

REVISTA

AMAZONIA

Investiga

August 2022. Vol. 11 Num. 56

ISSN 2322-6307

www.amazoniainvestiga.info

EDITORIAL TEAM

Editor

Diego Felipe Arbeláez Campillo. Research Group Languages, Representations and Education, Universidad de la Amazonia. (Colombia)

Coeditor

Magda Julissa Rojas Bahamón. Doctor Education and Environmental Culture, Surcolombiana University. Professor IE Jorge Eliécer Gaitán. Researcher recognized by the Ministry of Sciences of Colombia (Colombia)

Editorial board

Doctor Getman Anatolii P. Doctor of Legal Sciences, Professor, Rector of Yaroslav Mudryi National Law University.

PhD. Sergey V. Novikov Vyacheslavovich. Director of the Institute of Economics and Humanities of Engineering, Institute of Economics and Humanities of Engineering, Moscow Aviation Institute (National Research University), (Russia).

PhD. Danilyan Oleg G. Doctor of Philosophical Sciences. Professor, Head of the Department of Philosophy, Yaroslav Mudryi National Law University (Ukraine).

PhD. Tatsiy Vasyl Ya. Doctor of Legal Sciences. Professor, Rector's advisor Yaroslav Mudryi National University of Law (Ukraine).

PhD. Nadiia Skliar. Ph.D. in Economics, Post-Doctoral Fellow. National Institute for Strategic Studies, Kyiv, Ukraine. Associate Professor of the Department of State and Legal Disciplines. Donetsk Law Institute, MIA of Ukraine, Kryvyi Rih, Ukraine.

PhD. Aleksandr Alekseevich Korostelev. Doctor of pedagogical sciences. Associate professor. Director of the Center of scientific journals Federal State Budget Educational Institution of Higher Education «Togliatti State University» (Russia). SPIN-код: 2796-5077.

Doctor Juan L. Manzano Kienzler. Doctor of Education Universidad Pedagógica Experimental Libertador (UPEL). (Venezuela).

PhD. Osadchenko Inna Ivanovna. Doctor of pedagogical sciences. Professor Department of pedagogy and educational management Uman State Pedagogical University named Pavlo Tychyna. (Ukraine).

Doctor Tetiana Faichuk. Potebnia Institute of Linguistics of the National Academy of Sciences of Ukraine. Kyiv. (Ukraine).

PhD. Popovych Ihor Stepanovych. Doctor of Psychological Sciences. Full Professor of Department General and Social Psychology, Kherson State University. Kherson. (Ukraine).

Nadia Figol. National Technical University of Ukraine Igor Sikorsky Kyiv Polytechnic Institute. Kyiv (Ukraine).

PhD. Lucelly Correa Cruz. Doctor Education and Environmental Culture Universidad of the Amazonia. Professor Universidad of the Amazonia. (Colombia).

PhD. Olga I. Vaganova. Minin Nizhny Novgorod State Pedagogical University (Russia).

PhD. Lillyam López Pino. Doctor Education. Universidad of the Amazonia. (Colombia).

Doctor Bell Manrique Losada. Doctor in Engineering. Universidad de Medellín. Professor Universidad de Medellín. (Colombia).

PhD. Olga Vladimirovna Trischuk. Doctor of Social Communications. Professor Horizons of Printing. (Ukraine).

PhD. Reyber Parra. Doctor in Education. Universidad de Zulia. (Venezuela).

PhD. IS Pinkovetskaia. Ulyanovsk State University, Ulyanovsk. (Russia).

PhD. Eduardo Saguier. Ph.D. Washington University, St. Louis, Missouri (USA). (Argentina).

PhD. Ligia Terezinha Lopes Simonian. Universidad Federal del Pará. Belém. Professor Núcleo de Altos Estudos Amazônicos. (Brazil).

Scientific Board

Doctor Miguel Armando López Leyva. Director Instituto Investigaciones Sociales Universidad Autónoma de Mexico, UNAM, Mexico.

PhD. Georgina María Esther Aguirre Lora. Doctor of Pedagogy. President of the Mexican Society for the History of Education. UNAM. (Mexico). ORCID

Doctor Ademar Santos de Araújo. Grupo de Pesquisa do Centro de Educação Popular e Pesquisas Econômicas e Sociais (CEPPES). História Contemporânea/Educação, Centro Universitário Uni-Araguaia. (Brazil)

Doctor Joaquim Júlio Almeida Júnior. Doctor en Sistema de Cultivo. Coordinador del Centro de Investigación de Fitotecnia. Profesor Titular en UniFIMES - Centro Universitario de Mineiros. Research Group UniFIMES – Centro Universitário de Mineiros. (Brazil).

Doctor Clarimar José Coelho. Doutor em Engenharia Eletrônica y Computación. Laboratorio de Laboratorio de Computación Científica / Pontificia Universidad Católica de Goiás / UniEvangélica. Inteligencia artificial, reconocimiento de patrones, modelos matemáticos y computacionales, Laboratorio de Computación Científica / Pontificia Universidad Católica de Goiás / UniEvangélica. (Brazil).

Doctor Ressiliane Ribeiro Prata-Alonso. Post-doctor Environmental Sciences. Centro Universitário Araguaia, researcher, professor, coordinator Extension. (Brazil).

Doctor Saura Soraia Chung. Professor at School of Physical Education and Sports. Research Group PULA Centro de Estudos Socioculturais. Universidad de São Paulo. (Brazil).

Doctor Darci Schnorrenberger. Universidade Federal de Santa. Doutorado em Gestão de Negócios. Professor Associado no Departamento de Ciências Contábeis. (Brazil).

Doctor Emil José Hernández – Ruz. Dr. Genetic and Molecular Biology. Universidade Federal do Pará, Altamira. Conservation Genetic and Amazonian diversity. (Brazil).

Doctora Priscilla Guedes Gambale. Faculdade de São Miguel do Iguacu, Faesi, Paraná. (Brazil).

PhD. Zbigniew Kaźmierczyk. Department of History of Literature at the Institute of Polish Language and Literature at the University of Gdańsk. Associate professor. The head of the scientific and research Laboratory of Ethnogenetic Literature. (Poland).

PhD. Pablo Vommaro. Universidad de Buenos Aires, CONICET - CLACSO (Consejo Latinoamericano de Ciencias Sociales), (Argentina).

Beata Trojanowska. Kazimierz Wielki University. Dean of Education of the Faculty of Literature Study in Bydgoszcz. (Poland).

PhD. Luis Antonio García Gutiérrez. Doctor in Electronic Engineering Universite De Toulouse. Doctor in Electronic Engineering University of the Andes. Post-doctor LAAS-CNRS Electronic Engineering. Toulouse University. (Francia).

Ph.D. Carmen Beatriz Torres. Universidad Santo Tomas. (Colombia).

Dr. Jesica Arcangeli. Posgrado en Ciencias Biológicas. Departamento de Zoología, Instituto de Biología, Universidad Nacional Autónoma de México. (Mexico).

Ph.D. Ademir Araujo da Costa. Universidad Federal do Rio Grande do Norte. (Brazil).

Ph.D. Nyuara Araujo da Silva Mesquita. Universidade Federal de Goiás. (Brazil).

Ph.D. Paulo Moreira Pinto. Universidade Federal do Para. (Brazil)

Ph.D. Marcio David Macedo Da Silva. Doctor of Social and Environmental Sciences, NAEA/UFPA - Nucleo de Altos estudios Amazónicos. (Brazil).

Ph.D. Rafael Gerardo Arce. Doctor en Humanidades y Artes con Mención en Literatura. Facultad de Humanidades y Artes. Universidad Nacional de Rosario, Argentina.

PhD. Marianna Andreyevna Dudareva. Head of the Department of Literature of the Peoples of Russia and the CIS, Head of the Department publication policy and advertising of the Youth magazine. (Russia).

PhD. Olga Kiseleva. Ulyanovsk State University, Ulyanovsk (Russia).

Ph.D. Carlos Angel Arboleda Mora. Fundación Universitaria Católica del Norte. (Colombia).

PhD. Pablo Martínez Calleja. Universidad Leuphana Lünenburg. (Alemania).

M.Sc. Juan de Dios Rodríguez. Decano Universidad Pedagógica y Tecnológica de Colombia (Colombia)

PhD. Isabel Contreras. Universidad Iberoamericana. (México).

PhD. Ana Cristina Rocha Silva. Phd. Desenvolvimento Socioambiental del PPGDSTU/NAEA/UFPA and professor UNIFAP (Universidad Federal del Amapa). (Brazil).

PhD. Gian Carlo Delgado Ramos. Doctor en Ciencias Ambientales, Universidad Autónoma de Barcelona. Universidad Nacional Autónoma de México (UNAM), México.

PhD. Nelson Ernesto López. Director Doctorado en Educación y Cultura Ambiental, Universidad Surcolombiana, Colombia.

PhD. Cleofé Alvites-Huamani. Directora Doctorado en Educación Universidad César Vallejo. (Perú).

PhD. John Alexander Rojas Montero. Universidad Pedagógica Nacional. (Colombia).

PhD. Alfredo Olaya. Doctor in Hydraulic Engineering. Professor Universidad Surcolombiana. (Colombia).

Ph.D. Denise Machado Cardoso. Federal University of Para. (Brazil)

Ph.D. Luz Stella Cañón Cueca. Secretaría de Educación de Bogotá. (Colombia).

M.Sc. Libardo Motta. Master in Natural and Exact Sciences. Universidad Nacional de Colombia. (Colombia).

Lic. Kelly Rebeca Infante Díaz. Licenciada en Bibliotecología, Fundación Instituto de Estudios Avanzados – IDEA. (Venezuela).

PhD. Daniela S. Veas Iniesta. Postgraduate student. Institute of Engineering Economics and Humanities. Moscow Aviation Institute (National Research University), Moscow. (Russia).

PhD. Fredy Alexis Rivera Angel. Doctorando en Ciencias. Desarrollo Socioambiental en el NAEA de la Universidad Federal de Pará. NAEA Universidad Federal de Pará. (Brazil).

Miguel Angel Alcalde. Magíster en Biotecnología. Universidad de Barcelona (España)

Sergio Daniel Cubides Cubillos. Doctorando no Programa Interunidades em Biotecnologia (IPT/USP/Instituto Butantan). Universidade de São Paulo, Instituto de Ciências Biomédicas - SP, (Brazil)

PhD. Angela Maria Alvarez Gómez. Post-Doctoral fellow Centre of Excellence in New Target Discovery, Butantan Institute, Sao Paulo. (Brazil).

Marcia Cristina Santana. Zootechnist - UFV Master in Nutrition and Ruminant Production - UFV Doctor in Nutrition and Animal Feed. UNESP Professora de Zootecnia IFGoiano. (Brazil).

