educators is formed. They are able to respond to modern challenges and radically change educational approaches to their own learning and their professional mission. The results of the first diagnostic stage of the project of interregional cooperation on professional development of teachers are presented.

Keywords: Adult education; non-formal education; postgraduate pedagogical education; distance education; pedagogical workers.

1 Introduction

Education as a phenomenon is the result of changes in socio-economic development, and at the time is both the initiator and stimulator of these changes in various spheres of life. The course of the COVID-19 pandemic revealed a set of problems in the education system in Ukraine, exposed the sharp contradictions in the professional development of teachers, namely:

- despite a long period (over 20 years) of training teachers for the introduction of information technology it failed to provide full distance learning of students;
- urgent restructuring of the institutions to which the in-service training of teachers has been delegated has shown a lack of readiness to respond to societal challenges.

These contradictions determine the need for the development of adult education in the format of open education.

We are witnessing how modern society is losing the properties of stability, balance and stability demonstrates nonlinear tendencies in conditions when virtual reality becomes a space of socialization of an individual (Vlasenko, 2014). Global change is evolving at an extraordinary rate, so traditional strategies for building educational activities do not meet the challenges of such a contradictory time. In order to respond effectively and in a timely manner to changes in society, we need new knowledge, new theoretical attitudes, and ideas, a new modern methodology of education, that would correspond in a complex to the level of modern human development.

From the plurality of real objects we focus on the inconsistency of the traditional content of the professionalism of the teacher, formed on the verge of the XX-XXI centuries, the requirements of the information society. Therefore, we highlight the possibility of developing a modern project of interregional cooperation for the professional development of teachers in the system of informal education of adults, based on the requirements of education customers for the prospect of social transformations. The project must take into account the laws of dialectics, according to which new knowledge contradicts outdated forms of its translation in professional activities and, despite the traditionally established indicators, determines the entry into a new plane of solving problems on the quality of education at all levels, based on synergetic approach, theory open systems, educational management.

2 Literature review

The general nature and dynamism of nonlinear worldviews are faced in the duel with the traditional thinking of most educators who continue to profess a linear approach, in particular, in the system of postgraduate education (Kyrychenko, 2017). Since the need for nonlinear methodological attitudes depends on the level of development and goals of cognition, and with the discovery of complex and evolutionarily unstable systems the general scientific nature of the nonlinear educational paradigm is realized, thus the general nature and dynamics of nonlinear worldview in modern science are associated primarily with the theory of self-organization and based on this worldview (Snehirʹov, 2014).

The philosophical basis and prerequisite for nonlinear processes in education is a synergetic approach, developed on the basis of the term "synergetics" proposed by the German physicist G. Haken (2003). (from the ancient Greek – "joint action"). Thus, we proceed from the fact that the development of modern non-formal adult education is based on a synergetic approach and, according to research by O. V. Vozniuk (2012), is characterized by the following manifestations as openness, distance learning throughout life, integrity.

George Siemens (2005), as the founder of the theory of connectivism, expressed the idea that learning in the modern world should change significantly because the old theories (behaviorism, cognitivism, constructivism) were developed in the "pre-technological" era, therefore, in the modern world, many students will move in different, possibly interconnected, fields of knowledge throughout their lives.

Researchers believe that informal learning is a more widely used term than non-formal learning, and is often used to refer to both, and they can also be separated from each other (Pienimäki et al. 2001).

In our study, we consider the possibilities of adult education in the system of non-formal education as a way to go beyond the usual traditional postgraduate education that has prevailed for many years in Ukraine and does not meet modern challenges for professional development of adults, including teachers.

The development of non-formal education is important for our state. Thus, the experience of Lithuania (Zemaitaityte, 2017) can be useful for us, where the development of non-formal adult education is actively taking place, the main functions of which are to provide knowledge and understanding necessary to adapt to constant changes in society, labor market and human life and help adults choose the education that best meets their needs and gives them a choice.

Non-formal learning is an important aspect of our experience (Barton et al. 2021), and formal education does not include all learning experiences because learning is a continuous process that lasts a lifetime; learning, activity and work are now closely interlinked; "know-how" and "know-what" are now supplemented by the concept of "know-where" (understanding where to find the necessary knowledge) (Kartashova et al. 2020). In particular, these theses are the basis of distance education, where each teacher has the opportunity to access advanced training courses, study remotely in a convenient place and at a convenient time.
In our study, we relied on the theoretical developments of researchers (Hallinger, & Kovačević, 2019; Castillo, & Hallinger, 2018) in the field of education management and used their experience in developing a project of interregional cooperation to improve the skills of teachers. Attempts have been made to model the individual educational trajectories of customers of educational services on the basis of educational profiles to improve the skills of teachers (Crouch, Kaffenberger, 2021).

Studying the educational systems of the European Union, S. Sysoyeva and T. Krystopchuk (Sysoyeva, & Krystopchuk, 2012) note that postgraduate education in the European Union, in particular, Bulgaria, Poland, Romania, Slovakia, Slovenia, Hungary, the Czech Republic, covers a wide range of problems: from professional development to work in various fields, for professional training, retraining and advanced training of the temporary unemployed. Postgraduate education in Spain is an additional 2-3 years of study (in some higher education institutions more). We emphasize the existence of two opposite trends. On the one hand, both the Bologna Process and the Copenhagen Declaration of European Countries provide for the creation of European education with uniform principles and requirements for the unification of educational structures in these countries. On the other hand, the strategy and decisions are based on the real experience, traditions and potential of the educational systems of the European Union, and unification does not deprive them of their national identity.

In the conditions of open education there are actual systems of management of training on the basis of information technologies – LMS (Learning Management Systems). On this basis, the Ukrainian Open University of Postgraduate Education was created (UOUPE, 2021). LMS is used to develop and disseminate educational materials and work with them in the educational process. The components of the LMS are individual tasks, tests of various types, initial projects for work in small groups, a variety of text and multimedia manuals that provide the formation of an individual trajectory during training (UOUPE, 2021). Access to them, subject to open education, should be free not only for representatives of the institution, but also for representatives from different regions (Kartashova, 2020; Prenger et al. 2019).

The purpose of the research is to reveal the principles of non-formal education on the example Ukrainian Open University of Postgraduate Education. The task of the research is to develop a project of interregional cooperation for professional development of pedagogical workers on the basis of project-transforming nonlinear paradigm and reflexive-positional approach. And present the results of the first diagnostic stage of the project of interregional cooperation on professional development of teachers are presented.

2 Materials and research methods

The pedagogical research under consideration is carried out within the framework of research work of the Department of Philosophy and Adult Education of the Central Institute of Postgraduate Education (CIPE) of the State Institution of Higher Education “University of Educational Management” (SIHE “UEM”) of the National Academy of Pedagogical Sciences of Ukraine “Transformation of professional development of pedagogical and scientific-pedagogical workers in the conditions of open university of postgraduate education” (state registration number 0120 U104637) (2020–2025). To implement the diagnostic stage of the project of interregional cooperation “UOUPE”, which took place from 01.01.2020 to 31.12.2020, were conducted studies and analyses of the literature, regulations on the problem of teacher training in the context of non-formal education; diagnostics of teachers and identification of problems in the process of professional development of teachers in the conditions of “UOUPE”.

We used methods analysis and synthesis – for the purpose of complex study of organizational and managerial, psychological and pedagogical, scientific and methodological factors of professional development of teachers as consumers of educational services in an open university; content analysis of legal documents in the field of adult education, continuing pedagogical education, educational and scientific-methodological support of professional development of teachers as consumers of educational services; SWOT-analysis of existing systems of professional development of teachers as consumers of educational services, clarification of positive and negative aspects of non-formal education, achievements and shortcomings in the learning environment; psychological and pedagogical diagnostics (interview, survey, questionnaire, testing).

3 Results and discussion

At the theoretical and declarative level the andragogical model of adult learning has been developed and implemented for several decades, at the level of practical implementation, the approach of information cramming continues to dominate, without identifying and taking into account the practical needs of adults. In response to the mentioned above social challenges, the Ukrainian Open University of Postgraduate Education (hereinafter “UOUPE”) is the first self-governing (autonomous) educational institution type of a distributed university in Ukraine (UOUPE, 2021). Nowadays, the relevant and demanded by the pedagogical community purpose is opening the possibility of having access to refresher courses for those who wish to learn remotely in a convenient place and at a convenient time.

The University, on the basis of interaction of formal, non-formal, and informal education, provides: bringing the content of postgraduate and adult education in line with European educational standards and digitalization of society; modernization of educational infrastructure; development of educational and methodological support for the activities of postgraduate education institutions; introduction of innovative approaches to the continuous development of the specialist's personality (UOUPE, 2021).

In particular: the university has the resources to serve an unlimited number of students regardless of their place of residence; virtual departments accumulate participation in the educational process of scientists and practitioners of different fields of knowledge, different educational institutions; distance learning is accessible to all and provided with modern information support; personal account allows anyone to become a registered listener and choose a personal training profile; the student can monitor the process of their own development in the educational environment, has the opportunity to use innovative author's electronic resources developed by teachers and scientists of university departments; continuous development of professional competencies is provided (Kyrychenko et al 2020).

The project of interregional cooperation is developed as a form of social interaction based on openness, accessibility, horizontal connections, and attitudes, during which a community of progressive educators able to respond to modern challenges and radically change educational approaches to their own learning and professional mission is formed. The project is implemented on the basis of effective communication processes, diversification of educational activities, community design, coordinated teamwork. Designing various cases for the implementation of individual trajectories and the implementation of technology scientific and methodological accompaniment provides support for the subjective activities of teachers, promotes the formation of new professional behavior. The individual trajectory merges in the process of interaction of all project participants and grows to a new level (Sorochan et al. 2013).

The stages of the project and the terms of their implementation are presented in the previous work (Kyrychenko et al. 2021).

The trajectory of creating open information content “UOUPE” is built with the following principles of open education:

openness and accessibility: “UOUPE” open information content has opportunities to attract customers of educational services of the general public, including key stakeholders; the ability to interact and communicate off-line (educational environment “UOUPE” (UOUPE, 2021)) and on-line (BBB, chats educational environment);

flexibility and adaptability: opportunities to adapt to changing environmental conditions (including in the context of the coronavirus disease 2019 (COVID-19), to significant educational transformations (distance education, online education); flexible educational system (freedom of choice of forms and content of education, depth and scope of the program of advanced training of educational services, duration and pace of education);
globalization: free functioning in the world educational community of non-formal education (“UOUPE”);

economic efficiency and competitiveness among price proposals: the educational result is achieved with less, compared to traditional training, time, money; economic supply is competitive in the market of educational services.

The essence of the organization of activities within the project of interregional cooperation is presented by us in the form of a model (see fig. 1). The umbrella model covers and unites the main segments of the interregional cooperation project: problem-based, managerial-organizational, design-constructive, result-reflective.

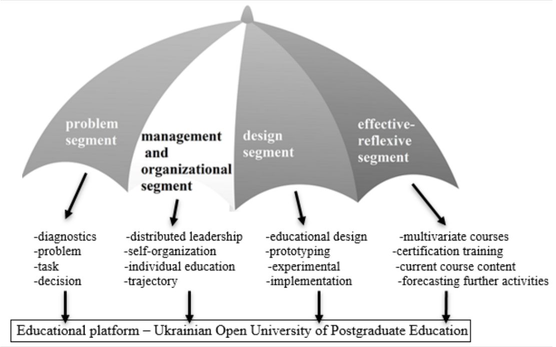

Figure 1 – Model of organization of interregional cooperation in "UOUPE"
Source: Developed by the authors

Perhaps this indicates that educators do not have the means that are already available to them. As an example, we can cite the situation with distance learning: all the means to implement online learning were available, but only in a pandemic was there a willingness to master these necessary tools. However, sometimes it may happen that the teacher does not have or does not have the means to implement a problem, then you need to organize innovative work and introduce innovations.

We conducted a SWOT-analysis of existing systems of professional development of teachers as consumers of educational services to clarify the positive and negative aspects of learning conditions in non-formal education as well as achievements and shortcomings. The SWOT-allows to look at professional development in non-formal education comprehensively, analyzing external and internal factors, and further generate strategic alternatives that combine the factors identified in the previous stage.

SWOT-analysis was conducted in several successive stages: collection of analytical information; analysis of internal and external factors, identification of strengths and weaknesses; comparison of strengths and weaknesses and external factors; identifying key actions relevant to opportunities, threats and weaknesses. The time of their implementation was distributed, as well as those responsible for the implementation and implementation period. The shortcomings of the SWOT-analysis, namely the subjectivity of the indicators, were taken into account when compiling the analysis. It should be noted that the comprehensive assessment was conducted not by one person, but by a group of experts and the entire team of authors of the article, as group discussions, exchange of ideas provide an opportunity to make the analysis more accurate and in-depth.

A total of 80 respondents were involved in the study, which was divided into four focus groups of 20 respondents each. And the fifth group – a group of experts, which involved 3 representatives from each of the four focus groups, analyzed the factors and assessed the correspondence in points for each factor. Among the participants of the focus groups, heads of educational institutions and pedagogical workers were evenly represented from different cities of Ukraine, namely: Lviv, Odessa, Kharkiv, Mykolayiv.

By gender, the study participants were:
female – 55 (68,75%);
male – 25 people (31,25%) (see fig. 2).

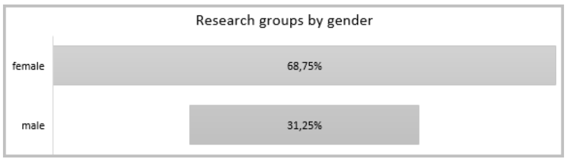

Figure 2 – Gender of study participants
Source: Developed by the authors

In terms of age, they belong to 4 groups (see fig. 3):
up to 35 years – 12 (15,0%);
36–50 years – 35 (43,75%);
51–60 years – 20 (25,0%);
over 60 years – 13 (16,25%).

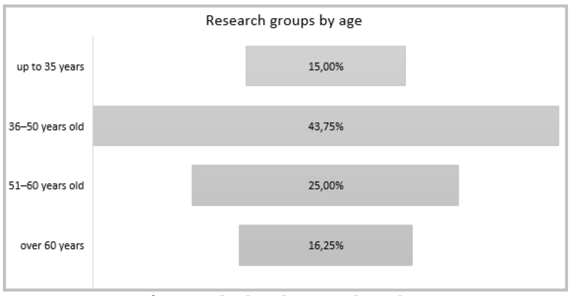

Figure 3 – Age of researched pedagogical workers
Source: Developed by the authors

A questionnaire was compiled for the work, which included questions for the analysis of external and internal factors of the conditions of professional development of teachers in non-formal education. SWOT-analysis is represented by two matrices. The first matrix of the primary SWOT-analysis consisted of generalized results of the work of four groups (Table 1).

Table 1 – Primary SWOT analysis matrix

Internal factors	S – Strengths Individual motivation, lack of coercion Meets the request of listeners Efficiency Choice The opinion and desire of the consumer of educational services are taken into account directly Applied basis and high practical efficiency Opportunity to study at a convenient time	W – Weaknesses Lack of platforms that would combine different forms of non-formal education The discrepancy is legislative, is the problem with the confirmation of the certificate Insufficient funding. There is no clear plan and strategy for the educational process Not all self-organized institutions provide quality content There is no accreditation system for courses, trainings, lectures	External factors
	O – Opportunities Ability to master new forms and information according to your own requests Ability to compare, look at the problem from another angle, look for creative content Improve where you want It is now possible to become a participant in online trainings, conferences, workshops without being tied to a specific place Creating a global human education strategy	T – Threats Opportunity to attend training, the results of which will not be recognized during the certification Additional funds are needed for training Unregulated requirements for the provision of services, as not all self-organized institutions provide quality content	

Source: Developed by the authors

To work on the matrix of the primary SWOT-analysis, a questionnaire was compiled, which contained questions for the analysis of external and internal factors of the conditions of professional development of teachers in non-formal education, which consisted of the following questions:

S – Strengths: What is the constructive advantage of non-formal education? What are the advantages of non-formal education over formal? What do you like about learning in non-formal education?
W – Weaknesses: What shortcomings do you see in learning in the non-formal education system? In what formal education is better? What can be improved in the non-formal education system?
O – Opportunities: What new opportunities are opening up for you in non-formal education? What new global educational trends can positively influence the development of non-formal education?
T – Threats: Can a pandemic negatively affect the development of non-formal education? Did you spend more of your own money on advanced training? Are providers of educational services in the non-formal education system reliable enough?

The fifth focus group – an expert, analyzed the factors and assessed the correspondence in points for each factor. Quantitative evaluation (used from 1-4, where 1 is the smallest value and 4 is the largest value). Based on the work of experts, we selected the factors that appear to respondents as the most important, reflected in high scores (in parentheses shows the total number of points scored by these factors according to experts), based on this study we comprehensively assessed opportunities and threats and weaknesses: where 0 – there is no connection between the factors; 1 – weak connection; 2 – moderate connection; 3 – strong connection (Table 2). During this analysis, possible synergies (mutual influence) between the components of the professional development system in the context of non-formal education were identified. The high assessment indicates a strong impact of the component matrix on the overall system of activities within the project.

Table 2 – Comprehensive assessment of opportunities and threats, taking into account strengths and weaknesses

Internal environment	Environment	Opportunities (0)			Threats (T)		
		O_1 Ability to master new forms and information on according to your own requests (48 p)	O_2 It is now possible to participate in online trainings, conferences, workshops without reference to a specific place (45 p)	O_3 Creating a glob al education strategy (42 p)	T_1 Opportunity to get on training, the results of which will not be recognized during the certification (48 p)	T_2 Additional funds needed for training (48 p)	T_3 Unregulated requirements for the provision of services, as not all self-organized
Strengths (S)	S_1 Individual motivation, lack of coercion (48 p)	3	3	3	0	0	2
	S_2 Efficiency (48 p)	3	3	3	0	0	0
	S_3 Applied basis and high practical efficiency (48 p)	3	1	1	0	0	1
Weak nesses (W)	W_1 Lack of platforms that would combine different forms of non-formal education (45 p)	0	0	3	1	0	2
	W_2 Not all self-organized institutions provide quality content (47 p)	0	0	1	0	0	3
	W_3 There is no accreditation system for courses, trainings, lectures (45 p)	0	0	1	1	0	0

Source: Developed by the authors

Next, after the analysis of factors, which was compiled by the second matrix TOWS – the final stage of SWOT-analysis based on the developments of Heinz Weihrich (1982). Thus, at the intersection of internal and external factors, one can find answers to strategic questions (Table 3).

Table 3 – TOWS matrix

	O (O1, O2, …, On)	T (T1, T2, …, Tn)
W (W1, W2, …, Wn)	WO What weaknesses hinder the use of emerging opportunities? The global trend – deepening interstate cooperation in education, creating a global strategy for human education, regardless of place of residence, educational level – these new opportunities can be used in our country, but may be hindered in particular by the lack of a single platform where everyone providers of educational services could submit their educational proposals, which would allow to see a holistic picture of possible options for qualification and professional development.	WT What are the biggest risks with identified weaknesses? One of the main risks is low-quality educational content against the background of unregulated requirements for educational service providers. There is a significant danger in the freedom gained in the field of professional development – populist curricula appear, which do not provide the necessary quality academic level.
S (S1, S2, …, Sn)	SO How to use opportunities based on strengths? With a high level of motivation for self-development today it is easy to choose the desired forms and content of training. Enhancing the quality of online education makes it possible to choose the necessary courses (training, webinars and other forms) regardless of place of residence.	ST How to neutralize risks using strengths? Strengths do not adequately adjust the risks raised during focus group discussions. But the self-awareness and intrinsic motivation of customers of educational services is a driving force in maintaining quality products and a powerful force in the fight against poor educational content and low levels of teaching.

Source: Developed by the authors

Thus, based on the SWOT-analysis and analyzing the positive and negative aspects of teacher training in non-formal education, we can conclude that the future development of our project of interregional cooperation for professional development of teachers is possible provided freedom selection of models of refresher courses for teachers, development of the content of courses by scientists on an innovative basis to ensure the quality of educational content and continuous professional andragogical support.

To build a personal trajectory of professional development, it is important to help teachers to understand individual needs and formulate personal challenges based on reflection on experience, psychophysiological and cognitive manifestations of personality.

Management and organizational segment of the interregional cooperation project. One of the modern theories of leadership – distributed leadership – is relevant for project management of interregional cooperation. D. L. Bradford and A. R. Cohen (Bradford, Cohen, 1998), the developers of the theory of “distributed” leadership, see the essence of this approach in the fact that in the group that implements the project, it is not necessary to have one, permanent, leader. The project is usually divided into several stages, and each stage requires a certain competence. According to the theory of D. L. Bradford and A. R. Cohen, the most competent individual, becomes a temporary leader, including a coordinator of the group. Upon completion of a specific phase of the project, this interim leader gives way to another member of the group with the competencies that are most relevant to the next phase. In this case, each leader himself becomes subordinate. This process continues until the project is fully implemented. As our experience of professional training of teachers shows, in different regions the leaders are usually representatives of postgraduate education institutions or Centers for Professional Development of Teachers, who know the situation in the region as well as possible.

It is important to single out as a key principle of project implementation – the principle of co-organization. The project unites educators on the basis of common values and meanings of innovation, the vision of holistic approaches to further effective steps in the project and, of course, in the process of co-organization creates conditions for the individual educational trajectory of each project participant. Thus, it is a dynamic system, the feature of which is the process of co-organization, which is achieved through informal cooperation, when all participants take balanced, purposeful, consistent steps together with the initiators of the project to achieve the projected personally significant goal.

The change of traditional forms of professional development of specialists of educational organizations is due to the influence of innovations in the system of non-formal education, which are designed to increase the effectiveness of professional development of specialists in accordance with individual requests. Research of such innovative influence of non-formal education on the activity of specialists of educational organizations is one of the priority directions of our research. Fundamentally new educational transformations in the paradigmatic system of formal and non-formal education are due to the need to respond to trends related to the orientation of the education system and the needs and demands of society. Therefore, alternative informal models of professional development of specialists model the innovation structure, propose a change in the functions of mentors of educational projects, offer new methods and technologies of adult learning and involve educators in effective innovative types of professional development in non-formal education.

In accordance with the diagnostic phase of the project (which took place during 2020), a study was conducted to identify problems and difficulties in the process of professional development of teachers as consumers of educational services in the conditions of “UOUPE”.

The work of specialists of educational organizations in the conditions of social transformations should be aimed at the application of qualification and personal-professional characteristics necessary for the fulfillment of a certain social role in the educational organization (Perevozova et al. 2020). Therefore, in order to act rationally and effectively in the conditions of change, the availability of competencies and skills to carry out effective activities are professionally necessary components of teachers. Pedagogical and scientific-pedagogical workers are expected to carry out their activities in such manifestations – specialists in the field, as active subjects of the educational organization, as members of a single team, as performers of social roles. On the other hand, taking into account the factors of these manifestations, in our opinion, it is important to study the self-assessment of professional and pedagogical motivation in non-formal education. Among the criteria for determining the self-assessment of professional and pedagogical motivation were identified as follows: socio-professional involvement, professional interaction in professional social communities, professional adaptation to change, professional stress, professional retraining in connection with reforming the methodological service, changes in professional communication in the context of digitalization of society, increasing the workload.

A comprehensive questionnaire was used to determine the self-assessment of professional and pedagogical motivation of teachers, namely, a modified version of the questionnaire M. P. Fetiskin “Self-assessment of professional and pedagogical motivation” was developed. The survey was attended by 123 pedagogical workers (employees of methodological services) – potential customers of educational services of the interregional cooperation project for professional development of pedagogical workers. According to the positions, the respondents were divided into two groups: 16,0% were heads of educational organizations, 84,0% – pedagogical and scientific-pedagogical workers (Table 4, see fig. 4).

Table 4 – Characteristics of the sample of researched pedagogical workers

Groups of research by position	Number	Percentage
Leaders	20	16,0%
Pedagogical workers	103	84,0%
Total	123	100,0%

Source: Developed by the authors

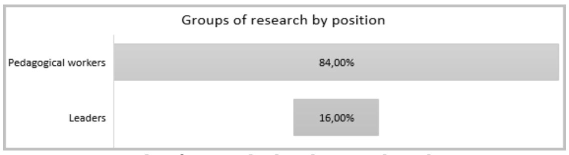

Figure 4 – Sample of researched pedagogical workers
Source: Developed by the authors

In terms of age, they belong to 5 groups (see fig. 5):
up to 30 years – 18,7%;
31–40 years old – 55,3%;
41–50 years old – 14,6%;
51–60 years – 10,6;
over 60 years – 0,8%.

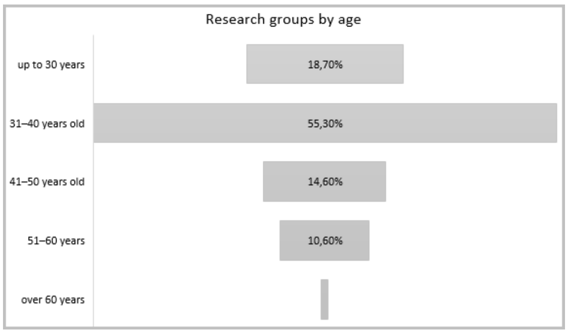

Figure 5 – Age of pedagogical workers
Source: Developed by the authors

By gender, the study participants were (see fig. 6):
female – 80,0%;
male – 20,0%.

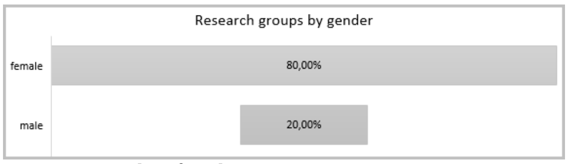

Figure 6 – Gender of study participants
Source: Developed by the authors

The analysis of the results of the socio-psychological survey of teachers allowed to determine their assessment of the state of self-assessment of professional and pedagogical motivation (Table 5).

Table 5 – Analysis of the results of the survey of teachers

Criteria	Positive changes,%	Undefined changes,%	No change, %	Negative changes, %
Socio-professional involvement (participation in non-formal education projects)	52,9	19,0	15,7	12,4
Professional adaptation in the conditions of innovative changes	4,2	67,5	10,0	18,3
Increased manifestations of occupational stress	8,3	47,1	6,6	38,0
Increasing the workload	14,2	38,5	4,0	43,3
Professional interaction in variable social communities	40,0	12,5	40,8	6,7
Changes in professional communication in the context of digitalization of society	56,2	33,1	3,3	7,4
Professional retraining in connection with the reform of the methodological service system	36,7	30,0	22,5	10,8

Source: Developed by the authors

Based on the analysis of the results of socio-psychological survey of teachers found that within the criterion of “socio-professional involvement,” 52,9% of respondents are constantly involved in the interaction of professional experience among the educational community (webinars, social networks and messengers by professional interests); 19,0% – were undecided with the changes; 15.7% of respondents did not change and 12,4% – determined that the changes were negative. The factor of socio-professional involvement in the period of change affects the improvement of both psychological and emotional state of educators and increase opportunities to meet the various professional needs of professionals in the field of experience exchange and professional socialization (especially important in today's reform of methodological service development of pedagogical workers – for future consultants of these centers). We define professional socialization as a process of professional development of a person, which involves gaining professional experience through the acquisition and active reproduction of professional knowledge, skills, abilities, norms, values, patterns of behavior that are necessary for professional activity in educational transformations. Among the answers on socio-professional involvement prevailed: independent search and self-educational activities in the field of specialized pedagogical literature on the introduction of modern educational technologies (both professional periodicals and registration on specialized educational platforms, etc.).

To analyze the criterion of “professional adaptation in terms of innovative change” it was appropriate to update the procedural theory of motivation of S. Adams, developed in the 60s of the twentieth century, which is called “theory of justice”. According to this theory, teachers, engaging in professional activities in terms of modernization and educational change, evaluate this situation from two positions: personal contribution to the professional activities of the organization and reward for personal contribution to the common cause compared to reward for similar work of other employees. Thus, 18,3% of respondents indicate negative changes in terms of adaptation to new educational changes and a sense of injustice leads to the emergence of psychological stress in teachers. In trying to get rid of it, the teacher can act as follows: vary their labor contribution, trying to achieve justice; change the level of own income due to additional income outside the educational institution; to re-evaluate the cost-benefit ratio; to influence the pedagogical worker, who is the personification of the standard for comparison; choose another representative of the organization for comparison; to resign from the educational organization. Each of these factors can manifest itself in one way or another in terms of professional adaptation to innovative changes in the organization. For example, “influencing the benchmark” and “choosing another person to compare” correspond to the mechanism of group resistance to change, when the teaching staff expresses dissatisfaction with those of its members who are too active in innovating in the organization. Only 4,2% of respondents consider their professional adaptation comfortable in the conditions of innovative changes, which indicates a low personal readiness for flexibility and adaptability in conditions of uncertainty. 67,5% of respondents were undecided with changes, and 10,0% had no changes at all.

Within the criterion of “increasing the manifestations of occupational stress”, a significant part of respondents consider the negative consequences of the introduction of changes in the field of methodological service increase the workload and manifestations of occupational stress (38,0%). The increase in workload is associated with: increasing the volume of work on the formation of content and the search and mastery of modern methodology and opportunities for individual trajectory of professional development of teachers with the introduction of various models of professional development of teachers in formal and non-formal education; strengthening of digitization and digitalization of professional activity (especially this factor affects the self-assessment of professional and pedagogical motivation of the age category – over 60 years). In addition, you have to work at a fairly low salary, insufficient level of social motivation to study, insufficient social security. 8,3% of respondents found positive changes in this, 47,1% were undecided about the changes, and 6,6% did not feel any changes.

The previous criterion is closely related to the criterion of “excessive workload” – 43,3% of respondents state negative changes due to excessive workload, which generally affects the socio-psychological mood of teachers, causing them a state of depression, dissatisfaction and irritability. It should be noted that the project of interregional cooperation for the professional development of teachers provides online psychological chat counseling. Emotional stabilization to stressful conditions involves: the ability to understand the real characteristics of stressful situations; ability to link the results of perception processes with coping strategies; availability of information on the subjective effectiveness of the short-term coping result;

availability of information on long-term criteria of successful adaptation to educational changes (physical, mental, social well-being). In this regard, the project of interregional cooperation for the professional development of teachers is considering possible educational proposals to combat stress – appropriate content for relaxation, concentration, autoregulation of mental states. 14,2% of respondents find positive changes in work, 4,0% do not feel changes, and 38,5% of respondents cannot be determined.

On the other hand, innovative changes have a positive effect on the flexibility and adaptability of another category of educators (age groups up to 30 years and 30-40 years) – the criterion of "professional interaction in diverse social communities" (40,0% of respondents said positive changes), Negative changes felt 6,7% of respondents, 40,8% – no changes, and 12,5% of respondents can not decide.

A significant part of respondents are interested in the problems and experience of other teaching staff; independent solution of professional and pedagogical challenges, using the mechanisms of self-directed work and sources of informal education; participate in various non-formal education projects, taking into account individual needs and requests (without pressure from management, on their own initiative). Such data indicate a willingness to communicate and cooperate in a changing environment. Competence in communication is manifested in the ability to go beyond the existing system and rebuild established relationships for professional self-improvement. Thus, the criterion of "change in professional communication in the context of digitalization of society" allowed to identify positive trends, according to respondents, and transformations in the field of communication – 56,2%, 7,4% – negative changes, 3,3% – did not feel any changes, and 33,1% of respondents did not decide on changes. In the context of digitalization of society, most educators have moved to the format of offline communication, including – messengers, social communities, chats, forums, collaboration on documentation using digital technologies, conducting various events (webinars) using online technology support (Zoom, Skype, BBB and others). Such changes in the perception of communication indicate, on the one hand, an understanding of the effectiveness of high-speed communications, which are carried out using digital technology, rather than solving the same professional tasks live. On the other hand, such trends reduce the effectiveness of direct communication to solve professional problems, because the effect of perception, which is important in direct communication, does not have the same effect in online communication.

The established patterns must be taken into account in the process of developing variable models of professional development of non-formal education of the interregional cooperation project for professional development of teachers in the period of transformational changes. Therefore, the criterion of "professional retraining in connection with the reform of the methodological service system" directly affects the educational needs of customers of educational services and the relevance of the implementation in the field of formal and non-formal education of this project. Thus, among the respondents, 36,7% are motivated to professional development and acquisition of the necessary competencies in connection with educational transformations in general and reforming the system of methodological service in particular. Only 10,8% of respondents see this as a negative change, which indicates cognitive rigidity and unwillingness to innovate. 22,5% of respondents did not feel changes, and 30,0% were undecided.

Thus, it should be noted that the transition to the digital space, exacerbated by the effects of the COVID-19 pandemic, increasing the digitalization of the educational process, its content with the latest information does not reduce the role and importance of socio-professional interaction. This requires new approaches to its organization. However, qualitative changes are seen as insufficient in the activities of pedagogical and scientific-pedagogical workers in the field of social relations. That is why, in our opinion, the data show the need to focus on interactive professional synergies in non-formal education (specialized forums and chats on the platform "UOUPE", to provide additional social groups in messengers), which is an active link in personal interaction and to enrich professional experience.

In addition, to study the motives of professional and pedagogical activities in terms of innovative changes, we conducted a survey using the developed author's questionnaire for employees of methodological services – future consultants of the Centers for Professional Development of Teachers (CPDT). 73 respondents took part in the survey (Table 6).

Table 6 – Analysis of the results of determining the motives of professional and pedagogical activity

Motive of professional and pedagogical activity	Yes, %	No, %
The desire to realize their professional potential in the face of innovative change	64,4	35,6
The desire to achieve recognition in the professional community	86,7	13,3
Desire to promote the development of educational innovations	71,1	28,9
Desire to provide new educational services to teachers	57,8	42,2
The desire to promote the development of CPDT as an innovative type of educational services	82,2	17,8

Source: Developed by the authors

Therefore, the results of the survey identified the following motives: the desire to realize their professional potential in terms of innovative change (yes – 64,4% of respondents, no – 35,6%), the desire to achieve recognition in the professional community (yes – 86,7%, no – 13,3%), the desire to promote the development of educational innovations (yes – 71,1%, no – 28,9%), the desire to provide new educational services to teachers, in particular, in the Centers for Professional Development of Teachers (57,8% – yes, 42,2% – no), the desire to promote the development of CPDT as an innovative type of educational services (yes – 82,2%, no – 17,8%). Therefore, by regulating educational services for teachers, CPDT counselors will satisfy their social motives, which are important for the pedagogical community. This motive correlates with self-assessment of professional and pedagogical activity. Personal motives, such as the realization of professional opportunities and recognition in the professional community, are no less important, because they directly affect the development of professional self-awareness of professionals.

Thus, based on the state of self-assessment of professional and pedagogical motivation of educators in terms of educational changes and motives of professional and pedagogical activities, the relevance of the interregional cooperation project for professional development of teachers is beyond doubt, as it is competitive in measuring non-formal education: among the offers of educational services offers a competitive educational product that takes into account the individual needs of consumers of educational services and takes into account the needs of interactive professional interaction of educators in distance / online education and necessarily provides psychological online chat counseling to prevent professional stress.

4 Conclusions

Non-formal education provides a real choice of educational strategies and content to meet the needs of adults, is a real educational space for practice-oriented, socially meaningful renewal of professional knowledge.

It is impossible to prepare a manual with ready-made recipes for various pedagogical situations that arise. The present time requires from the pedagogical worker subjective activity in his own professional activity. That is why the development of subjective, personal life position and active independent socio-cultural responsible activity is emphasized as the most important in the training of pedagogical workers. Non-formal education should provide opportunities – probably to become a modern educational platform – for social and practice-oriented learning for the effective professional development of the teacher's personality.

The project of interregional cooperation for professional development of pedagogical workers on the basis of the project-transforming nonlinear paradigm and the reflexive-positional approach is developed. The project is considered as a form of social interaction based on openness, accessibility, horizontal ties and attitudes, during which a community of progressives educators is formed. They are able to respond to modern challenges and radically change educational approaches to their own learning and their professional mission.

The nonlinear worldview of adult education helps to scientifically comprehend the phenomena in the educational activities of teachers as consumers of educational services that did not fall in the period of stable functioning of the education system in the field of basic research, including such characteristics of modern life as chaos, order, formation. According to our approach, it is the models of professional development in the system of non-formal education that meet the modern challenges of the irrationally arranged world. The synergetic approach allows transforming a sustainable system of postgraduate education into an active, mobile, constantly changing system of formal and informal adult education on the basis of self-organization, nonlinear thinking, creative design of individual professional development, construction of its various vectors according to the needs of the teacher. professional role in social systems.

Based on the results of the first diagnostic stage of the project of interregional cooperation for professional development of teachers, we identified problems and difficulties in the process of professional development of teachers as consumers of educational services in "UOUPE" and comprehensively studied organizational and managerial, psychological and pedagogical, scientific and methodological factors of professional development of teachers as consumers of educational services in the context of non-formal education.

The next stage of our study will be the modeling phase, which will take place during 2021. Based on the obtained results of the diagnostic stage of the study, we plan to theoretically substantiate and experimentally test the technologies and models of professional development of teachers as consumers of educational services in the conditions of "UOUPE" as a center of non-formal education; to present and substantiate the current methods for monitoring the results of professional development of teachers in terms of "UOUPE"; develop in-service training programs for teachers as consumers of educational services in various transformations (special courses, flash courses, etc.).

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Secondary Paper Section: AM

THE WAYS TO IMPROVE OF THE MEDICAL-SOCIAL EXAMINATION IN THE CONTEXT OF VOCATIONAL REHABILITATION OF THE PERSONS WITH DISABILITIES IN UKRAINE

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Abstract: The ways to improve the medical-social examination in the context of vocational rehabilitation of the persons with disabilities in Ukraine. An approach to the analysis of the activities of medical and social expert commissions has been developed, which, in contrast to the existing ones, considers the results of their work in the context of promoting the employment of persons with disabilities. It also reveals inconsistencies and contradictions between the subjects involved, the elimination of which allows to increase the effectiveness of medical and social expertise. Taking into account the proposals will increase the level of rehabilitation of persons with disabilities and help increase their employment.