PhD. Martha Cecilia Arbelaéz Gómez. Doctor Psicología de la Educación. Universidad Tecnológica de Pereira.

Dr. Yan Kapranov. Doctor of Philological Sciences, Associate Professor at Kyiv National Linguistic University (Kyiv, Ukraine).

The content of published articles and reviews is the responsibility of the authors and does not reflect the point of view or opinion of the editors or the Universidad de la Amazonia of Colombia.

CONTENIDO

Editorial

Olha Ivanivna Panchenko, Diego Felipe Arbeláez-Campillo, Oleksandra Leonidivna Kaminska, Magda Julissa Rojas-Bahamón.....6

Ukrainian refugees and the European labor market: socio-cultural markers of interaction
Kateryna Bannikova.....9

Research of future masters of pedagogy's socio-professional activity
Valerij Radul, Artem Stryzhakov, Irina Hornar, Olga Radul, Olga Tkachenko.....18

Eastern Romance borrowings in Ukrainian dialects (Indo-European retrospective)
Iryna Nechytailo, Olha Kovaliuk, Olga Gorodyska.....28

Efficiency of the complex program of psychocorrection of cyber-addictions among middle and late adolescents

Yuliia Asieieva, Hanna Morvaniuk, Denis Voznyi, Alina Chetveryk-Burchak, Viktoriia Storozh.....38

The problems of defining the legal nature of the court judgement
Svitlana Senyk, Hanna Churpita, Iryna Borovska, Tetiana Kucher, Andrii Petrovskiy.....48

Activity of NGOs as a constituent element of policy in the field of combating crime
Kseniia Kosiachenko, Maksym Pochtovyi, Hanna Kyrychenko, Serhiy Spilnyk, Viktoriia Mozol.....56

The essence and content of illegal obstruction of the organization or holding meetings, rallies, marches and demonstrations and forensic aspects of its analysis
Maksym Romanov, Nataliia Sergiienko, Dmytro Yevdokymov, Inna Odnolko, Yuliia Panimash.....66

Forming ESP oral communication skills of students by means of Zoom
Marina Bilotserkovets, Tatiana Fomenko, Tetiana Klochkova, Yuliia Shcherbyna, Liudmyla Korniienko.....73

Legal and organizational principles of person identification by appearance during the investigation of criminal offenses in Ukraine
Larysa Kryvoruchko, Oleksii Kucher, Vlada Husieva, Iryna Timush, Diana Timush.....82

The linguistic concept of phraseological units denoting the personality inner world in the modern Ukrainian and English languages
Nataliia Melnyk, Ganna Dyshleva, Alla Davydenko, Tetiana Matviichuk, Iryna Zhytar.....91

Current trends of teacher education in the Ukraine and EU countries under conditions of pospandemia and russian invasion
Nataliia Melnyk, Liudmyla Pukhovska, Olena Kovtun, Iryna Biletska, Nataliia Ladohubets.....103

The digital evolution of art: current trends in the context of the formation and development of metamodernism

Mariia Kovalova, Zoya Alforova, Lyudmyla Sokolyuk, Oleksandr Chursin, Liudmyla Obukh.....114

Administrative and legal principles of public control over the implementation of state policy in the humanitarian sphere

Elvira Sidorova, Oleksii Dniprov, Maryna Yunina, Liliia Bobrishova, Karine Mkrtchian.....124

Problems of accounting digitalization in conditions of business processes digitalization
Nadiia Kovalevska, Iryna Nesterenko, Olena Lutsenko, Oksana Nesterenko, Yuliia Hlushach.....132

Analysis of musical art trends in Ukraine in the 21st century
Olena Vashchenko, Oleh Kopeliuk, Ihor Sediuk, Ievgeniia Bondar, Tetiana Kornisheva.....142

Psycho-emotional states of future specialists in a socionomic area under lockdown and martial law: comparative analysis

Ihor Popovych, Nataliia Machynska, Nataliya Yaremchuk, Vira Korniat, Vladyslava Kurinna.....150

Reclamation of the war affected agricultural land in east of Ukraine
Oleksandr Chumachenko, Oksana Kustovska, Vladyslav Tymoshevskiy, Iryna Kolhanova, Oksana Kaminetska.....159

Structural analysis and comparative study of photovoltaic panel mounting systems in Northern Cyprus

Rifat Resatoglu, Ayten Özavaş Akçay, Shaghayegh Ostovar Ravari.....169

Digitalization of society: implications and perspectives in the context of the psycho-dimensionality of social reality / psychosyntics

V. Andrushchenko, I. Yershova-Babenko, D. Kozobrodova, A. Seliverstova, I. Lysakova.....183

From a commodity to addiction: Are mobile phones valuable commodities or sources of addiction for freshman students?

Saban Kara, Yunus Yildiz.....196

Al-Jouf educational supervisors perceptions about handheld devices' importance in health education concepts' acquisition to students	
<i>Mishal Mohammed Alnabulsi</i>	210
Influence of digital technologies of distance education on the mental health of a child in the conditions of wartime realities	
<i>Iryna Romanova, Serhiy Kudin, Oksana Rybak, Yuri Zavalevskyi, Tamara Pushkarova</i>	224
Innovative elements in distance learning in a multicultural environment	
<i>Svitlana Koda, Dinara Turkpenova, Svitlana Kyrylenko, Valentyna Malyk, Alla Lukiianchuk</i>	232
Theoretical and methodological principles of teaching linguists: the Ukrainian case	
<i>Kateryna Yakushko, Iryna Haidai, Yuliia Hariunova, Olena Pryshchepa, Dmytro Marieiev</i>	240
Impact of contemporary rebuilding process on changing architectural genotype	
<i>Ameera Ahmed Abdullah, Wrya Sabir Abdullah</i>	250
Turkey's syrian policy under justice and development party rule after 2009	
<i>Recep Bilgin, Seydali Ekici, Fatih Sezgin</i>	264
The use of big data and data mining in the investigation of criminal offences	
<i>Andriy Tymchyshyn, Anna Semeniaka, Serhii Bondar, Nataliia Akhtyrska, Olena Kostiuchenko</i>	278
Administrative law tools regulating high-rise construction in historic city districts: Ukraine and Germany	
<i>Yurii Tarasiuk, Igor Samsin, Yaroslav Bliakharskyi, Oksana Epel, Iryna Pokhystenko</i>	291
Formation of tolerance in the inclusive environment of an educational institution	
<i>Olena Budnyk, Marek Rembierz, Tanya Fernanda Arbeláez-Encarnación, Magda Julissa Rojas-Bahamón, Diego Felipe Arbeláez-Campillo, Alexander Chinchoy, Nataliia Matveieva</i>	305
The state of kurdish language through public policies in Turkey after 1980	
<i>Recep Bilgin, Seydali Ekici, Fatih Sezgin</i>	320

DOI: <https://doi.org/10.34069/AI/2022.56.08.0>

How to Cite:

Panchenko, O.I., Arbelález-Campillo, D.F., Kaminska, O.L., & Rojas-Bahamón, M.J. (2022). Editorial. *Amazonia Investiga*, 11(56), 6-8. <https://doi.org/10.34069/AI/2022.56.08.0>

Editorial

War in Ukraine and recession: Is new economic crisis threatening the world?

Guerra en Ucrania y recesión: ¿La nueva crisis económica amenaza al mundo?

Received: September 15, 2022

Accepted: October 12, 2022

Written by:

Olha Ivanivna Panchenko<https://orcid.org/0000-0003-4365-0495>

Ph.D in Law, Senior Researcher, Senior Research Fellow of the Department of Doctorate and Post-graduate Studies of the National Academy of Internal Affairs, Ukraine (Kyiv, Ukraine)

Diego Felipe Arbelález-Campillo<https://orcid.org/0000-0002-9041-9563>

Grupo de Investigación Lenguajes, Representaciones y Educación, Universidad de la Amazonia, Grupo de Investigación Primate, Colombia.

Oleksandra Leonidivna Kaminska<https://orcid.org/0000-0002-1524-0176>

PhD in Law, investigator of the Investigative Department of Myrhorod District Police Department of the Main Department of the National Police in the Poltava region (Myrhorod, Ukraine)

Magda Julissa Rojas-Bahamón<https://orcid.org/0000-0003-4882-1476>

PhD. Educación y Cultura Ambiental. Docente titular Jorge Eliécer Gaitán. Grupo de Investigación Primate. Par evaluadora Colciencias, Colombia.

The struggle between good and evil, light and dark, democracy and fascism, freedom of speech and dependence – all this in one way or another characterizes the confrontation that the Western world is observing – the Russian Federation's war against Ukraine. But does the world community think about the consequences of this war, which are just beginning to gain momentum?

The President of the World Bank made a statement regarding the likely growth of the recession in Europe as a result of the war in Ukraine. He noted that "it will take years to diversify world production after the Russian invasion of Ukraine" (Shalal, 2022). This suggests that the war in Ukraine has a direct impact on the state of the world economy and the development of the global economic crisis.

The consequences will be seen in the increase in food and electricity prices, which will lead to inflation, a decrease in the value of income and a burden on demand. The economic policy of neighboring countries will face disruptions in trade, logistics, money transfers, and a surge in refugees. Lower investor confidence will affect the value of assets, and, as a consequence, the decline in capital in markets (Kammer, Azour, Selassie, Goldfajn & Rhee, 2022).

That is, in addition to the human suffering and humanitarian crisis occurring as a result of the war on the territory of Ukraine, the world will also experience a global economic downturn.

Recession is a state of the economy, which is characterized by a decline in production, a decrease in consumption costs, an increase in unemployment, bankruptcy of enterprises, etc.' that is, it is an economic crisis. It is part of the economic cycle – economy grows, peaks, falls and grows again. Thus, it is impossible to avoid recession. But there is another side of the coin – when you emerge from a recession, you need to drive the economy, which is done by central banks. The consequences of such "schemes" are: high inflation, markets are oversaturated with "easy, cheap money", but production is recovering. If such recovery (economy recharging) did not take place, then inflation becomes uncontrollable. And this causes new recession.

Sadly, the world had not yet recovered from the consequences caused by the Covid-19 pandemic, when Russia launched a full-scale invasion of the territory of Ukraine. That is, impact of the pandemic and the record inflation that arose as a result of the war in Ukraine lead to a new global economic crisis. But is it possible to avoid this inevitable economic disaster?

In early 2022, world GDP was projected to grow by 3.9%. Currently, this forecast is negative – 2.8% (The Economist, 2022). According to the experts, this is caused by stagflation – a situation where economic recession is combined with inflation. Frederick Neumann and Trevon Logan (2022) in their interview to Bloomberg noted that the cause of stagflation is the outbreak of war in Ukraine. The risk of stagflation is significant and destabilizing for low- and middle-income economies. Therefore, it will be difficult for many countries of the world to avoid recession.