Keywords: a person with a disability, vocational rehabilitation, employment, medical and social examination, medical and social expert commission.

1 Introduction

Today, 15% of the world's population has the status of people with disabilities, and this number is steadily increasing due to the armed socio-political and military conflicts, natural disasters, accidents, economic impoverishment, industrial injury, etc. The states around the world are trying to establish an effective rehabilitation system which would provide persons with disabilities the meaningful life and integration / reintegration into society. For example, the Austrian Federal Government aims to provide people with disabilities with special legal protection wherever necessary. This principle encompasses the following measures in particular:

- the preservation of protection against dismissal in line with the Disabled Persons Employment Act; and
- to increase the development of association guardians and patients' advocates [10]. However, there are still stereotypes for this category of citizens in Ukraine.

The problems of the current state of medical and social expertise, both scientific and applied; they are intrinsically linked to the state's social policy for persons with disabilities. In the sphere of medical and social expertise, one of the aspects is the quality of the provision of medical and social assistance, the rehabilitation measures for persons with disabilities, which reflects the state of the health care system and the nature of state's social policy. The basis of the rehabilitation orientation in the activities of medical and social examination institutions (further – MSEI) is the Law of Ukraine "On Rehabilitation of Persons with Disabilities in Ukraine" (No. 2318-VIII of 13.03.2018), as well as the laws of Ukraine "On the basics of social protection of persons with disabilities in Ukraine" and "On social services", National Target Program "National Action Plan for the Implementation of the Convention on the Rights of Persons with Disabilities" for the period up to 2020", etc. [1] and others.

The effectiveness of the implementation of state's social policy in the field of protection of the rights of persons with disabilities, the promotion of their rehabilitation and employment are influenced by the results of functioning of various public institutions. For example, in Belgium when we Identification and diagnosis are carried out in various contexts: as part of health services (consultation of doctors, diagnosis and care centers, hospitals and treatment centers), in connection with health insurance and insurance against accidents at work, road accidents and occupational diseases (by insurance companies, the Industrial Accidents Fund and the Occupational Diseases Fund), and at the instigation of the Ministry of Social Affairs, Public Health and Environment. The Flemish Fund is responsible for screening and registering people with disabilities [10]. But in Ukraine, in addition to persons with disabilities, their associations, employers, the institutional environment is formed under the influence of decisions of the Social Security Fund of the Disabled, the State Employment Service, the Pension Fund of Ukraine, medical and social expert commissions, the State Labor Service of Ukraine, local self-government bodies and trade union committees of employers. After somebody become disabled, the first prerequisite for further vocational and labor rehabilitation is the relevant decision of the MSEI. Its correctness depends on the possible areas of employment, further prospects for a person to realize himself in his work activity.

Given this, it is very important to establish the legislative, organizational, methodological and technical characteristics of the MSEI work in order to ensure the fulfillment by the State of its functions regarding the employment and rehabilitation of persons with disabilities, the characteristics of the MSEI work from the point of view of their quality interaction with other institutes in order to provide the best conditions for employment of persons with disabilities in Ukraine.

The purpose of the article is studying the shortcomings in the work of medical and social expert commissions, the results of which are important in the professional rehabilitation of persons with disabilities and finding the ways to eliminate them.

2 Materials and research methods

The following methods were used to achieve the goal of the work: the theoretical generalization, abstraction, analysis and synthesis to study the development of basic concepts, scientific approaches and to study the features of vocational rehabilitation of persons with disabilities in Ukraine, modeling is used for the construction of structural and logical models of MSEI, structural and functional method we use for the description and explanation of the construction of MSEI system in providing the vocational rehabilitation of persons with disabilities.

3 Results of the research and their discussion

Vocational rehabilitation aims to maximize the ability of an individual to return to meaningful employment. Best rehabilitation practice:

- improves work and activity tolerance;
- avoids illness behaviour;
- prevents deconditioning;
- prevents chronicity.
- and reduces pain and the effects of illness or disability. Effective rehabilitation of work related illness/injury enables employees to return to work more quickly. For maximum effect, medical, social and vocational rehabilitation should occur concurrently rather than sequentially [12].

The beginning of the vocational rehabilitation process is the assignment of the resolution of the medical and social expert commission on professional suitability, which is being included in the rehabilitation individual program of a person with disability.

Scientific publications related to these issues are divided into two groups. The first research group observes the general issues of MSEI activities [3] or analyzes them from the standpoint of the rehabilitation of persons with disabilities, for example, the work of Moisy B. [14]. The second group of publications examines the main directions of state policy in the sphere of employment of persons with disabilities and considers the issue of medico-social expertise accordingly [12]. In view of the diversity of publications which concern to the outlined issues, in our opinion, there is no scientific analysis of MSEI work in terms of vocational rehabilitation of persons with disabilities in Ukraine.

After coming of the persistent disorder of body functions in a person caused by diseases, consequences of injuries or birth defects, that when it interacts with the external environment can lead to a limitation of its life, there is a need to confirm them in the manner prescribed by law. The main normative documents governing the process of recognizing a person with disability are:

1) CMU Resolution No.1317 of December 3, 2009 "Issues of Medical and Social Expertise", that contains [5]:

- Regulations on medical and social expertise (further – MSE Regulations);
- Regulations on procedure, conditions and criteria for establishing disability;

2) Ministry of Health Order No.561 of September 5, 2011 "On Approval of the Instruction on Establishing Disability Groups" [13].

These documents establish the powers of medical and social expert commissions that determine the level of limitation of persons with disabilities' life, including their level of ability to work.

Vocational rehabilitation begins after the formation of an individual rehabilitation program of a person with disability (further – the IRP) and it is an integral part of it. The IPR is developed with the participation of a person with disability within one month from the date of the person's appeal to the MSEI. According to the order of the Ministry of Health of Ukraine "On approval of the forms of individual rehabilitation program for a person with disability, a child with disability and the Procedure for their preparation" [8], this form includes the list of the life restrictions that the person can have.

Domestic medical and social expert assessment of the occupational rehabilitation of persons with disabilities differs significantly from foreign methods of conducting an expert assessment. For example, according to the Law of Ukraine "On the Rehabilitation of Persons with Disabilities" [16], such an assessment is performed by specially created medical commissions, using expert methods. On the other hand, medical commissions in developed countries use standard methods of performing the assessment.

Let's take a look at the main of them, which are used in leading European clinics:

- Barthel adi index allows to determine the mobility and self-care index used by European clinics;
- Functional Independence Measure allows you to determine the basic intellectual functions and the person's ability to perform certain operations – is actively used in practice in the U.S. and the EU;
- Frenchay Activities Index allows you to determine the ability to perform those activities that people with disabilities need – used in many developed countries;
- the Rivermead Activities of Daily Living as an opportunity to assess a person's condition, the possibility of self-care in the broad sense, and domestic activity – is used in many developed countries;
- classification of social and labor rehabilitation according to E.V. Schmidt, T.A. Makinsky, which allows determining the ability to perform certain tasks and the person's dependence on the environment and surroundings;
- Glasgow Assessment Schedule to determine a person's activity level – active use in the United States;
- Brain Community Rehabilitation Outcome Scales also determine a person's ability to self-care;
- RANKIN SCALE is used to quickly determine the degree of physiological impairment and gauge the client's impaired ability to function and vitality [15]

The developed expert methods and procedures allow for an independent assessment of the individual's professional condition. Moreover, it excludes the possibility of subjective influence in forming conclusions about professional suitability.

In Ukraine, the degree of restriction is measured on a three-level scale and includes the restrictions of I, II and III degrees. In this case, a person with disability may have only one limitation, while by the other criteria he will not be different from a person without disability. This information is about the degree of disability, illness, and limitations or restrictions serves as a basis for formulating the recommendations for rehabilitation measures and their implementation, which also includes the vocational and occupational rehabilitation.

In the context of its vocational rehabilitation, the MSEI should do the following:

- to conduct an examination of potential professional abilities;
- to do the professional orientation;
- to provide the recommendations on professional selection;
- to provide the recommendations on training, retraining and advanced training;
- to provide the recommendations on vocational education.

Based on the sequence of actions, which are shown in Fig. 1, we analyze the shortcomings that occur in the implementation of medical and social expertise and their impact on the process of vocational rehabilitation and further employment of individuals and the employment rate of persons with disabilities as a whole.

Each of these steps has specific tasks and requires a coherent action by the subjects to complete them. The primary stage of professional rehabilitation is the important from the point of view of early consideration of the problems of persons with disabilities in order to maximize their health and recovery potential. The primary and diagnostic steps should be preventative. In the early stages of recovery the aim is to reduce the impairment, but the ultimate goal is always to return the individual as near as possible to their previous occupational level of functioning. They restore health using purposeful occupation as the process and as the ultimate goal. Occupational therapy was founded in the early part of this century largely to help disabled war veterans back into useful employment after the two world wars. More recently it has been used primarily to assess personal care needs to allow for a safe discharge from hospital. However, the core skills remain the same. Occupational therapists assess a person's ability to safely manage whatever activities they need to do, and they also use activities therapeutically to improve ability [12].

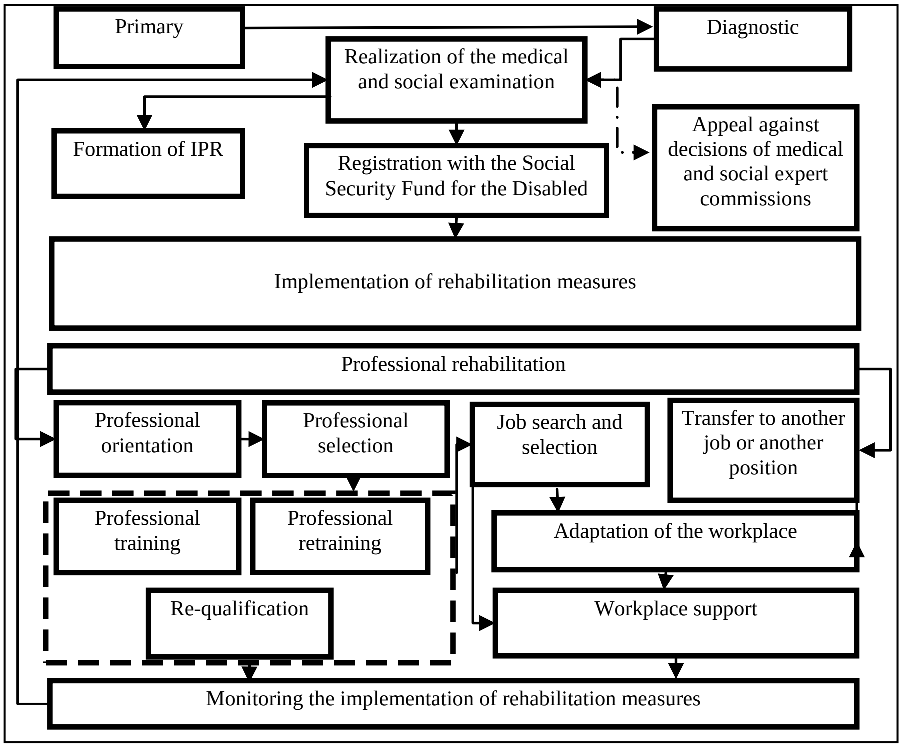

Figure 1 – Generalized scheme of professional rehabilitation process and employment of persons with disabilities

Disability prevention is the implementation of a complex of medical, hygienic, physical, pedagogical, psychological, professional and other rehabilitation measures aimed at preventing the transition of the disease, the consequences of trauma or disability to a person's disability or to reduce the severity of disability. The assessment of rehabilitation results should establish a measure to eliminate the disability constraints of the individual, that is, how effective the measures during the MSE were determined and how the rights of persons with disabilities have been respected. For this purpose, it is advisable to determine the control of the rehabilitation implementation, including professional, as a separate stage. The results of the MSEI realization determine the effectiveness of the whole process of the persons with disabilities' rehabilitation and employment.

In our opinion, there are the following options for influencing the decisions of medical and social expert commissions on the employment of persons with disabilities:

1. Recognizing a person as incapacitated by mistake or in accordance with medical evidence. In the first case, a person with disability has the physical capacity to work, but he is deprived of that right. In the second case, a person with disability cannot work according to the valid disability criteria, however, he seeks to do it and can fulfill his aspirations in exceptional situations and in the presence of special equipment, in other words, in special conditions.
2. Refusal to recognize a person's disability that will reduce a person's chances of finding a job.
3. Superficial study and superficial assessment of the ability of a person to perform various activities. This situation is formed by an inadequate examination of the person in the medical-preventive institutions at the place of residence or treatment of the patient.
4. There is a fixation in an individual rehabilitation program of a limited range of activities or even individual professions that can be performed by a person. In this case, it would be worth starting from the principle that is not forbidden, then allowed. The same opinion is present in the proposals for the improvement of legislative, informational, organizational conditions for carrying out the medical and social expertise and public involvement [9].
So, some authors propose item 31 of the Instructions for Completing the Primary Accounting Document Form №157/o "Act No. ___ review by the Medical and Social Expert Commission", which was approved by the order of the Ministry of Health of Ukraine from 30.07.12 №577 [2] to read in the following wording: "there is specified the indications and contraindications to working conditions, as well as orientation types of work, work or professions, which are not accessible to a person with disability for health reasons in the subparagraph 30.1 of item 30". These proposals have not yet been taken into account in the legislation [9]. It will allow to eliminate the harmful activities for the person, but at the same time not to create the artificial obstacles to his employment.
5. False, unsubstantiated conclusions and recommendations submitted to the individual rehabilitation program, which are mandatory for the execution of the state bodies. Continuing with the previous paragraph, it is worth noting the importance of the MSEI work results for the employment of persons with disabilities. In accordance with paragraph 6 of the MSE Regulation [5]: «Conclusions of the commission, rehabilitation measures, which were defined in the individual rehabilitation program of a person with disability, they are obligatory for execution by executive bodies, local self-government bodies, rehabilitation enterprises, establishments and organizations in which the person with disability works or remains, regardless of their departmental subordination, type and ownership". In addition to the implications of the decisions' impact on the employment of persons with disabilities, there are general aspects of their activities that indirectly affect the employment rate of persons with disabilities in Ukraine. The above-mentioned proposals for improving the legislative, informational and organizational conditions for carrying out the medico-social expertise and involvement of the public, the following disadvantages are noted:

1) the absence of procedures in the MSE Regulations for execution and providing the applicant with the decisions of the MSEI, motivating the decision;
2) the absence of the Regulations on the Central Medical and Social Expert Commission of the Ministry of Health and the Regulations on regional, city, centers (bureaus) of medical and social expertise;
3) the absence of procedure for correcting the erratum in the certificates of persons with disabilities on the results of examination without necessity to go to the court in case of

incomplete identification of information about the person, erratum in surnames, names, patronymics;
4) the inability to contact the MSEI on his own, in case of refusal of the health-care institution in the direction of MSEI;
5) the lack of a comprehensive list of grounds on which a disability group is established without specifying a retest period;
6) unclear issue on the status of MSEI as a subject of public law;
7) it is forbidden to issue an extract from the act of review of the commission to a person with disability, in respect of which the fact of loss of professional capacity has been established;
8) the failure to take into account any disturbances of the body's functions that may occur and which do not require mandatory examination;
9) the lack of communication between the set of rehabilitation measures and the disease and the lack of an opportunity to review an individual rehabilitation program with the advent of the latest technologies;
10) lack of public information on the activities of medical and social expert commissions and poor legal awareness of citizens on this issue, lack of active coverage of issues concerning the relationship between citizens and medical and social expert commissions;
11) insufficient involvement of the public, representatives of non-governmental organizations in rehabilitation issues;
12) insufficient level of communication between the various institutions concerned on the issues of medico-social expertise and rehabilitation;
13) the inaccessibility of institutions, where MSEI functions, for free access to them by persons with disabilities;
14) insufficient training for MSE committee representatives;
15) inadequate attention to the individual disability rehabilitation programs;
16) insufficient financing from the state budget for expenses related to the rehabilitation of persons with disabilities.

Listed shortcomings affect the overall results of medical and social expertise and therefore they are important from the point of view of realization the rights of persons with disabilities for work.

In our opinion, the improvement of the MSEI activities from the point of view of further employment of persons with disabilities can be implemented through the following measures (Fig. 2):

1. communication which are based on improving the interaction and exchange of information between all involved entities.

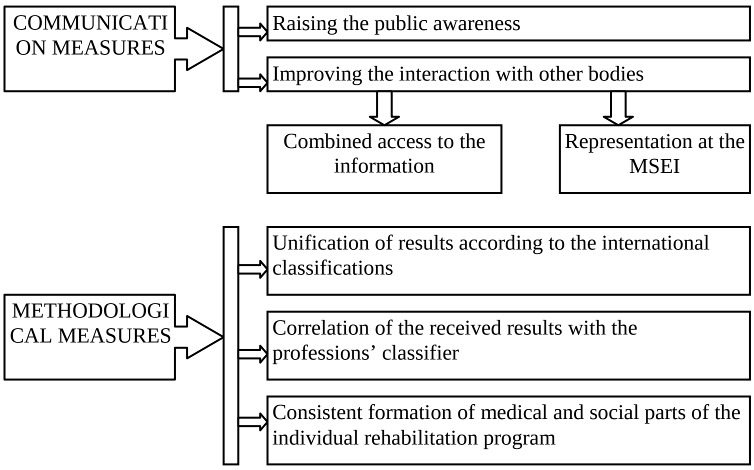

Figure 2 – Measures to improve the MSEI work in the context of professional rehabilitation

Raising the public awareness of the main points of implementation of MSEI, including the impact of its results on the prospects and consequences of further employment.

It should be noted that the coverage of MSEI work is insufficient. The responsibilities of MSEI are indicated in the MSE Regulation, in practice, however, there is no information available the procedure for passing MSEI, the necessary documents, and the procedure for appealing the decision [5]. Therefore, it is important to ensure the presence of the active sites, with updated information, moreover taking into account the capabilities and limitations of the audience to which it is designed;

1.2. Improving the interaction of MSEI with other stakeholders:

- through common access to information concerning the activities of various authorities, for example, to MSEI decisions by employees of the Pension Fund of Ukraine, the Social Security Fund for the Disabled, the State Employment Service. It will simplify the process of obtaining the status of "disabled person" and improve the process of his rehabilitation;
- ensuring the active representation of other bodies in the MSEI activities. In accordance with paragraph 10 of the MSE Regulation, the representatives of the Pension Fund of Ukraine, the State Employment Service and, if necessary, employees of scientific and pedagogical and social sphere take part in carrying out the medical and social expertise.

2. methodological:

2.1. Unification of results according to the international classifications.

One of the steps for such unification is to use the International Classification of Functioning, Life and Health Limitations (further – ICF) [6]. In our opinion, from the point of view of raising public awareness, improving interaction with other bodies, common access to information, representation at the MSEI, unification of results according to the international classifications, Correlation of the received results with the professions' classifier, harmonized formation of medical and social parts of individual rehabilitation program, employment of persons with disabilities, all this will allow to relate the results of the limitations of life activity to the possible spheres of human activity;

2.2. Correlation of the received results with the professions' classifier.

The problem of recording in an individual rehabilitation program of a limited list of professions, of which a person with disability may be engaged in, it can be solved by the abovementioned correcting in normative documents, that will allow to indicate the types of work, professions that cannot be occupied by a particular person. However, in view of the unification of results and the exclusion of arbitrary recording by MSEI experts these or those professions, it is advisable to establish a link between the limitations of the individual and the permissible employment opportunities. Best practice considers the employment requirements of individuals as well as their health and social rehabilitation needs. Occupational Therapists have an important role to play in this. Currently very few posts exist designated to consider the needs of patients on returning to employment. Skilled in activity analysis, they can assist employers and trainers in devising reasonable adjustments to work tasks to enable those with disabilities to be valued employees [12].

In terms of the employment opportunities for a person with disability, the profession which are listed in the professions' classifier can be divided into three groups (fig. 3):

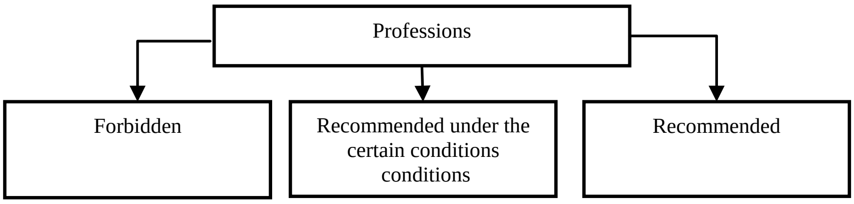

Figure 3 – Grouping professions for recording into the individual rehabilitation program of a person with disability

To the forbidden professions can be referred those types of professional activity that a person with disability cannot perform due to the existing restrictions, or which may be harmful for him or for others. To the recommended professions under the certain conditions, we suggest to refer those professions, groups of professions that a person with disability can perform in the presence of special conditions. To the recommended we can refer those professions that a person with disability can perform under the current restrictions. It should be noted that to the last group is included the professions those which require the additional training and those which do not require such training;
2.3. Consistent formation of medical and social parts of the individual rehabilitation program. MSEI determines not only the extent of a person's disability (medical function), but also forms an individual program of rehabilitation (social). In further employment, the assortment and selection of work options are influenced by both the established medical conclusion and the individual rehabilitation program, that is mandatory for all authorities, local self-government and employers. It should be noted that, in view of the need in society, the Government has developed the Concept of reforming medical and social expertise [11]. The implementation of the Concept is calculated for 2018-2020 period and foresees the improvement of legislation, principles of personnel, financial and logistical providing a system for assessing the level of functioning and social protection.

It should be noted that the above definition does not contain any objectives for the labor rehabilitation of persons with disabilities, unlike item 1 of the current MSE Regulation.

The purpose of the concept is to improve the disability approach by implementing changes based on ICF principles and to use the computer technologies developed by the World Health Organization, to create the holistic rehabilitation system based on a multidisciplinary approach. ICF does not contain the criteria for establishing disability and it does not extend the basis for establishing disability, while it clearly differentiates the prevailing type of limitation of life of a person with disability and objects to the appointment of certain rehabilitation measures and means of technical rehabilitation.

The toolkit for functional, vital and health assessment primarily determines the result of the proper identification of types and spheres of activity for persons with disabilities, which allows to raise their employment rates as a whole.

4 Conclusions

Thus, the article is modeled the place and identified the impact of the decisions of MSEI on the process of professional rehabilitation and further employment of persons with disabilities in Ukraine. This analysis made it possible to identify inconsistencies and contradictions in the work of commissions, as well as to indicate their consequences for the further employment of persons with disabilities. In order to improve the medical and social expertise in this context, it is advisable to carry out a number of communication and methodological activities.

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Primary Paper Section: A

Secondary Paper Section: AN

COGNITIVE LINGUISTICS AND MODERN LANGUAGE PEDAGOGY

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Abstract: In recent years, modern pedagogical science has seen increased interest in the educational potential of cognitive linguistics and its pedagogical effects in foreign language learning. The main method in the study is the experimental method. Analysis and synthesis are used to analyze the theoretical material throughout the pedagogical experiment; the use of observation methods, questioning. The research hypothesizes that the possibilities and conceptual apparatus of cognitive linguistics can be effectively used in language pedagogy while studying foreign languages. The result is a series of findings that a comparison of the students' performance results shows an increase in academic performance and overall satisfaction with the application of new techniques using the tools and characteristics of cognitive linguistics.

Keywords: applied cognitive linguistics, instructed second language learning, prepositions, English prepositions, semantics.

1 Introduction

Teachers and linguists have long discussed the most difficult grammatical and semantic categories to be mastered when learning foreign languages, such as the use of prepositions (Hung et al., 2018a), figures of thought (Ahmad, Samad, 2018), verb tenses, declension of noun forms, learning phraseology and proverbs (Barcelona, 2010) – especially for second language learners (Bruin et al., 2014). One reason for these difficulties is that certain grammatical parameters are simply absent in native languages (e.g., or similar categories are very difficult to define and characterize, such as the semantics of prepositions. In general, the language service parts in English and many others tend to expand and transform forms and meanings that may not be related semantically.

Linguistic research over the last 20 years has argued that the natural ability of the service parts of language to create complex and multi-valued networks, networks of meaning and presence to form temporal, spatial, modal markers, etc. (Ellis, 2015). But the search for methods aimed at facilitating and accelerating the process of learning foreign languages remains relevant. Such techniques, taking into account the research apparatus of cognitive linguistics, should become part of the modern educational space, where quality and speed are valued most of all. It determines the relevance of such research in the language pedagogy space.

Until now, most of the educational and reference literature presents the semantics of prepositions, particles, verb forms, (etc.) quite arbitrarily, without tracing any systematic or semantic connections. Classical linguistic studies have also represented the semantic categories of the service parts of language arbitrarily and insufficiently systematically (Hung, 2019b). As a result, many modern pedagogies for teaching foreign languages suggest memorization as the best strategy. Many researches define this problem even more acutely (Kobayashi, 2018). The results of such developments show the inefficiency of memorization, which learners try to learn last and even with a high level of foreign language proficiency cannot compare with native speakers (Leong, Ahmadi, 2017). Moreover, this is a promising research goal: to develop such techniques, taking into account the possibilities of cognitive linguistics.

Over the last 20 years, the quantitative and qualitative growth of research has contributed to the emergence of a separate field of applied cognitive linguistics (ACL). As a result, a broad research field has emerged in the related field of applied cognitive linguistics and foreign language teaching. The operational capabilities of cognitive linguistics could contribute to quality language teaching and help many dilemmas or problems that are encountered in language learning. Such a hypothesis requires the activation of both theoretical and empirical research concerning such central concepts of cognitive linguistics as radial categories, conceptual metaphor, and conceptual metonymy, semantic prototype, etc. These programs are related primarily to the problems of vocabulary growth, the study of phraseology and tropoeism, phonology and speech, writing, and reading. Attempts are emerging to create pedagogical practices that take advantage of cognitive linguistics (Diessel, 2015; Dzvinchuk et al., 2020).

The modern prospect is a further development of such integrated methods of learning a foreign language also with the involvement of the conceptual apparatus and characteristics of cognitive linguistics, conducting pedagogical experiments under the precepts of new research.

Aims. This research aims to establish the effectiveness of using the learning potential of cognitive linguistics in the teaching of a foreign (English) language.

The aim implies performing the following tasks:

- to establish the level of appropriateness of the use of teaching methodology involving the application of the characteristics of cognitive linguistics in complex cases of learning a foreign language;
- to analyze the results of the experiment to improve the effectiveness of learning foreign languages;
- to establish students' assessment of the difficulties of teaching techniques to improve the effectiveness of foreign language learning.

2 Materials and reseach methods

To conduct research and analyze its results, the descriptive method, analysis, and synthesis were applied. It allowed using theoretical research as a source of information. The main method in the study was the method of the experiment; the survey method was also used. The statistical method was applied to operate the data, to describe and present the survey results through the description of statistics.

42 students of humanitarian specialties, studying a second foreign language (English) were involved in the experiment. All participants in the experiment were combined into 2 groups. These groups used teaching methods that used the characteristics and achievements of cognitive linguistics in foreign language learning. For each group, performance was measured at each stage of the experiment.

All respondents voluntarily agreed to participate in the experiment. Data were provided by participants in the experiment with consent. The research team guaranteed confidentiality, personal information would not go outside the experiment, and anonymity was maintained.

Data collection was conducted from September 2020 to December 2020 at the Kharkiv State Academy of Culture and the Lviv National University named after Ivan Franko, Faculty of Culture and Arts (Ukraine).
The research is planned to be conducted in the III stage. In the first (organizational stage), preliminary testing is conducted to determine the level of knowledge and topics requiring additional consideration, as well as questionnaires and personal data are collected.

At the II stage, the educational process is implemented. The method of learning a foreign language using the possibilities of cognitive linguistics is used. At the end of the II stage, the control testing is also carried out. The research group collects and analyzes the data, which are subsequently used as a guide in the further formation of the learning process. A search for answers to the research questions continues.

At the III (final) stage, students' final control work is carried out and a questionnaire is administered to assess difficulties in the learning process. The data obtained are processed and used in such a way that they can be useful in answering the problematic research questions.

3 Literature review

The possibilities of cognitive linguistics in language pedagogy are the subject of consideration by several contemporary scholars (Kiki-Papadakis, Chaimala, 2016; Chen et al., 2018). Methods for teaching successful speech activities using the arsenal of cognitive and communicative linguistics are being explored (Bayram-Jacobs, 2015; Patil, 2008).

A separate area of research is to determine the role of cognitive grammar in the formation of learning strategies based on the natural approach to foreign language acquisition (Gilakjani, 2016), the role of social networks as part of comprehensive foreign language learning techniques (Dzvinchuk et al., 2020); digital technologies as a supportive component of actualizing the potential of cognitive linguistics in the process of improving communication skills in a foreign language (Sim, Pop, 2014; Rababah, 2020).

Separately, metonymy as a figure of thought and foreign language acquisition processes are explored (Barcelona, 2010), the role of rhetorical mastery in the plane of application of cognitive linguistics capabilities (Bruin et al., 2014; Ko et al., 2013), and ways of learning foreign language phraseology a separate learning technology (Boers, 2001).

The use of methods based on the concept of communicative linguistics has recently been popular in language pedagogy, thus exploring many ways to effectively and quickly master a foreign language at a high level (Holme, 2010; Hapsari, Wirawan, 2018). All these things also allow people to learn how to express their ideas, thoughts, and even emotions.

4 Results

In the course of the research quasi-experiment, several teaching methods related to the possibilities of cognitive linguistics were introduced into the process of foreign language learning. Their effectiveness had to be assessed at the end of the experiment by the students themselves. The control was conducted in 3 stages; the tests and tasks were changed. They were presented gradually, according to the completion of the study of the topic (Table 1).

Table 1 – Methods with a cognitive approach

Groups 1, 2	Test 1	Test 2	Test 3
Methods with a cognitive approach	5-minute guidance with the teacher, 30 minutes of paired work and 10 minutes of testing	5-minute guidance with the teacher, 30 minutes of paired work and 10 minutes of testing	5-minute guidance with the teacher, 30 minutes of text work, 10 minutes of testing

Source: Developed by the authors.

At the I stage, grammatical topics (complex cases of usage, the meaning of verbs and prepositions) were considered. First of all, the organization of conversation in pairs or a small group was made. An important condition was an active dialogue, constantly going on between the participants. Students were also asked to think about different uses of prepositions, to think about their multiple meanings, expand their ability to use the intercensal diatopic seme, and were also asked to consider the role of metaphors in expanding meaning. In our view, the cognitive approach implements a new way of thinking about perceiving and grouping the meanings of prepositions, reasoning about how prepositions are used to make sense of the context. This is a fairly heavy cognitive requirement, but it makes it easier to consider the complexities of learning a foreign language this way.

At the end of Phase I, a test of knowledge and communication skills were administered. It was measured using a 100-point system, and the results were submitted as a ratio (Table 2).

Table 2 – Preliminary test results in the experimental groups (author's elaboration)

	Unsatisfactory	Satisfactory	Good	Excellent
Group 1	10%	38%	42%	10%
Group 2	7%	35%	40%	18%

Source: Developed by the authors.

The results of the preliminary test showed that, despite a fairly high level of English proficiency, the test revealed several difficult places, gaps in knowledge regarding the extended meanings of the use of prepositions, tenses, and verb forms. The respondents scored a total of 50.7 out of a possible 100 points (the range was from 11 to 32 points). There were especially many mistakes in the use of the extended meaning at and Future in the Past Perfect Continuous (an average of 18% of correct answers).

At the II stage of the experiment, the following elements were added to the learning process: teaching new material, the opportunity for students to form their own needs by identifying weaknesses, the opportunity for teachers to constantly rearrange the learning technology, to use the language elements they had learned.

At each lesson, the respondents received explanations and instructions from the teacher on how to work with the learning material. After that, there was work in pairs; everything was focused on the correct use of tenses and forms of verbs, as well as the use of prepositions in various speech scenarios.

At the end of the II stage, there was a control test: students were instructed on the content and rules of the test, worked in groups, and then after a 15-minute break, they performed the test (Table 3).

Table 3 – Test results in the experimental groups at the 2nd stage of the research (author's elaboration)

	Unsatisfactory	Satisfactory	Good	Excellent
Group 1	8%	38%	41%	13%
Group 2	7%	33%	40%	20%

Source: Developed by the authors.

The test results obtained at the II stage show better results than at the previous testing, in general, positive marks became more than 5.5%.

At this stage, topics devoted to speech situations of using phraseology were introduced into the curriculum, the field of meanings and speech scenarios, in which the introduction of phraseological expressions and proverbs is considered. Each session began with a 5-minute explanation and review of charts and tables of meanings, semantic and evaluative connotations, and terms of idioms, followed by work in pairs and groups. At the end of the second stage, there was testing (Table 4).

Table 4 – Testing results in the experimental groups at the 2nd stage of the research (author's elaboration)

	Unsatisfactory	Satisfactory	Good	Excellent
Group 1	5%	38%	40%	17%
Group 2	6%	29%	43%	22%

Source: Developed by the authors.

The final stage of the experiment summarizes the effectiveness of the characteristic's introduction of cognitive linguistics in foreign (English) language teaching. The participants in the experiment showed improvement between the previous tests and the final test. Experiment participants' dexterity in the use of prepositions, verb forms, and English idioms improved, and performance increased by an average of 12%.

The students were tested and evaluated the new teaching methodology and determined the feasibility of continuing practical experiments to develop new instructional technologies involving cognitive linguistics. Answers to questions of the questionnaire – to help students give an informal assessment of their knowledge, priorities in learning a foreign language, the choice of teaching material, the right amount and nature of assistance and participation of the teacher, how it all contributes to improving the practical level of language skills and prospects for increasing the effectiveness of learning.
Responses to the questionnaire questions are presented as a percentage for each group (Table 5).

Table 5 – The final questionnaire of students to assess the implementation of foreign language learning techniques with the capabilities of cognitive linguistics (author's elaboration)

Question	G1	G2
English is a language that is good to learn by working in groups	45%	48%
English is a language that is good to learn by working in pairs	38%	43%
Learning English requires the obligatory participation of a teacher	52%	74%
The most difficult part was learning phraseology and paramiology	62%	58%
The biggest challenge for me was learning how to use prepositions	53%	38%
I had the biggest problem learning the rules of verb forms and tenses	28%	32%
Skills and knowledge in grammar, vocabulary, speaking, listening, reading, and writing affect my ability to engage in dialogue	17%	23%

Source: Developed by the authors.

To better understand how much the respondents are aware of their achievements and benefits of learning with the use of categories of cognitive linguistics, understanding of meanings and processes, such as the system of prepositional meanings, contexts of using idioms and proverbs, specifics of verb usage, this was the purpose of post-testing and questionnaires. Undoubtedly, the students of such a small group are not enough to draw general conclusions. Moreover, all the respondents and at the initial stage, most of the students had a rather high level of knowledge (8.5%), had a sufficient level of metalinguistic awareness, let us assume that this was what made them more ready to perceive semantic nuances and situations of using certain lexemes and idioms in implementing certain communicative situations.

The application of the possibilities of cognitive linguistics in the process of learning a foreign (English) language turned out to be a systematic synthetic process, where the system of meanings, knowledge of communicative communication scenarios, cultural component, and the ability to express correctly, to determine the features of meanings, genre and style are both important.

5 Discussion

In systematic researches (Tyler et al., 2011), the problems of applying the possibilities of cognitive linguistics in language pedagogy are given the following:

Firstly, a systematic motivated account of the range of propositional common meanings, a semantic network, the ability to operate with which greatly reduces the need to learn all variants of the use of, to, for) on memory (Tyler et al., 2011). Successful test scores, on average, improved from the initial phase to the final phase by 11.7%. The current study also had positive results (12% on average), indicating the effectiveness of implementing pedagogical models using cognitive linguistics capabilities.

Secondly, studies of this type (Sohrabi, Pirnajmuddin, 2017; Hung, 2019a) argue that this pedagogical model relies heavily on the experience and intuitive feelings of the speaker; they arise from observation, the speaker's own experience. Thus, it is necessary to rely on the motivational component and participants' assessment of the difficulties of using methods involving cognitive linguistics, the level of satisfaction with such a method within the toolbox of language pedagogy. As evidenced by the results obtained in this study, the greatest difficulties for the respondents arose with the study of the idiomatic level of language, and good practice students see the introduction of cognitive linguistics capabilities when working with the rules of the use of prepositions, forms, and verb tenses. Moreover, in traditional grammar, the whole unordered set of semes can be represented as Gestalt-like concepts of situations, roles, scenarios of linguistic behavior. All meanings are systematically connected, rather than being a series of separate dictionary-type definitions represented by a list.

6 Conclusion

The presented research presents one of many pedagogical experiments, which is another positive step in considering the usefulness of cognitive linguistics-based instructional approaches in language pedagogy. The proposed methods facilitate the teaching of semantic and grammatical features of a foreign (English) language using the apparatus of cognitive linguistics.

The results of the research quasi-experiment indicate that the participants felt progress and positive effects on the application of the features of cognitive linguistics. Even though none of the groups achieved high results or 100%, it can be stated that there was an improvement in academic performance (Group 1 by 11% and Group 2 by 13%) all the more it should be taken into account the limited duration of the experimental method – the academic load is 4 hours per week.

The students were constantly guided by the teachers to explain the difficult points in the study of the foreign language. All respondents had to be exposed to new concepts of cognitive linguistics.

The use of such techniques requires the involvement of professional teachers who work in the education industry and regularly use a foreign (English) language. Their methodological savvy about the means of implicit learning was also part of the successful completion of the experiment and shows that explaining difficult cases and topics in foreign language learning can enable the majority of the students in the group to improve their knowledge.

Also, an important finding is that explanations based on cognitive linguistics in language pedagogy can be a valuable contribution to understanding the use of complex language learning cases in practice, opening up several significant advantages for pedagogically oriented teaching aids over traditional approaches. Further experimental learning projects with respondents who have different levels of foreign language proficiency and linguistic backgrounds (this also applies to English) are to continue to test the reliability of the implementation of methods involving the cognitive linguistics potential.

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THE ROLE OF CREATIVITY IN THE HISTORICAL AND CULTURAL HERITAGE PRESERVATION

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Abstract: One way to preserve historical and cultural heritage is to use a creative approach. Creativity has become an important component of the modern post-industrial knowledge-based economy. The aim of the article is to form a theoretical basis for the implementation of the creative approach to the preservation of historical and cultural heritage. Methodology. The first part of the research is based on the case study as a method for studying the creative practices of museums. The second part of the study is based on the analysis of statistical indicators to assess the risks of cultural and historical heritage preservation. This article uses a combination of interdisciplinary, innovative and inclusive approaches to explain the introduction of creativity in the activities and practices of The Natural History Museum Vienna (2021), The Warsaw museum (2021). The results demonstrate a direct correlation between the quality of life of the population in different countries of the world and the expenditure per person in cultural heritage. The cases of Austrian and Polish museums with different specialization and different public expenditures per person in cultural heritage ($107 and $75.8) are considered. It is revealed that the modern activity of museums goes beyond the classical organization of exhibitions. Museums are becoming centers of research, educational and cultural, scientific activities. Based on an interdisciplinary approach, co-creation is formed. Visitors are attracted using a dynamic approach to the organization of exhibitions, which is integrated into the activities of the museum through digital technology and research activities. Based on case studies and the practices of museums in Vienna (Austria) and Warsaw (Poland), the following basic elements of creativity for the preservation of historical and cultural heritage are proposed: 1) an interdisciplinary approach to research, educational and cultural, scientific activities; 2) an innovative and inclusive approach to exhibition and visitor engagement based on digital technologies as a tool to encourage collaborative creativity.

Keywords: creativity, creative approach, collective art, cultural heritage, historical heritage.

1 Introduction

Cultural heritage is an important element of the existence and development of society, in the context of the implementation of the concept of sustainable development is becoming increasingly important in the context of the preservation of many valuable cultural achievements. Heritage contains various types of works of art, which form the identity and history of the nation and become the engine of sustainable development. The preservation of valuable cultural and historical heritage, the protection of which is an economic, social, historical, cultural process (Ekwelem et al., 2011), is becoming increasingly important these days.

One way to preserve historical and cultural heritage is through a creative approach. Creativity has become an important component of today's post-industrial, knowledge-based economy. It is generally recognized that creativity not only promotes growth, but is also a means of shaping cultural identity, which plays an important role in promoting cultural diversity.

Creative industries and digital technologies have developed rapidly over the past twenty years and are being actively integrated into museums. These trends increase the possibilities of preserving cultural and historical heritage through creative industries that develop creative products and disseminate them to the public (Hani et al., 2012). In the preservation of cultural and historical heritage, the government and museum management involve the society (community), companies and educational institutions. Therefore, innovative management practices are formed, promoting inclusion and co-creation.
The aim of the article is to form a theoretical basis for the introduction of a creative approach to the preservation of historical and cultural heritage.

2 Literature review

It is generally accepted in the academic literature that cultural heritage must be preserved as an important resource for building cultural resilience, reducing the risk of disaster, and maintaining peace and reconciliation in the future. In this research, the author rejects this latter view and instead suggests that cultural resilience, risk-taking, recovery from disaster, and human understanding will be better enhanced by an increased capacity to embrace loss and transformation. Apparent changes in heritage over time can inspire people to embrace uncertainty and absorb challenges during change, thereby increasing their cultural resilience (Holtorf, 2018).

Cultural heritage can contribute to a country's sustainability (Roders & Van Oers, 2011) by improving the economic, social, and environmental performance of a city. However, the literature explores the impact of culture in terms of tourism and real estate impact in the context of the economic component (Nocca, 2017). Cultural heritage as an object of profit is also considered in the context of digitizing the assets of galleries, libraries, archives and museums to form a new value (Terras et al., 2021). The international community, led by UNESCO, promotes the inclusion of culture in a sustainable development paradigm (Roders & Van Oers, 2011). Bennett, Reid & Petocz (2014) present an Art-Sustainability-Heritage (ASH) model that can be used to understand artists' values and actions regarding cultural heritage and permanence. Hani et al. (2012) based on an in-depth interview found several key successful factors of cultural heritage preservation through the activities of the creative sectors: “training and education of art, cooperation with government for international recognition and promotion, cooperation with educational institution, broadening marketing strategy, and making local community are involved in production process”.

Blake (2011) considers cultural heritage in the context of its role in the formation of human cultural identity, the relationship to the notion of cultural diversity, tradition, can negatively affect human rights, the potential of culture to serve as a means of expressing social and political tensions (Blake, 2011). The right to cultural heritage is the basis of its protection, is actively declared in the legislation of different countries. However, the soft legal nature does not provide full-fledged preservation of cultural heritage, requires the search for tools and approaches to solve this problem.

In the literature, the creative approach involves the private sector of the population in order to stimulate the revival and preservation of culture (Della Lucia & Trunfio, 2018). Strategy-based creativity promotes cultural sustainability. According to Della Lucia & Trunfio (2018), there is a “hybridization of urban cultural heritage with creativity and the strategies adopted to engage stakeholders in bottom-up cultural regeneration processes”. Innovative approaches to foster creativity and cultural regeneration contribute to heritage preservation. For example, in the tourist center of the city of Naples, the managerial innovation of the IlCartastorie Museum contributes to the development strategy of the Foundation, aimed at promoting tourism and increasing social inclusion, the organizational value of the actual museum. In Sicily, the socio-economic marginalization of the Farm Cultural Park, Favara envisages the transformation of the park into a creative city based on a strategy of social inclusion and sustainability, involving the private sector and the community (public). Kastenholz & Gronau (2020) define such a strategy as “co-creation”, which ensures not only the prosperity of tourism, but also the active involvement of tourists and citizens in the creative process of heritage.

3 Methodology

The first part of the study is based on the case study as a method of studying the creative practices of museums. This article uses a combination of interdisciplinary, innovative and inclusive approaches to explain the implementation of creativity in the activities and practices of The Natural History Museum Vienna (2021), The Warsaw museum (2021). For a qualitative content analysis of the practices of selected museums in Vienna and Warsaw due to the possibility of comparing the level of creativity, which is differentiated because of the different innovation practices, the practice of digitization of exhibitions and the introduction and use of digital tools to develop co-creation.

The second part of the study is built on the analysis of statistical indicators to assess the risks of preservation of cultural and historical heritage. For quantitative analysis, UNESCO and World Bank indicators for 2018-2020 are used to assess the dynamics and structure of exchange between countries of cultural values.

4 Results

The developed countries spend more on cultural and natural heritage: in Austria, the figure is $107.2 per person at purchasing power parity (according to Table 1, constant PPP$ – 2017), in France – $107, in Hungary – $162, in Poland – $75.8, in Slovakia – $48.1, in Sweden – $95.5.

Table 1 – The total public expenditure on cultural and natural heritage per capita (constant PPP$ – 2017) in 2018-2020

Year	2018	2019	2020
Austria	107.2	-	-
Azerbaijan	-	0.8	-
Belarus	98.1	103.3	-
Brazil	-	8.1	-
Burkina Faso	-	-	-
China	-	7.9	-
Czech Republic	115	-	-
Ecuador	-	2.6	-
Finland	-	29.7	-
France	107.2	-	-
Georgia	-	-	5.9
Hungary	162.4	-	-
Israel	-	29	-
Japan	-	4	-
Luxembourg	-	67	-
Mauritius	-	11	-
Mexico	14.6	-	-
Nicaragua	-	0.4	-
Peru	-	13.6	-
Poland	-	75.8	-
Portugal	31.8	-	-
Republic of Korea	-	65.2	-
Republic of Moldova	-	5.7	-
Slovakia	48.1	-	-
Spain	44.2	-	-
Sweden	95.5	-	-
Turkey	40.8	-	-
Uzbekistan	-	-	0.1

Source: UNESCO (2021a).

The level of quality of life of the population and economic development directly affects the expenditure on cultural and natural heritage: GDP per capita at PPP explains 22.73% of the variation in expenditure (Figure 1). At the expense of large expenditures on cultural heritage in the developed countries, innovations that promote creativity and involvement of the population in preservation of the heritage are introduced into management practice. In particular, involvement in this study is understood as stimulating attendance at cultural and historical sites and funding through the purchase of tickets or citizens' own initiated contributions. For example, a management innovation is the website of The Natural History Museum Vienna (2021), which allows information to citizens-potential visitors about the mission, vision, history of museum development. The mission of the museum is “To the realm of nature and its exploration”, and the goal is the sustainable development of Europe, Austria and the world, which is achieved by using interdisciplinary, inclusive and innovative approaches to research, co-creation through digital technology. Through the dynamism of the exhibitions (online and offline), the museum staff engages visitors in an ongoing dialogue that generates interest, generates value for the population. One of the main objectives of the museum “to create an inclusive platform for participation, dialogue and an exchange of views on current issues” (The Natural History Museum Vienna, 2021). Digital technologies are actively used to engage citizens: videos, animations and text to display exhibition content; social media channels for online tours, watching films about the museum and collection (e.g. YouTube channel to watch videos of the museum or current exhibitions) Google Arts & Culture platform to view all exhibitions; special digital interactive interaction tools (e.g. Digitorial to study minerals) digital collections; 3D-Museum. The museum attracts the financial resources of individuals and companies to hold exhibitions and carries out its activities, including research projects, on a collaborative basis. The sponsor can carry out funding in the form of support for exhibits, backgrounds, or showcases of any size.

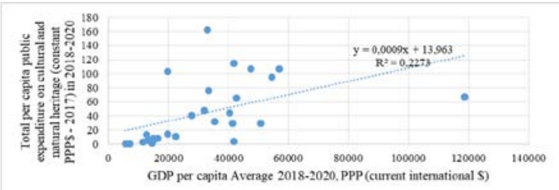

Figure 1 – Dependence between GDP per capita Average 2018-2020, PPP (current international $) and Total per capita public expenditure on cultural and natural heritage (constant PPP$ – 2017) in 2018-2020 (based on panel data in different world countries)
Source: World Bank (2021).

Despite the attraction by museums (as the example of The Natural History Museum Vienna, 2021 shows) of private individuals and companies to funding, still private spending on cultural and natural heritage remains low in comparison with public spending (Table 2). While in the Czech Republic public spending was $115 per person and private spending was $64; in Finland $29.7 and $3 respectively; in Georgia $5.9 and $5.6 respectively; in Poland $75.8 and $34.7 respectively; in Portugal $31.8 and $18.6 respectively; in Spain $44.2 and $30.7 respectively.

Table 2 – Total per capita private expenditure on cultural and natural heritage (constant PPP$ – 2017) in 2018-2020

Year	2018	2019	2020
Belarus	-	0.2	-
Czech Republic	64	-	-
Denmark	85	-	-
Finland	-	3	-
Georgia	-	-	5.6
Mexico	4.1	-	-
Poland	-	34.7	-
Portugal	18.6	-	-
Spain	30.7	-	-
Sweden	8.4	-	-

Source: UNESCO (2021a).

In general, the countries are significantly differentiated by the amount of public-private spending on cultural heritage (Figure 2), which means different financial potential for its preservation, support and implementation of the creative approach to the involvement of the population. In comparison, Poland has a significantly lower level of spending on cultural heritage (75.8) than Austria (107.2). The Warsaw Museum (1936-present), whose mission is to “collect, preserve, research and exhibit varsaviana”, conducts exhibitions, research, educational, cultural activities, publishing. Various museums within Warsaw collect souvenirs, photographs, clothing, architectural details, furniture, sculptures, maps, clocks as historical heritage. However, the level of implementation of innovative technology, compared with The Natural History Museum Vienna (2021) is much lower: the existing digitized collections are presented on the official website created the concept of a new main exhibition in 2016; functioning website as a tool to pass online exhibitions.

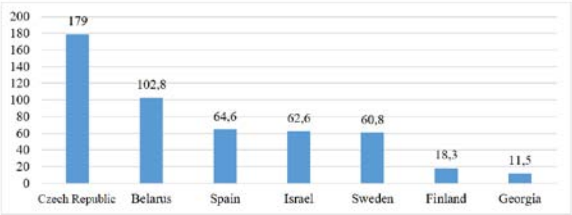

Figure 2 – Total per capita expenditure (public and private) on cultural heritage (constant PPP$ – 2017)
Source: UNESCO (2021a).

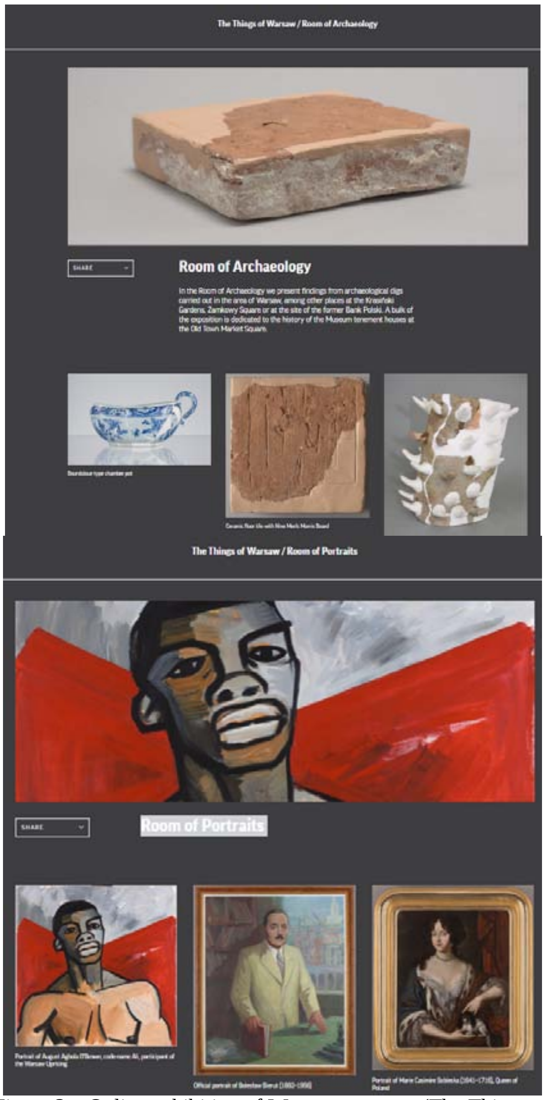

Figure 3 – Online exhibition of Warsaw museum (The Things of Warsaw / Room of Archaeology; Room of Portraits)
Source: The Warsaw museum (2021a); The Warsaw museum (2021b).

Among the main risks to the preservation of historical and cultural heritage – the exchange between countries of products that have historical and cultural value may threaten to reduce the value and value. The exception is cultural goods produced for commercial purposes, particularly for sale to tourists. For example, low-income countries export more cultural goods than they import. On the one hand, high income and wealth countries import more cultural goods. On the other hand, cultural heritage can be stored as a value in the countries that appreciate history, traditions, and culture.

Low-income countries export cultural goods (goods), including the share of exports significantly exceeds the share of imports (Table 3): on average, the share of exports of cultural goods was 2.17% in 2013-2019, while the share of imports was 0.85%. Similar trends in the excess of exports over imports in lower- and upper-middle-income countries. By comparison, in high-income countries, the share of exports is less than the share of imports: the average values of the indicators were 1.31% and 1.44%, respectively.

Table 3 – Average share of cultural goods export and import in different group countries in 2013-2019, % of all goods

	Average share of cultural goods import, % of all goods	Average share of cultural goods export, % of all goods
Sustainable Development Goal Regions		
World	1.16	1.41
Landlocked Developing Countries	0.70	0.21
Least Developed Countries	1.28	0.12
Small Island Developing States	1.62	1.99
Africa (Sub-Saharan)	0.44	0.20
Western Asia and Northern Africa	1.64	1.73
Africa (Northern)	0.64	0.19
Asia (Western)	1.84	1.88
Asia (Central and Southern)	0.62	2.84
Asia (Central)	0.51	0.09
Asia (Southern)	0.62	3.27
Asia (Eastern and South-eastern)	1.05	1.83
Asia (Eastern)	1.05	1.89
Asia (South-eastern)	1.07	1.63
Latin America and the Caribbean	0.67	0.29
Oceania	1.26	0.31
Oceania (Australia/New Zealand)	1.27	0.31
Oceania (excl. Australia/New Zealand)	0.84	0.30
Northern America and Europe	1.27	1.24
Europe	1.14	1.14
Northern America	1.57	1.58
World Bank Income Groups		
Low income countries	0.85	2.17
Lower middle income countries	0.68	1.58
Upper middle income countries	0.52	1.55
High income countries	1.44	1.31

Source: UNESCO (2021b).

In the structure of export of cultural values, the largest share in low-income countries is occupied by the "performance and celebration goods" group (average export share 78% for 2013-2019), an insignificant share – by the "visual arts and crafts goods" group (export share 19.8% for 2013-2019). By comparison, in high-income countries, the "visual arts and crafts goods" group has the largest share of exports at 66.82% for 2013-2019, the "performance and celebration goods" group at 13%, and the "books and press goods" group at 12.62%. Countries with a lower average income level export more "visual arts and crafts goods" group – 94.56% for 2013-2019. In countries with a higher average income level citizens also export performance and celebration goods (12.18%) and audiovisual and interactive media goods (12.84%).

Table 4 – Average share of cultural goods export by domain, 2013-2019, % of all cultural goods export

Country group	Average, 2013-2019, % of all cultural goods export				
	Share of performance and celebration goods in exports	Share of audiovisual and interactive media goods in exports	Share of visual arts and crafts goods in exports	Share of design and creative services goods in exports	Share of books and press goods in exports
World	14.09	6.56	68.30	0.05	9.38
Landlocked Developing Countries	1.66	0.74	83.03	0.02	9.76
Least Developed Countries	9.63	0.03	77.09	0.04	9.87
Small Island Developing States	46.73	2.02	44.69	0.07	6.29
Africa (Sub-Saharan)	11.49	0.82	55.70	0.02	24.61
Western Asia and Northern Africa	1.26	0.76	95.18	0.03	2.44
Africa (Northern)	3.14	11.45	73.46	0.02	10.70
Asia (Western)	1.25	0.65	95.40	0.03	2.36
Asia (Central and Southern)	1.23	0.04	96.41	0.03	2.05
Asia (Central)	2.12	0.16	86.68	-	10.36
Asia (Southern)	1.23	0.04	96.42	0.03	2.04
Asia (Eastern and South-eastern)	23.18	11.21	60.96	0.03	4.38
Asia (Eastern)	19.90	14.15	61.01	0.03	4.64
Asia (South-eastern)	35.06	1.04	60.02	0.04	3.68
Latin America and the Caribbean	12.42	7.65	65.97	0.03	13.82
Oceania	6.57	5.46	60.51	0.03	24.15
Oceania (Australia/New Zealand)	6.59	5.50	60.43	0.03	24.15
Oceania (excl. Australia/New Zealand)	2.95	0.07	68.95	0.03	27.54
Northern America and Europe	10.11	4.38	66.26	0.08	15.86
Europe	10.41	4.45	64.07	0.10	17.66
Northern America	9.42	4.25	71.52	0.03	11.53
Low income countries	78.26	0.14	19.80	0.01	1.73
Lower middle income countries	1.68	0.45	94.56	0.03	2.94
Upper middle income countries	12.18	12.84	69.59	0.02	5.23
High income countries	13.29	4.60	66.82	0.07	12.62

Source: UNESCO (2021c).

Low-income countries import “performance and celebration goods” the most – 42.66%, “visual arts and crafts goods” – 45.05%, “books and press goods” – 8.62%. In countries with lower-middle-income levels the most imported “visual arts and crafts goods” – 61%, “performance and celebration goods” – 25%, “visual arts and crafts goods” – 11%. In high- and middle-income countries, “visual arts and crafts goods” – 44%, “performance and celebration goods” – 35%, “visual arts and crafts goods” – 13% are imported the most. In high-income countries, “visual arts and crafts goods” are imported the most – 59%, performance and celebration goods – 17%, “visual arts and crafts goods” – 11%.

Table 5 – Average share of cultural goods export by domain, 2013-2019, % of all cultural goods import

Country group	Average, 2013-2019, % of all cultural goods import				
	Share of performance and celebration goods in imports	Share of audiovisual and interactive media goods in imports	Share of visual arts and crafts goods in imports	Share of design and creative services goods in imports	Share of books and press goods in imports
World	19.68	8.59	57.81	0.08	11.35
Landlocked Developing Countries	21.87	14.16	39.20	1.44	23.08
Least Developed Countries	9.03	0.11	77.21	1.70	11.86
Small Island Developing States	22.07	2.47	68.46	0.04	6.70
Africa (Sub-Saharan)	24.47	4.33	27.26	0.10	43.48
Western Asia and Northern Africa	6.03	2.93	85.66	0.09	4.99
Africa (Northern)	13.45	2.82	63.44	0.46	19.53
Asia (Western)	5.44	2.95	87.37	0.05	3.88
Asia (Central and Southern)	41.38	0.92	46.75	2.12	8.34
Asia (Central)	11.45	4.04	49.62	5.92	28.53
Asia (Southern)	43.65	0.71	46.44	1.73	6.98
Asia (Eastern and South-eastern)	26.17	5.59	60.95	0.03	5.54
Asia (Eastern)	25.79	6.94	59.52	0.02	5.54
Asia (South-eastern)	27.26	1.46	65.38	0.05	5.54
Latin America and the Caribbean	28.65	14.42	38.72	0.04	18.00
Oceania	17.43	11.77	44.19	0.01	24.85
Oceania (Australia/New Zealand)	17.45	11.89	44.14	0.01	24.76
Oceania (excl. Australia/New Zealand)	16.91	2.59	47.90	0.04	29.37
Northern America and Europe	17.57	10.70	54.31	0.04	13.98
Europe	15.61	10.03	55.40	0.05	15.85
Northern America	20.71	11.85	52.53	0.02	10.92
Low income countries	42.66	3.10	45.05	0.09	8.62
Lower middle income countries	25.29	0.92	61.16	0.89	11.45
Upper middle income countries	35.21	7.24	43.89	0.13	12.78
High income countries	17.10	9.23	59.57	0.03	11.22

Source: UNESCO (2021d).

5 Discussion

Similar to the findings of Hani et al. (2012) this study found that preservation of cultural heritage is possible through creative activities and the involvement of various parties (individuals, companies, universities). Hani et al. (2012) highlighted collaboration with government, educational institutions, and the local community as major elements of cultural heritage preservation. This study also found, using The Natural History Museum Vienna (2021) and The Warsaw museum (2021b) as examples, that collaboration promotes creativity and co-creation: museum management engages research institutions to organize interesting exhibitions, creative presentation of exhibits, in turn encouraging visitors to purchase tickets through expressions of interest. Therefore, the incentives to visit museums provide the funding with which the museum continues to create new exhibitions and introduce new concepts to its activities. Museums become shared spaces for government, citizen, and company activities that stimulate creativity. The introduction of digital technologies is an innovative tool that promotes the collaborative creativity of various stakeholders.

This study reveals the introduction of innovation through digital technologies in museum activities, greatly facilitates the visitor's interaction with the heritage through the digitization of exhibits in the exhibitions. These findings correlate with those of Della Lucia & Trunf (2018), who found implementations of innovation in the IlCartastorie museum and the Farm Cultural Park. In addition, we also found the ultimate goal of sustainable development, particularly in the practice of The Natural History Museum Vienna (2021), which is implemented through research activities. The goal of IlCartastorie museum and the Farm Cultural Park is the regeneration of culture through its combination with creativity and based on a private sector engagement strategy (Lidegaard, Nuccio & Bille, 2018). In both IlCartastorie museum and Farm Cultural park practices, intangible factors (Borseková et al., 2017), including innovative thinking (Kunzmann, 2004), creativity (Florida, 2002), have contributed to cultural heritage value and cultural regeneration. The involvement of the private sector has also promoted creativity in order to preserve cultural and historical heritage (Della Lucia & Trunf, 2018).

Thanks to digitalization, there is a shift from preserving cultural and historical heritage (as happened in particular in the Warsaw Museum, which was in 2016 for the restoration of exhibits and digitization) to its development by introducing a creative approach. As Della Lucia & Trunf (2018) argue, creativity, creativity provides social and organizational value to heritage. The interactive museum provides an increase in the number of visitors, diversity and level of engagement with private exhibits, contributes including the growth of international visitors, ensures the inclusivity and openness of museums, and promotes value collaboration to enhance its own, organizational and sustainable development. Museums become informal spaces, cells of social interaction and inclusion, hotbeds of creativity and incubation of innovation (Cohendet et al., 2010; Tavano Blessi et al., 2012). The inclusive, creative atmosphere of such spaces (Bertacchini & Santagata, 2012) promotes individual well-being, capacity and social capital (Inkpen & Tsang, 2005), attracts people interested in authentic experiences, including forms of creative tourism (Richards, 2014).

6 Conclusion

The study reveals a direct correlation between the quality of life in different countries of the world and the expenditure per person in cultural heritage. A higher level of spending per person corresponds to a higher volume of GDP per capita. The cases of Austrian and Polish museums with different specialization and different public expenditures per one person in cultural heritage ($107 and $75.8) are considered. Museums are becoming centers of research, educational and cultural, scientific activities. An interdisciplinary approach is taking shape, involving individuals and companies as sponsors of activities. The visitors are attracted using a dynamic approach to the organization of exhibitions, which is integrated into the activities of the museum through digital technology and research activities. Based on case studies, the practices of museums in Vienna (Austria) and Warsaw (Poland), the following basic elements of creativity for the preservation of historical and cultural heritage are proposed: 1) an interdisciplinary approach to research, educational and cultural, scientific activities; 2) an innovative and inclusive approach to exhibition and visitor engagement based on digital technologies as a tool to encourage co-creation.
Further research should be aimed at identifying the peculiarities of managerial innovative practices of EU museums as an important element in the creative approach to the preservation of historical and cultural heritage.

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Primary Paper Section: A

Secondary Paper Section: AL

FORMATION OF SPEECH ACTIVITY OF CHILDREN OF SENIOR PRESCHOOL AGE IN THE LEARNING PROCESS ENGLISH LANGUAGE

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Abstract: The article presents the pedagogical conditions for the formation of speech activity of older preschool children in the process of learning English, namely: the communicative orientation of learning English; differentiated-individualized approach to English language teaching; the presence of positive emotional stimuli of learning. The problem of formation of speech activity of preschool children is extremely relevant in connection with: the social demand for the formation of English preschool children in older preschool age, as indicated in the state standard of preschool education (variable component); growing demands on the quality of the educational process in a foreign language, the need to stimulate speech activity of older preschoolers; psychological and social readiness of an older preschool child to master the simplest communication skills in a foreign language. The purpose of the article is to present the methods of implementation of pedagogical conditions for the formation of speech activity of older preschool children in the process of learning their English. The following methods were used during the study: analysis and systematization of philosophical, psychological-pedagogical and methodological literature of systematization and generalization of data, purposeful systematic monitoring of the educational process in preschool education; theoretical modeling, comparative analysis; questionnaires; conversations, pedagogical observation; pedagogical experiment, which included ascertaining, forming and control stages; mathematical statistics. The article presents the criteria for the formation of English-language speech activity defined in the study with the appropriate indicators: motivational, semantic, volitional. A substantiated model is presented and the method of formation of speech activity of older preschool children in the process of learning English is experimentally tested, the main directions of experimental learning are outlined: organization of work with children during classes, outside them and at home (with parents). The research hypothesis is proved.

Keywords: speech activity, children of senior preschool age, learning English, sensitive period, educational process, model of formation of speech activity, pedagogical conditions, methods of formation of speech activity, preschool institution, parents.

1 Introduction

The strategy of language education is determined by the National Doctrine of Education Development in Ukraine in the XXI century on the mandatory mastery of the state and one of the foreign languages by the citizens of Ukraine. The state standard of preschool education in Ukraine defines the state requirements for the level of education and upbringing of preschool children (Basic component of preschool education, 2021). The variable part of this document provides for the teaching of English to older preschool children, provides the final indicators of children's competence in this educational area.

The problem of speech activity of preschool children (on the material of mastering the native language) was studied in domestic linguodidactics through measurements of various aspects, at the same time, despite the multifaceted research, the problem of speech activity remains underdeveloped, as evidenced by in a foreign language, the need to stimulate speech activity of older preschoolers in connection with their preparation for school and insufficient development of methods of activating children's speech in English, which does not allow to fully and effectively solve this problem in preschool institutions; psychological and social readiness of older preschool children to master the simplest skills of communication in a foreign language and the lack of methods of teaching English in preschool institutions that ensure the most effective use of age opportunities for children, most conducive to stimulating their speech activity.

The research hypothesis is based on the assumption that the formation of speech activity of older preschoolers in the process of learning English will be successful in the presence of the following pedagogical conditions: communicative orientation of the process of learning English; differentiated-individualized approach to English language teaching; providing positive emotional stimuli for learning.

2 Literature review

We will analyze the traditions and approaches to teaching English to older preschool children in domestic and foreign theory and practice. Thus, in domestic and foreign psychological and pedagogical literature, the problem of formation of speech activity has been studied in various aspects: preschool language didactics (Bogush, 2004; Kalmykova, 1996), speech activity (Gavrish, 2004; Krutiy, 2005; Reipolska, 2004; Sokhin, 1990); communicative approach to children's speech development (Lucenko, 2002; Pirozhenko, 2002); communication as the main activity of preschoolers (Elkonin, 1984).

Thus, A. Bogush (Bogush, 2004) emphasizes that in the process of teaching preschool children their native language, speech development, educators are guided by the principle of maximum speech activity. According to the researcher, speech activity can be interpreted not only as the ability of the subject to a certain communicative act of expression, but also as the ability to understand the speech of another. These abilities depend on the degree of language proficiency and ways of using it.

The most important task of speech development at the stage of preschool childhood, according to N. Gavrish (Gavrish, 2004), is the development of coherent speech. After all, for his own personal development, successful socialization, the child must learn to communicate with others, become clear, convincing, learn to know the world through language and speech.

The results of experimental studies of speech activation of young children, published by T. Naumenko (Naumenko, 1991), indicate that the speech activity of children of the third year of life depends on the duration of communication and changes in activities in which communication is carried out directly. The level of speech activity increases significantly, according to the author, in the process of unregulated communication between teachers and children, with timely change of activities depending on the interests of children. The researcher emphasizes that children's speech development is closely related to the development of thinking, as evidenced by the formation of generalizations, which is more effective when learning the names of objects, environmental phenomena, their qualities and characteristics is part of active cognitive activity of preschoolers using the sensory sphere of the child.

In the study of O. Reipolska (Reipolska, 2004) the model of foreign language teaching of preschool children in groups of different ages is substantiated and developed, which is based on the following provisions: priority of the child's individuality as an active carrier of subjective experience in a preschool institution; when planning and organizing the educational process it is necessary to carry out work aimed at identifying the level of readiness to learn a foreign language by each child, its cooperation with the teacher, joint activities of children in different age groups; differentiation and individualization of training, application of adequate methods, fascinating techniques; gradual formation of cognitive abilities and communicative competence on the basis of mastering all types of speech activity in a foreign language, the desire of older children to help younger ones.

Modern integration processes, Ukraine's entry into the European educational space, international exchange of information in various fields of knowledge significantly affect the status of a foreign language as an important means of communication. This thesis is especially relevant in connection with the transfer of the term of learning a foreign language from adolescence to senior preschool and primary school age, which is considered sensitive to mastering foreign language communication. In the modern educational practice of Ukraine, the study of a foreign language begins in primary school with the first grade of specialized schools and with the second – secondary schools.

Given these changes in education, S. Sokolovskaya (Sokolovskaya, 2002) argues that now promising are the problems of forming a personality that would combine communicative competence; striving for creative self-expression, free, automatic implementation of versatile speech activity; would consciously relate to their language practice, would bear the imprint of the socio-social, territorial environment, traditions of education in the national culture, which creative approach and level of creative competence would stimulate the improvement of speech, development of language taste, to constant reflection in language worldview. social, national and cultural sources and the search for new effective individual and stylistic means of linguistic expression.

In the method of teaching a foreign language, the ability of children to communicate, according to S. Nikolaeva (Nikolaeva,1996), is provided by the formation of foreign language communicative competence, the types of which are language, speech and socio-cultural.

According to M. Demyanenko (Demyanenko, 1986), the training of speech activities should be, on the one hand, differentiated (in order to create independently effective mechanisms of listening and speaking), and, on the other hand, complex. After all, such aspects as phonetics, vocabulary and grammar interact inextricably in speech. Awareness of the processes of origin and perception of speech, the author emphasizes, is associated with understanding the essence of thinking, the relationship between internal and external speech. Inner speech is used when a person thinks, reducing his thoughts to speech formulations. In other words, it has its own grammatical and stylistic structure, as well as a specific speech technique.

In the member states of the European Union at the level of ministers of education it was agreed that its citizens must speak at least two languages (according to the Barcelona model "native + two foreign"), which are spoken in EU member states (The Framework Education Programme for Elementary Education (FEP EE), 2007). This requirement is currently key for Central European education systems as well.

In "Czech Education and Europe" (Barcelona Summit. Presidency Conclusions, 2002), this requirement is argued as follows: "The ability to communicate in the official languages of the European Union and other at least two foreign languages is considered key to the development of the individual, his civic and professional level".

Aspects of English language teaching in Central Europe are reflected in the context of preparing teachers to teach foreign languages to primary school students O. Kotenko (Kotenko, 2014), who notes that: "… At the beginning of the XXI century in particular at the pre-school and primary stages, is a separate area of activity of one of the departments of the European Commission, called the "Language Learning Policies" and ensures the preservation of the linguistic diversity of the European community and promotes the acquisition of foreign languages".

As M. Tadeeva (Tadeeva, 2008) notes: "The first foreign language should be included as a compulsory subject in primary school curricula at the level of the first grade, then a second foreign language should also appear in the curricula. The need to study the languages of smaller European nations is also emphasized".
Thus, numerous documents of the European Union and the Council of Europe emphasize the importance of early language learning and not only native but also foreign, mostly English as international. In the course of our research it was found that at the preschool stage the introduction of foreign languages is offered in 7 countries, namely: Bosnia and Herzegovina, the Basque Country, Bulgaria, Catalonia, Estonia, Spain and Ukraine. The most common languages are English, French and German.

According to the norms of the European Union and the Council of Europe, all young children of older preschool age must learn two languages in addition to the official language(s) of their country of residence. In England, Southern Ireland and Scotland, foreign languages are optional, English, French and German are the most commonly taught, and two foreign languages are compulsory in Denmark and Greece.

According to the recommendations of the European Union and the Council of Europe, in most countries foreign language teachers must achieve a certain level of foreign language proficiency, which in 8 countries is measured according to the scale of Common European Recommendations (CEFR). Level *C 1* is often required of teachers. However, in France and the Basque Country, level *B 2* is considered acceptable. The most active countries in the employment of teachers are Scotland, the Basque Country, England, Romania, Switzerland. All of them are taking measures to increase the number of teachers in 38 of the 48 language categories (Kotenko, 2014; Labunets, 2012; Tadeeva, 2008; Lumir, 1979).

In Poland, learning foreign languages is not compulsory in the early preschool years. However, most children start learning foreign languages in the preschool education system, these courses are designed to meet the individual characteristics of preschoolers and are designed to meet their needs. Training courses combine "play" with the appropriate language, using the latest techniques and technologies that meet the age characteristics of children. The most popular foreign languages: English, German, French.

In Hungary, the preschool education system provides instruction in the following nine languages (public schools for minorities and special bilingual institutions): Bulgarian, Croatian, German, Romanian, Ruthenian, Serbian, Slovak, Slovenian and Romani. Despite the fact that preschool learning of foreign languages is becoming increasingly popular in private (usually paid) preschools, in public institutions this practice is not yet generally accepted.

The purpose is to present a method of realization of pedagogical conditions of formation of speech activity of children of senior preschool age in the course of training of their English.

3 Materials and methods

In order to determine the state of development of the problem of formation of speech activity of older preschool children in the process of learning English, the method of analysis and systematization of philosophical, psychological, pedagogical and methodological literature was used. To determine the essence of the basic concepts of research, substantiation of pedagogical conditions of formation of English speech activity of senior preschoolers, methods of systematization and generalization of data, purposeful systematic observation of the educational process in preschool institutions are used. Clarification of the state of practical work on teaching English to children in preschool educational institutions, determination of the content of the teacher's activity on teaching English to older preschool children was carried out by methods of theoretical modeling, comparative analysis of various programs of preschool education, teaching and methodical manuals. Identifying the features of English language teaching, determining the criteria and levels of formation of speech activity of older preschoolers was through a survey of educators and parents; conversations with children, pedagogical observation. In order to test the experimental model and methods of formation of speech activity of older preschool children in the process of learning English, a pedagogical experiment was conducted, which included ascertaining and formative stages. Methods of mathematical statistics were used for generalization, qualitative and quantitative analysis of experimental data and identification of regularities of their change.

4 Results

The ascertaining stage of the experiment was carried out in the following areas: work with children, their parents, teachers of preschool education.

To find out the attitude of parents, caregivers and children themselves to learning English, we conducted a survey. The survey data showed that parents, educators and children themselves have a positive attitude to learning a foreign language, but desire is not a decisive factor. The main thing is the formation and development of cognitive processes, good command of the native language.

At this stage, the criteria for the formation of English speech activity with indicators were determined: motivational (children's desire to communicate in English and awareness of its role, positive attitude of preschoolers to English lessons, development of cognitive interest, children's desire to learn it); semantic (understanding of English vocabulary, mastering of English lexical and grammatical skills, logical sequence of composing dialogic and monologue expressions in English); strong-willed (persistence in solving tasks in English, development of self-esteem and self-control, manifestations of initiative).