Russia's invasion led to a sharp rise in food and energy prices, which creates a greater risk of global stagflation. That is, high prices have a stagflation effect – depress production and costs and raise inflation in around the world (Hussein, 2022).

The African Development Bank reports that African countries are also at risk of stagflation – a long period of slow economic growth accompanied by high inflation, as pricing policy and logistics failures resulting from war, suppress production (Dzawu, 2022).

According to data by the Organization for Economic Cooperation and Development, the world's leading economic systems are on the verge of recession, as the global energy and food crises and inflation caused by hostilities are growing faster than predicted (The Guardian, 2022). For example, dependence on gas for heavy industry will entail the entry of the world's leading economies into a long period of recession.

Thus, a representative of the Bank of England stated that Great Britain has faced the longest recession ever, and the economic decline will continue until 2024. GDP will fall by 0.75% as a result of the decline in real incomes due to the sharp rise in energy and market prices as a result of a reduction in real incomes due to a sharp increase in the prices of energy carriers and market goods (Gilchrist, 2022).

Government of Prime Minister Rishi plans to raise taxes and cut spending to help the Bank to take inflation under control and restore confidence among British investors. According to estate agents, the UK market is included in the sustained price slowdown, which is a negative phenomenon in the real estate market over the past 12 months (Tajitsu, 2022).

The British currency fell almost 3% against the dollar, which is the largest drop among major world currencies. Combined with a large current account deficit in World Bank, this could mean that investors consider further depreciation of the pound as inevitable consequence, which will happen very soon.

The chief business economist at S&P Global Market Intelligence is convinced that the speed of the economic downturn is accelerating after political and financial turmoil. Therefore, the economy will fall in the fourth quarter after likely contraction in the third one, that is, the World Bank is in recession (Romei, 2022). Thus, we are observing negative changes in the economic system of Great Britain, which arose as a result of the war in Ukraine.

We suggest also paying attention to digital assets. For example, despite the relevance and independence of the crypto currency, all digital coins fell – Bitcoin fell by 14 thousand dollars in one week by \$14,000 in one week. The Terra coin has dropped by more than 1,000 times, as a result of a withdrawal from the Anchor platform more than 2.2 billion digital dollars. The reasons for the fall of the crypto market are obvious - the war in Ukraine and the global inflation (Spivak, 2022).

As for Germany, the Minister of Economy, Robert Habeck (2022), said that the country is experiencing a serious energy crisis, which is slowly turning into an economic and social one.

According to the Bundesbank, Germany's economy is in danger of shrinking by almost 2% this year war in Ukraine continues and an embargo on Russian coal, oil and gas leads to restrictions on electricity suppliers and industry. The country's research institutes say that the ban on energy will cost the European economy about 220 billion Euros, which is equivalent to 6.5% of annual production over the next two years. According to the calculations of the Bundesbank, losses for this year already amount to 165 billion Euros. And the biggest damage will be caused by higher prices for goods (Randow, 2022).

But it is necessary to understand that these forecasts do not include individual problems in the financial markets, that is, the consequences may be much greater and tangible than now, if the war in Ukraine continues.

Thus, we can observe the deterioration of the prospects of the world economy of the leading countries over the last decades. According to the IMF, inflation will peak at the end of this year at an annual rate of 8.8%, will remain high longer than expected and will slow to 6.5% in 2023 and 4.1% in 2024 (Martin, 2022).

Clearly, the consequences of the war in Ukraine also have a negative impact on the economies of Latin America and the Caribbean. According to a report provided by ECLAC (2022), the region is facing an economic downturn, rising inflation, and a slow recovery of the labor force. This leads to the increase in the level of poverty or extreme poverty. The recession is associated with the accumulation

of the implications of previous crises: the international financial crisis, the economic tension between the United States and China, the Covid-19 pandemic, and the war in Ukraine.

Currently, there is a sharp increase in food prices. The level of extreme poverty grew to 14.9%, regional poverty – 33.7%. Inflation rose to 8.1%. The growth of commodity prices, transport costs, and disruptions in logistics have a negative impact on the export of goods in the region. The rise in prices for products, the region buys and sells, has increased by 23% compared to ECLAC forecasts to 10% (ECLAC, 2022).

Since China is a critical trading partner for Latin America and the Caribbean, trade disruptions between China and Russia will be felt in the form of changes in supply chains, shortages of consumer goods, and rising prices. Monetary policy interest rates will also grow in all countries of the region as a result of the fight against inflation.

Thus, the war in Ukraine is a vivid example of the fact that the world is on the brink of a global economic crisis that cannot be avoided. Increasing imbalances in the world economy, stagflation risks, and vagueness are the elements of the crisis – financial, food, social and economic ones, caused by the war in Ukraine. And while the world community says sympathetically that Ukraine needs support and aid, their economic systems will slow down. Thus, the world will pay a rather high price for Russia's war against Ukraine.

Bibliographic references

- Dzawu, M. M. (2022). War in Ukraine Puts Africa at Risk of Stagflation, Debt Distress. Bloomberg. <https://www.bloomberg.com/news/articles/2022-05-25/ukraine-war-puts-africa-at-risk-of-stagflation-debt-distress>
- Economic Commission for Latin America and the Caribbean (ECLAC) (2022). Repercussions in Latin America and the Caribbean of the war in Ukraine: how should the region face this new crisis? <https://reliefweb.int/report/world/repercussions-latin-america-and-caribbean-war-ukraine-how-should-region-face-new-crisis>
- Gilchrist, K. (2022). UK faces longest recession since records began, Bank of England says. CNBC. <https://www.cnn.com/2022/11/03/bank-of-england-uk-faces-longest-ever-recession.html>
- Habeck, R. (2022). Germany headed for recession in 2023, says economy minister. DW. <https://www.dw.com/en/germany-headed-for-recession-in-2023-says-economy-minister/a-63417843>
- Hussein, F. (2022). Yellen: Ukraine war fallout threatens 'stagflation,' hunger. AP News. <https://apnews.com/article/russia-ukraine-government-and-politics-15014b248051a4ccc56cafb8c78c5fc8>
- Kammer, A., Azour, J., Selassie, A., Goldfajn, I., & Rhee, C. (2022). How War in Ukraine Is Reverberating Across World's Regions. IMF Blog. <https://www.imf.org/en/Blogs/Articles/2022/03/15/blog-how-war-in-ukraine-is-reverberating-across-worlds-regions-031522>
- Martin, E. (2022). IMF Warns 'Worst is Yet to Come' as Steps to Slow Inflation Raise Risks. Bloomberg. <https://www.bloomberg.com/news/articles/2022-10-11/imf-warns-worst-to-come-as-steps-to-slow-inflation-raise-risks>
- Neumann, F., & Logan, L. (2022). These Are the Biggest Economic Risks Ahead. Bloomberg. <https://www.bloomberg.com/news/articles/2022-08-05/recession-and-stagflation-are-some-of-the-biggest-risks-ahead>
- Randow, J. (2022). Germany faces recession if war in Ukraine spurs energy ban. Aljazeera. <https://www.aljazeera.com/economy/2022/4/22/germany-faces-recession-if>
- Romei, V. (2022). UK economy has fallen into recession, survey suggests. The Financial Times. <https://www.ft.com/content/77a03e89-13c5-4d05-ad71-72a18bd05d7c>
- Shalal, A. (2022). World Bank's Malpass sees risk of stagflation, likely recession in Europe. Reuters. <https://www.reuters.com/business/finance/world-banks-malpass-sees-risk-stagflation-likely-recession-europe-2022-09-29/>
- Spivak, R. (2022). What price will the world economy pay for the defeat of Russia? HB Business. <https://biz.nv.ua/ukr/experts/svitova-recesiya-yakim-krajnam-zagrozhuje-golod-ta-vpliv-viyni-rosiji-proti-ukrajini-prognozi-50241190.html>
- Tajitsu, N. (2022). More Pound Pain Coming as BOE Shifts to Recession From Inflation. Bloomberg. <https://www.bloomberg.com/news/articles/2022-11-06/more-pound-pain-coming-as-boe-shifts-to-recession-from-inflation>
- The Economist (2022). By how much will the war in Ukraine reduce global growth? <https://www.economist.com/graphic-detail/2022/08/04/by-how-much-will-the-war-in-ukraine-reduce-global-growth>
- The Guardian (2022). Leading economies sliding into recession as Ukraine war cuts growth, OECD finds. <https://www.theguardian.com/business/2022/sep/26/leading-economies-sliding-into-recession-as-ukraine-war-cuts-growth-finds-oecd>



DOI: <https://doi.org/10.34069/AI/2022.56.08.1>

How to Cite:

Bannikova, K. (2022). Ukrainian refugees and the European labor market: socio-cultural markers of interaction. *Amazonia Investiga*, 11(56), 9-17. <https://doi.org/10.34069/AI/2022.56.08.1>

Ukrainian refugees and the European labor market: socio-cultural markers of interaction

Los refugiados ucranianos y el mercado laboral europeo: marcadores socioculturales de la interacción

Received: September 12, 2022

Accepted: October 5, 2022

Written by:

Kateryna Bannikova¹<https://orcid.org/0000-0002-5696-1033>

Abstract

The study aims to identify the main aspects of the influence of the socio-demographic and cultural characteristics of migrants from Ukraine on their integration into the labor market in Europe.

The methodology of the research is based on the methods of systematic approach and structural-functional analysis with the use of general scientific methods of SWOT-analysis, description, analysis and synthesis, comparison, and generalization. The use of these methods allowed for an analysis of the totality of statistical data and the results of sociological research on migrants, the peculiarities of national culture in Ukraine as a general environment of professional activity of migrants from Ukraine, their system of values in comparison with similar characteristics of Europeans.

As a result, the conclusion is that most Ukrainian refugees will face a mismatch with the needs of the European labor market due to the difference in their usual prevailing type of organizational culture and value system, which causes the need for an adaptation policy. It is shown that the risks of mismatch should be identified, controlled, and avoided by means of developed public policies, including special communication campaigns.

Keywords: values, culture, management, refugees, foreign workers, labor market.

Introduction

Russia launched a full-scale military invasion of Ukraine in 2022. This event radically affected the

Resumen

El objetivo del estudio es identificar los principales aspectos de la influencia de las características sociodemográficas y culturales de los migrantes de Ucrania en su integración en el mercado laboral en Europa.

La metodología de la investigación se basa en los métodos de enfoque sistemático y análisis estructural-funcional con el uso de métodos científicos generales de análisis DAFO, descripción, análisis y síntesis, comparación y generalización. El uso de estos métodos permitió analizar la totalidad de los datos estadísticos y los resultados de la investigación sociológica sobre los migrantes, las peculiaridades de la cultura nacional en Ucrania como entorno general de la actividad profesional de los migrantes de Ucrania, su sistema de valores en comparación con características similares de los europeos.