The results of the ascertaining examination of older preschoolers made it possible to identify the levels of formation of speech activity in them:

- *a sufficient level* was found by 26.7 % of respondents in the experimental group and 25.5 % – in the control group. Children with this level always chose the right picture that matched its name; the volume of their dialogic and monologue utterances is 4 sentences each; took an active part in the proposed games, unmistakably called in English the toys hidden by the experimenter, correctly using grammatical structures; showed perseverance in performing tasks; strictly followed the relevant instructions; showed interest in the proposed tasks;
- 55.5 % of children in the experimental group and 54.9 % of children in the control group were referred to the *average level.* These children had some difficulty in using the necessary grammatical structures; the volume of their dialogic and monologue utterances – 3 sentences each; performed tasks, but sometimes distracted; sometimes there was a deviation from the instructions of the experimenter; in general, showed interest in performing the proposed tasks;
- 17.8 % and 19.6 % of children in the experimental and control groups, respectively, showed *a low level*. Preschoolers with this level of speech activity almost did not follow the instructions of the experimenter; did not perform the task completely; did not show interest in the proposed tasks; sometimes refused to perform the task at all; the volume of dialogic and monologue utterances of these children was 1–2 sentences.

Table 1 – The results of the ascertaining examination of older preschoolers

Levels	Groups	
	experimental	control
a sufficient level	26.7 %	25.5 %
the *average level*	55.5 %	54.9 %
a low level	17.8 %	19.6 %

Source: Developed by the authors.

In all six groups of children, the majority of respondents showed an average level of speech activity according to three defined criteria. This trend can be traced in the indicators of low and sufficient levels, which are almost the same in percentage.

In developing the model, program and methodology of experimental work, we proceeded from the fact that the main specific methodological principle of teaching English is communicative orientation. It fully reflects the practical purpose of this process – mastering a foreign language as a means of communication, the acquisition of older preschool children the skills of basic foreign language communication.

At the formative stage of the experiment, the formation of English language skills in older preschoolers was carried out in the process of conducting English language classes and organizing English-language activities in everyday life, life situations, etc; there was a determination of the level of formation of speech activity in children, possible ways to correct difficulties in learning English that have arisen; provided a foreign language environment in the daily activities of preschoolers.

Teachers carried out individual work with children during the organization of life situations to master the English language. The discussion of the received data on the results of the statement and individual forecasts of educators on the researched problem was organized.

Individual homework of children in English was organized. To this end, parents were acquainted with the data of the statement, discussed possible ways of correction and formation of English-language skills, as well as made a forecast for their further development. The formative stage of the experiment involved the direct introduction of experimental methods for the formation of speech activity in older preschoolers in the process of learning English.

A model of speech activity formation of older preschool children was developed and implemented. Let’s cover the content of this model in more detail. It covered three main areas of work: the formation of speech activity of older preschool children both in class and outside them; necessary work of parents with children at home. We specify these areas.

Classes have become the main form of presentation necessary for the formation of children’s speech activity of linguistic material. Their organization involved teacher training – compiling notes with the formulation of the purpose of the work; selection of linguistic and didactic material, didactic and moving games, means of encouraging children, etc. It should be noted that the main goal in determining the goals of classes was the formation of English – language speech activity of preschoolers. All didactic and mobile games were subordinated to this goal, in the process of which linguistic material was presented with the help of various methods and techniques.

During the classes, the teacher stimulated children to show initiative in communicating in English, interest in its study, the maximum implementation of basic communicative activities in English, and so on. Here are some names of games that were held in class and were purely communicative, encouraging children to actively learn the linguistic material: “At the zoo”, “Yes or no?”, “Tell me who I have?”, “Tell me who it is?”, “Unexpected meeting”, “Visit me!”, “Toy store”, “Fun chain”, “Big or small”, “Colored balls”, “Tell me what you have, what color is it? / size?”, “My favorite toy” and many others.

A noticeable variety of didactic material (demonstration and handouts) contributed to the concentration of attention of older preschoolers, their interest. The collected didactic material was distributed according to the learning situations planned for study (“Toys and animals (domestic and wild)”, “Teams”, “Number”, “Food (vegetables, fruits, groceries)”, “Colors”, “Transport”, “School supplies”, “Seasons”, “My room”, “I can…”, “Body parts (face, torso)”, “Dishes”, “Clothes”, “Time”, “Eating”, “Our house (rooms, furniture)”) was stored in the appropriate folders (illustrations, cards, pictures, posters, incentive chips, lotto, reproductions, drawings, masks, emblems, etc).

As evidenced by observations, skillful mastery of facial expressions, gestures, voice modulations, methodically correct operation of different ways of semanticization of language material, alternation of methods, techniques, forms of learning, timely and appropriate change of work with children, taking into account the general level of development of each child, knowledge of the native (Ukrainian) language gave the teacher the opportunity to ensure the most arbitrary memorization of language material, its use in the implementation of basic communication in English, and, consequently – to achieve the main goal – the formation of speech activity of older preschool children.

Working out the language material provided during the training session has become mandatory in life situations with the participation of children. We mean the organization of the use by preschoolers of lexical and grammatical material already learned in the classroom during observations on walks, in moving, didactic and plot-role games in a group during the day, on holidays, in entertainment, etc. Here are some didactic games that were used to form the speech activity of older preschoolers during the organization:

- in the group: “Ask a friend to help”, "Let’s be grateful!", “Name what you see in English”, “Delicious food” etc;
- observations on walks (“Hot or cold?”, “What do you see around?”, “What color are the flowers?”, “Future farmers”, etc);
- moving games on walks (“Hear the team!”, “Give the team!”, “Guess who it is”, “Fast – slow”, “Merry counter”, etc).

It should be noted that a teacher should initiate a similar application of lexical and grammatical structures. When the initiators of the use of English vocabulary in life situations with the participation of children are themselves, they should be encouraged in every way, to support such initiative.

During the day, children used English vocabulary when returning from a walk, performing hygienic actions, the teacher had the opportunity to organize training for children in the use of certain vocabulary on the topic “Let’s be polite” (Give me please! Thank you! Let me help you! etc), “Bathroom. Accessories” (It is a bathroom, a soap, a tower, cold water, hot water, a mirror, etc).

Linguistic material on “Let’s be polite” (Enjoy your meal! It is very tasty! Thank you! Etc), “Food” (“Food” / a soup, a porridge, a puree, a chop, etc), “Grocery” / an apple, a pear, grapes, a tomato, a cucumber, etc/, “Drinks” / tea, juice, milk, water, compote, etc/, “Sweets” / a sweet, pastry, cake, etc) worked out during meals for children.

It is necessary to intensify the use of lexical and grammatical structures on the topics “Natural Phenomena” and “Transport” on walks. It is about observing natural phenomena and expressing children about it. For example, “The sun is shining. The wind is blowing. It is snowing. It is raining. The weather is warm / cold. The weather is nice. It is a car, a lorry, a tractor, a bus, etc”.

Moving games, morning gymnastics gave the teacher the opportunity to initiate the use of any vocabulary by children (it depends on the plan of the educator), lexical and grammatical structures on the topic “Teams”. For example: “Run! Stop! Jump! Clap your hands! Turn yourself around! Count! Right! Left! Up! Down! etc”.

During the day, children played a lot, distributing roles, building monologue and dialogic expressions, so the activation of English-speaking activities of preschoolers took place in group and individual games. It is clear that the subject of lexical and grammatical structures was extremely multifaceted, interconnected with learning situations. These are “Domestic and wild animals” (game-dramatization), “Food” (game “Shop”), “Transport” (design games) and others.

During the organization of holidays and entertainment, children were encouraged to remember a certain English vocabulary. It should be noted that such work was unobtrusive, interesting, related to the language material already familiar to children, which was introduced in previous classes. It is clear that the possible topics given by us, lexical and grammatical examples are indicative. After all, each topic can be accompanied by a number of interrelated subtopics.

However, in order to achieve better results, parents were involved, and group and individual consultations were held, where they were offered relevant information on ways to practice language material at home, recommendations for using a variety of visual aids, organizing conversations with children to increase their interest in foreign language communication. We recommended that parents offer their children to perform certain tasks at home, work assignments with elements of the use of the English language.

The developed model of formation of speech activity of senior preschoolers made it possible to involve children in playful communication in a foreign language, encouraged them to solve communicative tasks, formed a stable motivation to perform, strong-willed qualities, etc. It is clear that the formation of speech activity is possible provided that all these points are taken into account: working with preschoolers during classes, outside them and the practice of parents with children at home. However, the cooperation of teachers, children and parents was not limited to this. The experimental work provided for the gradual introduction of a model, on the basis of which the gradual monitoring of current qualitative changes in the process of formation of speech activity of older preschool children was carried out.

Thus, the proposed experimental model of the formation of speech activity of older preschoolers in the process of learning a foreign (English) language was based on certain areas of work with older preschool children, taking into account certain pedagogical conditions: communicative orientation of the learning process; taking into account the individual and age characteristics of children; differentiation and individualization of learning organized in an interactive mode; the presence of positive emotional stimuli in the learning process of older preschoolers.

In order to verify the effectiveness of the experimental work, a final section was made, the purpose of which is to generalize information about the results of the organization and conduct of the formative stage of the experiment; checking the effectiveness of experimental methods to increase the level of speech activity of older preschool children in the process of learning English; determining the prospects for further formation of English speech activity in children.

The method of the final stage of the experiment is similar to the technology of the statement: all blocks of tasks given to identify levels of English speech activity in older preschool children coincided with the tasks and indicators identified at the statement stage of the experiment.

At the stage of the final section, the dynamics of the levels of formation of speech activity of children in the control and experimental groups was traced. Comparative analysis of the results of the ascertaining and final stages of the experiment showed the possibility and effectiveness of applying the model of formation of speech activity of older preschoolers in the process of learning English.

Analyzing the comparative data of the final section in the experimental and control groups, we find that the level of formation of English speech activity in children belonging to the experimental groups is much higher (89.6 %) than found in participants of control groups (44.4 %). In 10.4 % of participants in the experimental groups we state the average level of formation of speech activity. In the control groups of such children 38.4 %. According to the results of the final stage of the experiment, the children of the experimental groups did not show a low level of formation of English speech activity. At the same time, preschoolers in the control groups had a low level – 17.2 %.

Summarizing the results of the experiments, we state that the appropriate level of English speech activity of older preschool children is achieved by forming this quality by motivational, semantic and volitional criteria in the process of purposeful teaching English to children and systematic work outside school and at home.

5 Discussion

Numerous studies in the field of preschool foreign language teaching of Ukrainian (Budak, 2008; Reipolska, 2004) and foreign (Dulay, 1974; Gardener, 1988; Goodenough, 1926; Harris, 1975; Ionescu, 1993; Kubanek-German, 1998; Miller, 1984;Vereshchagina, 1969) scientists have proven the feasibility and effectiveness of preschool English education for children, its positive impact on intellectual development personality and preparation of the child for school.

We share the point of view of O. Dunn (1983) features of perception of children of a foreign language, for mental development of the child of preschool age fast pace and considerable intensity (there are essential qualitative shifts in processes of perception, memory, thinking, attention, imagination, arbitrary regulation of behavior, etc). Yes, the memory of preschoolers has great potential. Our study confirmed his thesis that one of the most important prerequisites for successful foreign language learning is the attention of preschoolers.

Children of this age do not yet have a stable focused attention, can not focus on one task for a long time. Given this, the main form of organization of children during the formation of speech activity were classes. The opinion of J. Trim (1997) agrees with us, the researcher emphasizes that the main form of organization of work on teaching preschoolers a foreign language is a lesson. However, the optimal number of these classes per week is from 3 (if the class is in the form of group work – with a significant number of formed subgroups of children) to 4 (if the number of subgroups is small and can be provided with each child in the teacher's schedule; if the lesson is conducted directly by the educator with children of his age group), while in our study there are three of them.

6 Conclusions

The article presents the pedagogical conditions for the formation of speech activity of older preschool children in the process of learning English, namely: the communicative orientation of learning English; differentiated-individualized approach to English language teaching; the presence of positive emotional stimuli of learning.

The criteria for the formation of English speech activity with the appropriate indicators: motivational, semantic, volitional. It is proved that teaching English to preschoolers, on the one hand, is a pedagogical process based on the interactive interaction of teacher and child, on the other – a personal-internal phenomenon.

Taking into account the essence and structure of the concept of "English speech activity" in the study developed a model and experimentally tested methods of forming speech activity of older preschool children in the process of learning English, outlined the main areas of experimental learning: organization of work with children during classes at home (with parents). In each of the above areas of study in an organic relationship was the implementation of certain pedagogical conditions for the formation of English speech activity.

The value of the obtained results is a practical methodological support for teachers of preschool education which includes: methods and system of classes for teaching English to children, didactic and speech games, English speech situations aimed at forming speech activity of older preschool children in the process of learning English. On the positive side, it should be emphasized that the results of the study can be used by educators and teachers of English in preschool educational institutions, compilers of programs.

The conducted research does not claim to be comprehensive and exhaustive coverage of the stated problem. In future publications, we plan to explore ways of continuity in the formation of speech activity of older preschoolers and younger students in the process of learning English.

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AN ASSESSMENT OF CORPORATE SOCIAL RESPONSIBILITY OF COMPANIES BASED ON NATIONAL AND INTERNATIONAL INDICES

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Abstract: The global economy has put forward some new requirements for doing business and the business environment itself. The central element of the new corporate management system is its socially-oriented component, which is already a measure of performance and indicates the priority of the social component in different levels of global environment relationships. The social-ecological orientation of the modern international economy determines the priority of all sectors – from production to final consumption. This research aims to analyze the assessment of corporate social responsibility of companies based on national and international indices. Research methods: systematization; synthesis of information; modeling the essence of social responsibility. Results. The conducted research gave a brief character of the corporate social responsibility development and indicated the conceptual approaches in the assessment system of companies' corporate social responsibility. It was noted that the assessment of corporate social responsibility is aligned with the priorities of the economy phase. Nowadays market economy dominates. Therefore, the priority measure of the economic activity of firms is economic indicators of profitability. Consequently, the assessment of corporate social responsibility of companies is carried out mainly based on stock indices. The modeling of the system of corporate-social relations also determines the methodology for assessing the corporate social responsibility of companies. Nowadays, the modeling of corporate social responsibility is also focused on the business environment of companies, and their assessment already takes into account non-financial relations as well. That is why the assessment system is introduced because of non-financial indices. For countries where the stock market is underdeveloped and, large companies are not powerful in the international market, their assessment of corporate social responsibility is done through ratings determined by non-financial reports. It is proved that the assessment of corporate social responsibility considers only indirectly the basic human needs. Thus, the key factors directly determining the state of companies' social responsibility to people regardless of religion, race, and financial status are noted. By this priority, modern business is not socially responsible to people of the Earth. It is indicated that the assessment of corporate social responsibility can only be made because of quantitative indicators (reduction in the number of hungry people, the area of reforestation per person, receiving electricity at low rates, etc.). Such an assessment is possible only if full education is provided to all inhabitants of the planet and, first of all, to children in the study of nano- and pico-technologies. The results of the research can be used for the formation of national policies in the process of forming the criteria for assessing corporate social responsibility and developing strategic programs for the development of the socio-economic policy of the state or a regional interstate association. Such an approach points to further research directions of the institute of corporate social responsibility research.

Keywords: corporate social responsibility, standards of corporate social responsibility, models of corporate social responsibility, stock and non-stock indices, basic factors of social responsibility (knowledge and realized innovations), economics of social guarantee.

1 Introduction

Any modern field of knowledge, first of all, must form a measuring mechanism, since without a measuring system no practical activity is possible. Trends in orientation and increasing compliance with the requirements of social responsibility of businesses also make it necessary to pay attention to the assessment of their activities according to a certain scale or criterion. In addition, global trends in digitalization lead to an acceleration in the application of the system of automated measurement of a series of different data in a real-time stream.

Accordingly, a measurable assessment of the social responsibility of modern companies is not only an urgent problem of the enterprise itself but also of scientific interest. At the same time, scientific interest considers this problem much broader and more in-depth, taking into account numerous diverse indicators: both purely economic, financial and organizational, and political.

In general, a unified scientific approach in assessing corporate social responsibility has not yet been developed. This scientific problem has a spontaneous nature, resulting in the application of various methods (quantitative, qualitative, rating). The most widespread in the application are index assessments of corporate social responsibility. This methodology takes into account different directions and indicators and covers different areas of application. The study of these indices is the basis of the scientific interest of our article.

The research aims: to analyze the assessment of companies' corporate social responsibility based on state and international indices.

Research tasks:

1. To form an abstract model of criteria for assessing the corporate social responsibility of companies.
2. To analyze the current indicators of corporate social responsibility of companies and prioritize them according to the abstract model.

2 Literature Review

Scientific discussion and definition of social responsibility as a separate social institution was filed by H. Bowen in 1953 (Bowen H., 1953). In 1960-1970th, Davis K. (1960) expanded theoretical considerations of social responsibility, and most importantly, explained them in a professional and accessible to all members of society.

In the modern understanding, corporate social responsibility has various forms, exploring many authors (Raudeliūnienė, Tvaronavičienė, Dzemyda and Sepehri, 2014; Figurska, 2014; Baronienė and Žirgutis, 2016; Jankalová and Jankal, 2017; Iqbal, MK and Bhutta, USA, 2020).

The literature provides various descriptions of the concept of corporate social responsibility and its implications for society (Riera, M., & Iborra, M., 2017; Selcuk, EA, & Kiymaz, H., 2017; Li, J., Sun, X., & Li, G., 2018). However, until now, the definition of corporate social responsibility proposed by Carroll (Carroll A., 1991) is the most widely accepted and used in practical and academic research (Gerda Barauskaite & Dalia Streimikiene, 2020).

In addition, various methods of assessing corporate social responsibility are used (Gerner, M. 2019, Lechuga Sancho, MP, Larrán Jorge, M. and Herrera Madueño, J. 2020; Forcadell, FJ, & Aracil, E., 2017; Zentes, J., Morschett, D., & Schramm-Klein, H. (2017) However, there is no single approach to assessing corporate social responsibility.

3 Methods

The implementation of the research aims implies the use of the following methods:

- systematization, generalization of scientific publications on the study and assessment of corporate social responsibility;
- method of comparative analysis on a group of indicators of assessment of corporate social responsibility;
- modeling of the essence of social responsibility;
- system and logical analysis, method of information's synthesis.

4 Results

Scientific discussion and definition of social responsibility began in the 1970s in the United States and England due to the practice of enhancing the image of companies and business responsibility to community groups. At the end of the 20th century, this concept embraced the sphere of labor protection and ensured the social protection of employees of firms and corporations. In addition, developed countries have implemented strict labor standards at the legislative level. The attention of the added concept intensified due to the aggravation of environmental problems of the world, and then new requirements for production greening and environmental protection were put forward. Society demands the minimization of environmental risks of corporate activities under the standards of sustainable economic growth. In the energy sector of the economy, development must be achieved without disturbing the energy balance and without compromising the security of access to electricity, environmental sustainability, economic sustainability, and economic growth.

The international legislative initiative has enshrined corporate social responsibility (CSR) in several agreements and standards: (European Union Social Policy Agreement, 1991), Rio Declaration on Environment and Development, United Nations, 1992; UN Global Compact, 2000, Millennium Development Goals, United Nations Millennium Declaration, 2000; International Standard Guidance on social responsibility, International Organization for Standardization, 2010, The Sustainable Development Goals, United Nations, 2015.

In the 21st century, the publication of annual CSR reports of well-known corporations began. For example, within 5 years, 81% of the world's 500 largest companies voluntarily published non-financial reports on economic, environmental, and social activities, compared to only 61% in 2011. In 2017, the EU Directive required mandatory disclosure of non-financial and other information of a different nature.

Consequently, assessment of social responsibility is a complex process that includes numerous indicators of different aspects. That is why indices are widely used in social responsibility assessment practice.

In general, these indices are divided into stock and non-stock ones. The most widespread among stock indices are DSI 400 (Domini Social Index 400), DJSI (Dow Jones Sustainability Index), FTSE4Good, etc., and for non-fund ones: Accountability Rating; Business in the Community's Corporate Responsibility Index; Social Index of Danish Ministry of Social Policy and others.

However, the methodology of such indicators is very specific. Therefore, let us indicate the main characteristics and features (Table 1).

Table 1 – The characteristics of social responsibility indices

Indexes	Specifics of application
Stock	Limited number of companies in which certain indicators are defined
	Wide range of indicators
	Consideration of strong and weak elements of companies
	Environmental and economic results of the company activities are taken into account
Non-stock	Assessment of the company's performance by different stakeholder groups
	Assessment of non-financial activities of the company at all stages of its development and implementation
	Environmental, economic performance of the company is not taken into account
	Often environmental and economic results of the company's activity are not taken into account
	Some indices do not consider the division of a company's activity into financial and non-financial components

Source: author's elaboration

In our research, we will start with the definition of corporate social responsibility. Thus, according to the World Bank research institute, social responsibility of business is, firstly, a set of policies and actions related to key stakeholders, values, and requirements that take into account the interests of people, communities, and the environment; secondly, it is the focus of the business on sustainable development. The European Commission defines corporate social responsibility as a tool to influence society by ensuring sustainable development.

In these definitions, the priority of sustainable development and consideration of people's interests is noted. But this definition is more general and does not take into account specific human needs. Let us note the basic factors that allow a person to act and develop and improve.

1. Climatic needs – are determined by the climatic zone of human life.
2. Needs for shelter, food, and clothing. These needs change with the passage of man in his biological cycles. These are demographic needs.
3. The need for protection and security. These are overwhelmingly environmental security.
4. The need for communication. By nature, communication bears the seeds of learning. The need for communication acts as a need for learning.

Such is the minimum of needs, which allows a person to live and not to survive. However, the development of society makes it possible to change the priority of needs. For example, the availability of electric current and various equipment, climatic needs allow disregarding (it is possible to heat or cool the premises). Also, the housing needs, clothing are significantly negated by technology. But there is a growing need not just for resources, but in a certain way prepared for use and safe to use.
Consequently, the factors of social responsibility will change (Figure 1).

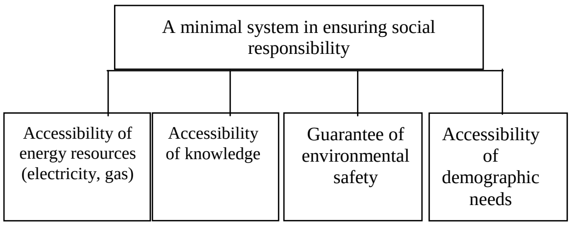

Figure 1 – The requirements for the system of minimum social guarantees for a person
Source: author's elaboration

The fulfillment of these needs under market conditions is determined only through the mechanism of supply and demand. In this mechanism, the only measure of guaranteeing social responsibility is the concentration of money with the consumer. This is why the system of corporate responsibility of business has been introduced. Unfortunately, it is not able to solve the urgent problems of humanity (malnutrition, fresh water, electricity).
Social responsibility is a function of four factors excitement:

$$\mathrm{CSR} = f(X, Y, Z, d), \rightarrow max \quad (1)$$

Graphically, the CSR function intersects the benefit availability function:

$$\begin{cases} \mathrm{CSR} = f(X, Y, Z, d) \\ BA = f(R, T) \end{cases} \quad (2)$$

This system is solved only by the technology development.

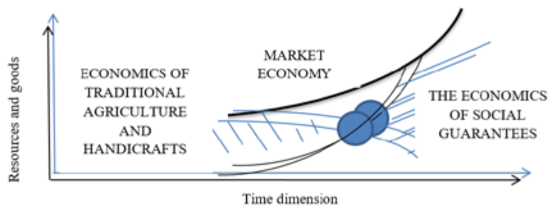

Figure 2 – Graphical link between social responsibility and the benefits accessibility
Source: author's elaboration

The understanding of the fundamental natural laws of the Universe brings humanity to a new stage of development and social responsibility. At the same time, technologies should not be controlled by a separate group, and the patenting system should become transparent and publicly available in the system of a real implementation.

Consequently, the measure of social responsibility of business becomes the indicator of innovative implementations. Therefore, scientific and technological developments should play a dominant position in the integral indicators.

The quantitative indicators of overcoming conditions unfit for human life (reducing the number of hungry and malnourished people, getting electric power and drinking water, etc.) have more practical value in the system of corporate social responsibility indicators. It is worth reminding that about 2 billion people on the planet do not have an opportunity to fully feed themselves, and this indicator is growing every year. The situation with drinking water and power supply is similar. Such a situation is strange, taking into account the fact that labor productivity in the world economy is constantly growing and the reduction of daily working time to 6-7 hours in developed countries is observed.

5 Discussion

Our research is focused on the assessment of the social responsibility of business. However, social responsibility in society is a fairly new phenomenon and is in its formative stage. Its assessment depends on the understanding of this phenomenon and its manifestation in the world economy. We somewhat disagree with Bowen H. (Davis K, 1967), who treated social responsibility as a separate social institution. It only becomes a social institution if there is the exploitation of the wage-worker, defined by the legislative field of the national and international economy. Corporate social responsibility is, therefore, a natural action to counteract this exploitation of labor (Mihus et al., 2021). Davies K. was the one who managed to explain this phenomenon in a professional and accessible way to all members of society, pointing out the benefits for all participants of this institution.

The explanation of the methodological approach to the assessment of corporate social responsibility is based on an understanding of the mechanism of corporate social responsibility, and the mechanism itself is revealed through an appropriate model. The modeling of corporate social responsibility was laid down by Carroll A. (1979) in the late 1970s. Fully agree with the researcher that the basis of corporate social responsibility is economic, legal, ethical, and discretionary compliance.

Changes in the international environment entail changes in the mechanism of corporate social responsibility. For this reason, Carroll A. is constantly adapting his basic model. Let us clarify that the essence of global corporate social responsibility remains unchanged: making a profit. Schwartz M. (2003) deduces this as a necessary condition and points out that this economic goal should not violate national and international law, be guided by standards (local and global), and take into account the expectations of local communities.

If we evaluate corporate social responsibility as the development of fundamental-application explanations of the business environment, two models are made CSR-1 (Frederick W., 1968) to CSR-2 (Frederick W., 1978). CSR-1 is the basis for understanding social responsibility, and CSR-2 is the concept of corporate social responsiveness and is a managerial tool and technique in shaping the organizational structure of a corporation and its behavior. These models, accordingly, have developed techniques for the integral assessment of corporate social responsibility through the stock and, respectively, non-fund indicators.

However, in these assessments, the person himself does not occupy a primary position. In our opinion, from a position of humanity and ethics in the estimation of corporate social responsibility should stand a change of environment of life of the person to improve to provide the person with necessary benefits for its development.

6 Conclusion

To summarize, let us point out that corporate social responsibility is a phenomenon in most political measures of the representatives of the globalist elite. Accordingly, this elite sets the direction of most scholars' research. For ethical reasons, however, social responsibility is a natural process of human development. Therefore, this phenomenon becomes central to the social and economic process discussion in the global economy.

The impact of CSR needs to be measured. Therefore, assessing the impact of CSR requires taking into account a fairly large number of factors and economic indicators. Considering that the modern mechanism of economic activity is a market economy, this phenomenon has been used by large corporations to improve their stock ratings, which ultimately provides an additional increase in their stock quotes, and investors increased dividends. Consequently, CSR began to be evaluated through improvements in stock index methodology.

Further implementation of social standards and mandatory filing of non-financial reports by corporations introduced a mechanism for evaluating CSR through non-stock indices. This trend can be traced both internationally and nationally.

In conceptual terms, this CSR assessment is carried out solely to increase the importance of the responsibility of international and large national companies in the business environment and the commitment of consumers and their customers. Thus, the priority measure is the efforts made by companies to improve certain factors in their business activities and their impact on the environment (ecologization, elimination of discrimination, etc.).

Undoubtedly, such an approach is important because it allows and forces the management of corporations to focus not only on purely economic goals but to solve urgent problems of the environment and social inequality. However, a radical solution to the problems of social responsibility of business has not yet been traced. The reason for this is the substitution of the aims' priority. Nowadays, the aim of improving the living conditions of a single person on a global scale is not even voiced. Therefore, the social value system does not track the measurement of specific quantitative characteristics. However, integral indicators developed on an economic basis (stock indices) dominate reports and various rankings, because the economic component of the social assessment of the international environment remains a priority.

The transition to full social responsibility is possible, but under certain conditions, among which the factor of knowledge which in their realization leads to innovative development is obliged to dominate. And the knowledge should become completely accessible and not be fragmented by different factors.

The understanding of social responsibility can change fundamentally only through innovation, or more precisely, its rapid implementation. Modern innovative development is difficult from the position of implementation's organization because it requires significant efforts to harmonize legal requirements and organizational and production processes. Modern breakthrough innovative technologies are implemented over dozens of years and are focused on profit.

When it comes to knowledge, modern mass learning, especially in national countries with less powerful economies, is fixated exclusively on national priorities. Education should be oriented to the study of nano- and pico- (10-12) technologies.

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Primary Paper Section: A

Secondary Paper Section: AE

DEVELOPMENT OF STUDENTS' ABILITY TO INDEPENDENTLY MASTER AVIATION ENGLISH WITHIN THE CONDITIONS OF COVID-19 PANDEMIC

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Abstract: The new millennium is characterized by an unprecedented breakthrough in knowledge and technology; consequently, the challenges of the XXI century require new paradigms of interaction in all life spheres. In light of the fact that safety in the aviation industry directly depends on the high-quality speech interaction between flight personnel and air traffic controllers, communication issues in aviation and the professional speech of aviators are the subject of close consideration not only by scientists and aviation operators-practitioners, but also by the world aviation organizations. The development of students' ability to independently master Aviation English within the conditions of the COVID-19 pandemic is a crucial role of education. The developers of curricula around the world are looking for methods through which they can qualitatively transfer the traditional education system. For this reason, the provision of quality education includes the expectation that educators will effectively use educational technologies and facilitate students' ability to learn aviation-related English on their own. The purpose of the research lies in determining the effectiveness of distance education for students' ability to independently master Aviation English within the conditions of the COVID-19 pandemic based on a survey of students in order to establish the key skills acquired by students as a result of studying the discipline "Aviation English". The research methods are as follows: comparative analysis; systematization; generalizations, surveys. Results. It has been determined that all pilots flying international flights and all air traffic controllers providing services on international flights should possess a minimum level of English proficiency – ICAO Operational Level 4. It has been established on the basis of a survey conducted that a particular amount of students learn Aviation English on their own (53,42%); the other part believes that distance education is better than traditional education in the process of self-study of Aviation English (38,16%); however, a smaller number (5,63%) were unsure of the quality of distance education. Along with this, the rest of the students have noted that distance education is worse than traditional education due to the inadequate level of development of communicative competence in Aviation English (2,79%). As a result of the research conducted, it has been revealed that the following training methods, namely: exercises for the formation of radio communication skills, tasks for analyzing aviation events, communication tasks, role-playing and business games, as well as the digital method will contribute to the development of students' ability to independently master Aviation English within the conditions of the COVID-19 pandemic. It has been established that the speech skills of students should be improved in a professional direction in order to form the ability to communicate in accordance with ICAO standards..

Keywords: Aviation English; self-instruction development; independent language learning; English for special purposes (ESP); COVID-19.

1 Introduction

The COVID-19 pandemic has caused changes in the educational process and affected the interaction of students and teachers (Sobaih, Hasanein, Abu Elnasr, 2020). The situation limiting traditional learning between teachers and students within the conditions of the COVID-19 pandemic inevitably forces the education system to be adapted in order to remain relevant in responding to students' needs for further study. The traditional education system, which relies on face-to-face interaction between teachers and students, cannot be implemented during a pandemic, considering the fact that there must be social distance for preventing the spread of COVID-19 (Demirdöken, 2021).

In countries around the world, national governments have introduced appropriate measures to avoid the spread of COVID-19 and ensure the implementation of a smooth educational process, in connection with which educational institutions use distance learning (Ali, 2020), which, due to modern conditions, is a substitute for the traditional educational process (Abou El-Seoud et al., 2014).

The inevitable necessity to implement distance learning, which is based on the application of computer technology and the Internet, helps establish interaction between teachers and students (Demirdöken, 2021). The use of innovative information technologies simplifies the process of transferring educational material in order to ensure the educational process simultaneously between a significant number of degree-seeking students (Suresh, Priya, Gayathri, 2018).
With a view to the continued growth of the aviation industry, there is a growing need for more qualified pilots and air traffic controllers who are proficient in Aviation English. Therefore, ensuring the process of teaching English for special purposes (ESP) in educational institutions within the conditions of the COVID-19 pandemic is important for asecuration of high-quality training of future specialists (Demirdöken, 2021).

The purpose of mastering Aviation English lies in providing the participants of the educational process with an awareness of their responsibility for the safety of aircraft passengers, as well as giving an opportunity to communicate freely when using English in the aviation profession (Rossydi 2020a; Rossydi 2020b).

In response to modern challenges, in order to ensure the ability of students to independently learn Aviation English, the learning process is conducted through distance learning (Spector et al. 2014; Rossydi, Masita, 2021).

In the prospect of maintaining a safe and stable aviation, the necessity for specialized training in Aviation English within the conditions of the COVID-19 pandemic is more urgent than ever in order to prepare students for gaining success in flight school and their future careers outside of school (Emery, 2021).

Clear and effective aviation-related communication in English between air traffic controllers and pilots is a crucial component for aviation safety (CAA, 2006). Consequently, uninterrupted and permanent communication is important, forasmuch as both parties should maintain a constant understanding of the circumstances in order to share the responsibility for efficient and safe air traffic control (Park, 2020).

The purpose of the research lies in determining the effectiveness of distance education for students' ability to independently master Aviation English within the conditions of the COVID-19 pandemic based on a survey of students in order to establish the key skills acquired by students as a result of studying the discipline "Aviation English".

The research objectives of the academic paper are as follows:

1. To analyze the structural components of the ICAO language proficiency rating scale (the 4th operational level).
2. To conduct an analysis of the major ICAO directives and normative legal acts of Ukraine for the organization of foreign language training for students-aviators.
3. To identify how the COVID-19 pandemic affected learning process in all educational institutions.
4. To differentiate the goals and objectives of the principal discipline "Foreign Language (English)" and the professional discipline "Aviation English" in the process of language training of future specialists of the aviation industry.
5. To conduct a survey among students in order to assess the effectiveness and ability of students to independently learn Aviation English within the conditions of the COVID-19 pandemic.
6. To determine the key skills of students' communicative competence formation, which will be obtained by the latter as a result of mastering the academic discipline "Aviation English".

2 Literature Review

Distance education is defined as "an educational process in which all or most of the teaching and learning activities are carried out by a teacher in remote mode in space and / or time from students, with the consequence that all or most of the communication in the learning process between teachers and students is carried out for using an artificial medium" (UNESCO, 2002). As a result of the investigations conducted, it has been revealed that distance education has proven its validity and value (Xiao, 2018; Babu, Sridevi, 2018), and it has been determined that there is no significant difference between distance and full-time education (Bozkurt, 2019a; Jung, 2019). The pragmatic nature of distance education allows applying working solutions to students' learning in the education sphere, and it has been established that the education sphere should provide training opportunities for students with disabilities (Bozkurt, 2019b; Coman et al., 2020).

The virtual classroom is used for conducting classes in distance learning mode, and it is considered as a generalized channel of hybrid learning. The investigations of scientists show that the introduction of a virtual classroom has a positive impact on the learning process (Radovan, Kristl, 2017; Martin, 2019; Blaine, 2019; Aditya et al. 2019; Nugroho, Atmojo, 2020). It is important to emphasize that the implementation of a virtual classroom may vary depending on the context and the students' needs (Masita et al. 2020; Masita, 2020). The focus of attention of the present research will be the integration of virtual classrooms in order to develop students' ability to learn Aviation English independently (Rossydi, Masita, 2021).

Aviation English is considered as a language that is specifically used by pilots and air traffic controllers for communication purposes during air traffic in the air as well as on the ground. Crystal (1997) has designated Aviation English as "Airspeak" and defined it as a limited vocabulary containing a fixed set of sentences that are used to unambiguously express all situations that may occur during air traffic. In addition, Aviation English covers a wide range of language use situations (Mede et al., 2018), including both aviation phraseology and simple aviation-related language. Such differences in the ways pilots and air traffic controllers communicate with each other imply as follows: on the one hand, this means the correct and standard application of terminology or phraseology during air traffic both in the air and on the ground, the manufacture of aircraft and its specifications, as well as the use of legal terms in aviation law; on the other hand, it concerns the general use of English among aviation personnel in everyday communication, regardless of their nationality, race and cultural background (Demirdöken, 2021).

With the expansion of air travel in the XX century, safety concerns have arisen concerning the ability of pilots and air traffic controllers to communicate. In 1951, the International Civil Aviation Organization (ICAO) recommended in ICAO Appendix 10 to the International Chicago Convention to use English everywhere for "international aeronautical radiotelephony" Although this was only a recommendation, ICAO Aviation English has been widely accepted (Kankaras, 2020).

By the way, ICAO (2004) has further developed a set of Language Proficiency Requirements (LPR), consisting of six skill levels in six areas of applying Aviation English as follows: pronunciation, structure, vocabulary, fluency, comprehension and communication. The outlined standardization in assessing Aviation English lays a solid basis for improving Aviation English. However, it is not ICAO but training institutions in the aviation industry that are responsible for ensuring effective coverage of all six ICAO Aviation English skills at the operational level (ICAO, 2009).

According to ICAO's guidelines, regardless of the mother tongue of air traffic controllers, pilots, navigators and station operators, they should demonstrate their ability to speak and understand Aviation English used for radiotelephone communication. However, despite the use of LPR, language and comprehension issues remain a major cause of airspace incidents (Tiewtrakul, Fletcher, 2010). Recently, covering training and assessment based on the competence of the air traffic controller, ICAO (2016) has adopted a five-phase model of instructions called ADDIE as follows: 1) analysis, 2) design, 3) development, 4) implementation and 5) assessment. The ADDIE model has become one of the most widely used platforms for creating and assessing potential Aviation English training modules and programs. However, no empirical study on the structure has been conducted in the course of developing and implementing training programs for air traffic controllers in English, except for cabin crew training (Meishella, 2018) and training of aviation maintenance specialists. It bears mentioning that prior to obtaining a license; an air traffic controller must pass an ICAO English language test (Rossydi, 2020a).

Therefore, the development of students' ability to independently master Aviation English within the conditions of the COVID-19 pandemic has not been reflected in the publications of scientists in the form of practical investigations and theoretical studies; however this issue is relevant and open for further research.

3 Methods and Materials

The implementation of the objectives of the present research involves the using the methods as follows:

- systematization of the basic directive documents of ICAO and normative-legal acts of Ukraine for the organization of foreign language training of students-aviators;
- system and logical analysis, the method of synthesis of information about the ICAO language proficiency rating scale (the 4th operational level);
- summarizing the latest scientific publications related to the result of studying the academic discipline "Aviation English" in order to form the students' communicative competence and determine how the COVID-19 pandemic has affected learning in all educational institutions;
- the comparison method for distinguishing the goals and objectives of the major discipline "Foreign language (English)" and the professional discipline "Aviation English" in the process of language training of future specialists of the aviation sphere.

In order to determine the individual features, effectiveness and ability of students to independently master Aviation English within the conditions of the COVID-19 pandemic, the study was conducted using descriptive statistics, the data of which were provided as a result of a survey using MS Forms Pro. Consequently, the survey has been conducted to determine students' perceptions of their ability to master Aviation English independently within the conditions of the COVID-19 pandemic and reveal the teaching methods which will help develop students' ability to learn Aviation English independently within the conditions of the COVID-19 pandemic. An online survey was conducted in the period from May, 20 till October 30, 2021, which collected information from 1 900 students of the higher educational institutions as follows: Flying Academy (Brno, the Czech Republic), Czech Aviation Training Center (Prague, the Czech Republic), National Aviation University (NAU) (Kyiv, Ukraine), South Sweden Flight Academy AB (Swedala, Sweden), Omega Aviation Academy (Piraeus, Greece). These participants answered questions about their learning experience, motivation, expectations and general satisfaction with distance education in the process of mastering Aviation English. The following research questions were considered in this survey, namely: 1. How do the students perceive the way universities provide knowledge in the context of exclusively distance education? 2. What is the students' perception of the ability to absorb information in the context of exclusively distance education? 3. What kind of education is better: distance or traditional one? 4. What training methods do you consider the most appropriate for learning Aviation English? 5. What speech skills should be developed in future aviation specialists in order to ensure a high level of their professional speech?

4 Results

In pursuance of ICAO standards, all pilots flying international flights and all air traffic controllers providing services on international flights must possess a minimum level of English; this level is known as ICAO Operational Level 4. ICAO has developed criteria for assessing Aviation English. Applicants taking the Aviation English Proficiency Test are assessed from

Level 1 to Level 6. The candidates receive from 1 to 6 points for each of 6 skills as follows: pronunciation, structure, vocabulary, fluency, comprehension and communication (refer to Table 1).

Table 1 – ICAO Language Proficiency Assessment Scale (Operational Level 4)

Operational Level 4	
Pronunciation	Pronunciation, stress, rhythm, accent, and intonation depend on the native language or regional variations, sometimes interfering with ease of understanding.
Structure	Basic grammatical structures and sentence patterns are used creatively, and they are usually well controlled. Errors can occur, especially in unusual circumstances, however, they rarely interfere with meaning.
Vocabulary	Vocabulary and accuracy are usually sufficient for effective communication on general, specific and work-related topics. Ideas can often be successfully paraphrased when there is a lack of vocabulary in unusual or unexpected circumstances.
Fluent speaking	Language phrases and sentences at the appropriate pace are created. Sometimes there may be a loss of fluent speaking in the transition from rehearsed or standard speech to spontaneous interaction; however, this does not interfere with effective communication. Conjunctions or discursive markers may be used to a limited extent. Pronunciation does not distract communicators.
Understanding	Understanding is mostly accurate on general, specific and work-related topics, when the accent or dialect used is sufficiently clear to the international users' community. When the speaker is faced with speech or situational complexity or unexpected turn of events; comprehension may be slower or it requires a rapid messaging strategy.
Communicative interaction	Answers are usually immediate, relevant and informative. The speaker initiates and maintains communicative interaction, even when dealing with unexpected events and situations. He adequately copes with obvious misunderstandings by checking, confirming or clarifying.

Source: Compiled by the authors based on official data of Kankaras, (2020), ICAO, (2010).

In higher education institutions, specialized foreign language training of future specialists takes place; curricula are concluded on the basis of the "Program in English for Professional Communication" recommended by the Ministry of Education and Science of Ukraine, which is a Typical program. The purpose of the discipline lies in forming students' "general and professionally oriented communicative speech competencies (linguistic, sociolinguistic and pragmatic) in order to ensure their effective communication in the academic and professional environment". There are a number of ICAO documents and normative legal acts of Ukraine with directive documents for the organization of foreign language training of students-aviators as follows:

- The Air Code of Ukraine as of July 4, 2013 № 406-VII;
- The Law of Ukraine "On approval of the Rules of Radiotelephone Communication and Phraseology of Radio Exchange in the Airspace of Ukraine" as of August 14, 2012 № 494;
- The Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Regulations on the State Aviation Service of Ukraine" as of October 8, 2014 № 520;
- Doc 4444: Amendment No. 1 to the Procedures for Air Navigation Services "Air Traffic Management";
- DOC 9835: Manual on the Implementation of ICAO Language Proficiency Requirements (Saleable Document – Links to the ICAO Store);
- CIR 323: Guidelines for Aviation English Training Programmes;
- Resolution A38-8: Proficiency in the English language used for radiotelephony communications.

In the context of the initiated research, the analysis was conducted concerning direction of the academic discipline in the educational institutions as follows: Flying Academy (Brno, the Czech Republic), Czech Aviation Training Center (Prague, the Czech Republic), National Aviation University (NAU) (Kyiv, Ukraine), South Sweden Flight Academy AB (Swedala, Sweden), Omega Aviation Academy (Piraeus, Greece) for the formation of professional speech skills of future international pilots and air traffic controllers (refer to Figure 1).

Language training of future specialists in the aviation sphere

The major discipline "Foreign language (English)"

The purpose of the discipline:
preparing students for effective foreign language communication in their academic and professional environment.

The major goal of the discipline:
formation of communicative language competencies in order to ensure adequate speech behavior of students in real situations of academic and professional life.

Professional discipline "Aviation English"

The purpose of the discipline:
gaining by students of communication skills in Aviation English at a level sufficient for the successful performance of professional duties in the workplace of the future specialist.

The major goal of the discipline:
gaining by students of skills and abilities professionally necessary for future pilots / air traffic controllers in accordance with ICAO language requirements and standards.

Figure 1 – Language training of future specialists in the aviation sphere
Source: Compiled by the authors based on official data of Kankaras, (2020), ICAO, (2010).

COVID-19 pandemic has affected learning in all educational institutions and only 2% of educational institutions have reported that the pandemic does not influence the training process. Two thirds of educational institutions have reported that teaching has been replaced by distance teaching and one quarter has stated that most activities have been currently discontinued; however, the institution is working on developing solutions for continuing education using digital means or special self-study methods, and only 7% have informed that teaching has been cancelled (refer to Figure 2).

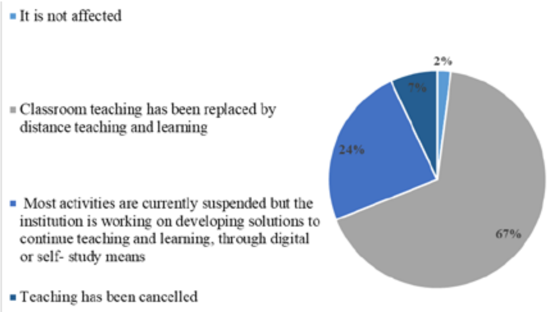

Figure 2 – How has COVID-19 affected teaching and learning?
Source: Compiled by the authors based on official data of IAU Global Survey Report (2020).

These results demonstrate that two-thirds of educational institutions were able to transfer teaching online and one third was not. However, most educational institutions are working to develop solutions for continuing teaching on the Internet.

In order to assess the development of students' ability to master Aviation English independently within the conditions of the COVID-19 pandemic, which has been implemented by teachers remotely, students of Flying Academy, Czech Aviation Training Center, National Aviation University, South Sweden Flight Academy AB, Omega Aviation Academy, have noted that distance education has a positive effect on ensuring the ability to independently learn Aviation English (53.42%); the other part believes that distance education is better than traditional education in the process of independent learning Aviation English (38.16%); however, a smaller number (5.63%) have been unsure of the quality of distance education; the rest of the students have noted that distance education is worse than traditional education due to the inadequate level of development of communicative competence in Aviation English (2.79%) (refer to Figure 3).

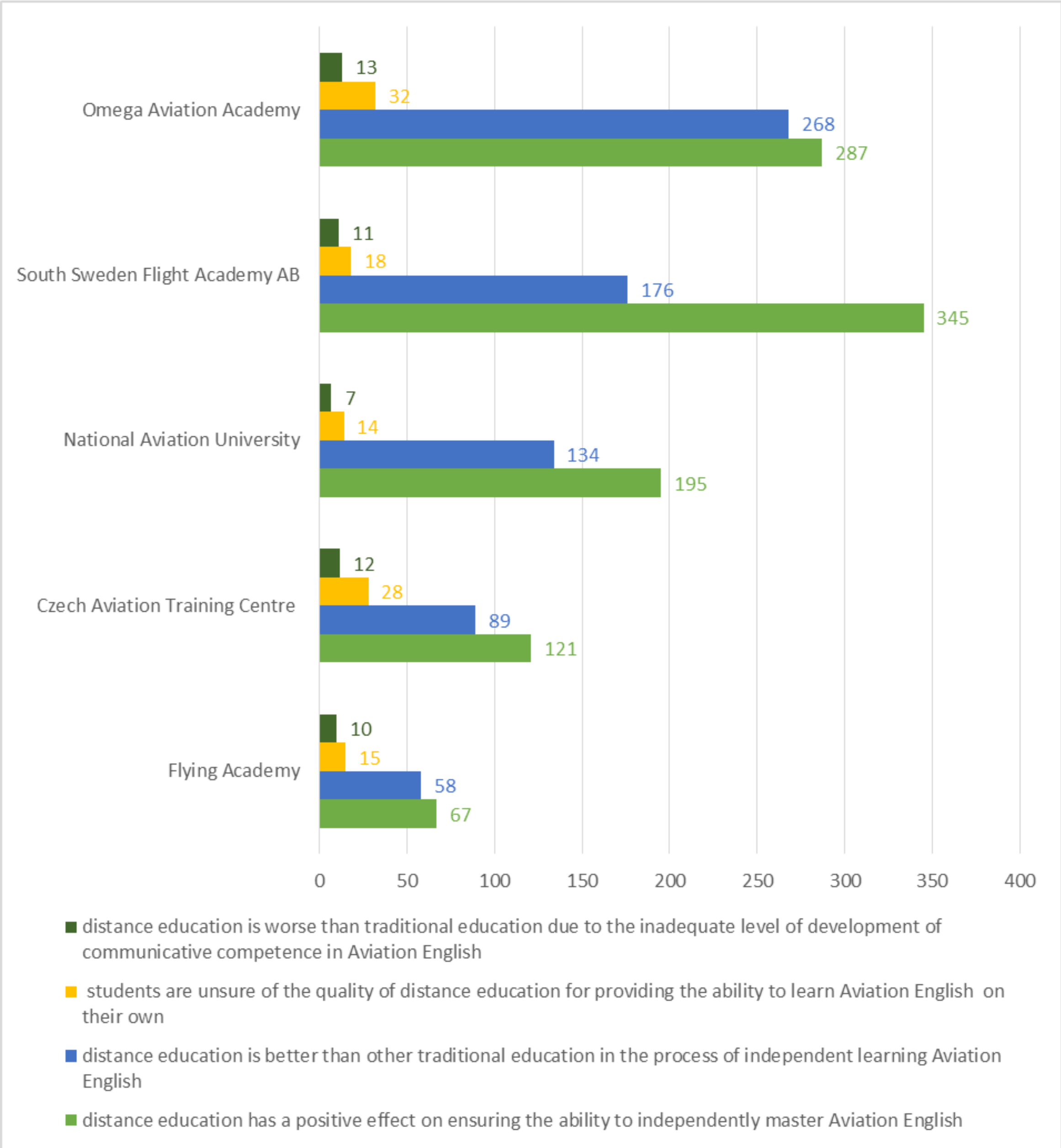

Figure 3 – Assessment of the development of students' ability to master Aviation English independently within the conditions of the COVID-19 pandemic
Source: Developed by the authors.

Figure 4 reflects the methods of educational activities contributing to the development of students' ability to master Aviation English independently within the conditions of the COVID-19 pandemic as follows: exercises for the formation of radio communication skills (1900 people or 8.65%), analysis of aviation events (1900 people or 8.65%), communication tasks (1885 people or 8.58%), role-playing and business games (1859 people or 8.46%) and the digital method (1834 people or 8.35%).

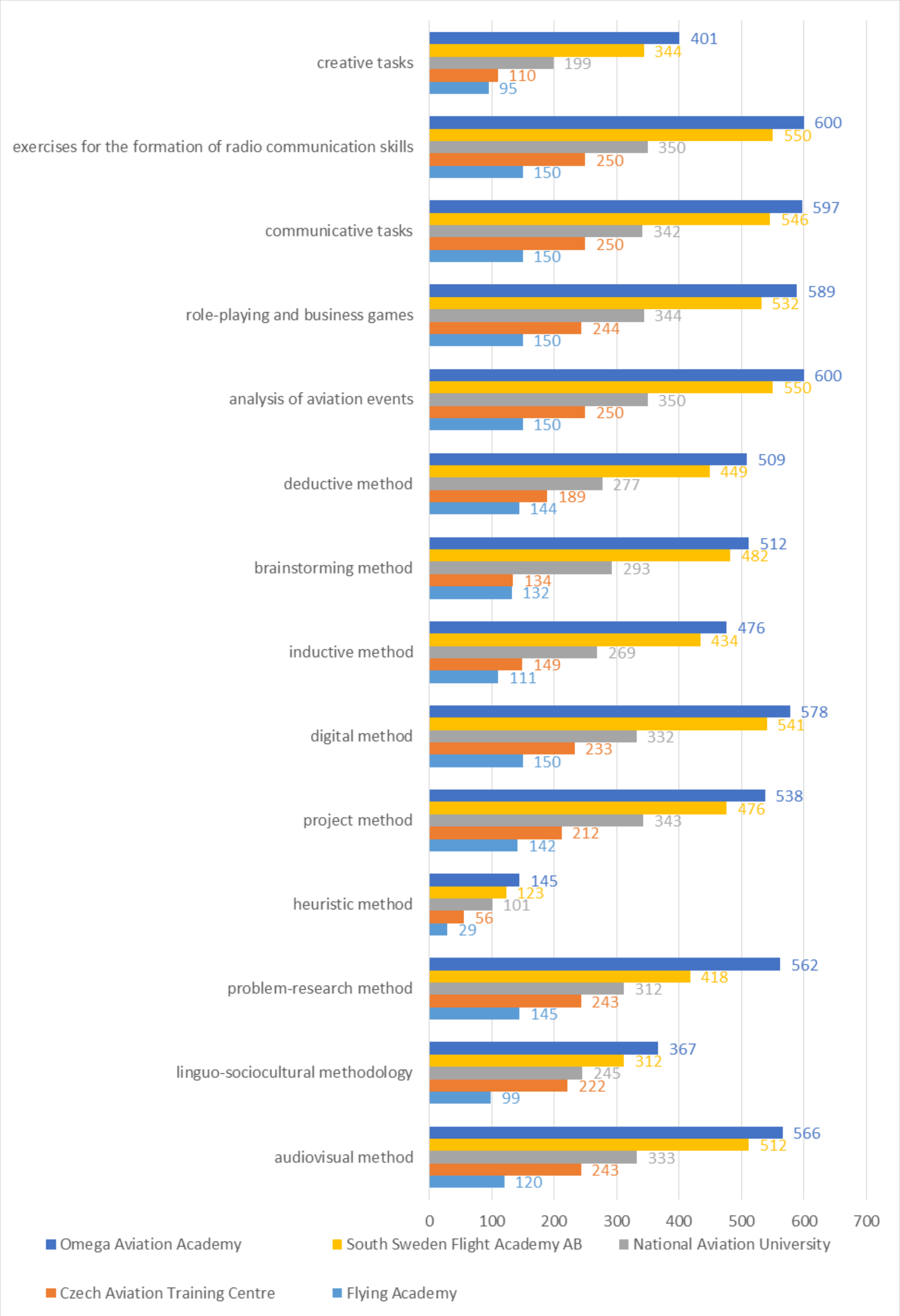

Figure 4 – Methods of educational activities for the development of students' ability to master Aviation English independently
Source: Developed by the authors.

Figure 5 reflects the result obtained from the learning the academic discipline "Aviation English" for the formation of students' communicative competence.

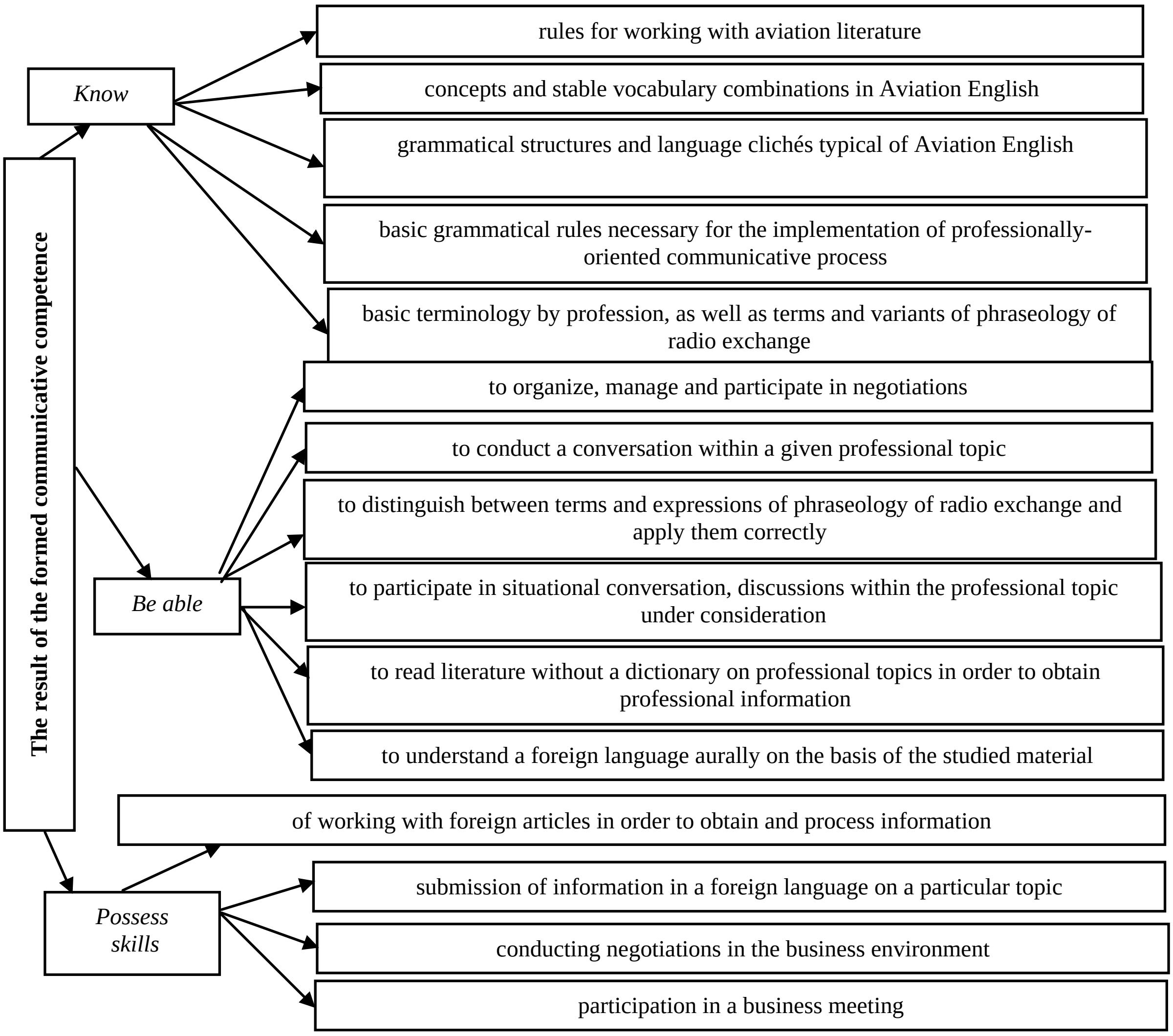

Figure 5 – The result of mastering the discipline "Aviation English" for the formation of students' communicative competence
Source: Compiled by the authors based on official data of Kalugina (2016).

Speech skills of students and future professionals are expected to be improved in the professional direction, in particular to form the ability to "build communication in accordance with ICAO standards concerning the 4 operational level of professional English proficiency".

5 Discussion

The results of the research conducted on the development of students' ability to independently master Aviation English within the conditions of the COVID-19 pandemic have led to the conclusions as follows. Distance learning benefits students when it is used as an additional tool to replace the traditional learning process. A great amount of investigations has shown that students tend to have a positive attitude towards distance education; although, sometimes, some of them believe that they absorb information better due to the traditional system of teaching Aviation English (Coman et al., 2020).

Firstly, investigations have revealed numerous benefits of distance education, namely: better learning outcomes, adapting the learning process to students' needs, flexibility, students' orientation and removal of barriers to master Aviation English independently (Babu, Sridevi, 2018). Secondly, the survey conducted proves that the educational process quality achieved due to distance learning will ensure the independent learning Aviation English by students, if the teachers apply exercises to form radio communication skills, tasks for analyzing aviation events, communication tasks, role-playing and business games and the digital method (Coman et al., 2020). Data visualization, image processing and the creation of a virtual environment allow future aviation professionals achieving approaches to independently master Aviation English.

The research conducted demonstrates that distance education can influence the development of students' ability to learn Aviation English on their own, forasmuch as respondents have reported that distance education has a positive effect on the ability to learn Aviation English independently; however, the rest of the respondents believe that distance education is better than traditional education in the process of independent learning Aviation English. Taking into consideration the globalization challenges, teachers will have to work in a more complex educational environment, forasmuch as the 2020 pandemic has brought changes to traditional education; consequently, teachers should integrate into the educational information technology space in order to ensure effective learning of Aviation English. Therefore, teachers and students will face challenges due to the fact that the potential of distance education in the educational information technology space is quite high, however, it is not sufficiently implemented, the in-depth study of which will increase attention towards improving distance education for effective learning Aviation English.

6 Conclusion

As a result of analyzing the development of students' ability to master Aviation English independently within the conditions of the COVID-19 pandemic, it has been established that due to the intensification of educational processes and the emergence of obstacles to traditional learning, requiring an urgent alternative solution, this process involves the development of distance learning, where this issue is becoming increasingly relevant. It has been revealed that in connection with the pandemic, distance learning is gaining popularity in almost all countries of the world.

The quality of distance learning should be improved and perceived as equal to traditional education in an educational institution, which will contribute to the development of students' ability to independently master Aviation English within the conditions of the COVID-19 pandemic. It is currently quite obvious that in order to achieve an effective learning process on mastering Aviation English, educational institutions should combine the benefits of mixed types of education. The application of modern methods of training activities for developing students' ability to independently learn Aviation English will contribute to the quality education of future specialists. In addition, the research has evaluated and identified the results of studying the discipline "Aviation English" for the formation of students' communicative competence. It is expected that the provision of these results for the period of applying distance education will help improve the Aviation English language learning proficiency as students move on to the next academic year. By the way, it is particularly important to improve distance education platforms, which may be the only available way to learn and teach Aviation English, which can ensure the continuity of learning during unexpected events such as the COVID-19 outbreak.

The practical significance of the research conducted lies in in the fact that the conclusions and recommendations developed by the author and proposed in the academic paper can be used for prospective development of students' ability to independently master Aviation English in the context of distance learning.

Further investigations can be aimed at improving distance education for students' ability to independently learn Aviation English, which will stimulate the educational sphere and improve teaching activities in the educational information technology space, providing quality online education. Increasing the capabilities and widespread using innovative, scientific – research approaches to distance education at the educational level can be the basis for strategies for future periods.

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Primary Paper Section: A

Secondary Paper Section: AM

THE PHENOMENA OF RADICALISM AND EXTREMISM: SOCIO-LEGAL HYPOTHESES FOR THE RESPONSE

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Abstract: One of the socio-dangerous phenomena that infringe on the rights of citizens to security is organized crime, in particular, the activities of terrorist groups united by the ideas of radicalism. The phenomena of radicalism and extremism are a global trend, in particular on religious grounds. This article aims to highlight socio-legal hypotheses for countering radicalism and extremism. Methodology. This article used a quantitative methodology based on a statistical analysis of the Global Terrorism Database (GTD) containing data regarding the number of terrorist attacks from 1970-2020, regions of terrorism, targets of attacks, types of attacks, target groups, victims, and information on Perpetrator. The results show that the number of terrorist attacks for 2011-2020 is significantly higher than between 1970 and2010, in particular, due to the growth of terrorism in the Middle East, North Africa, and South America, which are characterized by high religiosity. Terrorist attacks have a variety of goals, closely intertwined with a complex structure of connections: political, economic, religious, social factors; goals to intimidate, attract and expand the audience. The main targets and victims of terrorist attacks are citizens and their property (25% of cases between 1970 and 2020), military (16%), police (14%), government (12%), business (11%). Terrorist groups are mostly composed of Islam adherents' members. In addition to radicals, terrorist attacks are actively carried out by extremists who are supporters of communism or by paramilitary, militant groups advocating freedom rights because of the uprising.

Keywords: radicalism, counterradicalism, extremism, anti-terrorist security, soft power, terrorism, radicalization of society.

1 Introduction

A great achievement of humanity is the rule of law, which is the basis of civil society and the guarantor of the quality of life of citizens. One of the socially dangerous social phenomena that infringe on the rights of citizens to security is organized crime, in particular, the activities of terrorist groups united by the ideas of radicalism. The phenomena of radicalism and extremism are a global tendency, in particular, for religious beliefs. They easily spread due to technological advances, especially in the information and communication sphere (Nur et al., 2020). Their range and upward tendencies are evident, which entails the deformation of the reform process, threatening the foundations of statehood, constitutional legality, and the security of citizens. In this regard, strengthening the rule of law is the most important task facing modern society, is one of the state priorities.

The main reasons for the unprecedented growth of organized crime lie in the instability of society, legal nihilism that has engulfed all strata of society, including the power structures at different levels, the destroyed system of prevention and prevention of crimes. The imperfection of the legal framework, especially on the regulation of criminal activity in the information environment, also harms the level of security of citizens. Mass media does not contribute to the fight against organized crime, so the leaders of criminal formations exert informational influence on the general population, especially on minors. Modern terrorist organizations have a complex network structure, which implies the presence of different actors, including different degrees of terrorist qualification and the degree of awareness of their decisions.

This article aims to highlight socio-legal hypotheses for the prevention of radicalism and extremism.

2 Literature review

Radicalism, as a term, appears from the early XVII century, while the notion of extremism is quite modern. Extremism characterizes an ideological position encompassing opposition to entities that understand politics as a struggle for supremacy rather than peaceful competition between parties with different interests, seeking popular support to advance the common good (Josefsson, Nilsson & Borell, 2017). Extremism exists on the periphery of societies and seeks to gain its center of influence over citizens through society's sense of fear. Extremists divide citizens and foreigners into friends and enemies, without territorial affiliation to form different opinions and alternative lifestyles (O'Hara & Stevens, 2015). Extremism, due to its dogmatism, is intolerant and should not be compromised. Extremists tend to form circumstances that allow them to organize aggressive activities led by a warlord, including criminal acts and mass violence, to gain political power (Wibisono, Louis & Jetten, 2019). In places where extremists gain state power, they tend to destroy social diversity and seek to prove an overarching homogenization of society based on their ideology with apocalyptic traits. On a societal level, extremist movements are authoritarian, and if extremist rulers are in power, countries tend to become totalitarian. Extremists glorify violence as a mechanism for conflict resolution and oppose the constitutional state, majority-based democracy, the rule of law, and human rights (Bötticher, 2017). Schmid (2014) defined an extreme group as one that holds an understanding of extreme violence or extremism. Compared to radicals, extremists tend to be closed-minded, impatient, anti-democratic and can justify any means, including fraud, to achieve their own goals. This group is different from radical groups, groups of people who embrace radicalism (Schmid, 2014).

Some scholars define radicalism as an ideology (idea) that involves making changes to the social and political system through violent/extreme methods. The core of radicalism is the attitudes and actions of an individual or group using violent methods to achieve the desired change. As a rule, radical groups seek abrupt and immediate changes that tend to contradict the dominant social system (Nur et al., 2020). Radicalism refers to political doctrine encompassing social and political movements advocating individual and collective freedom and emancipation from the dominance of authoritarian regimes and hierarchically structured societies (McCoy & Knight, 2017). In this sense, radicalism advocating radical political change is a form of hostility against the status quo and its establishment. The origins of radicalism are frequently found among the sons and daughters of the bourgeois elite, young people who identify with the social conditions of the majority and seek to improve their condition. Historically, radical political parties have been key drivers of progress toward greater democracy in several states. Radicalism as an ideological mindset tends to be highly critical of the existing status quo, with the goal of restructuring and/or overthrowing outdated political structures. Their opponents often portray radicals as violent. Thus, this is only partially correct since radicalism is generally historically associated more with progressive reformism than with utopian extremism, the glorification of which radicals reject as violent (Kruglanski, 2018). Radicalism is emancipatory and does not seek to subjugate people and ensure the domination of conformism, unlike extremism. Radical narratives contain utopian ideological elements, but they do not advocate any means of achieving goals. While radicals are unwilling to compromise their ideals, they are open to rational arguments about the means to achieve their goals. Unlike extremists, radicals are not necessarily extreme in their choice of means to achieve their goals. Unlike extremists, radicals also recognize themselves as radicals (Bötticher, 2017).

Carter (2018) explores the signs of right-wing radicalism, extremism: a strong state, authoritarianism, nationalism, racism, xenophobia, anti-democracy, populism, anti-establishment rhetoric, using the ideology of different political parties as examples. Exactly these attributes are evident in radical political forces, but not all of them are defining characteristics (Schmid, 2014). The research found that all attributes are present for the ideology of only one party, the Austrian National Democratic Party. Carter (2018) concluded that the "call for a strong state" was not fully present in the ideology of the Dutch centrist party. Also, the sign of anti-democracy was absent in the ideologies of the Communist Party, and the German National Democratic Party. The anti-democracy and "strong state" are not the defining features of right-wing extremism/radicalism, only nationalism, racism, and xenophobia. Carter (2018) argues that authoritarianism, anti-democracy, and an exclusive and/or holistic type of nationalism are defining features of right-wing extremism/radicalism. As a comparison, xenophobia, racism, and populism are concomitant characteristics of this concept. Thus, Carter (2018) formulates a definition of right-wing extremism/radicalism as an ideology that encompasses authoritarianism, anti-democracy, and exclusive and/or holistic nationalism. The holistic nature of the nationalism of some extreme/radical right-wing parties requires the subordination of the individual to the will and purpose of the nation, thereby undermining and limiting rights and freedoms (McCoy & Knight, 2017). The nationalism of another extreme/radical right party is not like this. However, it is also anti-democratic because it is based on opposition to pluralism and rejects the principle of equality. All extreme/radical right-wing parties, then, believe in different ways that the nation is in danger, and their response to this threat is anti-democratic. As for the relationship between authoritarianism and nationalism, the traditional values (i.e., conventionalism) promoted by extreme/radical right parties are largely shaped by their view of the nation as an organic entity to be valued and protected, as well as the specific attitude toward membership in the nation (Nur et al., 2020). In turn, the protection the nation needs require respect, order, and discipline (i.e., submission), and threats to the nation, particularly from outsider groups that do not conform to the traditional understanding of the national community, must be met with aggression (Kruglanski, 2018). Thus, the authoritarianism of right-wing extremist/radical parties is guided by their nationalism. In some cases, the traditional values espoused by the parties are anti-pluralistic, promote inequality, or limit civil and political freedoms. The ideas appealed to by political forces also entail restrictions on individual rights and freedoms. Aggression toward those who do not conform to these values (which is found in condemnation, discrimination, and punitive measures) exposes the rejection of pluralism, equality, and individual freedoms (Carter, 2018).

The phenomenon of radicalism and extremism arose out of the social protest movements of the 1960s and 1970s in Western Europe and North America. Today, the problem has spread around the world. In post-communist Europe, radicalism development has taken place in a regionally specific way, influenced by various historical processes. These processes included the existence and fall of communist regimes, post-communist political and economic transformations, and the Westernization of post-communist societies. The birth of radicalism and extremism is caused by reactions from different opposing political forces in different world regions. The attempts to combat this phenomenon are mainly made by the police and intelligence agencies at the level of security policy, and by neoliberal and conservative political forces at the level of political discourse. At the same time, there is a certain amount of restrained tolerance for some radical activity, predominantly on the left side of the intellectual spectrum. The struggle against the more problematic aspects of the radical/extremist movement was sometimes accompanied by measures against various political, economic, and social regulations (Mareš, 2008).

Thus, the literature identifies the essence of radicalism and extremism, their ideological position, signs of right-wing radicalism, extremism: strong state, authoritarianism, nationalism, racism, xenophobia, anti-democracy, populism, and anti-establishment speeches.

3 Methodology

This article uses a quantitative methodology based on a statistical analysis of the Global Terrorism Database (GTD) containing data regarding the number of terrorist attacks from 1970-2020, regions of terrorism, targets of attacks, types of attacks, target groups, and victims, and information on Perpetrators. The database is available on the official START website – National Consortium for Study of Terrorism and Responses to Terrorism (2021).

The statistical analysis was supplemented with the analysis of attacks' cases, in particular, the belonging of terrorist groups' members to a certain political force or religious commitment. It allowed us to conclude that the members of the groups are, in most cases, radicals, extremists, belonging to the communist parties or other political forces in the country.

The research identified the main motives, reasons, and desires (Kothari, 2017) in committing terrorist attacks. As stated by Creswell & Poth (2016), Denzin and Lincoln (2011), qualitative research involves identifying practices in a particular area. Qualitative research was conducted using the case study method (attacks in different countries by different terrorist organizations from 1970-2020) (Yin, 2013), given that this method allows researchers to conduct empirical studies of phenomena in the context of their environment to identify the relationship between attacks and the environment in which they occur (political, economic, social, religious). In addition, points of similarity and difference were taken from the GTD database to maximize results and conclusions about radicalists and extremist activities (Kothari, 2017).

4 Results

The number of terrorist attacks between 2011 and 2020 is significantly higher compared to the period between 1970 and 2010. It happened, in particular, as a result of the terrorism growth in the Middle East (share is 28.04%), North Africa, South America (share is 9.73), South Asia (share is 25.5%), and Sub-Sahara countries (share is 10.81%). In other words, terrorism has increased in countries with low levels of socio-economic well-being (Table 1). These countries are also characterized by high religiosity and radical thinking. The share of terrorism in Western European countries is high – 8.47%, which is associated with the migration flows of citizens from the Middle East to these countries, the policy of developed European countries regarding inclusion, equality, attracting a labor force due to the demographic crisis and an aging population.

Table 1 – The distribution of terrorist attacks by regions between 1970 and 2020, %

Region	1970-1980	1981-1990	1991-2000	2001-2010	2011-2020	Total	Total share, %
Australasia & Oceania	23	89	101	21	71	305	0.15%
Central America & Caribbean	1988	6736	1545	46	59	10374	5.16%
Central Asia	0	0	356	136	82	574	0.29%
East Asia	79	208	336	70	132	825	0.41%
Eastern Europe	27	100	1238	1352	2549	5266	2.62%
Middle East & North Africa	1527	2940	5201	9298	37448	56414	28.04%
North America	1671	519	671	260	577	3698	1.84%
South America	1328	10455	4837	1147	1805	19572	9.73%
South Asia	63	3459	4594	9652	33533	51301	25.50%
Southeast Asia	281	1347	1551	2924	7976	14079	7.00%
Sub-Saharan Africa	300	1968	2429	1860	15185	21742	10.81%
Western Europe	5288	4560	3841	1288	2056	17033	8.47%
Total	12575	32381	26700	28054	101473	201183	100.00%

Source: START (National Consortium for the Study of Terrorism and Responses to Terrorism) (2021).

Terrorist attacks have a variety of goals, which are closely intertwined with a complex structure of connections: political, economic, religious, social factors; the goals of intimidating, attracting, and expanding audiences who are potential members of terrorist groups. Also, terrorist attacks are usually outside the scope of international humanitarian law (Table 2).

Table 2 – The distribution of terrorist's goals of attacks between 1970 and 2020, %

Region	Cases, number			Share, %		
	Criterion 1	Criterion 2	Criterion 3	Criterion 1	Criterion 2	Criterion 3
Australasia & Oceania	297	305	290	0.15%	0.15%	0.17%
Central America & Caribbean	10166	10354	7352	5.11%	5.18%	4.20%
Central Asia	563	573	501	0.28%	0.29%	0.29%
East Asia	813	821	791	0.41%	0.41%	0.45%
Eastern Europe	5144	5253	4335	2.59%	2.63%	2.48%
Middle East & North Africa	56128	55942	47741	28.23%	28.00%	27.28%
North America	3589	3638	3645	1.80%	1.82%	2.08%
South America	19413	19516	17945	9.76%	9.77%	10.25%
South Asia	50686	50925	46098	25.49%	25.49%	26.34%
Southeast Asia	13709	14035	11986	6.89%	7.02%	6.85%
Sub-Saharan Africa	21439	21585	18515	10.78%	10.80%	10.58%
Western Europe	16904	16844	15827	8.50%	8.43%	9.04%
Total	198851	199791	175026	100.00%	100.00%	100.00%

Source: START (National Consortium for the Study of Terrorism and Responses to Terrorism). (2021).
Note: Criterion 1: POLITICAL, ECONOMIC, RELIGIOUS, OR SOCIAL GOAL; Criterion 2: INTENTION TO COERCE, INTIMIDATE OR PUBLICIZE TO LARGER AUDIENCE(S); Criterion 3: OUTSIDE INTERNATIONAL HUMANITARIAN LAW

The predominant terrorist attack types are bombing/explosive crimes, armed assault, assassination, hostage taking (kidnapping), attacks on facilities/infrastructure, unarmed assault, and hostage taking (barricade incident) 1). 89% of terrorist attacks between 1970 and 2020 are successful, i.e., that ensures that the group's objectives for the target of the attack are met.