Como resultado, la conclusión es que la mayoría de los refugiados ucranianos se enfrentarán a un desajuste con las necesidades del mercado laboral europeo debido a la diferencia en su tipo de cultura organizativa y sistema de valores habitual, lo que provoca la necesidad de una política de adaptación. Se demuestra que los riesgos de desajuste deben ser identificados, controlados y evitados por medio de políticas públicas desarrolladas, incluyendo campañas especiales de comunicación.

Palabras clave: valores, cultura, gestión, refugiados, trabajadores extranjeros, mercado laboral.

European and world economies, in particular the labor market. A situation has emerged that is

¹ PhD, Sociological sciences. 22.00.04 - Special and sectoral sociologies V. N. Karazin Kharkiv National University (Kharkiv) Director of Talent Acquisition and Human Resources, Ukraine.

characterized primarily by the abundance and unusual composition of Ukrainian refugees in European countries. Whereas in previous periods migrants were predominantly men, who traveled purposefully to earn money to meet labor market needs, now it is mostly women, children, and the elderly (Oxford Analytica, 2022). Researchers note that this war was the most serious refugee crisis in Europe since World War II (Leon et al., 2022). However, due to the fact that events are unfolding very rapidly, and the situation is constantly changing, there have not yet been studies that have thoroughly and comprehensively examined this topic, and in particular the conditions, influencing factors, and prospects for the integration of Ukrainian refugees into the European labor market. This issue, therefore, has so far not only been unresolved but not even sufficiently addressed. This study is an attempt to do just that.

With this in mind, the study aimed to identify the main aspects of the influence of socio-demographic and cultural characteristics of migrants from Ukraine on their integration into the labor market in Europe. Achieving this goal required focusing on the following main research tasks, the implementation of which are outlined in the relevant sections of this article: to provide a theoretical basis for highlighting the influence of national values on the conditions and results of work of Ukrainian refugees in Europe; to improve the methodology of research of this influence; to identify features of this influence; to develop recommendations for optimization of approaches to the integration of Ukrainian refugees in the labor market in Europe.

Theoretical Framework

In our opinion (and this is the main hypothesis of the study), the main problem of integration of Ukrainian refugees into the European labor market is the need to overcome certain discrepancies between the values, norms, and behavior patterns inherent in the organizational culture that accompanied the professional activities of migrants in Ukrainian companies on the one hand, and their European patterns, on the other. Therefore, we consider it expedient to go out in our study according to the concept of G. Hofstede (Hofstede, Hofstede, & Minkov, 2010), who developed his own concept of national cultures and proposed six dimensions of it, which are:

1. Power distance, associated with different solutions to the basic human problem - inequality.

2. Uncertainty avoidance associated with the level of stress in society in front of an unknown future.
3. Individualism vs. collectivism related to the integration of individuals into primary groups.
4. Masculinity vs femininity, related to the distribution of emotional roles between women and men.
5. Long-term and short-term orientation related to the choice of focus for people's efforts in relation to the future, present, or past.
6. The indulgence associated with pleasure versus control of the basic human desire associated with the enjoyment of life.

On the other hand, it is important to pay attention to the opinion of S Schwartz (2006), according to which cultural value orientations are a tool of conceptualization and operationalization of the key element of culture. These orientations characterize cultures, not individuals. Evaluations of a country are not preserved in the mind of any individual, nor do differences between any pair of individuals fix cultural distances between societies (Lassalle et al., 2020). These orientations are basic, they justify and give coherence to the ways in which social systems function. They are external to individuals and are expressed in the distribution of expectations and opportunities faced by members of a cultural group (ILO, 2022).

An important theoretical foundation for the study of this range of issues is that institutional and group differences cause social tension, conflict, and cultural change. Distinguishing cultural orientations from basic individual values allows us to investigate the impact of societies' normative culture on the values of their members. Cultural value orientations are an aspect of societies' cultural system; core values are an aspect of individuals' personality system (Schwartz, 2007). If we distinguish between them, we can use them together to gain a much deeper understanding of human behavior in different societies (Bannikova, 2016). For this purpose, the work applies factual and statistical material contained in the studies of a number of authors (Beaumont, 2022; Berezivska, 2022; Chaliuk, 2022; De Coninck, 2022).

Methodology

To achieve the goals of the study, a systematic approach and structural-functional analysis were used with the use of general scientific methods of SWOT-analysis, description, analysis and

synthesis, comparison, and generalization. Thanks to this methodological basis based on processing statistical material and the results of sociological research, the characteristics of migrants from Ukraine were systematized and the range of countries for which the issue of integration policy for the labor market is of paramount importance was determined. Based on the comparison of value components of the business culture of Ukrainian companies and common values of Ukrainians with similar European values outlined zones and countries of potential contradictions. This made it possible to identify with which of the European labor markets the Ukrainian value type of organizational culture (as a generalized model) and the general value system can best be integrated.

To solve the research tasks, we applied the concepts of Hofstede and Schwartz to data from sources containing statistical information concerning Ukrainian refugees (Beaumont, 2022; Berezhivska, 2022; Chaliuk, 2022; De Coninck, 2022). Further use of the author's

methodology proposed and tested by us (Bannikova, 2016), as well as the methods of other scholars, in particular Lybanova (2018), Sokołowicz & Lishchynsky (2018) and Lassalle et al., (2020) allowed to make theoretical and practical conclusions.

Note that the results obtained were comparable to those of other researchers. It was taken into account that the situation we studied is quite different in its qualitative and quantitative indicators from the situations investigated by other scientists. So appropriate corrections were made, taking into account which conclusions were made.

Research Results

At the first stage of the study, we will characterize the group of migrants from Ukraine. For this purpose, we analyzed and summarized data on migration from Ukraine after February 24, 2022. The basic quantitative indicators obtained in the course of this stage of the study are presented in Table 1.

Table 1.
Number of refugees who left Ukraine as of June 21, 2022, persons

Country	Number of registered refugees from Ukraine in countries	Number of refugees granted temporary protection status	Number of border crossings with Ukraine	Number of border crossings to Ukraine
Republic of Poland	1 180 677	1 180 677	4 146 144	2 073 052
Republic of Moldova	85 797	no data available	507 552	138 488
Romania	82 733	40 202	691 413	370 707
Slovak Republic	78 972	78 782	525 620	254 316
Hungary	25 042	25 042	814 607	no data available
Belorussia	9 006	no data available	16 660	no data available
Russian Federation*	1 305 018	no data available	1 305 018	no data available
Total	2 767 245	1 324 703	8 007 014	2 836 563

* expected projected number of refugees
Source: Ukraine refugee situation (Operational data portal, 2022).

The main primary recipient countries of migrants from Ukraine were those with which it borders. During the first days of the war, these countries greatly simplified the border crossing procedure. Most Ukrainian citizens were accepted by Poland, which accounted for about 60% of all refugees. Much less went to Romania and other neighboring countries (UNHCR, 2022).

It should be borne in mind that such statistical analysis only characterizes border crossings, not the “completion of the migration line”. Obviously, eight million border crossings with Ukraine and the number of those remaining in the primary recipient countries provide an opportunity to talk about at least two million who have moved on. The main “final migration destination” countries were Poland (1.3 million),

Germany (656,000), and the Czech Republic (427,000). Spain, Moldova, Bulgaria, Canada, Finland, Romania, Slovakia, Hungary, Italy, USA, France, Belgium, Netherlands, Sweden and Portugal, Great Britain, etc. were also final destinations (IOM, 2022).

In support of Ukrainian refugees, as of April 8, 2022 39 countries have introduced a total of 519 measures, most of which relate to areas such as education, health care, or access to other key services. Cash and in-kind social protection payments account for approximately 30% of these measures. At the EU level, granting temporary protection status to Ukrainian refugees grants them rights including the right to residence, access to the labor market and housing, medical care, and access to education for children. According to (Martin, 2022), in order to be successful, a country's migration policy should include a set of measures aimed at ensuring that migrants are not only involved in the labor market of the country they arrived in, but also integrated into its society.

With regard to the labor market, as Anderson & Poeschel & Ruhs (2021) note, there is no universally accepted definition of a labor or skills "shortage". From the perspective of employers, a "labor shortage" usually means that the demand for labor exceeds the supply. There are currently almost 5.3 million refugees from Ukraine in Europe (Operational data portal, 2022). According to statistics from the Office of the United Nations High Commissioner for Refugees, as of June, there were approximately 4.9 million refugees from Ukraine in 44 European countries in need of such integration (International Monetary Fund Blog, 2022).

Along with this, researchers note that the size and speed of this migration has taken Europe by surprise (Adler, 2022). Most recipient countries lack the necessary facilities and infrastructure to accommodate the large numbers of refugees now crossing their borders. Many European countries have responded to the lack of housing in these countries: efforts to (temporarily) house large numbers of Ukrainian refugees continue in many European countries (European Commission, 2022; Walker, 2022a). In addition, in early March 2022, the European Union (EU) activated a provision of the 2001 Temporary Protection Directive that provides for the unlimited admission of certain types of refugees (in this case Ukrainians) during a crisis and the immediate and automatic admission of refugees not in need of asylum (Walker, 2022b). Thus, Ukrainian refugees avoid the lengthy

administrative process of recognition and receive quick access to basic services and a work permit for an initial period of three years (Martin, 2022; Walker, 2022b).

To analyze the risks arising in recipient countries in the labor market, on the one hand, the characteristics of migrants from Ukraine are important. Thus, among refugees, there are predominantly women, children (about 80%), and people over 60 years old. Among the total number of refugees, approximately 2.75 million are of working age. Of these, 43.5%, or 1.2 million, worked before the conflict began and left or lost their jobs during the conflict. Of these, more than 87% used to work full time. The vast majority (88%) were employees of businesses, while the remaining 12% were self-employed. Two-thirds had a college degree and 49% had a high-skilled occupation; only 15% had a low-skilled occupation (ILO, 2022). Along with this, according to ILO, almost 53% of migrants from Ukraine will not have any relationship with the labor market. This is a separate challenge for recipient countries.

To date, about ten countries have groups of migrants from Ukraine potentially important to their labor market. Note that the situation in Poland, the Czech Republic, Spain, and Germany is critical for finding solutions and strategies, given the number of migrants.

Poland now has 410,000 previously employed refugees, including 200,000 highly skilled workers, 146,000 with medium qualifications, and 64,000 with low qualifications. According to Polish researchers, 76 percent of Ukrainian refugees in Poland have higher education. Higher education is a kind of indicator that a person can master the language, can think, and can learn a new profession (Miroshnychenko, 2022).

Thus, the basic characteristics of migrants are potentially acceptable for the possibility/necessity of their integration into the labor markets of recipient countries.