The success of a terrorist strike is defined according to the tangible effects of the attack. Success is not judged in terms of the larger goals of the perpetrators. For example, a bomb that exploded in a building would be counted as a success even if it did not succeed in bringing the building down or inducing government repression. The definition of a successful attack depends on the type of attack. Essentially, the key question is whether or not the attack type took place. If a case has multiple attack types, it is successful if any of the attack types are successful, except for assassinations, which are only successful if the intended target is killed.

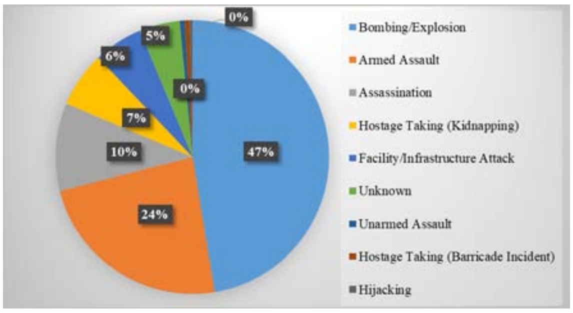

Figure 1 – Terrorism Attack's Type Hierarchy between 1970 and 2020, %
Source: START (National Consortium for the Study of Terrorism and Responses to Terrorism) (2021).

The main targets, victims of terrorist attacks are private citizens and their property (25% of cases from 1970 to 2020), military (16%), police (14%), government (12%), business (11%) (Figure 2). Thus, the attacks are mainly related to political, economic, social, and religious issues and their radical perception by terrorist groups members.

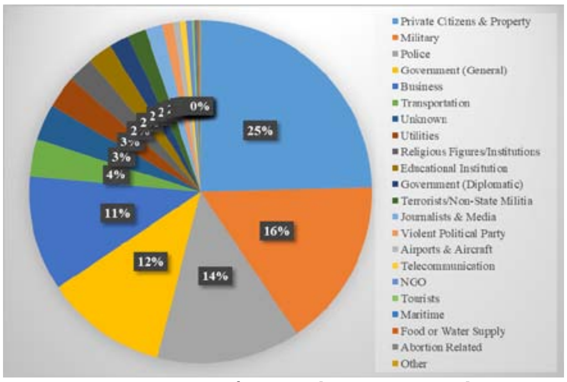

Figure 2 – Target/Victim Information between 1970 and 2020, %
Source: START (National Consortium for the Study of Terrorism and Responses to Terrorism) (2021).

According to the data in Fig. 3, it is obvious that terrorist groups are formed of Islam adherents' members. For example, members of the radical Sunni Islamist movement, which originated in Afghanistan among Pashtuns in 1994 and formed the Taliban organization, carried out 10094 attacks, the Islamic State of Iraq and the Levant carried out 6864 attacks, the communist terrorist organization Shining Path (SL) carried out 4563 attacks, the radical Islamist fundamentalist group Al-Shabaab carried out 4126 attacks, the left-wing political party, one of the two largest parties in El Salvador, Farabundo Marti National Liberation Front (FMLN) carried out 3351 attacks (Figure 3).

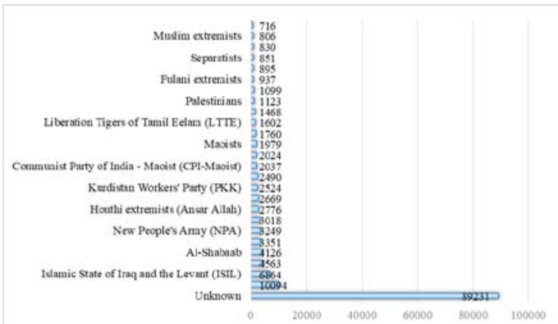

Figure 3 – Perpetrator Information of Terrorism Attack in 1970-2020, %
Source: START (National Consortium for the Study of Terrorism and Responses to Terrorism) (2021).

In addition to radicals, terrorist attacks are actively carried out by extremists (Fulani extremists carried out 937 attacks, Muslim extremists – 806 attacks, Sikh Extremists – 716 attacks), communists (for example, Communist Party of India – Maoist (CPI-Maoist9) 2020). Between 1970 and 2020, the new political forces in Yemen under the Houthi extremists (Ansar Allah) carried out 2776 attacks. The Irish paramilitary group Irish Republican Army (IRA), whose goal is to achieve full independence of Northern Ireland from the United Kingdom, including ending the military occupation of Northern Ireland, carried out 2669 attacks. The members of the IRA are the Catholic population of Ireland. The Kurdistan Workers' Party, a militant and political organization of the Democratic People's Union, has carried out 2524 attacks. The left-wing Colombian rebel organization Revolutionary Armed Forces of Colombia (FARC) has carried out 2490 attacks. Thus, religion and religious beliefs are always the basis for radicals and extremists.

Table 3 – The type of terrorist attacks between 1970 and 2020, the number

Region	Unknown	The attack was miscellaneous international	Total
Australasia & Oceania	59	30	89
Central America & Caribbean	133	210	343
Central Asia	94	21	115
East Asia	27	25	52
Eastern Europe	279	185	464
Middle East & North Africa	1214	1670	2884
North America	61	210	271
South America	-61	838	777
South Asia	499	1536	2035
Southeast Asia	89	286	375
Sub-Saharan Africa	716	1735	2451
Western Europe	2025	1310	3335
Total	5135	8056	13191

Source: START (National Consortium for the Study of Terrorism and Responses to Terrorism) (2021).

«The attack was miscellaneous international» – the attack was different/international; the location of the attack is different from the nationality of the target(s)/victim(s). "Unknown" – unknown if attack was international or domestic; nationality of target / survivor is unknown.

5 Discussion

Europe has launched a new counterterrorism program in response to the Islamist terrorist attacks of recent years. The scholars are not only trying to solve the "radicalization puzzle" to understand its causes (why young Muslims in Western countries are attracted to extremism) but are also making suggestions for de-radicalizing extremists and building trust with Muslim communities. Directly or indirectly, Muslim minorities in Europe are the targets of interventions and preventive work by members of terrorist organizations. This study suggests an alternative approach. Instead of viewing Muslims in Europe as more or less passive targets of various anti-extremist interventions, it is useful to look at strategies developed by European Muslims themselves to combat Islamist extremism (Josefsson, Nilsson & Borell, 2017). The example of Indonesia, as the country with the largest Muslim population and rich diversity, can serve as a role model for countering radicalism and extremism by spreading moderate Islamic practices among its supporters (Nur et al., 2020).

The research found that peaceful nations around the world face the activities of ideological radicals and extremists. The plans to counter or neutralize their ideology require different strategies, goals, and tactics than in traditional warfare. Prevention is as important as elimination. Long-term strategic planning for counterterrorism must take into account, if not emphasize, radicalization and recruitment by terrorists. There should be a clearer understanding of the appeal of militant jihadism to young people and the tactics used by radicals to mobilize their members for violent action. To this end, it is advisable to conceptualize and hypothesize social and legal countermeasures as a good-faith attempt to gather facts and analyze them to understand the problem before turning to large-scale and potentially damaging solutions.

If radicalization to violent extremism meets many of the well-established principles of other known systems and theories of development (and experience shows that it does), the following study of radicalization may consider the following assumptions as a starting point:

1. Radicalization is multi-deterministic; it is predetermined and sustained by several causes, not one cause. The goals of radicals and extremists are usually linked to political, economic, social, and religious factors, a desire to attract citizens to their activities, and to broaden their audience. Causal factors often include a broad level of discontent "pushing" individuals toward radical ideology and narrower, more specific "pull" factors that attract them.
2. Ideologies (and their group support) develop in the human consciousness of nested contexts and systems, including family, economic, social, and political structures.
3. Different paths can lead to radicalization (sometimes this hypothesis is called the equifinality principle); conversely, different individuals on a common path or trajectory can have different outcomes (sometimes this hypothesis is called the multi-infinity principle).
4. For some people, religion contributes to their adherence to attacks. For others, the sting contributes to their commitment to religion. For some, ideological attachment leads to group affiliation. For others, social or group affiliation leads to ideological commitment.
5. For some, the strength of personal conviction and commitment precedes their willingness to take subversive action. For others, engaging in disruptive action strengthens their conviction and commitment.
6. Not all terrorists are part of radical groups.
7. Violent radicalization and terrorist involvement are best viewed as a dynamic psychosocial process involving at least three phases: (1) involvement, (2) involvement as participation in unambiguous terrorist activity, and (3) disengagement (which may or may not lead to further deradicalization). In addition, involvement involves many potential roles and functions, which people very often change, sometimes playing multiple roles simultaneously.

The effective efforts to counter terrorist attacks by radicals and extremists need to be built on new operational and strategic reference systems to not only eliminate existing terrorists but also prevent terrorists from operating in the future.

6 Conclusion

The main reasons for the unprecedented growth of organized crime lie in the instability of society, legal nihilism that has engulfed all strata of society, including government structures at various levels, and the ruined system of crime prevention and prevention. The number of terrorist attacks in 2011-2020 is significantly higher than between 1970 and 2010, in particular, due to the growth of terrorism in the Middle East, North Africa, and South America, which are characterized by high religiosity and radicalism in their way of thinking. Terrorist attacks have a variety of objectives, closely intertwined with a complex structure of links:

- political, economic, religious, social factors;
- goals to intimidate, attract and expand the audience.

The main targets, victims of terrorist attacks are citizens and their property (25% of cases from 1970-2020), military (16%), police (14%), government (12%), business (11%). Terrorist groups are mostly composed of Islam adherents' members. In addition to radicals, terrorist attacks are actively carried out by extremists who are supporters of communism or by paramilitary, militant groups advocating freedom rights because of the uprising.

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Primary Paper Section: A

Secondary Paper Section: KA

THE MANAGEMENT OF TECHNOLOGY TRANSFER AND ITS IMPACT ON BUSINESS ACTIVITY AND FINANCIAL SECURITY IN DEVELOPING COUNTRIES

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Abstract: This article is devoted to assessing the impact of technology transfer on developing countries. The main purpose of the study is to determine the impact of production and technology transfer on the level of growth of developing countries. In order to achieve the goal, statistical data on research and development (R&D) expenditures, GDP, technology transfer and innovation development for 2014-2020 were analyzed. According to the results of the study, the countries investing in innovations have a great technological potential, which allows to develop the economy more rapidly, than by capital accumulation. The most influential indicator of technology development is the level of spending in R&D.

Key words: technology transfer, innovation, research and development (R&D), developing countries

1 Introduction

Technology transfer is a multifaceted process, which includes the transfer of intangible values and covers a wide range of market activities. The transfer includes migration of research results of inventions, investments in research and development (R&D), forming contractual relations between headquarters and branches of multinational firms, joint ventures or license partners, etc. Manufacturers of innovative technologies are also quite numerous. They include universities and research laboratories, private and public foundations, NGOs, start-ups and technology brokers, multinational enterprises, and R&D partners. New technologies and products are developed and transferred for various needs, ranging from expected profitability to humane purposes or often mixed motives. Increasingly in recent years, participants in this complex process have come together in global innovation and production networks, where technology transfer plays a central role.

The importance of having access to a portfolio of global technologies, of establishing relationships within the framework of international technology transfer can hardly be overestimated. This issue is doubly important for developing countries because they lag behind the technological frontier and face more severe constraints, for instance, the lack of resources and skilled personnel. Moreover, international technology transfer plays a critical role in solving social and environmental problems through technical solutions and technologies available abroad. This is most evident in medical technology, knowledge-intensive agricultural production, energy efficiency, and climate change mitigation methods. Each of these fields requires a combination of research incentives to solve socially important problems with sufficient resources. Therefore it is less costly to use off-the-shelf global technologies while adapting them to local conditions.

But technology transfer is not a concept of human assets; it is a matter of competitive advantage and the ability to generate significant revenues. Attempts to limit the diffusion of valuable technology to competing firms have been evident for centuries. Many researchers to this day have noted ongoing attempts by some states to increase intellectual property protection on a global scale to limit the leakage of technological information to developing countries because of their commercial interests (Stiglitz & Charlton, 2005; Sell, 2003).

In turn, developing countries that develop such technologies do not use them domestically but more often sell them to more developed countries to generate revenue. Thus, the trade-off between the needs of recipients for new information and the desires of technology developers has long been at the forefront of international debate. Therefore, the question of policymaking in technology markets and technology transfer for developing countries remains open. However, suppose we follow the established market order, it turns out that the developed countries buy advanced technologies to introduce them into production. In contrast, the developing countries sell the latest developments but use those technologies that are available for international trade to support their economy.

Thus, there is a problem involving developing countries' ability to participate in the international transfer of technology, relying solely on the products of developed countries. Given that technology must be constantly imported due to its obsolescence, many states become dependent on such technology, lacking domestic innovation development. In turn, those states that develop the production of innovative technologies within the country have prospects for rapid economic growth.

If we talk about the impact of technology transfer on the development of countries, we can emphasize that, in contrast to the Neoclassical Growth Model that is based on of capital accumulation as a determinant of development, even minor development of domestic R&D contributes to technological change and human capital accumulation (Lucas, 1998). Moreover, R&D-based models of growth consist of essential information about how new products embody new ideas, and trade in goods can help transfer knowledge embodied internationally.

The main purpose of the study is to determine the impact of production and technology transfer on the level of growth of developing countries.

2 Literature review

The issue of technology transfer is quite widely researched in the scientific literature, statistical and analytical companies. In particular, only the Scopus catalog (2021) counts more than 8000 publications on this topic.

A significant part of the research is devoted to studying the potential of technology transfer in the development of different countries, including the factors that affect the development of technology transfer (Singhai, 2021). In particular, Corsi *et al.* (2021), who conducted their study based on 107 thematic sources, concluded that the main obstacles to technology transfer development are resource constraints, lack of or insufficient government subsidies, and bureaucracy in transferring such technologies. These are the main problems of developing countries, which hinder technological development and the flow of foreign investment, market entry of international companies, and the overall competitiveness of the economy. Technology transfer is a consequence of public administration; in particular, for developing the technologies, a favorable environment must be created within the country for the entry of investors. Byczkowska *et al.* (2022) conducted a study evaluating technology transfer and direct investment in innovation management in Poland. The authors argue that the use of foreign technology allows the economy to develop more rapidly and gain a competitive advantage. In turn, multinational companies occupy the central place in the transfer of technology. But the process of technology transfer itself is constantly evolving, and today, it is safe to say that the importance of developed countries in the flow of innovation is gradually decreasing. If recently all the flows were directed from the Western to the Eastern countries, from the more developed

Northern countries to the Southern ones, today the crucial role is played by the countries with leapfrogging economies (Crupi, 2021). Such countries today are China, Korea, Brazil, and others. Developing countries with a fairly high level of innovative products have a huge potential both in their development and global technology development. However, detailed studies of the potential of developing countries are insufficient, which confirms the relevance of the research.

3 Research Methods

This study is based on a sample of statistical information on developing countries. Today there is no precise definition of this category of countries. However, there are several classifications of states from different organizations based on democracy, the formation of a free market economy, industrial development, availability of social programs, and human rights guarantees for their citizens (OECD Library, 2021). If we consider the classification of countries according to the UN, there are no clear criteria for classification. In UN's reports, the organization groups regions according to its methodology, where, for example, countries of Eastern Europe or the CIS do not form a list of developed or developing regions at all. On the other hand, if we talk about the IMF classification of countries, there is a clear classification of developing countries by region (IMF, 2021).

According to the IMF and the OECD, the authors have made a sample of 10 states among the developing countries, based on statistical data used for research. These states include Russia, Turkey, Romania, Ukraine, Kazakhstan, Bulgaria, Croatia, Georgia, Belarus, and Montenegro. These countries are located in the same region, they have approximately the same history of development, which allows us to generalize the study results to understand the general trend of technology development in the European region on the developing countries.

The statistical information used for carrying out research includes regular UNICTAD, UNESCO, WTO reports, and statistical information on the development of separate economies, particularly Ukraine.
Statistical data on GDP, technology transfer, and innovative development for 2014-2020 allowed conducting a horizontal, comparative analysis to determine the average values. Based on the correlation analysis, the level of technology transfer importance for developing countries was determined. For this purpose, the Pearson coefficient is used, which allows studying the patterns of influence of technology transfer and innovation on the level of GDP of the country. Graphical methods are used to present the results of the study, which allow ranking the states by technology, technology transfer, and its importance in the economy. In addition, general scientific methods of knowledge are used, such as analysis, synthesis, induction, and deduction.

4 Research results

Depending on the level of development of the countries, technology transfer can have different models. In particular, the movement of innovations of the developed countries essentially differs from the technologies of developing countries. Let us consider the features of technology transfer of developing countries in Table 1.

Tab. 1: Comparison of technology transfer of developing countries with developed countries

Comparison parameters	Developed countries	Developing countries
The movement of innovations depending on their life cycle	Technology packages in the initial stages of the life cycle	Technological packages at a mature or declining stage
Geography of the recipient of technology	Technology transfer depending on the level of technology compatibility, taking into account the competition	Technology transfer regardless of the recipient's geography
The field of investment	Possibility of transfer to industrial sectors with a branch or joint venture	All possible sectors in which it is possible to create a joint business
Strategy	Offensive, absorptive and individual strategy	Individual and offensive competitive strategies
Pricing	Market and intra-company pricing of the technology package	Market pricing of the technology package
Goal	Increasing turnover and maximizing profits	Inclusion of the country in global chains of TNCs

Source: Developed by the authors

As shown in Table 1, the approaches to technology transfer in developed countries are quite different from those in developing countries. Today there are six technological models of development, which are used in the economies of different countries. In particular, the most developed countries have the highest technological level, which includes the use of piece intelligence, biotechnology, nanotechnology and thermonuclear energy (Zakharchenko & Medvedeva, 2014). The difference in systems is explained by the fact that developed countries are currently working on the sixth technological mode, and developing countries mainly use the forth level, where the automation of production processes takes place.

According to Zakharchenko & Medvedeva (2014), in the USA and Japan, the share of the economy corresponding to the sixth pattern is up to 10%. China is also actively moving in this direction, which has allocated more than $100 billion to acquire innovative foreign technologies. If we estimate the level of economies' readiness to apply advanced technologies, we can say that the average level of readiness in the world fluctuates value of 0.45 from 1. At the same time, the average index of developed countries is at the level of 0.8, while the level of developing countries is approximately 0.3, as shown in Figure 1.

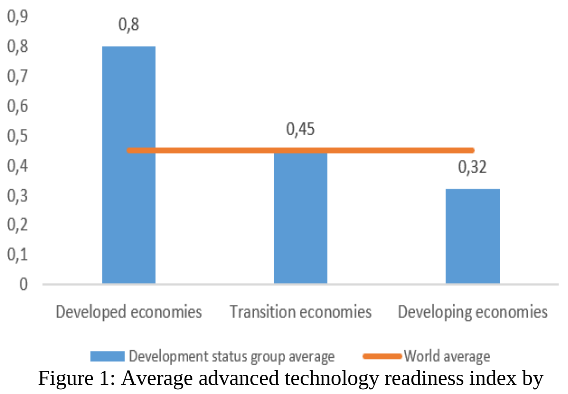

Figure 1: Average advanced technology readiness index by country development level
Source: UNICTAD, 2021

In developing countries, according to a number of scientists, the share of the fifth mode, characterized primarily by the mass transition to digital information transfer technology, the widespread use of electronics and microelectronics, nuclear energy, satellite communications, the Internet, and innovative

technologies in production does not exceed 10% (Zakharchenko, Medvedeva, 2014), which influences the low index value.
Industrial technologies and production in developing countries correspond to the fourth technological mode with elements of the fifth mode, with imported equipment and technology. Today, developing countries are only setting the fourth stage by importing technology. The future of developing countries will depend on technological readiness to use the fifth and sixth technological modes, the driving sectors of which will be nanotechnology, biotechnology, new medicine, robotics, and other technologies.

If we conduct a study of readiness to use advanced technologies for the countries included in the sample, we can see that most of them are classified as above-medium readiness levels. Only Russia has a high level, which ranks 27th in the overall readiness ranking. It is necessary to designate that the main components of the indicator are: spending on scientific and technological researches, condition of information and computer technologies in the country, level of competence and necessary knowledge for management of new technologies, level of industry and development of the financial sector. The rankings for all these indicators are shown in Table 2.

Tab. 2: Rating of developing countries on the level of readiness to use new technologies and its components

Country	R&D ranking	ICT Ranking	Skills Ranking	Industry Ranking	Finance Ranking	Total Ranking
Russian Federation	11	39	28	66	45	27
Turkey	27	75	63	78	49	55
Romania	34	44	70	38	115	45
Ukraine	39	66	84	71	13	53
Kazakhstan	56	62	42	75	114	62
Bulgaria	66	53	48	41	73	51
Croatia	76	46	39	47	66	52
Georgia	87	71	56	81	56	79
Belarus	91	45	35	63	109	59
Montenegro	111	55	37	97	78	70

Source: UNICTAD, 2021

It should be noted that in the overall rating of readiness to use advanced technologies, the first place among the sample countries is occupied by Russia, which has a large gap from the other countries. Today Russia ranks 27th in the global ranking, while Romania ranks 45th and Bulgaria, Croatia, Ukraine, Turkey and Belarus occupy 50-60th positions in the global ranking. Among the surveyed countries, Georgia, Montenegro, and Kazakhstan have the lowest score.

The most important component of the rating is the level of spending on research and technology development. Having conducted a correlation analysis, there is the highest level of correlation between the final indicator and the level of research – 0.78, while for others, it is 0.2-0.6. At the same time, if we make a rating of countries by the indicator of technology development, the situation here will be slightly different. Russia is still the leader in development, but Turkey, Ukraine, and Kazakhstan have significantly increased their positions in the rating.

The formation of the indicator of production of innovative technologies occurs mainly in the business environment at the expense of transnational corporations investing in the development of their business. Developing countries hope not only to import more efficient foreign technology through foreign direct investment (Elgin, 2021) but also to increase the productivity of local firms through technological externalities:

- demonstration effects: local firms can adopt technologies introduced by multinational firms through imitation or reverse engineering.
- labor skills dynamics: staff training or work experience in a multinational firm can transfer important information to local firms, facilitating technology diffusion.
- vertical linkages: multinationals can transfer technology to potential suppliers of intermediate goods or buyers of their products.

Global innovation networks and open innovation offer developing countries new opportunities for better access to technical information. Observations show that global innovation networks are growing in countries with strong R&D capabilities, effective funding, and strong public governance. Indeed, today's innovation network partners are predominantly located in industrialized economies, with growing participation in large emerging economies. Similarly, firms and universities with scientific and technical personnel working in existing research programs perceive the information presented through open innovation. This fact underscores the importance of investing in educational and research skills and competencies in developing countries seeking to move closer to the global technological frontier and international innovation.

According to statistics, Russia spends more than $40 billion in technology production and research, with $24 billion spent by businesses (mostly multinational companies), $12 billion by government agencies, and only $3.9 billion (9.6%) by educational institutions. Today, Russia has the greatest scientific potential among developing countries, as the number of researchers per 1 million people is 3,075 (in developed countries, the figure is from 4,000 people). Turkey is also a country that invests heavily in the development of new technologies. Turkey's expenses on R&D according to data of 2020 make up $15.9 million; thus, unlike Russia, in Turkey, much money is allocated for development in universities – $6.4 million (40.2% of the total amount), while the state uses $1.5 million. In other countries, indicators of investments in the development of technologies are much lower. However, Ukraine, which invests about $3 million in technologies, stands out from the list. At the same time, there is not enough funding for university programs of innovation development (5.7% of the total amount), businesses and government spend basic funds.

Let's consider the expenses of developing countries on R&D in Table 3.

Tab. 3: Investments of developing countries in R&D

Countries	R&D spending in $mln	R&D spending by Business, $mln	R&D spending by Government, $mln	R&D spending by universities, $mln	Number of researchers per mln inhabitants
Russian Federation	40360	24058	12302	3947	3075
Turkey	15933	7931	1544	6457	1160
Ukraine	3005	1694	1137,1	173	1023
Romania	1569	650	674	238	903
Bulgaria	1005	660	248	88	1821
Chroatia	732	353	190	188	1437

Kazakhstan	714	262	233	158	798
Belarus	907	562	239	105	n/a
Georgia	97	0	11	63	1059
Montenegro	37	13	7	13	671

Source: UNESCO, 2020

In general, it should be noted that the state can receive new technologies that are not used in other countries through investments in university development, while business accepts global technologies already used in the world (Li & Tang, 2021; Koo & Cho, 2021). Thus, those countries that invest most in the development of technology at the level of universities, laboratories, and research centers will significantly improve their competitiveness level compared to other countries. For example, today, Turkey, Georgia, and Montenegro are among the listed countries which actively invest in university developments.

Despite the fact that some countries allocate small amounts of money for technology development, it does not mean that these technologies do not affect the development of the economy. One of the main indicators, which shows the impact of new technologies on the economy is the ratio of spending in GDP of the country. Having analyzed this indicator, let us make a graph (Fig. 2).

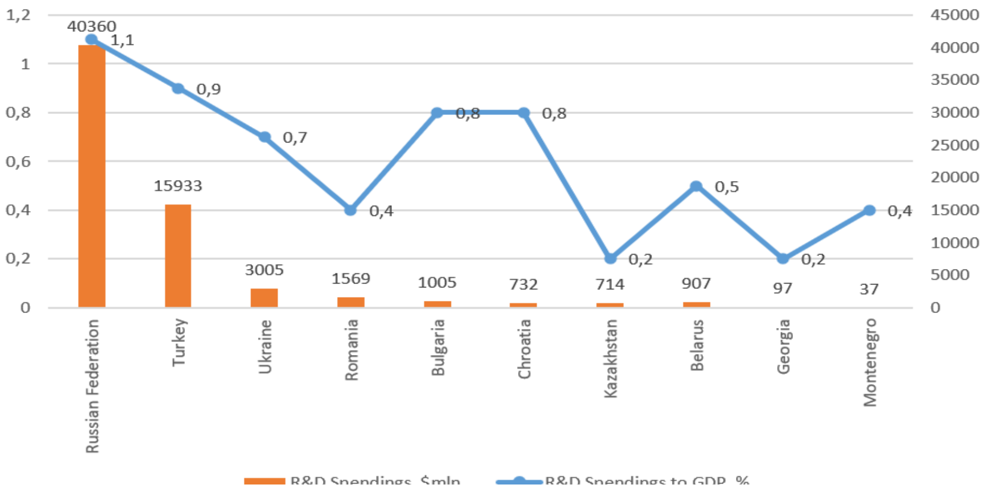

Figure 2: Comparison of R&D expenditures with their share in the country's GDP in 2020

Source: UNESCO, 2020

Figure 2 clearly shows that the size of investments in new technologies does not indicate the activity of research in the country. In particular, another ranking of countries in terms of the share of R&D expenditures in the country's GDP can be made based on the results of the study of this indicator.

According to the analysis results, we can form three groups of countries with high, medium, and low potential for developing new technologies. The countries with high potential include Russia, Turkey, Bulgaria, Croatia. The countries with an average level of potential are Ukraine, Belarus. Finally, countries with low potential include Romania, Montenegro, Georgia, and Kazakhstan.

The impact of technology transfer on the development of developing countries cannot be assessed in general terms, because here the dynamics and structure of the indicators must be studied separately for each country. Let us study the impact of technology transfer on the development of Ukraine (table 4).

Tab. 4: Dynamics of technology transfer, innovation activities and their ratio to GDP of Ukraine for 2014-2020

Indicator	2014	2015	2016	2017	2018	2019	2020
Technology transfer / GDP, %	0,004	0,004	0,004	0,004	0,003	0,003	0,005
Innovation / GDP, %	0,491	0,698	0,975	0,306	0,342	0,358	0,363
Annual growth of technology transfer, %	15,1	31,6	34,2	-15,2	12,2	74,3	15,1
Annual growth of innovations, %	79,5	68,2	-60,8	33,6	16,8	7,1	79,5
Annual growth of GDP, %	26,3	20,4	25,2	19,3	11,7	5,5	26,3

Source: Developed by the authors

Considering the dynamics of the technology transfer indicator in Ukraine, we can see its rapid positive trend except in 2018, when there was a decrease in the technology transfer activity (see. Fig. 3).

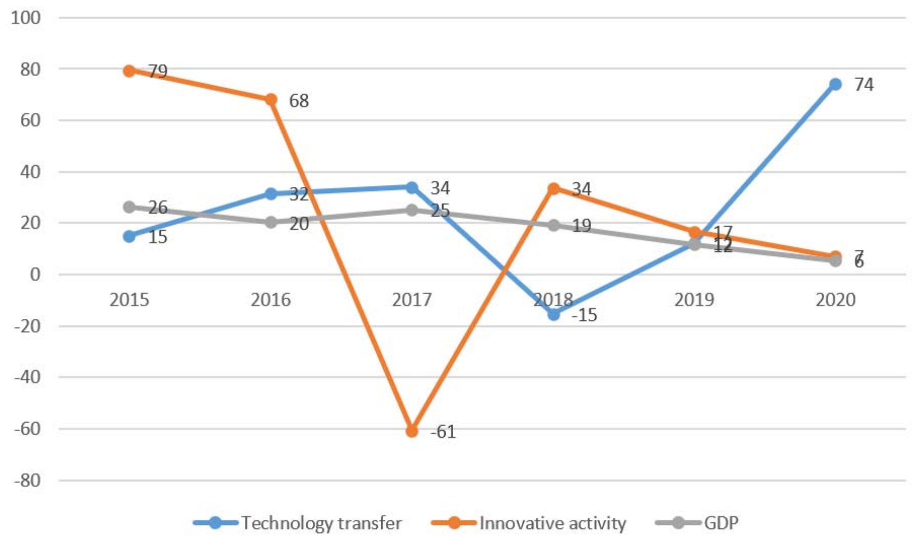

Figure 3: Annual growth of spending on R&D, innovation and GDP in 2015-2020, %

Source: UNESCO, 2020

The trend of the technology transfer indicators and innovation activity indicators during the analyzed period is quite different; the comparison of these indicators shows a weak correlation (0.14) (see Tab. 5).

Tab. 5: Result of the assessment of the relationship between indicators of technology transfer, innovation and GDP of Ukraine for 2015-2021

Indicator	2014	2015	2016	2017	2018	2019	2020	Pearson's correlation coefficient
Technology transfer, mln UAH	64,9	74,7	98,3	131,9	111,8	125,48	218,74	0,14
Innovation activity, mln UAH	7695,9	13813,7	23229,5	9117,5	12180,1	14220,9	15225	
Technology transfer, mln UAH	64,9	74,7	98,3	131,9	111,8	125,48	218,74	0,82
GDP, bln UAH	1566	1979	2383	2982	3558	3974	4194	
Technology transfer, mln UAH	x	64,9	74,7	98,3	131,9	111,8	125,48	0,92
GDP, bln UAH	x	1979	2383	2982	3558	3974	4194	

Source: Developed by the authors

The relationship between technology transfer and GDP of the country is more clearly traced; the correlation between the indicators is (0.83).

Let's take into account the fact that any introduction of technology requires a certain amount of time, which does not allow a full measure of the impact on the economy in the year of investment in advanced technology. So, we can also estimate the relationship between technology transfer and GDP obtained in the following year. This relationship is even denser, with a Pearson coefficient of (0.92).
Thus, on an example of the analysis of the influence of transfer of technologies on the economy of Ukraine, it is possible to draw a conclusion that development of the economy of the country depends on the transfer of technologies, thus more effect from the transfer of technologies the economy will be felt in the following year after investment.

5 Discussion

Recent studies of the impact of the transfer of technology on economic development in 2022 are mainly devoted to the study of the transfer of technology in different industries. In particular, the issues of technology transfer in the educational process are actively investigated. Many scientists (Mahmoud e*t al*., 2012; Kasych, 2020; Dahlman, 2007; Hoekman *et al*, 2005; Xiaokan *et al*,.2011) have studied the problem of technology transfer in developed countries. It is possible to highlight their common idea that technology transfer is crucial in developing economies, innovation, and competitiveness. Most researchers argue that universities, which were the leading suppliers of the invention in industrialized countries, are of great importance in technology production. They also have been conducted to show the effect of university developments, which is expressed by additional revenues from the acquisition of licenses and patents (Koo & Cho, 2021; Li &Tang, 2021). Today, in the period of globalization, the gap between educational programs and the technological level of the economy is very large. Therefore, the primary source of technology is its transfer from developed countries. In 2021, a new research topic emerged during a period of active coronavirus control: technology transfer in medicine (Defendi & Santiago, 2021). Given the dependence of economic processes on population activity, technology transfer for the treatment and prevention of coronavirus and future diseases is currently the most valuable compared to technological innovations.

6 Conclusion

Advanced technology is a new link in the development of economies, which can create economic and social benefits more effectively and quickly than the neoclassical theory of evolution based on the accumulation of capital. Developing countries are mainly recipients of technology from developed countries, with the consumption of technology that is at a mature and declining stage of development does not allow economies to grow more dynamically. Those developing countries which actively invest in innovative technologies have a high technological potential and, consequently, the potential for economic development.

The gap between the use of advanced technologies of developing countries and developed countries is rather large, about 0.5/1, which is explained by the different levels of the technological mode of countries. While developed countries are transitioning to artificial intelligence and nanotechnology, developing countries are still automating production processes.

The development of advanced technologies is influenced by different factors: scientific and technological research, the state of information and computer technology in the country, the level of competence and the necessary knowledge for managing new technologies, the level of the industry, and the development of the financial sector. However, the most pronounced is the influence of scientific and technological research.

The main sources of technology transfer are transnational companies that implement their know-how in the organization of production processes in their subdivisions in developing countries.Business is the main source of obtaining new technologies, but technologies obtained from universities are more effective in creating technologies, as they will be at the initial stage of their development, which will allow the country to increase its level of competitiveness.

The indicator of investment in scientific and technological research does not speak about the country's innovation potential. The ratio R&D / GDP will be more indicative. Transfer of technologies has a strong influence on the country's GDP. The effect on economic development will be stronger in the next year after investment in innovations.

The study's practical significance comes down to the provision of tools for developing countries, the main of which is primarily the production of technology and its transfer. The research will also be promising from increasing the productivity of technology in educational institutions in developing countries and the transfer of medical technology as the primary tool to support the economy in the period of quarantine restrictions.

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Primary Paper Section: A

Secondary Paper Section: AE

CONFLICT OF ENVIRONMENTAL AND ECONOMIC INTERESTS OF THE STATE: EXPERIENCE OF EASTERN EUROPEAN COUNTRIES

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Abstract: Global warming is a purposeful and logically proven solution for managing national economies. The central link of such management is the energy system, which is being reformatted in terms of investment support and financing. It is in the energy sector that the conflict of the global energy crisis is manifested, being distinguished in all areas - from production to final consumption. The essence of the environmental component provides an evident elimination of global control. It has been proved that the global environmental crisis is not a consequence of human activity, but, it is a separate link in the mechanism of transferring national control to the priority of global governance. It has been indicated that when overcoming the environmental issue of global warming, control over the natural energy resources of the OPEC countries becomes an expected result.

Keywords: energy security, global governance, global warming, liberal fundamentalism.

1 Introduction

Current trends in improving energy efficiency are implemented through the introduction of energy efficiency policies, decarbonization, decentralization and digitalization. The purpose of such a policy lies in transiting all energy and solving global challenges, namely: the abandonment of fossil fuels and the expansion of using green energy sources. The goal outlined, according to the results of the World Economic Forum, should be achieved without disturbing the energy balance, in particular, not violating security of access to electricity, environmental sustainability and economic sustainability and economic growth. The overwhelming majority of scientists around the world believe that such changes in energy began after the signing of the Paris Climate Agreement in 2016, when 180 countries took upon themselves the responsibility to prevent the temperature on the planet from raising more than 1,5 degrees Celsius by 2050. Along with this, in 2020, the European Union has set an additional goal which lies in the fact that by 2050, EU countries should achieve zero emissions of carbon dioxide, the so-called “pure zero”. Herewith, a significant proportion of carbon dioxide can be absorbed by plants and it will increase due to soil storage, increased reforestation and protection of peatlands, wetlands and marine environment.

The purpose of the research lies in analyzing the environmental and economic goals of the EU countries’ economic activities and their contradictions.

The research objectives are as follows:

1. To reveal the specifics of the isolation and selection of environmental challenges of modern production as the basis of potential conflicts between national economies.
2. To analyze the national policy of the EU countries from the standpoint of energy efficiency and environmental friendliness based on the last anomalous seasons.

2 Literature review

Numerous studies have shown that there is no direct compromise between economic growth and environmental security (Stephen Polasky et. al., 2019; Tuomas Ylä-Anttila et al., 2018; M. Grazia Pennino, 2018). The issues of increasing pollution, irrational use of rare natural resources and growing public awareness of the importance of ecology and its sustainability have influenced the emergence of political ecology (Jason Roberts, 2020; Thomas J. Bassett, Alex W. Peimer, 2015). And although modern governments, companies and individuals are increasingly aware of the fact that the use of technology and increasing economic capacity should not negatively affect the environment (Lael K Weis, 2018; George D. Gann, 2019; Nash Nick et al., 2019), however, economic practice notes the absence of significant environmental changes (lack of drinking water, food, access to electricity, Internet, etc.) (Andros et al., 2021). Furthermore, climate change, frequent extreme weather events, air pollution and rising sea levels, on the contrary, complicate business and economic activities (Watts et al., 2018; Francisca C. García, 2018). The analysis of current investigations proves the existence of significant conflicts of the state’s environmental and economic interests, especially in developing countries (Pan Jianwei, et al., 2016; Brian Czech, 2008; Stephen Polasky et. al., 2019; Darko B. Vukovic et al., 2019).