The next stage of analysis should be the labor markets of these countries. The most relevant for these labor markets in the discussions of recent years is the problem of labor shortages. Along with this, as Anderson & Poeschel & Ruhs (2021) point out, there is no universally accepted definition regarding "shortages" of labor or skills. From the perspective of employers, a "labor shortage" usually means that the demand for labor exceeds the supply of labor. Some

employers may be unwilling or unable to meet the demand and pay higher wages.

This situation is fundamentally different from the Ukrainian labor market before February 24, 2022, where the number of applicants far exceeded the number of vacancies (Work.ua, 2021), which can lead to contradictions in the interaction of migrants from Ukraine and the labor markets of recipient countries or their harmonization.

We agree with Miroshnychenko (2022) about the fact that the labor market of some EU member states may “absorb” Ukrainian refugees of certain professions, actualizing the professional segment of migration. It is known that today's European labor market requires migrant workers. Approximately 18.3 million workers in EU member states are migrants (i.e., 8% of the labor market). In Germany, some sectors depend on migrant workers by 20-30%. In Spain, due to the shortage of 500 thousand construction workers, developers are forced to slow down the implementation of a number of projects. In France, due to a shortage of nurses and paramedics, 20% of hospital beds are not used. This situation is characteristic of many EU member states.

At the same time, professional affiliation is not the only criterion by which to judge the success or failure of integrating migrants into the labor market. Today the question of in which country it is easiest for Ukrainian refugees to integrate into the local labor market is mostly considered by Ukrainian researchers. We agree with the opinion of Filipchuk et al., (2022), according to which at this stage Poland is the most favorable for Ukrainians, through the higher standard of living, historical connections, similar language, large Ukrainian diaspora. A significant factor is the similarity of Ukrainian and Polish cultures. But not everything is as it seems at first sight.

An important issue of attracting migrants to the labor market at their place of residence is the question of values, which also belongs, after all, to the cultural sphere. The basic document that defines EU values, and which Ukrainian refugees must consider, is Article 2 of the Treaty on the European Union. It states that the EU is built on values that include: respect for human dignity; freedom; democracy; equality; the rule of law; respect for human rights, including minority rights. According to the Treaty, several EU values are common to society. These are: pluralism, non-discrimination, tolerance, justice,

solidarity, and equality between women and men (Mtchedlishvili, 2018).

The latest World Values Survey (WVS) 2020, suggests that there are certain contradictions between European (EU) and Ukrainian value systems. According to the study, Ukraine has clearly declared a European path of development, but its value and the normative system is one of the barriers to movement in this direction. Already in 2020 the Ukrainian society was characterized by changes, negative for democratic development, in particular the growth of xenophobia (the share of those who do not wish to live next door to immigrants increased from 19% to 27.1%, with people of other nationalities - from 17% to 24.8%); an increase in the prevalence of gender stereotypes that university education is more important for a boy than for a girl, from 18% to 24.5%; that “if a woman earns more money than a man, it tends to cause problems” - from 20% to 30.9%; decrease of the share of those who support the fact that “not the government, but independent experts make decisions based on what they think is best for the country” - from 65% to 46.2%; increase of the share of those who support military management of the country, from 13% to 21.1%; decrease of trust to the majority of state institutions (courts, government, Verkhovna Rada, educational institutions, public institutions and services in general) - except the Armed Forces and National Police, trust to which has increased. Trust in public organizations and big business has also decreased (Danyuchenko, 2020).

The World Values Survey 2020 also provides an opportunity to draw basic parallels along two value lines (traditional versus secular and survival versus self-expression values) that are important for understanding societies and the people who live with them as they relate to those countries where most migrants from Ukraine turned out. The study showed that the resemblance of Ukrainians to residents of European countries exists in only one - the second vector. And the greatest correspondence is with France, Austria, Andorra, Spain, Hungary, and Slovenia. But none of these countries is the leader in terms of the presence of migrants from Ukraine. At the same time, leading recipient countries have significant differences in value systems with migrants from Ukraine, which can be a source of potential risks in the labor markets and public life.

Accordingly, potential contradictions in the interaction of migrants with Ukraine and the

societies of the EU countries are already at the basic value level. Note that cultural differences can be an important criterion in the choice of destination for migrant workers. They also often determine the length of stay.

In our opinion, we should also note that an important factor for the development of effective strategies and solutions for providing refugees with jobs is the following value-cultural level - elements of organizational culture common to Ukrainian migrants and common to European companies, which contribute to the efficiency of the labor process. Using the various cultural dimensions presented in Hofstede, G., Hofstede, G. J. & Minkov (2010), as well as our improved methodology for researching organizational cultures of international companies (Bannikova & Mykhailova, 2019), organizations need to check the suitability of job applicants with the values of the organizational culture and thus determine and understand whether the recruiting of employees will have a positive effect on the functioning of the company.

Earlier we proved that the mechanism of organizational identification plays a special role in this case. In Ukraine, there is a specificity of the formation of organizational culture, and the main factors of its formation are: the behavior and values of the top management, general economic conditions, the scope of the organization's activities, the strategy of the

organization's development, the size of the organization (Bannikova & Mykhaylyova, 2017).

That is why even though migrants can positively influence the work of organizations, they can also be a source of conflicts, misunderstandings, and communication problems (Klimas, 2019; Rakowska, 2019). We should not forget, in our opinion, that there is a high risk of prejudice and stereotypes towards migrants, as well as artificial divisions between workers within the organization. Undoubtedly, this affects the work atmosphere and interpersonal relationships, which in turn affects job performance. This leads to further consequences in the form of the fundamental question of whether it is worth staying in a particular country, whether it is better to look for a more culturally similar country or return to one's home country (Sandilya, Deleva & Deleva, 2022, March 10). Therefore, the cultural (and more specifically cultural-organizational) aspect may be a decisive factor for Ukrainian workers, which confirms our hypothesis.

Discussion

In general, we can say that forced migration from Ukraine forms not only negative but also positive potentials for the EU countries. A systematic analysis of these potentials allows us to point out the following (Table 2):

Table 2.

Impact of migration of Ukrainian refugees to the EU: A SWOT analysis

STRENGTHS	WEAKNESSES
<ol style="list-style-type: none"> 1) A special system of measures is introduced in the EU countries in order to integrate Ukrainians into the labor market of these countries. 2) A special and effective system of coordination and management has been developed and implemented in the EU countries at the national and local levels to address the problem of Ukrainian refugees. 	<ol style="list-style-type: none"> 1) Lack of people with sufficient professional qualifications and training among Ukrainian refugees. 2) Ukrainian refugees have to undergo a complex process of verification and confirmation of their professional qualifications.
OPPORTUNITIES	THREATS
<ol style="list-style-type: none"> 1) Integration of Ukrainian refugees into the EU countries can be an important factor that will positively affect the sustainable functioning of healthcare, as well as social and food sectors in these countries. 2) Increased labor supply and employment in the host countries. 	<ol style="list-style-type: none"> 1) Due to the integration of Ukrainian refugees into the European labor market, the level of expenditures on social needs may increase in the EU countries. 2) Due to the increased demand for skills and insufficient supply of skills in EU countries, an imbalance may arise, resulting in an increase in unemployment among immigrants.

Source: author's development.

When analyzing statistical and sociological data, one should keep in mind that for the economies

of many EU countries, Ukrainian refugees can be both a burden and a lifesaver. According to

Goldman Sachs, the four largest EU countries (Germany, Poland, France, Sweden) will spend almost 0.2 percent of GDP to support refugees. The budget deficits of these countries will grow by 1.1% of GDP in 2022.

Note that the goal of the current EU migration policy is to select the most active and able-bodied people. For this purpose, some countries do everything possible to identify such people and offer them jobs. In Germany, for example, they facilitate the employment of Ukrainian medical personnel, help them pass language exams, and get used to them. French and Polish organizations offer free language courses and introduce them to the local culture.

The solution of issues of establishing relations between migrants from Ukraine and EU countries should concern not only labor relations, taking into account the structure of migrants described above. At the same time, this structure also requires addressing issues of providing places in kindergartens and schools. After all, women migrated with children mostly without men, so many of them will find it difficult to find official employment since they will not be able to leave their children by themselves. Public kindergartens in Poland already do not have enough places for all children from Ukraine, and the cost of private ones is too high.

Conclusions

Thus, having investigated the situation resulting from Russian aggression in Ukraine, as a result of which millions of Ukrainian refugees found themselves outside their country, we have identified the main aspects of the influence of the socio-demographic and cultural characteristics of migrants from Ukraine on their integration into the labor market in Europe.

First of all, the structure of migrants determines different vectors of work with them: from professionally differentiated (depending on the needs of the labor market of the recipient country) to the social welfare of “non-labor categories of migrants”. In this aspect, it has been established that many Ukrainian refugees face a mismatch of available skills with the needs of the labor market, which determines the need for professional retraining. In addition, additional measures should be taken to prevent threats such as exploitation in the workplace, bullying, or sexual harassment, which may arise in relation to migrants as a socially vulnerable category of workers. These risks should be identified, monitored, and addressed through well-

developed public policies, including special communication campaigns. Questions regarding the details of the content of such public policies and special communication measures should be the subject of further research.

The development of public policy toward migrants should take into account value differences at different levels: societal, organizational, and personal, which involves monitoring migrants' values and measures to address the differences.