3 Materials and research methods

The implementation of the research purpose assumes application of the methods as follows:

- systematization, generalization of scientific publications on the study of economic and environmental conflicts of the EU;
- the method of comparative analysis in order to ensure energy security of individual Eastern European countries;
- the system and logical analysis, the method of information synthesis.

4 Results

An active scientific discussion and outlining global environmental issues of the world was being formed over a period of time and had so-called benchmarks. These particular points ensured the priority of ecologization in modern social production. In Table 1, the principal milestones in the development of the ecological approach are represented, which has grown into a global problem of mankind and has formed the international environmental policy of the vast majority of the world countries. The major concern was formed, namely: the rapid increase in the gas content of the earth’s atmosphere, which stimulates the tendency of an increase in the average temperature on the planet, leading to a change in the climatic component of our planet.

Table 1 – The process of considering and identifying global environmental issues

Year	Authority	Features and specifics of the global environmental issue
1972	Report of the Club of Rome “Limits of Growth”	The essence of the ecological problem was determined as a consequence of the influence of the biosphere’s anthropogenic component; in the future it can develop into a state that puts human civilization on the brink of physical survival.
1972	Stockholm Conference	It identified 26 principles and 109 recommendations, which became the United Nations Environment Program (UNEP). Clark and Timberlake pointed out that prior to 1972 there were no more than 10 ministries of the environment, and within 10 years the number of ministries and secretaries of state increased to 110.
1988	Establishment of an intergovernmental group of experts on climate change	Scientifically defining human impact on climate change, assessing risks and developing a mitigation strategy.
1990	Environment and Energy Management Agency was established	Implementation of policy in the sphere of sustainable development, environmental protection and energy. Providing of organizations and territorial associations with consulting and examination services at the disposal of state-owned enterprises.

1992	Conference in Rio de Janeiro (Earth Summit or UNCED)	The concept of sustainable development was developed; it describes the process of evolution, which makes it possible to meet the current needs of citizens without affecting their future interests. A program of action and 2,500 recommendations were approved in relation to all possible spheres of human influence on the environment. It was approved by 178 heads of states. The summit also established the Rio Conference's plan for annual meetings under the UN Convention on Climate Change.
1990-2007	Kyoto agreement on greenhouse gas emissions	An international agreement that has established binding targets and deadlines for reducing greenhouse gas emissions in most countries, including industrialized ones. The treaty is based on the UN Framework Convention on Climate Change (UNFCCC); Member States have decided to establish a stricter protocol. The mandatory goal, provided by the Kyoto Protocol for different countries, lies maintaining the level of greenhouse gas emissions at the level of 8% to + 10% compared to 1990. The agreement provides certain flexibility for countries regarding the ways and means of achieving the objectives set in the Protocol (increasing the number of forests, financing projects).
2001	Agreement in Bonn and Marrakech	The outcome of the negotiations held during COP 6 in Bonn in July 2001 and COP7 in Marrakesh in November of the same year. It concerns, in particular, the obligations of advanced countries to provide assistance to developing countries. Signing of these agreements, which had determined the procedure for implementing the Kyoto Protocol, paved the way for its ratification and implementation.
2005	The entry into force of the Kyoto Protocol	55 countries, which accounted for an average of 55% of carbon emissions in 1990, ratified the protocol. Its entry into force meant a commitment for 30 industrialized countries to meet targets towards reducing or limiting greenhouse gas emissions. It also allowed for the formalization of the international carbon trading market and the establishment of the Clean Development Mechanism (CDM).
2009	Copenhagen Agreement	A three-page text bringing together international climate change strategies (reducing greenhouse gas emissions, limiting global warming by 2 °C, funding of 30 billion USD in 2010-2012).
2011	Agreement in Durban	It was aimed at the adoption of a universal agreement in 2015. They initiated the formulation of a new protocol, the adoption of which in 2015 was to lead to concrete results on greenhouse gas emissions and a reduction in global warming to 2 °C by 2020.
2014	COP 20 in Lima	It highlighted the necessity for additional efforts in order to maintain warming rates below 2 °C by 2100. It led to the editing of a preliminary document to the future COP21 agreement in Paris and the approval of 37 pages of text.
2016	Paris Conference	The signed agreement on climate, according to which when 180 countries took upon themselves the responsibility to prevent the temperature on the planet from rising by 2050 more than 1,5 °C.
2019	Conference in Brussels	It has outlined the additional goal that by 2050 the EU countries should achieve zero emissions of carbon dioxide, the so-called "pure zero". Moreover, a significant part of carbon dioxide can be absorbed through absorption by plants and it will be amplified by storing soil, increasing reforestation and protecting peatlands, wetlands and the marine environment.

Source: UN data (2021).

Thus, over the course of thirty years, European initiatives have formed a powerful environmental policy, which is enshrined at the international legislative level and the level of national legislation. It is quite intensively implemented in all spheres of social production and covers the geography of the globe.
As a result, environmentalists and public figures began to actively submit scientific predictions about the possibility of lowering the temperature on the Earth (see Fig. 1).

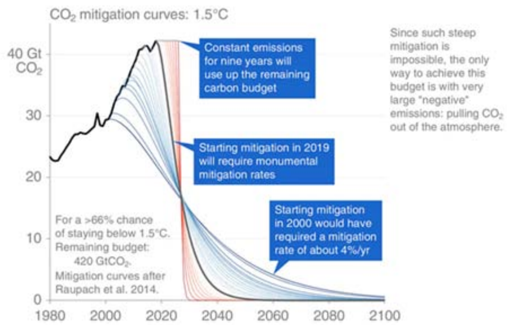

Figure 1 – Scientific substantiation of bringing the average annual temperature to the climatic norm
Source: CICERO (2021).

However, such a political course of the EU is not acceptable enough for all European countries. For instance, Poland did not agree to take the course in order to achieve a zero balance of carbon emissions by 2050. Hungary and the Czech Republic, on the other hand, have agreed to such an initiative only on condition that such an agreement will allow using nuclear power units in the electricity production.

Regarding the functioning of efficient energy supply of the EU countries, a number of measures have been taken, which have been manifested as energy packages. In 1988, the European Commission began implementing the concept of large-scale reforms of electricity and gas markets. The rationale for such changes was to create a more integrated European energy market, which would lead to lower energy costs and cost restructuring and rational production, transmission and energy distribution. And this, in turn, will ensure the liberalization and unification of the European countries' national markets; it ultimately would create a unified liberalized electricity and gas market with a high level of competition.

However, the real action began only 10 years later, when the first electrical directive (Directive 96/92 / EC) and the first gas directive were adopted (Directive 98/30/EC). It is also specific that these directives had a nature of a limited experiment, which indicated that the planned system would become viable. Therefore, the second electric №2003/54 and gas №2003/55 directives (2003/54 / EC) were adopted in 2003, which developed and detailed the major provisions of the reform. In September 2009, measures were taken to reform the energy market (2009/72 / EC). It was based on Directives №2009/73 and №2009/72, which established common rules for gas and electricity internal market.

The really operating models of the market in England and Holland were taken as the basis for the future energy market in Europe. The specificity of these models was based on the fact that gas was extracted from the sea shelf. In these countries, a legal entity was created for each field for the extraction of fuel due to the fact that this provided low costs for the development of such deposits. At the same time, stock exchanges are highly developed in these countries; this over time has ensured the emergence of subsidiaries, which have become independent in the implementation of exchange shares. In fact, a situation arose when a large number of suppliers of natural resources were formed in these countries, which were connected with exchange trading. At the same time, they did not depend on each other, and the supply was made through the Central European gas hub in Baumgarten, Austria.

In 2010, the European Commission decided to transfer the activities of this hub to all EU countries. However, it was not taken into account that there are 30 independent and autonomous suppliers in England, and in the Netherlands - 20. For Europe, this number of suppliers is minimally unacceptable due to geographical diversification. This actually means 1,5 suppliers per 1 country.

In addition, the EU guaranteedly had pipeline operating gas supplies from Norway through the state-owned company Equinor, Algeria - Sametrac, Azerbaijan Sokars and Russia – Gazprom. At the same time, Algerian supplies do not increase in volume, forasmuch as they are interested in supplies to Southeast Asia, where prices are much higher than in EU countries. Sametrak's share is 8% of the global LNG market. As for Equinor, in 2020, there has been a statement that during 2021 preventive repairs will be carried out at offshore production sites. Consequently, the total volume of gas production will decrease by 5%, and, therefore, an increase in supplies to Europe is not expected. Caspian gas through the Kashkanar pipeline has an annual capacity of 6 billion m^3, with construction costs of 42 billion USD, which is four times more expensive and 4 times less in terms of pumping volume than Nord Stream-2. In 2021, it will be able to pump only 12 billion m^3, of which 6 billion m^3 will remain in Turkey, 6 billion m^3 - in Albania, Greece and Italy. Against the background of the total capacity of European consumption of approximately 600 billion m^3, this is critically insufficient.

Currently, the goal of forming a European gas market has been achieved. The price for it is detached from the pricing of oil, and payment is made in relation to oil in a ratio 1 to 1,5, although, the coefficient of 1 to 0,6 has been assumed. This is closely connected with the logistics components, namely: storage facilities, distribution networks, etc. Gas prices have pulled away from oil prices and they are forming a growing trend.

The reasons for rising gas prices in Europe are quite diverse. However, the basic one is the principle of liberal fundamentalism, which points to the denial of energy security and energy security. After all, the emergence of a shortage of natural gas in Europe's storage facilities was revealed in June 2021. At the same time, American LNG supplies were reoriented to Southeast Asia, and Gazprom fulfills its obligations under long-term contracts, which do not provide for an increase in gas supplies for pumping into underground gas storage facilities. Moreover, the European Energy Commission, namely the Commissariat for Energy, has not taken any decision yet towards reducing the critical situation with natural gas. In fact, the European Commissariat implements the policy of liberal fundamentalism (the market automatically regulates everything).

The second factor for rising gas prices is clearly climatic changes. Cold winters and very hot summers were in Europe. Consequently, this has led to an increase in the consumption of natural gas for heating and electricity for air conditioning.

The third factor is the insufficient elaboration of the third European energy package. In fact, the third energy package was not implemented in the national legislation of the EU countries; as a result, this was manifested by court decisions in 18 EU countries. In reality, this package and the gas directive were implemented thanks to court decisions after 2015.
The fourth factor is the insufficient number of European economists and politicians who could not defend the current model of long-term gas export, when early contracts were drawn for the supply and pumping of gas according to the take-and-pay scheme.

Thus, currently, the EU countries are faced with a situation in which the new model of the gas market is not cost-effective and leads to problems of gas shortages. This results in a decrease in the production volume for natural gas raw materials. The way out of this situation is to accuse Gazprom of not supplying natural gas. However, such conditions are not provided in the concluded contracts. For instance, in Poland in 2020, the contract for long-term supply and pumping of gas from Russia has expired. Nowadays, Poland is forced to hold regular auctions for capacity booking of various terms (year, six months, month, 3 months, even per day). However, the employers of Gazprom do not take part in such auctions. Penalties to suppliers are not provided by contracts for non-attendance of the auctions. Although Poland has won a lawsuit against Gazprom in the amount of 3 million USD due to the lack of revision of gas prices tied to the market situation, it is currently impossible to bring Gazprom to justice.

Other countries have taken a different path. In particular, Romania has been reformatting its gas market. For instance, the ANRE decision has been made, stating that the maximum wholesale price for gas by 2022 should be at the level of 163 USD for 1 thousand m^3. However, this decision does not correspond to reality, when gas futures on the European market amounted to more than 1000 USD per 1000 m^3, and this leads to a complete loss of the country's national security.

Hungary has concluded a new long-term contract with Gazprom on October 1, 2021. According to it, the principal volume of supplies will pass through the Turkish stream, Serbia and Austria, and a small part will pass through the transition point Beregovo (Ukraine) and Bangrad (Slovakia). According to the contract, the annual gas supply will be 3,5 billion m^3 for a period of 15 years. The specified contract excludes transit capacity of gas pumping on the territory of Ukraine.

According to European requirements, in case a European company signs a contract for a long-term supply of gas with an annual volume exceeding 28% of the country's annual consumption, then the national regulator must be notified, which is obliged to submit an assessment for compliance with antitrust laws and energy security requirements. Consequently, the expressed disputes of Ukraine to the government of Hungary are legally groundless.

The contract with the Finnish Gazum and Gazprom for the supply of natural gas has been extended until 31.12.2031. Estonia owns new power plants, which make up the world's two largest shale thermal power plants - the Estonian Power Plant and the Baltic Power Plant. Along with this, at the expense of European funding, a separate unit was constructed using American technology that meets modern environmental requirements. Estonia resumes operation of thermal power plant units, despite penalties for harmful emissions into the environment. Herewith, the penalties are much lower than the purchase of gas for the operation of thermal power plants. In case the penalties are increased, Estonia will have to cut off the energy complex, which will cause a loss of 80% of electricity in the country.

Austria resolved the issue of energy security in 2015 by signing a long-term contract with Gazprom for a period of 40 years. At the same time, the supply of gas increased by 150 m^3 (by 5%), which ensured the growth in the maximum gas withdrawal by 1,55 million m^3 per day. Moreover, Gazprom, BASF, E.ON, OMV, Shell initiated and implemented the Nord Stream-2 gas pipeline project, with a capacity of 55 billion m^3 of fuel per year.

Thus, the EU countries solve the problem of gas supply independently, mainly in two directions. Firstly, this means a complete transition to long-term supplies from Russia, which is reflected in the growing supplies of Russian gas; secondly, this means resumption of electricity production at the expense of its own suspended TPPs and CHPs operated on coal and shale fuel.
Therefore, European countries have become hostages of the environmental and economic conflict over the transition to green energy. The political vision and reforms of the energy market have led to speculative trading in natural gas, resulting in the loss of energy security of both individual national economies and the EU economy as a whole.

In the situation outlined, only the owners of natural gas deposits receive economic benefits. After all, gas is a more environmentally friendly fuel compared to solid energy rocks (coal, peat, shale).

Strategic European energy market pointed to the non-viability of the principle of liberal fundamentalism. Against this background, the national economy forms energy security exclusively on the approach of market regulation, which is not justified, forasmuch as it does not take into account global climatic changes, requiring prompt intervention in the process of pricing, supply, redistribution and transit, and in general, in reformatting the country's energy security.

Thus, the general tendency towards ecologization causes an increase in the contradictions of different levels from production to inter-national, forming the basis of conflicts. While, in general, the EU energy policy is forced to act in line with environmental norms and requirements, the national energy policy of individual countries, on the other hand, is focused on their own decision and mainly due to long-term contracts with Russia. Consequently, in this general direction of ecologization, natural gas remains a priority as the basic fuel resource of Europe.

After all, the long-term implementation of environmental protection measures has led to the recognition of the environmental issue as a purely global one. Therefore, it can be overcome only by limiting the use of traditional fuel resources, primarily coal. Herewith, the priority is given to the use of alternative energy of the sun and wind.

Such one-sided approach has formed a system of excluding heat generation from the EU energy system. As a result, this carries an economic conflict not only in the energy sector but in the entire chain of production and consumption. Due to the reason outlined, it is advisable to talk not about an economic conflict, but about a public-based one (see Fig. 2).

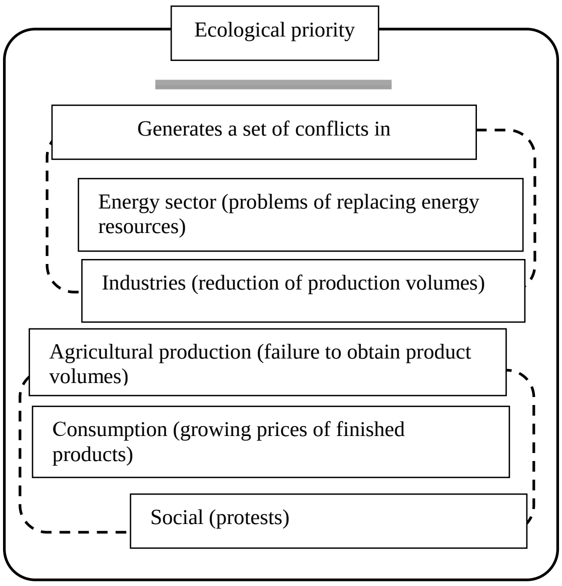

Figure 2 – Hierarchy of conflicts towards addressing the global environmental issues of global warming
Source: Developed by the authors.

Despite loud calls on combating global warming, real measures to fight against global warming are limited to banning traditional technologies and putting them under enhanced control regime. In terms of technology, alternative energy is not a solution to numerous environmental challenges. In fact, the disposal of alternative stations for this period is reduced to the disposal processes of selection of elements from aluminum and copper. Deeper recycling technologies are missed or are at the stage of their formation.

5 Discussion

Our research focuses on the environmental conflict concerning global environmental processes in Eastern Europe. However, environmental conflicts have been addressed in the scientific works of Martinez Allier and Martin O'Connor, who examined their limited access to natural energy benefits. The authors decipher in detail the system of this conflict due to the price parities of the counterparties of trade relations.
The scientific papers (Agarwal, 2001; Zografos and Howarth, 2010) point to a different approach to broadening the understanding of environmental conflict through the political factor and introducing the term of "political ecology". In our studies, this thesis is defined as the political impact on the implementation of environmental dimensions and action programs on the scale of the European region, as well as the influence of the global political elite.

Taking into account scientific thought (Guha & Martinez Alier, 1997), the authors infer the level of environmental conflict within geographic space and social justice. This approach is crucial for national economies. Consequently, it is relevant for European countries, forasmuch as the development level of European countries is quite different, and geography determines the provision of natural energy resources.

6 Conclusion

Summing up, it should be pointed out that ecologization is an artificial and political measure of the representatives of the globalist elite, forasmuch as they highlight these issues through the vast majority of scientists and environmentalists. Due to the political pressure of national elites, these processes have become widespread; they are aimed primarily at reforming the energy sector of the modern economy. However, nature points out the erroneousness of this direction of solving environmental challenges due to local cold weather throughout the earth.

The economic reality of national economies is more pragmatic and focused on strengthening energy security. The example of the EU just shows the conflict of global ecology with the economic reality, which is directly related to the weather (geographical - climatic conditions). Measures of the European collective regulation and solution of the ecological problem of global warming in economic terms do not correspond to the requirements and globalists' plans, but lead to an aggravation with national governments. The latter are more consistent in their actions; they are tied to reality and solve energy security issues by increasing gas supplies from Russia on the terms of long-term cooperation.

In terms of theory, the liberal approach of a market economy is not justified in solving global problems. The market itself will never ensure environmental friendliness. Moreover, the system of supranational regulation (EU) neither takes into account the national interests of the economy, nor carries out operational energy regulation, creating a conflict of priorities for the development of national European economies within a unified economy.

The final resolution of such conflicts is possible, but only through the development and implementation of environmental technologies. However, these technologies are not evolving due to purely economic reasons. Investment processes are aimed at implementing projects towards increasing the capacity of alternative energy, but not to improving existing ones due to their environmental component.

In order to resolve all the conflicts outlined, it is necessary to develop the entire science, deeply understand physical processes and, based on this latest knowledge, to form fundamentally new pico (10^{-12}) technologies. Unfortunately, modern science is unable to form vital nanotechnologies for mass implementation.

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DEVELOPMENT OF PUBLIC ADMINISTRATION IN CENTRAL AND EASTERN EUROPE

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Abstract: The main attention is paid to the characteristics of public administration reform in CEE. In particular, public administration was analyzed using a system of indicators: political stability and the absence of terrorism; efficiency of government activities; quality of government legislative activity; rule of law; control of corruption. The reasons of application failures of public administration and consequences of its introduction are outlined. Also have been identified the key features of the SIGMA program, which formed the preconditions for the introduction of public administration in the CEE countries. The reform of public administration through the implementation of e-government has been clarified. It is substantiated that the efficiency of public administration is influenced by such indicators as: political stability, corruption control, the quality of government regulations and the rule of law. In particular, attention is focused on the priority of the rule of law and rule-making activities.

Keywords: public administration, governance, Central and Eastern Europe, COVID-19, public administration, good administration

1 Introduction

The progress of states is based on the formation and implementation of a model that involves a change of emphasis in society from the state itself to its citizens, their active involvement in the social space. Changes in civil society generate requirements for direct public administration, its content and form, in particular the format of "public administration".

Public administration includes the organization of government agencies, including and those in power, focusing on management issues related to control and leadership (leadership), planning, organizational services, information systems, personnel management and performance appraisal.

The aim of the study is to make a research of the public administration development in Central and Eastern Europe in terms of ex post, covering the last three decades.

Research tasks:

1. Analyze the evolutionary development of public administration in CEE countries.
2. Assess the characteristics of public administration in CEE countries.
3. Investigate the regression dependence of the influence of certain characteristics of public administration on government efficiency.

2 Literature review

In Bouckaert & Werner (2020), public administration is characterized as a process that has been sought to increase efficiency for a long time and not only in Europe. These researchers analyzed the evolution of public administration as a concept of government and identified management systems in developed European countries: public administration (traditional public administration, which reflects the development of bureaucracy, lack of innovation, efficiency, effectiveness and feedback); a new system management; new public administration (public management, which is focused on citizens as consumers of public services, based on innovation); the new public administration (NPM) is essentially a public administration where the focus is on citizens. They also highlight the necessary (good) governance (Good Government) which is used to create and maintain conditions of openness, transparency, efficiency, accessibility of law, justice, etc. Thus, public administration is seen as a modern outward-looking, dynamic system, focused on the management of many stakeholders. In particular, public administration in the EU is a multilevel management of the European institutions; national authorities, local self-government; civil society, the involvement of international experts and lobbyists.

Ágh (2013) noted the roleparticipatory and good governance democracies, which have significantly affected the effectiveness and political legitimacy of the new CEE democracies. Governance (middle-level participatory democracy) in CEE countries is characterized by low efficiency and lack of effective public administration. The results of the study generally indicate that CEE countries lag behind the developed EU member states in the development of democracy and should catch up not only with the economic sphere, but also with regard to public administration systems and public policy. By Europeanization, the author understands the dissemination of experience and the introduction of best practices of the EU governing bodies or other Member States in national public administration systems, adaptation and modernization of national procedures, norms, standards to EU norms and rules.

The main message of this work is that the Europeanization and democratization of public administration and public policy in the CEE countries cannot be carried out without participatory democracy, i.e. without the participation of large masses of the population in new institutional structures and transformations.
Until recently, researchers and practitioners, who studied public administration reform in Europe relied mainly on the main work of Pollit and Bouckaert. However, as the analysis of scientific research in this area shows, quite a lot of developments have appeared in this field (international comparisons, specialized OECD studies).

A number of works have also been devoted to the study of public administration issues in the EU countries. In particular, among them interesting developments are the impact of new governance reforms in European countries (*Andrews, Hammerschmid, Walle* (2016) – COCOPS project (Coordinating for cohesion in the public sector of the future); research and publications (The Network of institutes and schools of public administration in Central and Eastern Europe (NISPAcee).

At the end of the last century, public administration was used with very limited success in many developed countries. It has also been part of several reforms, at least in some CEE countries. The result of its application can be as a simple cost reduction, or it can be effectively used for better efficiency in the near future in a crisis of public finances (German, 2010).

Definitely, researchers *Kotnik, Kovac*(2018) studied a series of text documents that included 142 articles published between 2008 and 2016. As CEE (still) faces (post-transition) challenges, the development of public administration is important. In this context, it should be emphasized that public administration and its reforms need to be addressed in a multidisciplinary, if not interdisciplinary manner, in order to succeed in solving problems. In practice, CEE countries must unite their potential to learn from each other and to develop democratic and effective governance. NISPAcee's activities are aimed to support these goals.

Public administration reform is in the heart of developments in CEE. It was not just a reform from a centralized economy to a market economy. Huge efforts also have been made to transform and modernize the public sector. The NISPAcee Working Group on Public Administration Reform addressed issues related to such reforms, including the reasons for missing, slow and ineffective reforms. At the first NISPAcee conference, the root causes were still sought in the conflicts between external pressure for reform and dependence on the path. The context and common succession of the CEE countries, including the role of officials, the denial of the importance of competence, the lack of a merit system and the lack of civil service were considered extremely important. The explanations were found in the conflict of interests in state organizations, lack of skills, knowledge and positions in the public sector (Iancu, Junjan, De Vries (2013).

The monograph of Kovač (2015) is devoted to modern New Weberian and proper management, as managed models are one of many initiatives launched by NISPAcee to provide scientific expertise to support CEE countries in finding the most effective management approaches. In it, authors from CEE and other European countries explored modern theoretical paradigms and administrative practices in individual countries and regions with certain characteristics that should be taken into account. It is proposed that CEE countries develop additional resources to develop democratic and effective policies, using so-called good governance as a doctrine that includes Weberian and public governance.

Assessment of the main causes of reforms and driving forces in Central Europe based on the method of cluster analysis and classification of reforms in public administration presented by researchers Bouckaert, Nakroshis, German (2011). Since joining the EU, the European Commission's ex-ante controls have been replaced by much weaker ex-ante controls in the event of non-compliance or delayed implementation. It is possible that these factors, combined with a number of shortcomings in the political and party systems, have reduced the willingness of the new EU Member States to participate in successive reforms of public administration at the internal level.

Bouckaert, Nemec, Nakrošis, Hajnal and Tõnnisson (2009) concluded that CEE countries, which collapsed under communism, generally had a completely disqualified state model of bureaucracy. Most of the methods acceptable to the vast majority of EU member states were (unambiguously) not suitable for CEE countries, they were alien to the socio-cultural reality in which these countries found themselves and they did not have the necessary economic experience and did not correspond to the way of functioning. Foreign advice has also increased confusion in governments bombarding parallel, often contradictory models. Civil servants inevitably faced uncertainty caused by a change in the political system (which also called into question their moral integrity and continued employment), caused by ultimate uncertainty about the size and role of government and how it functioned.

An article by Meyer-Sahling (2009) examines the state of historical heritage in discussions on public administration reform in CEE and identifies: hereditary arguments as negative consequences of the communist past; similarities between the administrative past and the current composition of CEE administrations to demonstrate the importance of heritage; interaction of the consequences of the legacy with other determinants of administrative reform, such as European integration and political parties.

In the early 1990s, the political and state administrations of the CEE countries had many common features due to their common communist legacy, as well as the period of accession to the EU, which stemmed from the EU's requirement for "administrative capacity". However, the internal decisions of individual CEE governments after accession distanced them from each other. While some CEE countries are facing changes in democratic public administration reforms, others are pursuing e-government initiatives and a modern phase of public sector development. (Randma-Liiv, Drechsler, 2007, 2016, 2017).

In the CEE region, there has always been great tension between somewhat Eastern realities and "Western" aspirations; tension outlined by the concept of "modernization". It should be borne in mind that future success depends on the ability to apply effective Western solutions that match the national identity. This study also focuses on the negative role of major international organizations, most notably the IMF. These organizations have proposed or, conversely, forced CEE countries to apply public administration in the form of shock therapy to a patient in a state of shock (Rhodes, 1997).

In addition, according to Liebert, Condrey & Goncharov (2013), corruption related to government, in particular during mass privatization, election politics, police, courts and health care, plays a leading role in public administration reform and higher education as one of the biggest problems in many countries. As a result, there is an evidence that there are significant differences in the level of corruption among post-communist countries. Thus, Estonia, Poland, Lithuania and Hungary were among the least corrupted countries. Another important factor was the low competence of civil servants in Romania.

Intensive scientific work on the study of public administration reforms in the CEE countries continued in the following researches:

- during the the formation of public administration, Kovač and Bileišis (2017) noted the need to create new management tools, public administration, reform of administrative procedures / services, civil service development, decentralization and agency processes (building political and management networks), market marketing (transformation) states with mass introduction of public administration methods.
- Nemec (2010), Sorin and Pollitt (2014) concluded that the success of public administration in Central and Eastern Europe was very limited, including an explanation of some specific regional factors that determine the level of success. Nevertheless, he states about the management of contracts, goals, competition, etc., as a goal is a forgotten history (not only for CEE countries, but also in general). However, it is a future goal to manage a predictable, reliable and consistent, open and transparent, accountable and accountable bureaucracy, using evidence-based information and policy advice, while properly managing the efficiency, cost-effectiveness and efficiency of any government operation. The researcher singles out Estonia as a country, where the ideas of public administration prevailed in various concepts and strategies for public administration reform, which emerged in the second half of the 1990s.

In his article, Nemec (2014) discusses an issue of decentralization in Central and Eastern Europe after the signing and ratification of the European Charter of Local Self-Government. Decentralization as one of the approaches to reform has several positive consequences for governance, but it can also have negative consequences. There are questions about the distribution of financial resources, optimal territorial structure and weak local democracy. Local governments, especially smaller ones, are not cost-effective in either administering or managing the quality and cost of public services. In order for the reforms to realize the necessary democracy and efficiency, the author proposes to adhere to some principles of decentralization.

- Reinholde, Guogis, Smalskys, Žičkienė and Klimovsky (2020) assessed the basic development of public administration in Central and Eastern Europe, indicating the most important stages of modernization in the light of the prevailing theoretical paradigms. The authors have singled out public administration as the most desirable paradigm in Central and Eastern Europe, especially due to its social attractiveness and sensitivity, but it still lacks more of specific methods and tools to apply in practice. Due to its capitalist spirit of entrepreneurship, public administration has only partially changed the model of public administration. At the same time, the principles of public administration are focused not only on the participation of citizens and groups of citizens, but also on the development of social welfare, social quality, social responsibility and social justice. These values are the most necessary to overcome the side effects of modernization.
- *Bayar* (2017) noted the impact of the integration process of some CEE countries to the EU, which supported and accelerated the transformation thanks to the existing EU criteria and

financial support. As a result, CEE countries have come a long way in terms of good governance and the interaction between the quality of public administration and financial development.

The basic development of public administration in Central and Eastern Europe was assessed in a study by Reinholde, Guogis, Smalskys, Žičkienė and Klimovsky (2020), indicating the most important stages of modernization in the light of the prevailing theoretical paradigms. It is concluded that by developing and presenting principles that are more progressive and values of public administration, such as openness, transparency and social justice, social quality, absence of corruption and more active non-governmental organizations, CEE countries can achieve more stable democratic development and eliminate or minimize the negative impact of public administration on various areas of public sector reform.

Country studies presented by Kovac, Gajduschek (2015) also provide comprehensive information on public administration and public administration reforms in individual CEE states. In particular, *Gajduschek (2015)* provided a brief, critical, reasoned overview of the four main theories of public administration as they have emerged in the CEE over the past few decades. He discusses bureaucracy in more detail. This is due to the generally accepted view that it was the communist regime with its politicized personnel policy, which hindered the formation of a full-fledged bureaucracy and argues that there are other long-term obstacles in the region. Public administration, advocating a minimal level of government influence, was in its heyday when the CEE states began their transition from a communist regime based on the idea of an all-powerful government. Good governance and the New Weberian state are widely discussed among researchers in the region. However, such solutions are unlikely to be found in practice in CEE countries.

Onofrei and Lupu (2010) compared the main characteristics of public administration in CEE countries. Faced with the financial crisis, governments are beginning to take steps to improve governance. In particular, the evolution of public administration in Romania between 1990 and 2009 is analyzed; the impact of the financial crisis on it; and finally, which is important, the econometric model establishes the relationship between the main factors of influence, GDP, government spending and the number of civil servants.

Thus, the research conducted on public administration in the CEE countries is quite thorough, but needs to identify current trends given the significant changes taking place in EU public administration and as a result of COVID-19.

3 Materials and research methods

In this study were used the following methods: withgeneral scientific methods (induction and deduction, description, analysis, synthesis, generalization) and special (statistical method, system analysis, descriptive statistics and interstate comparisons, graphic method). We will also use the list of countries used for international comparison in UN statistical publications. The choice of countries is limited to the member states of the European Union.

The research concerns the potential observation of differences in the development and current state of public administration in CEE countries today. To this end, we use covariance analysis to identify priority drivers of public administration in CEE countries and the international methodological approach of comparative research, as it is a variable-oriented approach and as it is recognized that a full theory may be absent in this particular study.

This article uses a descriptive analytical method. Descriptive analytical method is used often to study social processes (in this case, public administration) and their current trends or new phenomena, selecting information about the current situation, and wanting to have a comprehensive picture of the analyzed phenomena.

In our case, research analyzes and evaluates the phenomenon of "new government", which is socially responsible and focused on citizens and their groups. A comparative method is also used. This method is perceived as maintaining the consistency of information about administrative reforms and their features in different CEE countries.

4 Results

Today, effective public administration is one of the main tools for ensuring the implementation of effective public policy aimed at developing such strategic areas as: efficiency and improvement of administrative services, growth and guarantee of social standards, competitiveness and sustainable economic development. In addition, public administration today is the driving force behind the implementation of the process of European integration and the implementation of qualitative changes in the context of countries meeting the criteria for EU membership.

This process is especially significant in the CEE countries, which have significantly transformed the system of public administration for more than a decade. The complexity and duration of this process is due to the specific features of public authorities, which were inherent in their accession to the EU. In particular, these are: features of command-administrative style, clear hierarchical structuring of public authorities, duplication of workload between them, high maintenance costs, total control over the activities of public organizations, restrictions on the free will of citizens and freedom of speech. Thus, some countries in the region have managed to improve public governance by transforming it in accordance with the practical experience and experience in this area by EU member states and became part of it, another group of countries in the region,

Public administration reform in CEE countries in the context of ensuring their membership in the EU was carried out in the direction of forming effective state institutions, rules of their functioning, procedures and mechanisms of interaction between them, as well as proper staffing of civil services.

In order to ensure the effective reform of public administration in the CEE countries, the SIGMA program, which deals with the implementation of transformations to ensure certain political, economic and so-called membership criteria, has been used for their accession to the EU.

In generalized form, the development of public administration in accordance with the requirements of EU accession, due to this program provides:

In the political sphere:

- ensuring the free expression of the countries' citizens will during the presidential, parliamentary and local elections;
- formation of an effective civil service with appropriate staffing;
- ensuring the decentralization of state power;
- promoting the establishment of non-governmental organizations and expanding the scope of their activities;
- improving the effectiveness of the fight against corruption and crime;
- ensuring objectivity, transparency and the rule of law;
- promoting the formation of an independent information space;
- protection of the rights and freedoms of citizens.
- In the economic sphere:
- ensuring transparent management of public finances;
- promotion of effective budgeting taking into account national peculiarities;
- ensuring effective, independent financial control;
- creation of a transparent public procurement policy;
- ensuring the appropriate level of key economic indicators;
- providing social guarantees.
- In the European integration (membership) sphere:
- adoption and implementation of European law (acquis);
- reforming administrative and judicial structures in accordance with the norms set by the European legal framework.

The result of achieving certain criteria should be a European administrative space formation. At the same time, in practice, the development of public administration in the CEE countries, which are part of the EU, usually involves the implementation of the following stages:

1) decentralization (formation of self-government basic territorial units, development of the relevant regulatory framework, implementation of a new territorial system);
2) reorganization of the government (creation of state agencies, renewal of the structure of ministries, provision of appropriate legislative bases for the implementation of such reforms);
3) introduction of new mechanisms and procedures (formation of a system of tenders and transparent public procurement, development of relevant legislation in the field of anti-corruption activities, public finances, access to information, etc.).

At the present stage of development of public administration, the models of New Public Management (NPM) and Good Government (GG) are most often used. The essence of NPM is the implementation of best business practices in the field of public administration and therefore does not provide for the existence of dogmatic models that are the basis for reform. The main principle of such reform is to minimize state intervention in the economies of countries and its dominance in those areas where its need is socially justified. At the same time, the activities of government agencies should be customer-oriented. Despite the progressive nature of this approach, opponents of the NPM argue that such a model of public administration significantly limits democratic initiatives, identifying citizens primarily with consumers of public services, while eliminating the fact that they are the sources of political power, social initiatives. In addition, the prerogative of applying this approach is to ensure the economic effect of ongoing reforms, while socio-cultural values are of secondary importance.

The concept of GG is slightly different – It envisages the transformation of public administration based on the principles of free will, decentralization of power, participation, rule of law, independence of the media environment, political pluralism, hierarchical accountability of public authorities and democracy.

At the same time, it is necessary to determine the fundamental difference between these models, which is that GG, in contrast to NPM, presupposes the presence of the state as a full subject of making and implementing management decisions in all areas of state development. After all, a disciplinary structural element ensures interaction between the main areas of activity in the country and provides a constructive dialogue between business and society. In addition, the NPM provides for the decentralization of public administration, while the GG is based on the implementation of the project principle of the organization.

At the present stage of public administration development, e-government is becoming especially popular, accompanied by the digitalization of the main activities of public authorities. This direction is extremely relevant in a pandemic caused by the spread of Covid-19, which requires social distancing and public services quality.

From the data given in Table 1, we can see that all CEE countries, which were surveyed during 2018 and 2020, are characterized by high values of the e-government index (EGDI), which indicates the ability of states to respond to today's challenges and quickly reform public administration by improving the quality of services provided and reducing their spending implementation, which is especially relevant in the Covid crisis.

Table 1 – Dynamics of EGDI in CEE countries in 2018 and 2020

Country	EGDI 2018	EGDI 2020	2020/2018
Bulgaria	0.72	0.79	0.07
Czech Republic	0.71	0.81	0.1
Poland	0.79	0.84	0.05
Moldova	0.66	0.69	0.03
Romania	0.72	0.78	0.06
Slovakia	0.71	0.81	0.1
Germany	0.87	0.85	-0.02
Slovenia	0.77	0.85	0.08

Source: Summarized and calculated by the authors according to United Nations https://publicadministration.un.org/en/Research/UN-e-Government-Surveys

It should also be noted that in 2020 Bulgaria and Slovakia for the first time were included in the group of countries with a very high value of EGDI. Moldova is also showing significant progress in this direction. In the context of the growth of the e-government index in 2020, there is an increase in the level of the online services index (Figure 1).

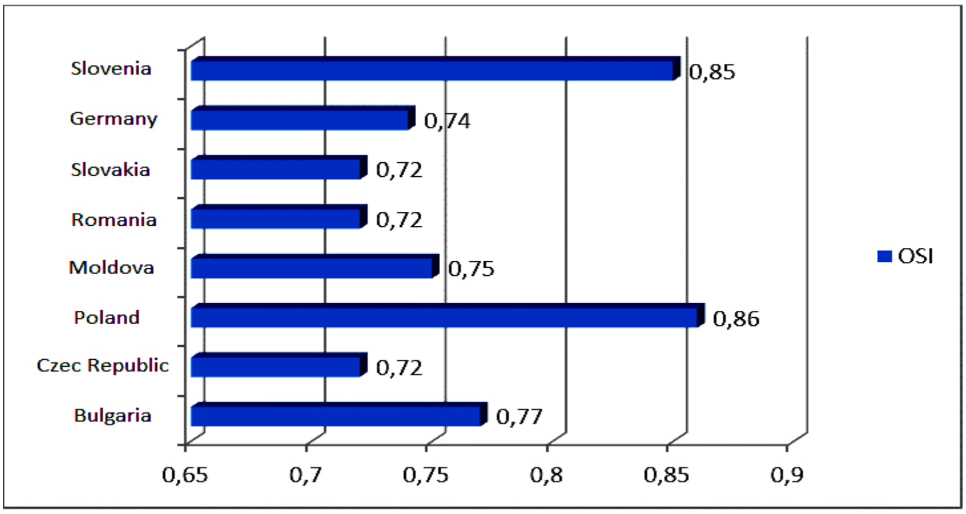

Figure 1 – Index of online services in CEE countries in 2020
Source: Summarized and calculated by the authors according to the United Nations https://publicadministration.un.org/en/Research/UN-e-Government-Surveys

According to Figure 1, it is appropriate to conclude that the countries of the studied region are characterized by a high and very high level of digitalization in the provision of services, which inevitably indicates the success of ongoing reforms in the field of public authorities.

In addition, in order to study the development of public administration in CEE countries, it is advisable to assess their administrative capacity at the national level. To this end, it is advisable to use indicators that represent the progress of public administration, in particular: indicator of political stability and absence of terrorism (Political Stability and Absence of Violence / Terrorism); Government Effectiveness; Quality of legislative activity of the government (Regulatory Quality); Rule of Law;
– Control of Corruption indicator.
–

The dynamics of the indicator of political stability and the absence of crime (terrorism) is shown in Figure 2.

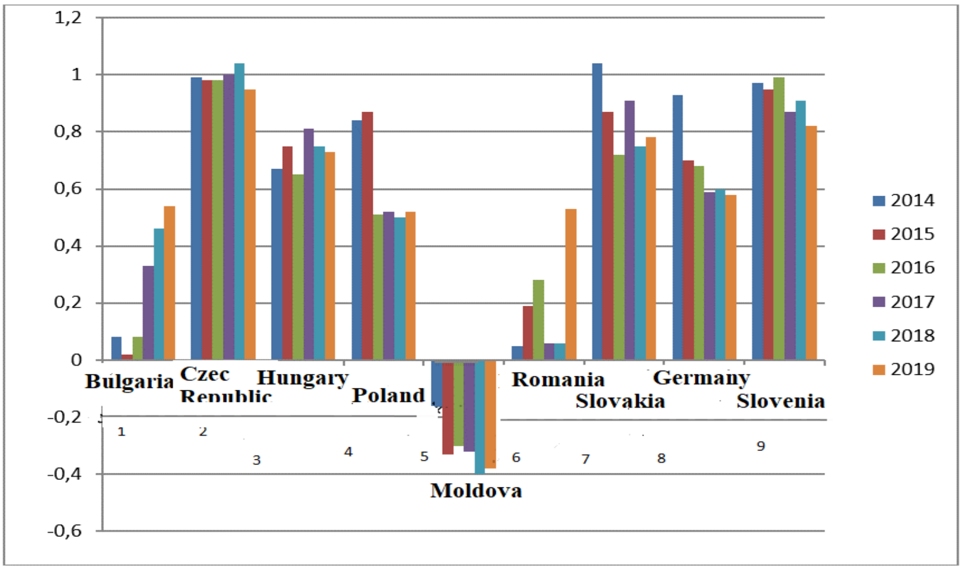

Figure 2 – Indicator of political stability and lack of terrorism in CEE countries in 2014-2019
(1 – Bulgaria, 2 – Czec Republic, 3 – Hungary, 4 – Poland, 5 – Moldova, 6 – Romania, 7 – Slovakia, 8 – Germany, 9 – Slovenia)
Source: Systematized and constructed by the authors according to the World Bank www.govindicators.org

According to Figure 2, it can be noted that the majority of the studied countries (during 2014-2019) show significant progress towards political stability and the absence of crime and terrorism, which indicates the effectiveness of the ongoing reforms in the field of public administration. The only exception is Moldova, whose values, although within the relevant limits, are negative.

While analyzing the efficiency of the government from the data on Figure 3, it should be noted that negative relevant indicators characterize the activities of Moldova and Romania in this direction, while other countries are progressing in this area.

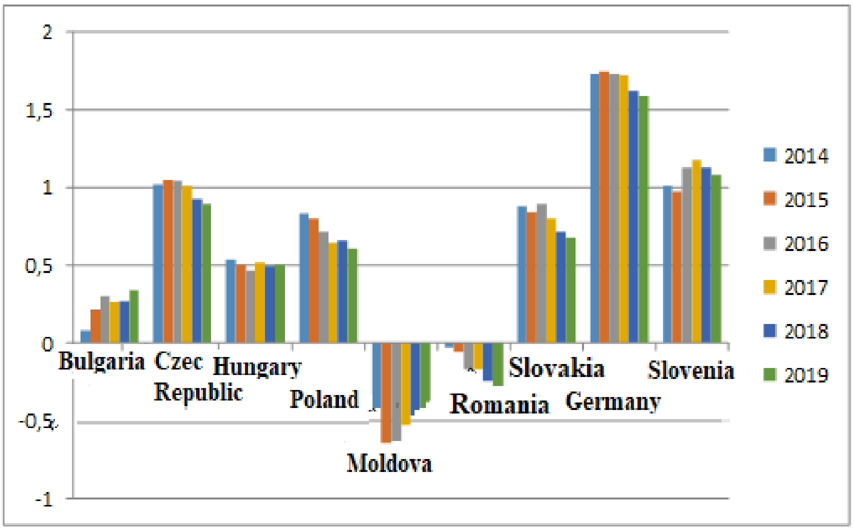

Figure 3 – Government performance indicator in CEE countries in 2014 – 2019
(1 – Bulgaria, 2 – Czec Republic, 3 – Hungary, 4 – Poland, 5 – Moldova, 6 – Romania, 7 – Slovakia, 8 – Germany, 9 – Slovenia)
Source: Systematized and constructed by the authors according to the World Bank www.govindicators.org

Characterizing the quality of legislative activity of the government (Figure 4), it is worth noting that during 2014 – 2019 in all countries there is a significant increase in this indicator, which is relevant. However, in Moldova this indicator is egative.

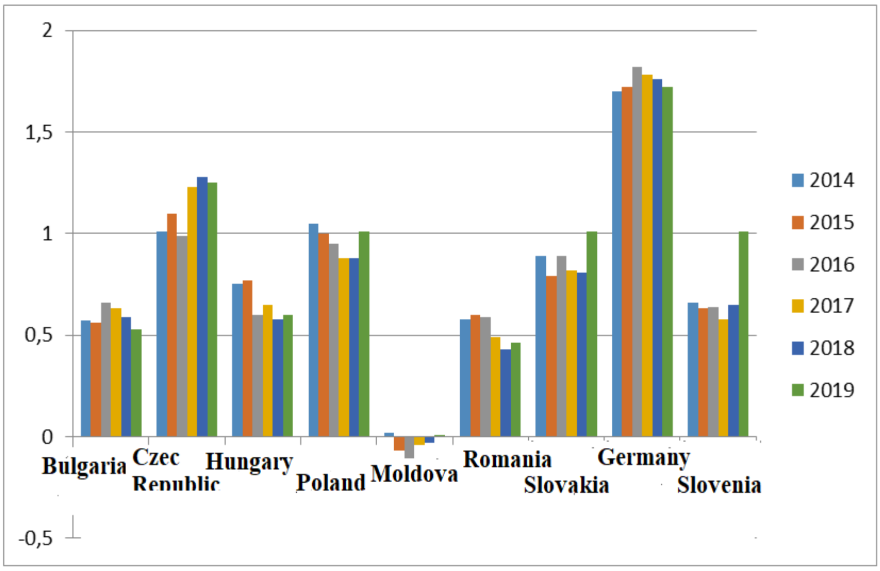

Figure 4 – Quality of government legislative activity in CEE countries in 2014–2019
(1 – Bulgaria, 2 – Czec Republic, 3 – Hungary, 4 – Poland, 5 – Moldova, 6 – Romania, 7 – Slovakia, 8 – Germany, 9 – Slovenia)
Source: Systematized and constructed by the authors according to the World Bank www.govindicators.org

In Figure 5 is shown the dynamics of the rule of law in the dynamics of 2014–2019. Based on these results, it should be noted that in Bulgaria and Moldova the analyzed indicator has a negative but normative value, which indicates the need to accumulate efforts to reform the judiciary in these countries.

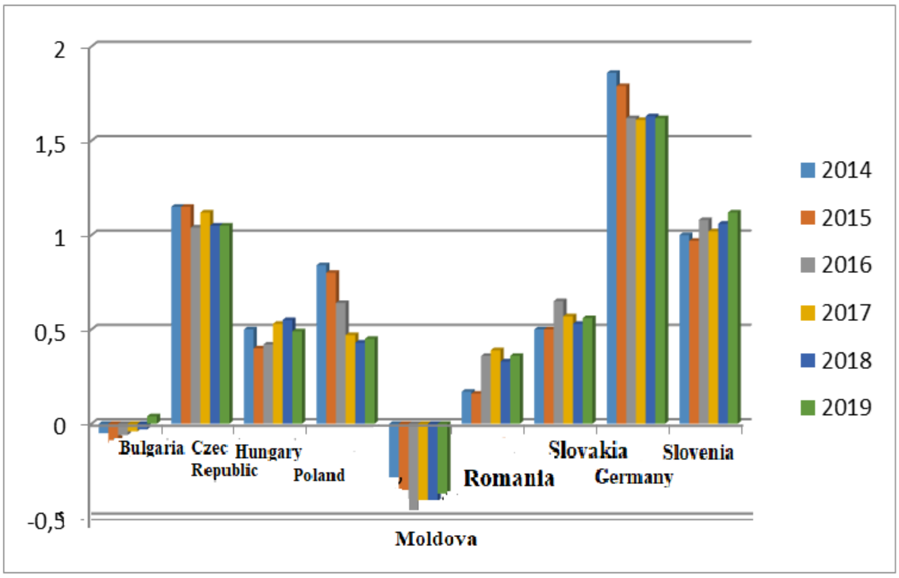

Figure 5 – Rule of law in CEE countries in 2014–2019
(1 – Bulgaria, 2 – Czec Republic, 3 – Hungary, 4 – Poland, 5 – Moldova, 6 – Romania, 7 – Slovakia, 8 – Germany, 9 – Slovenia)
Source: Systematized and constructed by the authors according to the World Bank www.govindicators.org

According to Figure 6, it can be concluded that the most effective reform of public administration in the direction of controlling corruption was carried out in Germany, while in Bulgaria, Moldova and Romania, although there are positive developments, this indicator during 2014–2019 is negative.

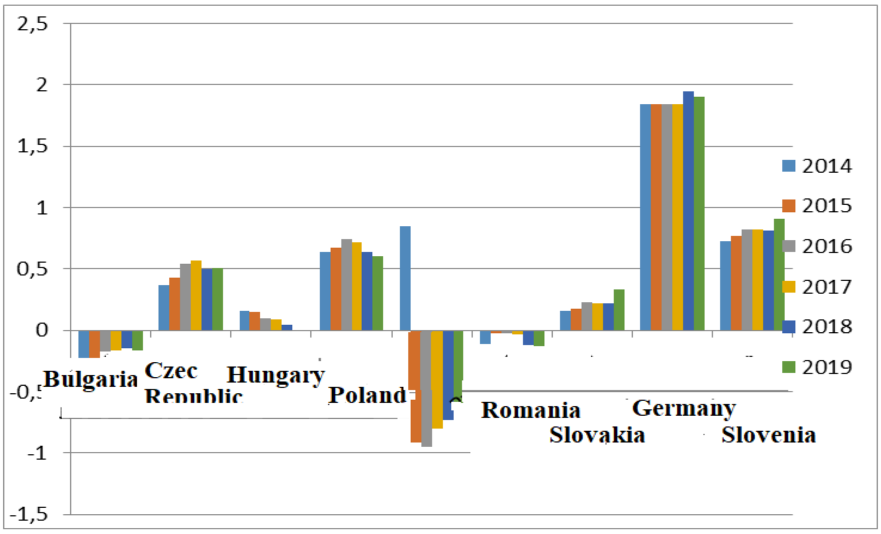

Figure 6 – Control of corruption in CEE countries in 2014–2019.
(1 – Bulgaria, 2 – Czec Republic, 3 – Hungary, 4 – Poland, 5 – Moldova, 6 – Romania, 7 – Slovakia, 8 – Germany, 9 – Slovenia)
Source: Systematized and constructed by the authors according to the World Bank www.govindicators.org

At the same time, it should be noted that the effectiveness of reforming these areas primarily depends on the initial positions and economic opportunities of each country. Thus, the analysis indicates that the countries of the post-Soviet space, for the most part, are characterized by lower efficiency of ongoing reforms compared to other countries studied and obviously require more financial and time costs.

We will use regression analysis to see the impact on government efficiency of such indicators as political stability, quality of government regulatory activity, rule of law and corruption control.

The calculations are based on the example of Poland, which demonstrates some of the highest results of public administration reform in the CEE countries. The initial data for regression analysis is given in Table.2, Table.2a, Table.2b, Table.2c.

Table 2 – Initial data for analysis

Poland	Government efficiency (y)	Political stability (x1)	Quality of government regulatory activity (x2)	Rule of law (x3)	Corruption control (x4)
2014	0.83	0.84	1.05	0.84	0.64
2015	0.8	0.87	1	0.8	0.67
2016	0.71	0.51	0.95	0.64	0.74
2017	0.64	0.52	0.88	0.47	0.72
2018	0.66	0.5	0.88	0.43	0.64
2019	0.6	0.52	1.01	0.45	0.6

Table 2a – The results of the regression analysis are as follows:

Regression statistics	
Multiple R	0,999117588
R-square	0,998235954
Normalized R-square	0,99117977
Standard error	0,008600717
Observations	6

Table 2b – The results analysis of variance

Analysis of variance	*df*	*SS*	*MS*	*F*	*Significance of F*
Regression	4	0,041859361	0.01046484	141,4696642	0,062963775
The rest	1	7,39723E-05	7,39723E-05		
Total	5	0,041933333			

Table 2c - Statisticks

	Coefficient	*Standard error*	*t-statistick*	*P-Value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Y-intersection	1,509	0,213	7,094	0,089	-1,194	4,211	-1,194	4,211
Variable X 1	-0,146	0,080	-1,830	0,318	-1,156	0,865	-1,156	0,865
Variable X 2	-0,784	0,136	-5,750	0,110	-2,517	0,949	-2,517	0,949
Variable X 3	0,845	0,102	8,294	0,076	-0,450	2,140	-0,450	2,140
Variable X 4	-0,700	0,166	-4,2165	0,148	-2,810	1,410	-2,810	1,410

Thus, the theoretical equation of linear regression will look like this:
$y = 1{,}509 - 0{,}146 \times x1 - 0{,}784 \times x2 + 00{,}845 \times x3 - 0.700 \times x4$ (1)

The obtained results indicate the presence of a close correlation between the selected study factors. The value of the multiple correlation coefficient indicates that the obtained econometric model adequately describes the studied economic dependence. 99% of variations in the change in the performance indicator depend on factorial characteristics and only 1% – on random factors. Regression analysis indicates an inverse relationship between government efficiency and the quality of its regulatory activities, political stability and control over corruption. At the same time, there is a direct link between the efficiency of government and the rule of law. That is, the dominant and fundamental aspect in public administration reform is the improvement of the judicial and regulatory spheres.

5 Discussion

The role of public administration in the development of the CEE region is constantly changing. Today, taking into account the national identity, states seek to find new tools for cooperation between public authorities, citizens and civil society. This is realized based on e-government and digitalization of public services.

In fact, in CEE countries, elements of all three models (i.e. traditional, NPM and e-government) coexist in practice, but because reforms in CEE countries have been implemented quite aggressively, ineffectively for specific countries, reform models have been applied without proper adjustment and evaluation. Among the CEE countries, there is no country that would successfully and fully implement the principles of both NPM and e-government.

The current fiscal crisis in Europe affects the countries of the region in different ways; although some countries in the CEE countries have a direct impact on it, others are only slightly affected. Nevertheless, it seems that some form of crisis (whether financial, economic or social) will become part of the reality of public administration in the region for a while; therefore, the implications of the crisis for future research on public administration in the region need to be discussed. Moreover, the path of reform does not resemble the NPM model, but rather the so-called Neo-Weberian approach. The Neo-Weberian state is becoming a requirement for private enterprises to compete for service quality, and in which civil society organizations are fully involved in shaping public policy, from decision-making to service delivery, strengthening the civil sector and its organizations.

6 Conclusion

Public administration always reflects social change and thus evolves. As CEE (still) faces problems (after) the transition, the development of public administration will remain a subject for a long time. The EU, as a part of the broader effort to encourage its citizens and businesses to digital, including the CEE countries, calls for the ambitious goals of the development of the information society set out in the EU accession process.

The e-government agenda is more or less adhered to worldwide, but it is gaining importance in CEE. The region is just beginning to emerge from a period of far-reaching political and economic transformation after the collapse of repressive communist systems. For these countries, e-government is not just a new tool of public administration, but a necessary condition for further development. The study concludes that CEE countries are becoming increasingly capable of implementing such changes. Governments of CEE countries, in order to promote the effectiveness of their public administration, should ensure the quality and dynamics of development in the field of law, in particular its rule and rule-making activities.

Today, in the CEE countries, a new model of interaction between public authorities, citizens and civil society is actually being developed – various mechanisms for providing services are being implemented. Therefore, the organic introduction of market methods and principles in public administration determines new areas of research.

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POLYCENTRISM OF THE MODERN WORLD AS A GEOPOLITICAL REALITY

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Abstract: The article is devoted to the study of the polycentric concept of world politics formation. The research aims to study the current world geopolitics state and model a possible scenario of polycentrism development in the future. According to the study results, the polycentrism of the modern world is based on bipolarity formed by the USA and other countries. In particular, the main rivals today are China and Russia, which can act separately as a geopolitical entity, or combined, creating a weighty area of world influence. The study also shows the importance of interstate political configurations, as the possible development of polycentrism in the direction of small states connection, regional mergers, and the participation of large multinational companies in the field of advanced and information technology.

Keywords: polycentrism, bipolarity, geopolitics, IT market, Covid-19

1 Introduction

It is clear from world history that no unipolar world can create a solid geopolitical structure because of its conflicting nature. It is only a sign of world politics transition to a new geopolitical era. Such a system is characterized by instability since it inevitably moves to aggressive-power principles of influence on the surrounding world to realize its geopolitical power. The rise of one of the world politics subjects can not last long. Due to overstretched economic resources, weakened domestic leadership, and risky adventures, the hegemon created by several states will cease to be the center of world influence (Kalyuzhnyj, 2010).

One version of a polycentric world is the bipolar model, in which power is distributed almost equally between a pair of hegemonic states. However, despite some stability, such a system cannot exist indefinitely because of the different rates and directions of development. An example is the USSR-US bipolar world after 1945 and before 1991 (Kalyuzhnyj, 2010).

Polycentrism is the geopolitical reality of the current world order. The unification of Europe based on the Maastricht Treaty of 1992 is deepening, despite the withdrawal of the United Kingdom. Also, despite pockets of instability, the Islamic world is increasing in influence. However, the U.S. still has a superpower in the current transition to a polycentric world. Its hegemon position in striving to become one of the poles of the new world is already challenged by India and China. Therefore, we should not forget about strengthening individual states, especially ones that form separate civilizations (China, Japan, India). Also, India and Brazil are becoming strong world players (Kalyuzhnyj, 2010).

At the moment, the main problem, the development of which is impossible to predict, is the severe strengthening of the position on the world stage of transnational companies, which now act as arbitrators of economic and political decisions and challenge the decisions of old political systems (Saran, 2021).

The study aims to examine the current state of world geopolitics and model a possible scenario of polycentrism development in the future.

2 Literature review

The theoretical aspects of the formation of polycentrism are quite well studied at the scientific level. It is equally noteworthy the work of Handley J. (2021), which shows the main directions of the movement with a more in-depth theoretical model of the polycentric world. The issue of polycentrism is quite specific and debatable. So, to show the topic's relevance and the availability of its understanding, Lederleitner M. (2021) thoroughly interprets the idea of polycentrism. He reveals the underlying principles that are common to both polycentrism and religion.

The formation of polycentrism has become especially relevant today when another severe threat to security has emerged: the Covid-19 pandemic. The speakers Bajkov A. *et al.* (2020) are unanimous that the pandemic has not stopped the war between the U.S. and China for technological supremacy. On the contrary, it continues but gives the PRC a respite, as all the country's forces are focused on the fight against COVID-19, which requires significant resources.

Determining the type of modern world order alone, whether bipolar or multipolar, is one of the most ideological issues in international relations (Keersmaeker, 2015). It is fair to say that the science of international relations in general, like any other social discipline, has a significant ideological component. Most American experts declare that the world is unipolar and will remain so for a long time to come, presenting this as an absolute good for humanity. On the other hand, the EU and other BRICS countries argue in favor of a multipolar world.

Each side has its arguments. Thus, in the opinion of the U.S. Secretary of State in 2005-2009, K. Rice, the reality is that "polycentrism has never been a unifying idea or vision. It was a necessary evil that supported the absence of war, but it did not contribute to the triumph of peace. On the contrary, polycentrism is a theory of rivalry; of competing interests and, at worst, of competing values" (Primakov, 2011).

The parties had moved from theoretical discussions to the normative plane of the academic world a long time ago. Thus, supporters of unipolarity rely on the theory of hegemonic stability, which Kindleberger J. originally developed concerning his desired mechanism of world economic governance during the Great Depression (Kindleberger, 1973) and was further developed by experts on international political economy Gilpin G., Keohane, R. and Goldstein J. Proponents of this approach argue that the presence of a hegemon allows to stabilize the global system and is an unconditional good. They refer, for example, to J. Modelski's research on the concentration of maritime power (Modelski, 1988), as well as to C. Rasler, according to whom the emergence of global wars coincides with periods of low concentration of power (Rasler, 1994).

Theoretical elaboration of the polycentrism concept in this respect is still something poorer. In the 1990s, several researchers made several attempts to develop theoretical foundations for a polycentric world, promoting, according to Bogaturov A., the image of a "necessary future", although without proper reliance on the analysis of the power relations (Bogaturov, 2003). Today, it can be argued that the issue is also not sufficiently studied in the scientific literature, which forms the relevance of the research at the scientific level.

3 Research Methodology

The study of the polycentrism of the modern world as a geopolitical reality takes place in this research by modeling the main geopolitical models of development. Based on this approach, researchers predict the main trends of development of the system of interstate relations, identify the main confrontational knots in it, and form an idea of both global geopolitical threats and specific threats to the national interests of states generated by certain geopolitical processes.

The essence of geopolitical modeling consists of a structural and genetically functional representation of the world space and the fundamental characteristics of the world structure and parameters of the functionality of the elements of this structure.

Using general scientific methods of cognition, including analysis, synthesis, induction, and deduction, a critical analysis of the literature, which highlights the issues of the polycentric world structure, was conducted. Synthesis of information allows highlighting the main ideas and providing them in the study in a structured and consistent manner. Induction and deduction will enable us to draw conclusions on possible world development scenarios and highlight the author's vision of their problems.

4 Research results

The third decade of the XXI century has forced the world to face its most difficult challenge – how to offer a coherent, collective, and equitable response to the COVID-19 pandemic. This challenge to the beliefs of the most ardent internationalists is part of a profound shake-up in the global order that loomed even before the first COVID-19 case in Wuhan in 2019 (Steward, 2020). It began as U.S. hegemony almost ended, and the rise of a multipolar world entailed a redistribution of influence on the global stage. American leadership, which would have been necessary to intensify collective action against the pandemic, was transformed into a desire to isolate itself from the rest of the world long before former U.S. President Trump launched the “America First” campaign. On the other side of the world, in Europe, the utopian vision of interdependence and global cooperation suffered when Brexit destroyed the ideological and institutional foundations of the European Union. In such circumstances, China, as another great power, became involved in its Pax Sinica project, seeking to make globalization profitable for its communist party.

Global institutions have weakened, and the benefits of investing political will into international mechanisms have diminished considerably. Moreover, the Coronavirus further exacerbated the situation. When the disease began to spread rapidly, countries retaliated alone or with trusted partners and interacted with the international community solely for self-interest. In the end, everyone turned out to be “Darwinists” and gave priority to their survival, not caring about the fate of others.

The bipolarity of the modern polycentric world
The current world order is characterized by multi-vector polycentrism, caused by the uncoordinated foreign policy activity of new power centers. It provokes the emergence of bipolarity. They emerge within this chaotically formed and not fully formed polycentrism. At the same time, the new global bipolarities are not a copy of the Soviet-American confrontation because they were born under different political and economic circumstances (Garbuzov, 2019).

U.S.-China confrontation
The main bipolarity today is the confrontation between the U.S. and China. The U.S. remains to this day a superpower, unwilling to give up its position. In turn, China, in the previous 40 years, has become a producer of everything for the whole world and is rapidly increasing its influence at the global level. Therefore, China sees the United States as the most likely threat to its economic and military power today. Thus, the era of U.S. hegemony is winding down, while at the same time, the PRC is becoming the greatest challenge to the existing balance of power. The specific of this confrontation is contemporary interdependence and mutual rejection. So, there is a unique, regulated, and controlled bipolarity model in the polycentric world order (Garbuzov, 2019) (see Tab. 1).

Tab. 1: Scenario of geopolitical development in the context of the confrontation between the U.S. and China

USA	China
Prioritizing global interests over national ones; development of an army that can defend global interests; development of U.S. domestic technological and innovation capabilities; strengthening the alliance system	Strengthening of the army, especially the navy; rapid economic growth, more than 5% a year, development of the technological market; strengthening of local authorities, Belt and Road Initiative development; increasing influence on global institutions and standards

Source: Developed by the authors

The Risk and Forecasting Group, led by Brennen S. (2020), modeled four scenarios of how the world will change in the future. The primary basis for forecasting was the relative power and influence of the United States and the PRC, interaction between them and other significant allies and adversaries of the United States.

The group concluded that forming a new world order is taking place without clear organization and definite direction. The primary influence on the formation of geopolitics in the future will be exerted by the United States and China, or rather the relationship between these world leaders. Regardless of the specific scenario, the U.S. and the PRC's relative influence and interaction will be the dominant factor influencing how geopolitics will be shaped from 2025 to 2035. Depending on the path chosen to establish the new world order, the measure of each state's weakening or the speed of economic recovery after Covid-19 will be determined.

None of the scenarios suggests a wholly positive relationship between the two countries. The only way a fully cooperative relationship could be achieved if common chosen global interests emerged and only if the power and influence of the United States were equal or greater than the power and influence of the Celestial Empire.

The confrontation between the United States and Russia
The second bipolarity can be considered the confrontation between Russia and the United States. This confrontational axis is vulnerable because it has more geopolitical context than an economic one, so bipolarity is less manageable. In its active politico-economic activities, Russia constantly runs into retaliatory actions by the United States. It makes the rest of the world more chaotic and disorderly. Of course, it leads to new uncertainties and risks. The restoration of a full-fledged dialogue between the countries is only possible if they make mutual concessions. True, this is unlikely because the strategic interests of one state affect the strategic interests of the other (Garbuzov, 2019) (see Tab. 2).

Tab. 2: Scenario of geopolitical development in the context of the confrontation between the United States and Russia

USA	Russia
Strengthening the Alliance at the expense of countries in geographical proximity to Russia; the policy of technological leadership as an instrument of influence on the economic processes of other states.	Increasing political pressure on countries dependent on Russia; forming its own political-military alliance; increased demonstration of combat readiness and military superiority; information warfare and use of hybrid warfare methods; an alliance between Russia and China.

Source: Developed by the authors

The analysis of scenarios for 2025-2035 revealed a lack of stability in relations between the Russian Federation and China. Therefore, it is assumed that cooperation between the countries may have reached the highest level, which will be pretty challenging to maintain.

It turns out that Russia's foreign policy is closely linked to assessing its relative power relative to China and the United States. It has dynamically rebalanced in favor of its indicative superiority.

The technological and military surprises were the “black swans” in 2025-2030. The military application of technology in the scenarios was evolutionary rather than revolutionary. Still, technological surprises could not be ruled out, and in many respects, they were considered imminent unless predictable. In order of likely strategic importance, the key technologies to track were: conventional and nuclear hypersonic weapons, autonomous systems, and biological weapons.

The most significant concern is the inability to predict the development of space weapons against the background of increased competition in the gray zone and the possibility of armed conflicts. In addition, the associated unintended and uncontrolled escalation between the hegemons has been a cause for concern in many scenarios, as a reason to either build new strategic stability and possible arms control negotiations or to initiate an armed confrontation.

Thanks to the analysis of possible developments, we can summed up that the most likely new world order in the next decade will not be a monopolar or a bipolar world of the type Soviet-US confrontation. Instead, it could be an unstable polycentrism. Regardless of developments, the relative power of both the United States and China will be weakened or counterbalanced by the influence and independent foreign and security policies of India, Japan, Germany, France, the United Kingdom, and other states.

The scenarios also feature a great deal of contestation of U.S. dominance, particularly by Russia, Iran, and North Korea, and their "unfair" play on the world stage. Although Russia will lose some economic power in this period, it remains the most problematic global player for the U.S. and its allies in the scenarios. Thus, cooperation with the Western World is possible only in issues of strategic stability.

Iran has begun to show aggression in scenarios where the United States has weakened its favor with its Middle Eastern allies. North Korea was a severe problem because of the expansion of weapons and rearmament programs in each scenario. However, it became more open to negotiation as the United States strengthened its position and China reduced its power.

Also, regardless of the scenario, violent extremist groups are projected to be active. Still, according to the projections, they will be more localized, and the influence of cross-national groups will be reduced significantly. Extremists will take advantage of the weakening of the U.S. or its seeming retreat from key regions in which they sought to consolidate gains and when they felt the weakening of U.S. cooperation with regional partners. At the same time, Saran S. (2021) believes that modern geopolitics is determined not only and not so much by these bipolarities but by new threats and the inability of the global world to respond adequately to them (see Fig. 1).

Figure 1: Factors Affecting the State of Modern Geopolitics
Source: Developed by the authors

China's Belt and Road
The first factor affecting the future world order, the author calls the dramatic rise of China, which, thanks to the Belt and Road Initiative and advances in civilian and military technology, is becoming an inevitable reality. However, this factor would not be negatively influenced were it not for the country's international policies, which are distrusted by the United States and many of its allies (Saran, 2021).

Closed Globalization
In addition, hyper-nationalism and populism, for which globalization and multilateralism are an encroachment on the sovereign choices of powers, have increased due to the 2008 global financial crisis and the COVID-19 pandemic. As a result, a "closed globalization" is possible. Economic policies are no longer dictated solely by economic principles; they are now guided by considerations of strategy, political trust, climate, health, and technological threats. Countries like Britain, the U.S., and India have imposed trade restrictions, investment screening mechanisms, sanctions, and monetary policies that reflect these new trends. China has already worked out its distorted model of global integration.

Small-Group Formation
Frustration with multilateralism can be directly attributed to institutional inertia, lack of reform, and vested interests that continue to impede decision-making in international institutions (Patrick, 2015). Therefore, countries are leaning toward smaller groups to forge flexible partnerships on specific issues that accelerate cooperation among like-minded individuals. While this may be one way to overcome the malaise of international institutions, this tendency may hinder the development of broader and more coherent international strategies to combat "global disasters" from COVID-19 to climate change, that require the participation and commitment of all.

War by other means
Against the backdrop of a worldwide pandemic that deepened the crisis that began in 2008, geopolitics is being refocused to consider new actors, emerging factors, and considerations. Modern geopolitics is increasingly influenced by geoeconomics. Influential monographs such as War by Other Means by economist Jennifer Harris and diplomat Robert Blackwell speak of the systematic use of economic tools to achieve geopolitical goals. It is a form of governance that was present during the Marshall Plan and is present today in Chinese "checkbook diplomacy" and in the more general context of the "Belt and Road.

IT as an innovative tool
If the medium of communication is the message (McLuhan, 1964), then technology is the future of our politics. The advent of the fourth industrial revolution has led to the development of technologies that can be both a boon and a poison to humanity. America was the technological leader in the recent past. Still, China is now challenging this as it invests heavily in new and dual-use technologies such as artificial intelligence, quantum computing, and biotechnology. Pioneers can achieve technological leadership and become suppliers to other countries, creating asymmetric dependencies (Saran, 2021). A new field of interstate competition is opening up, where national security and strategic autonomy considerations imply technological choices and unique arrangements (Kryvtsova et al., 2021). In an increasingly digital world, the capture of data – not territory – and undermining critical information infrastructure – not state borders – are new security challenges for nations. As human attention and personal data become a coveted political reward, will the person become the next area of conflict.

While the factors above remain at the heart of the change, new players and geographic regions also affect geopolitics. Although the Coronavirus marked the return of the "nation-state," cross-border communities pose a threat to sovereignty in the Westphalian sense. The concentration of economic resources and power in global technology companies, from Facebook to Tik Tok, has meant that states are no longer major players in the world. Hate, tribalism, and irrational ideologies have returned with renewed force, drawing on the reach and spread of digital technology. Technological giants now act as judges (Saran, 2021) of economic and political decisions and challenge the decisions of old political systems.

We believe that broad, inclusive debates about the prospects for a new world order could be an example of constructive engagement in highly volatile times. In the face of global challenges, collective governance on a fair and equitable basis, the involvement of a wide range of countries in international political processes is required Paniuzheva M. (2021).

5 Discussion

The issue of the bipolarity of a polycentric world is quite debatable in academic circles. Many authors believe that today the world order is dictated by the policies of three countries at once: the United States, China, and Russia. For example, Morozov Y. (2020) shows the approaches of Russia and the United States to geopolitics and strategy in the regions of the world, taking into account the influence of China. Other researchers identify four leading players in the political arena. For example, Elamiryan R. (2020) analyzes the interests of the European Union, the United States, Russia, and China regarding the Eastern Partnership region. In his piece, the author reveals and discusses the complementary long-term interests of global players, which can become the basis for the mutual coexistence and development of a culture of cooperation for all actors involved. In turn, Kapkov S. (2009) shows that polycentrism is one of the directions of U.S. geopolitics, along with Atlanticism and Mondialism. On the contrary, Saran S. (2021) believes that U.S. hegemony is almost over due to the United States policy, which has been gradually isolating itself from the rest of the world since Barack Obama.

In his article Volodin A. (2019) explores the processes that took shape in the last 25 years of the twentieth century, which led to the formation of modern world politics and Russia's role in them. Today, after the collapse of the USSR, Russia is at the stage of recovery as a world state, and the monopoly influence of America on the world is gradually collapsing. Now there is a search for a new global consensus based on a universal/universal collective security system, with Russia at its core.

Along with the policy of large states, the military and economic independence of less developed countries are decreasing, as the powerful hegemons of the world political establishment are building subjective-objective policy against weaker states. Under such conditions, developing states tend to be subjects rather than objects of politics. At the same time, interaction with powerful forces becomes possible only through the unification of weaker countries. In particular, today's Central and Eastern Europe politics are shaping a new, post-liberal international order in which more vulnerable states do not feel sufficiently independent. Thus, in his work Bartoszewicz M. (2021) tries to reveal the relevance of creating the Three Seas Initiative. The 12 states of Eastern and Central Europe came together to reduce the influence of the big economies and minimize everything that hinders the development of the “Inter-Sea,” the vast region between Berlin and Moscow.

In such a situation, contrary to the methods of civilized confrontation between states with different development levels, when geopolitical claims must be formulated and justified, today, the existing shares are resolved by war. In this case, both military actions and hybrid ones are used, based on information warfare and the war of new technologies. Under such conditions, today, there is a qualitatively new synthesis of military and civilian, primarily information and political, means of protection of geopolitical interests (Kovalev, 2018, Venediktov et al., 2021).

Actual conclusions present Kalyuzhnyj V. (2017). He indicates that today the world is in the crisis point of the bifurcation period when the monopolar geopolitical global structure order collapses and turns into a new type of world development. However, its contours are still tricky to outline because they are formed not by large forces clearly, but by a set of small, which may soon create new global polycentric geopolitics.

6 Conclusion

The question of the components of polycentric world order is quite debatable. Today it is impossible to indicate what will be the geopolitical distribution in the future. Still, it is possible to identify the essential components of the formation of this world order:

1) it will be based on innovative technologies that will influence world development;
2) information policy will be formed not only by the authorities of certain states, but also by independent information transnational companies;
3) to protect against the influence of large states, smaller ones will organize their alliances. It is not out of the question that the role of small states and their associations that will be core in shaping the world balance and security;
4) despite the current superiority of the U.S., given the scale of China's development today, we can talk about a possible future reorientation of geopolitics;
5) perhaps the development of a closed society will be formed not by economic goals but by preserving the culture and health of nations.

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