Bibliographic references

- Adler, K. (2022). Ukraine war: Europe's new security era, faced with the Russian threat. BBC. Retrieved September 12, 2022, from <https://www.bbc.com/news/world-europe-60960155>
- Anderson, B., Poeschel, F., & Ruhs, M (2021). Rethinking labour migration: Covid-19, essential work, and systemic resilience”. *Comparative Migration Studies*. Retrieved September 12, 2022, from <https://comparativemigrationstudies.springeropen.com/articles/10.1186/s40878-021-00252-2>
- Bannikova, K. (2016). Special Aspects of Human Resources Management in a Multinational Environment of International Companies. *Sociological studies [Sociologichni studii]*, 1(8), 6-10.
- Bannikova, E.B., & Mykhailova, K. (2019). The potential of organizational culture in the management of human resources of international companies. Kharkiv: Publisher NUA. Retrieved September 12, 2022, from <http://dspace.nua.kharkov.ua/jspui/bitstream/123456789/1990/1/Bannikova%20Mikhaylova.pdf>
- Bannikova, K., & Mykhaylyova, K. (2017). Organizational Memory as a Mechanism of Formation and Development of Organizational Culture. *IOSR Journal of Humanities And Social Science (IOSR-JHSS)*, 22(4), 9–15.
- Beaumont, P. (2022). Ukraine has fastest-growing refugee crisis since second world war, says UN. *The Guardian*. Retrieved September 12, 2022, from <https://www.theguardian.com/world/2022/mar/06/ukraine-fastest-growing-refugee-crisis-since-second-world-war>
- Berezivska, R. (2022). Why Ukrainian refugees will not change the European labor market too much. *Economic Truth*. Retrieved September 12, 2022, from URL:

- <https://www.epravda.com.ua/columns/2022/03/29/684847/>
- Chaliuk Y. (2022). Global Socio-economic Implications of the Russia-Ukraine. War Ekonomika ta suspilstvo, 37. Retrieved September 12, 2022, from <https://doi.org/10.32782/2524-0072/2022-37-54>
- Danyuchenko, T. (2020, November 30). Values of Ukraine in 2020. Nashe slovo. <https://nasze-slowo.pl/czinnosti-ukrayiny-u-2020-mu/>
- De Coninck, D. (2022). The Refugee Paradox During Wartime in Europe: How Ukrainian and Afghan Refugees are (not) Alike. The International Migration Review, 019791832211168. <https://doi.org/10.1177/01979183221116874>
- European Commission. (2022). Fleeing Ukraine: Access to accommodation and housing. Retrieved September 12, 2022, from https://ec.europa.eu/info/strategy/priorities-2019-2024/stronger-europe-world/eu-solidarity-ukraine/eu-assistance-ukraine/information-people-fleeing-war-ukraine/fleeing-ukraine-access-accommodation-and-housing_en
- Filipchuk, L., Lomonosova, N., Syrbu, O., & Kabanets, Y. (2022). Forced migration and war in Ukraine [Vymushena migratsiia i viina v Ukraine]. Cedos. Retrieved September 12, 2022, from <https://cedos.org.ua/wp-content/uploads/vymushena-migracziya-ta-vijna-v-ukrai%CC%88ni.docx-1.pdf>
- Hofstede, G., Hofstede, G. J. & Minkov, M. (2010). Cultures and Organizations: Software of the Mind (Rev. 3rd ed.). New York: McGraw-Hill.
- ILO (2022). The impact of the Ukraine crisis on the world of work: Initial assessments. Retrieved September 12, 2022, from https://www.ilo.org/europe/publications/WC_MS_844295/lang--en/index.htm
- International Monetary Fund Blog. (2022). How War in Ukraine Is Reverberating Across World's Regions. March 15, 2022. URL: <https://blogs.imf.org/2022/03/15/how-war-in-ukraine-is-reverberating-across-worlds-regions/>
- IOM. (2022). Million People Displaced. Retrieved September 12, 2022, from URL: <https://www.iom.int/news/71-million-people-displaced-war-ukraine-iom-survey>
- Klimas, P. (2019). Organizational culture models of coopetitors. In A.-S. Fernandez, P. Chiambaretto, F. Le Roy and W. Czakon (Eds), The Routledge companion to competition strategies (pp. 117–127). Abingdon: Routledge. <https://doi.org/10.4324/9781315185644-11>
- Lassalle, P., Johanson, M., Nicholson, J. D., & Ratajczak-Mrozek, M. (2020). Migrant entrepreneurship and markets: The dynamic role of embeddedness in networks in the creation of opportunities. Industrial Marketing Management, 91, 523–536. <https://doi.org/10.1016/j.indmarman.2020.04.009>
- Leon, D. A., Jdanov, D., Gerry, C. J., Grigoriev, P., Jasilionis, D., McKee, M., Meslé, F., Penina, O., Twigg, J., Vallin, J., & Vågerö, D. (2022). The Russian invasion of Ukraine and its public health consequences. The Lancet Regional Health. Europe, 15(100358), 100358. <https://doi.org/10.1016/j.lanepe.2022.100358>
- Lybanova, Ye. (2018). Outward labour migration of Ukrainians: Scale, causes, consequences. "Demography and social economy", 33(2), 10–26. Retrieved September 12, 2022, from <https://dse.org.ua/arhcrive/33/1.pdf>
- Martin, I. (2022). The war in Ukraine: A migration crisis like no other. Policy Center for the New South. Retrieved September 12, 2022, from <https://www.policycenter.ma/publications/war-ukraine-migration-crisis-no-other>
- Mtchedlishvili, D. (2018). Theorising Europeanisation in European literature: Conceptualisation and operationalization. Australian and New Zealand Journal of European Studies 10(1), 79–91.
- Miroshnychenko, B. (2022). Stone cross on demographics. How many people will Ukraine lose and how to stop migration? [Kaminnyi khrest na demografii. Skilki liudei vtratyt Ukraina ta iak zupynyty migratsiiu?] Economic truth [Ekonomichna Pravda]. Retrieved September 12, 2022, from <https://www.epravda.com.ua/publications/2022/06/24/688509>
- Operational data portal (2022). Ukraine refugee situation. Retrieved September 12, 2022, from <https://data.unhcr.org/en/situations/ukraine>
- Oxford Analytica (2022). Ukraine crisis will bring heavy costs for Europe. In Emerald Expert Briefings. Emerald. <https://doi.org/10.1108/oxan-db267573>
- Rakowska, A. (2019). Diversity Management in Poland. (in) A. Georgiadou, M. A. Gonzalez-Perez, and M. R. Olivás-Lujan (Eds), Diversity within Diversity Management: Countrybased Perspective, Emerald Publishing Limited, 197–216.

- <https://doi.org/10.1108/S1877-636120190000021011>
- Sandilya, H., Deleva, Z., & Deleva, H. S. A. (2022, March 10). How Europe can include Ukrainian refugees in society. *Social Europe; Social Europe (SE)*. <https://socialeurope.eu/how-europe-can-include-ukrainian-refugees-in-society>
- Schwartz, S. H. (2006). Value orientations: Measurement, antecedents and consequences across nations. In *Measuring Attitudes Cross-Nationally* (pp. 169–203). SAGE Publications, Ltd.
- Schwartz, S. H. (2007). A theory of cultural value orientations: explication and applications. In *Measuring and Mapping Cultures* (pp. 33–78). Leiden, The Netherlands: Brill. URL: https://www.researchgate.net/publication/233669287_A_Theory_of_Cultural_Value_Orientations
- Sokołowicz, M. E., & Lishchynskyy, I. (2018). Are Poland and Ukraine gravity centres for each other? Study on the labour migration patterns. *Comparative Economic Research*, 21(1), 45–65. <https://doi.org/10.2478/cer-2018-0003>
- UNHCR (2022). Ukraine Refugees Situation. Retrieved September 12, 2022, from <https://data2.unhcr.org/en/situations/ukraine>
- Walker, L. (2022a). More than 10,000 temporary shelters made available to Ukrainian refugees in Belgium. *The Brussels Times*. Retrieved September 12, 2022, from <https://www.brusselstimes.com/209209/more-than-10000-temporary-shelters-made-available-to-ukrainian-refugees-in-belgium>
- Walker, L. (2022b). EU proposes temporary protection for people fleeing war. *The Brussels Times*. Retrieved September 12, 2022, from <https://www.brusselstimes.com/eu-affairs/208986/eu-proposes-temporary-protection-for-people-fleeing-war>
- Work.ua. (2021). The number of vacancies and resumes in Ukraine. Retrieved September 12, 2022, from <http://www.work.ua/ru/stat/count/?time=year2021&quantity=1>

DOI: <https://doi.org/10.34069/AI/2022.56.08.2>

How to Cite:

Radul, V., Stryzhakov, A., Hornar, I., Radul, O., & Tkachenko, O. (2022). Research of future masters of pedagogy's socio-professional activity. *Amazonia Investiga*, 11(56), 18-27. <https://doi.org/10.34069/AI/2022.56.08.2>

Research of future masters of pedagogy's socio-professional activity

Дослідження соціально-професійної активності майбутніх магістрів педагогіки

Received: July 25, 2022

Accepted: August 27, 2022

Written by:

Valerij Radul²<https://orcid.org/0000-0001-5354-9142>**Artem Stryzhakov³**<https://orcid.org/0000-0003-1407-939X>**Irina Hornar⁴**<https://orcid.org/0000-0002-2993-6262>**Olga Radul⁵**<https://orcid.org/0000-0003-0627-1541>**Olga Tkachenko⁶**<https://orcid.org/0000-0002-6413-4839>

Abstract

The purpose was to conduct an empirical study of the content parameters of future masters of pedagogy's socio-professional activity. Valid psychodiagnostic methods, purposeful observation, and statistical data processing methods were used to display relevant content parameters of socio-professional activity. With the clarification of reliable correlations, an ascertaining strategy was developed. It was revealed that respondents' general activity (GA) had reliable connections with all parameters of motivation: internal ($rs=.208$; $p<.01$), external negative ($rs=.099$; $p<.05$), and external positive ($rs=.128$; $p<.05$), as opposed to creative activity (CA), which was only reliably associated with internal motivation ($rs=.198$; $p<.01$). It was discovered that creative activity had the most reliable correlations with the individual's self-regulation parameters – four in total: modeling ($rs=.088$; $p<.05$), programming ($rs=.112$; $p<.05$), flexibility ($rs=.228$; $p<.01$) and independence ($rs=.245$; $p<.01$). It has been established that creative activity is essential in the development of the social and professional activity. It is concluded that it is preferential to operationalize

Анотація

Метою є емпіричне дослідження змістових параметрів соціально-професійної активності майбутніх магістрів педагогіки. Для релевантного відображення змістових параметрів соціально-професійної активності застосовано валідний психодіагностичний інструментарій, включене цілеспрямоване спостереження, статистичні методи обробки даних. Побудовано констатувальну стратегію зі з'ясуванням достовірних кореляційних зв'язків. Встановлено, що загальна активність (ЗА) респондентів має достовірні зв'язки з усіма параметрами мотивації: внутрішня ($rs=.208$; $p<.01$), зовнішня негативна ($rs=.099$; $p<.05$) та зовнішня позитивна ($rs=.128$; $p<.05$), на відміну від творчої активності (ТА), яка достовірно зв'язана тільки з внутрішньою мотивацією ($rs=.198$; $p<.01$). Констатовано, що творча активність має найбільше достовірних зв'язків з параметрами саморегуляції особистості – чотири: моделювання ($rs=.088$; $p<.05$), програмування ($rs=.112$; $p<.05$), гнучкість ($rs=.228$; $p<.01$) та самостійність ($rs=.245$; $p<.01$). Обґрунтовано, що творча активність є ключовою у формуванні

² Doctor of Pedagogic Sciences, Full Professor, Head of the Department of Pedagogy and Education Management, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Kropyvnytskyi, Ukraine.

³ Candidate of Pedagogic Sciences, Researcher of the Department of Pedagogy and Education Management, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Kropyvnytskyi, Ukraine.

⁴ Laureate of the Department of Pedagogy and Education Management, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Kropyvnytskyi, Ukraine.

⁵ Doctor of Pedagogic Sciences, Full Professor, Professor of the Department of Preschool and Primary Education, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Kropyvnytskyi, Ukraine.

⁶ Doctor of Pedagogic Sciences, Full Professor, Professor of the Department of Preschool and Primary Education, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Kropyvnytskyi, Ukraine.



received scientific facts into educational and professional training and professional development of future masters of pedagogy.

Key words: social maturity, personal growth, personality development, personality formation, educational process, educational and professional training.

Introduction

Modern student youth aspires to achieve rapid success in personal and professional development and formation. High-speed communication technologies and a wide range of modern applications have an impact on the formation of ideas and the demand for quick success. These technologies and means can instantly transport an individual to any part of the world, immersing them in multiple media spaces simultaneously, overcoming thousands of kilometers of distance, and eradicating communication and cultural barriers. The new socio-psychological reality, dictated by the rapid pace of technological progress, and socioeconomic and political transformations in society, has a significant impact on future specialists' socio-professional activity. The educational and professional training of future teachers necessitates the development of modern competencies with an anticipatory character that will contribute to the integration of Ukrainian higher education institutions into European and global educational and scientific spaces. Implementation in global dimensions necessitates the growth of social and professional activity, flexibility, tolerance, and the creation of a safe educational environment. The development of future masters of pedagogy's social and professional activity combines social and psychological objectification, appropriate behavior, constructive relationships with the environment, and an active social and psychological position.

Hypothesis. The study of future masters of pedagogy's socio-professional activity will allow significant scientific facts to be discovered that should be operationalized in their educational and professional training and professional development.

The purpose was to conduct an empirical assessment of the content parameters of future masters of pedagogy's socio-professional activity.

соціально-професійної активності. Узагальнено, що отримані наукові факти доцільно операціоналізувати у навчально-професійну підготовку і підвищення кваліфікації майбутніх магістрів педагогіки.

Ключові слова: соціальна зрілість, особистісне зростання, розвиток особистості, становлення особистості, освітній процес, навчально-професійна підготовка.

Literature Review

The study of the phenomenon of activity entails the disclosure of the individual's internal driving forces, the need-motivation sphere. At the same time, activity is a way for an individual to model, structure, and implement operation, communication, and behavior. A person autonomously acquires the qualities of such a system through these functions, allowing oneself to function successfully in the interpersonal space. The interpretation of V. Radul (2011a) that it is advisable to focus on the social and professional activity as a component of the social maturity of the personality of the future specialist is of interest in the context of our study.

It has been studied that the individual uniqueness of a person's voluntary activity during his interaction with the environment is indicated and studied through the concept of individual style of the most diverse forms of mental activity and operation (Adler, 1956). The activity of the student's and teacher's personalities can be traced in the unity of the reproduction of external and internal societal trends. On the one hand, the future teacher's social activity is the level of their personality development; on the other, it is a hierarchy of types of operations that, at successively changing stages of personality development, become leading in relation to the successful resolution of teaching and upbringing tasks (Radul, 2011a).

The main goal of any humane society is the creative disclosure of human potential, for which a person is able to creatively reveal oneself, express oneself, and assert oneself, but not selfishly, for oneself, but through socially significant activities (Merlin, 2009). Socially significant activities shape the contours and determine the subject's place and role at all stages of the professional educational process. At the same time, the content and parameters of educational and social spaces are determined by the subject's operation. Increasing future masters

of pedagogy's socio-professional activity is a self-creation process.

Personification, innovation, and a democratic system are dominant in modern society. Society is able to reproduce itself for the future, the universal prevails over the local, and there is an orientation towards instrumental values. A modernizing society's emphasis on innovation is an important systemic component (Radul, 2011b; Tsiuniak et al., 2020).

According to B. Novikov (1998), activity, unlike processes of operation, forms moments of the progressive movement of the operation itself – its formation, development, and change. The main point, in his opinion, is that the actual activity is determined by the operation, that is, it is the activity of the operation. The activity contains the energy of its carrier. The activity of the future teacher's personality reflects societal external and internal trends. The teacher demonstrates a valuable method of modeling the content of socially significant operations, communication, and behavior, through which the individual gains the ability to exist independently as a system in the interpersonal space. This causes, during the process of social activity formation, an active search, creation, and transformation of conditions for satisfying socially significant needs in accordance with the individual's position, values, and requirements (Novikov, 1998). As a result, social activity is a personal way of comparing oneself to others, defining one's position, and building a growing professional and educational space.

According to E. Zeer (2011), the developing professional and educational space is characterized by the following conditions: 1) Coordination, interaction, and mutual development of coordinate vectors provide stability, balance, and resilience to the educational space and its processes. Innovative transformations ensure evolutionary development; 2) disintegration and unbalancing of educational space components disrupt its determination, stability, and balance, resulting in strong fluctuations and the formation of moments of instability, as well as the emergence of bifurcation points. The destruction of stability results in the formation of open educational space and critical development points.; 3) the selective functioning of the open space in the mode of interaction of its components is determined by the self-organization and spontaneous search for mutual coordination of all components of the vector coordinates of the educational space. A dynamic equilibrium state is established. The

process of development takes on an evolutionary character. The normative provisions of the documents that regulate the functioning of the components of the educational space in the mode of mutual coordination provide the space with stability (Zeer, 2011). We conclude that permanent societal changes disrupt the evolutionary development of the educational space. At the same time, future pedagogical masters must have developed competencies that will ensure social and professional activity in today's changing conditions.

The retrospective analysis confirmed the rich theoretical and empirical scientific heritage on activity problems, which has its origins in philosophy and is comprehensively represented by all humanitarian and socioeconomic sciences. Social and professional activity are important skills for future pedagogy masters. This competence is an integrated formation that combined in the course of educational and professional training the parameters of the respondent's general and creative activity, self-regulatory readiness, and parameters of the need-motivation sphere.

Materials and methods

Methodology. Individual social maturity is a key concept in the development of socio-professional activity research methodology (Radul, 2011b). The modern concept of student youth social activity (Stupak, 2021) and self-regulation readiness (Hulias, 2020; Hulias & Hoian, 2022; Popovych et al., 2020a; 2020b) is taken into account. A number of empirical works in the contexts of educational and professional formation, as well as personality development, were studied in order to develop an ascertaining research strategy. The research studies are combined in the accompanying directions: 1) structural components of an individual's self-regulation readiness (Halian, 2019; Popovych et al., 2021c); 2) individual activity (Halian et al., 2020a; Plokhikh, 2021; Plokhikh et al., 2021); 3) personal mobility (Blynova et al., 2020d); 4) professional and educational space construction (Blynova et al., 2020c; Hudimova, 2021); 5) management system (Nosov et al., 2020a; 2020b; 2021; Zinchenko et al., 2020); 6) educational and professional training (Halian, et al., 2020b; Popovych et al., 2021a; Radul et al., 2022; Shevchenko et al., 2020a; 2020b; Zaverukha et al., 2022). The studies under consideration are either directly or indirectly related to our research strategy for the respondents' socio-professional activity.

Participants. The study included second-year master's students from Volodymyr Vynnychenko Central Ukrainian State Pedagogical University (Kropyvnytskyi, Ukraine). Six different groups of both full-time and part-time master's students participated in the survey ($n=104$). Among them, there were $n=34$ males (32.69%) and $n=70$ females (67.31%). The sample's average age was 21.67 years ($SD=1.67$).

Organization of Research. The empirical section was planned and carried out between September and October 2021, i.e. during the first semester of the 2021-2022 academic year. In advance, standardized questionnaire forms, targeted observation protocols, and biographical data questionnaires were created. The survey was conducted anonymously in accordance with scientific research ethics. To conduct the research, permission was obtained from the faculty administration and the university's ethical committee.

Procedures and instruments. The questionnaire "Motivational structure of the personality" ("MSP") was used to determine the levels of parameters of general and creative activity (Milman, 1990). In addition to general (GA) and creative activity (CA) parameters, the method allows determining the following: level of life support (LLS), desire to communicate (DC), level of comfort (LC), and social usefulness (SU). At the second stage of the application of the "MSP", profiles of future masters of pedagogy were built based on the results of these scales. Motivational and emotional profiles reveal information about the studied phenomenon. The α -Cronbach, parameter was established, which met the requirements for this kind of research and was set at .834.

The questionnaire "Style of self-regulation of behavior" ("SSRB") was used in the study of future masters' social and professional activity to establish the parameters of self-regulatory readiness (Morosanova, 1991). The questionnaire was developed for scientific research to diagnose various aspects of individual self-regulation. The questionnaire includes one integrated scale as well as six major

ones. The integrated scale is the general level of self-regulation (GLSR), which characterizes a person's voluntary activity level of self-regulation. Six major scales reflect the major regulatory processes: planning (PL), modeling (MD), programming (PG), and results' evaluation (RE), as well as the regulatory and personal properties of flexibility (FX) and independence (ID). Respondents marked the standard form of the questionnaire by selecting one of three possible answers. The α -Cronbach parameter was established and was at the level of .867, which met the requirements for this kind of research.

The research's ascertaining strategy involved determining the respondents' motivational structure, which was accomplished using the questionnaire "Motivation of professional work" (MPW) (Rean et al., 2006). The psychodiagnostic method "MPW" (Rean et al., 2006) has been tested and recommended for professional and pedagogical occupation research. There are three scales in the methodology: internal motivation (IM), external positive motivation (EPM), and external negative motivation (ENM). The development of internal motivation is critical. External positive motives are also more effective than external negative motives in educational and professional occupations. The α -Cronbach parameter was established, which met the requirements for this type of research and was at the level of .907.

Statistical Analysis. "SPSS" v. 23.0 was used to carry out the empirical research strategy. For graphic visualization, the graphic editor "MS Office Word 2007" was used. Basic descriptive characteristics were used to present empirical data. To establish reliable relationships, Spearman's correlation coefficient (r_s) was used. Correlations with $p \leq .05$ were considered reliable.

Results and discussion

Table 1 presents the empirical results of three questionnaires: "Motivational structure of the personality" (Milman, 1990), "Style of self-regulation of behavior" (Morosanova, 1991), and "Motivation of professional work" (Rean et al., 2006).

Table 1.
Empirical results based on research questionnaires (n=104)

Scale	Arithmetic Mean (M)	Mean-square Deviation (SD)
“MSP”		
General Activity (GA)	12.56	±2.98
Creative Activity (CA)	16.86	±4.06
Level of Life Support (LLS)	11.45	±3.29
Desire to Communicate (DC)	16.78	±4.02
Level of Comfort (LC)	13.45	±3.56
Social Usefulness (SU)	17.97	±5.31
“SSRB”		
General Level of Self-Regulation (GLSR)	27.12	±4.46
Planning (PL)	5.76	±1.97
Modeling (MD)	6.34	±2.76
Programming (PG)	4.78	±1.79
Results’ Evaluation (RE)	7.08	±2.16
Flexibility (FX)	5.12	±1.87
Independence (ID)	5.09	±1.86
“MPW”		
Internal Motivation (IM)	4.54	±1.39
External Positive Motivation (EPM)	4.71	±1.41
External Negative Motivation (ENM)	4.12	±1.22

Source: Personal elaboration, September/October, 2021.

According to research methods, the key parameters (M and SD) of the descriptive frequency characteristics were within the limits of the authors’ proposed norm (Milman, 1990; Morosanova, 1991; Rean et al., 2006). The obtained empirical data showed no significant differences from the findings of previous studies on educational and professional activities (Tsiuniak et al., 2020).

Correlations were established between the general (GA) and creative activity (CA) components of the “MSP” (Milman, 1990) and the main parameters of the “SSRB” (Morosanova, 1991) and “MPW” (Rean et al., 2006) methods (Table 2).

Table 2.
Correlation matrix of general and creative activity connections with applied method parameters

Parameters	GA		CA	
	r_s	R	r_s	R
Planning (PL)	.091*	5	.029	-
Modeling (MD)	.042	-	.088*	5
Programming (PG)	.046	-	.112*	4
Results’ Evaluation (RE)	.086*	6	.056	-
Flexibility (FX)	.019	-	.228**	2
Independence (ID)	.156*	2	.245**	1
Internal Motivation (IM)	.208**	1	.198**	3
External Positive Motivation (EPM)	.128*	3	.043	-
External Negative Motivation (ENM)	.099*	4	-.023	-

Source: Personal elaboration, September/October, 2021.

Note: GA – general activity; CA – creative activity; r_s – correlation by the Spearman method; R – ranking of correlations; * – $p < .05$; ** – $p < .01$.

The correlation galaxy of general activity (GA) and creative activity (CA) with the studied parameters are shown in Fig. 1, using the ranking

(R) of correlations from strongest to least reliable.

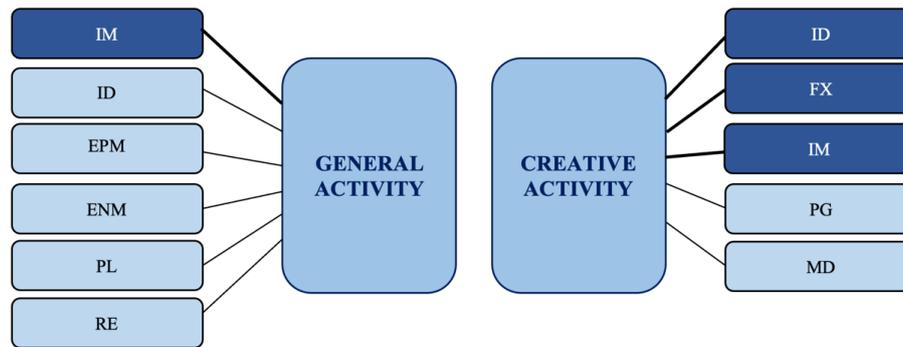


Figure 1. Correlative galaxy of general and creative activity by ranks

Source: Personal elaboration, September/October, 2021.

Note: — positive connections with $p \leq .05$; — positive connections with $p \leq .01$; IM – Internal Motivation; ID – Independence; EPM – External Positive Motivation; ENM – External Negative Motivation; PL – Planning; RE – Results’ Evaluation; FX – Flexibility; PG – Programming; MD – Modeling.

The created correlation matrix (see Tabl. 2) and correlation galaxy (see Fig. 1) revealed that respondents’ general activity (GA) had reliable connections with all motivational parameters: IM ($r_s = .208$; $p < .01$), ENM ($r_s = .099$; $p < .05$) and EPM ($r_s = .128$; $p < .05$), in contrast to creative activity (CA), which had reliable connections only with IM ($r_s = .198$; $p < .01$). It was established that GA had three statistically significant correlations with self-regulation parameters: ID ($r_s = .156$; $p < .05$), PL ($r_s = .091$; $p < .05$) and RE ($r_s = .086$; $p < .05$). At the same time, CA was superior in terms of both the quantity and quality of statistically significant correlations with self-regulation parameters, which total four: MD ($r_s = .088$; $p < .05$), PG ($r_s = .112$; $p < .05$), FX ($r_s = .228$; $p < .01$) and ID ($r_s = .245$; $p < .01$). We realized that CA is critical in the formation of social and professional activity. Internal motivation is provided as a mental resource to CA, and it has a decisive influence on the formation of the future master’s self-regulatory readiness. What was notable was the lack of significant correlations between CA and ENM

($p > .05$) and EPM ($p > .05$). It was also crucial that IM had the strongest correlation with GA. The clarified correlations corrected understanding of the perspective of building a formative experiment of the researcher’s social and professional activity. Focusing on the unity of general and creative activity with the established interconnections of motivation structure and self-regulation parameters clarified the study of this complex socio-psychological phenomenon.

The development of motivational and emotional profiles of respondents in accordance with the “MSP” was an important stage in the study of future masters’ socio-professional activity (Milman, 1990). The method of developing a motivational profile’s based on the sum of points on motivation scales. There are five types of motivational profiles: progressive (PT), regressive (RT), impulsive (IT), expressive (ET), and flattened (FT). Figure 2 illustrates two types of motivational profiles.

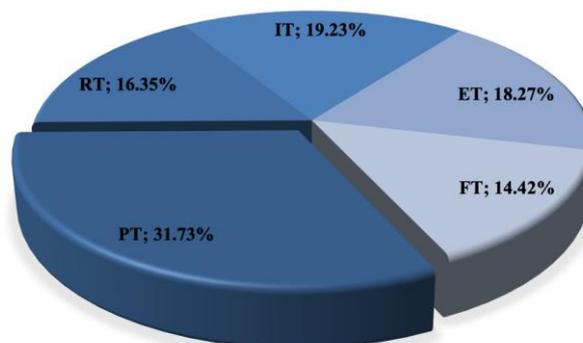


Figure 2. Types of the motivational profile of the subjects (n=104)

Source: Personal elaboration, September/October, 2021.

Note: PT – Progressive Type; RT – Regressive Type; IT – Impulsive Type; ET – Expressive Type; FT – Flattened Type.

As the respondents showed average and above average values on the parameters affecting the motivational profile, it was expected that PT would have the highest representation (n=33; 31.73%). All other types were distributed fairly evenly, ranging from 14.42% to 19.23%. We believe that the presence of relatively high RT values (n=17; 16.35%) represented a hidden resource that should be converted into PT through a qualitatively constructed educational process. It is worth noting that FT had the lowest value (n=15; 14.42%). This suggests that these

respondents' motivational needs were not clearly differentiated.

The next step was to empirically determine the number of choices made by respondents and to create an emotional profile of the subjects. The emotional profile was divided into four categories: sthenic (ST), asthenic (AST), mixed sthenic (MST), and mixed asthenic (MAST). Figure 3 illustrates the types of emotional profiles.

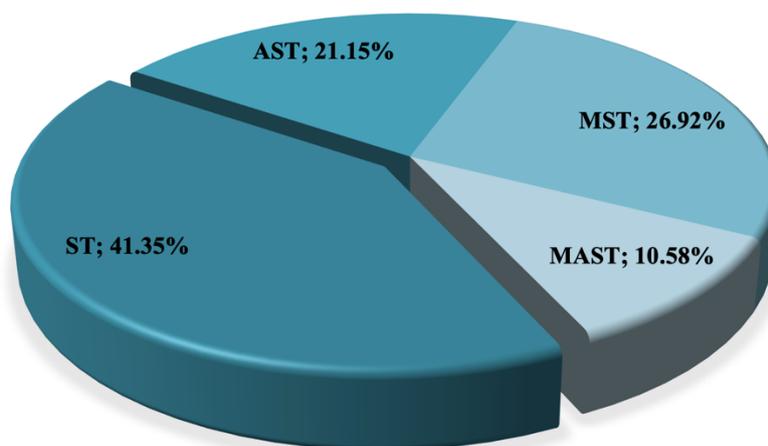


Figure 3. Types of the emotional profile of the subjects (n=104)

Source: Personal elaboration, September/October, 2021.

Note: ST – Sthenic Type; AST – Asthenic Type; MST – Mixed Sthenic Type; MAST – Mixed Asthenic Type.

ST was discovered to be dominant (n=43; 41.35%). We conclude that the development of parameters affecting future masters of pedagogy's emotional intelligence determined the structure and provided the dominant indicators of ST. The sthenic type of future masters was a reflection of active actions and objective emotional experiences of educational process subjects. The empirical data we obtained were supported by A. Halian's study (2021). Respondents with a dominant ST were motivated to solve problems constructively, and they were mobile and manageable in conflict situations. Due to the developed parameters of self-regulatory readiness for the likely course of events, such respondents did not lose their temper, were well versed in the expectations of the educational process subjects, and predicted the likely scenario of event development (Popovych et al., 2021b). The MAST data (n=11; 10.58%) were the lowest. The "MSP" method's creator (Milman, 1990) established that PT of the motivational profile has a consistently positive relationship with the ST of the emotional profile. We did not

investigate this correlation, but we did note that the overlap of these profiles among respondents indicated a mature active position, progressiveness of views, and the formation of socio-professional activity in the latter, as a sign of social maturity. (Radul, 2011a).

In the context of our research findings, there was a discussion about how programming, modeling, and generally designing one's future affect social maturity, mobility, and socio-professional activity (Blynova et al., 2020a; 2020b), as well as the desire for digitalization and the implementation of cutting-edge technologies (Kulish et al., 2020). According to empirical results, the development of programming and modeling as key parameters of self-regulatory readiness of the subject of the educational process affected the effectiveness of pedagogical technologies (Tsiuniak et al., 2020) and the formation of key competencies (Kazibekova, 2019).

We noted that the revealed high indicators of the "SSRB" (Morosanova, 1991) on the PL scale

($M= 5.76$; $SD=\pm 1.97$) and the MD scale ($M= 6.34$; $SD\pm 2.76$) were evidence of individually formed features of promotion and retention of activity goals, as well as the formation of conscious activity planning. Such respondents always plan, and their plans are realistic, detailed, and stable, with tasks that are as operationalized as possible for today's realities. They have a strong desire to achieve the goal in the present and in the future. It is recommended that the obtained scientific facts be used in the development of a formative experiment of future teachers' socio-professional activity, emphasizing important correlations and clarified scientific facts.

Conclusions

1. Retrospective analysis confirmed that socio-professional activity is an important competence for future pedagogy masters. It is established that socio-professional activity is an integrated entity that combines respondents' general and creative activity, self-regulatory readiness, and need-motivation parameters in the direction of educational and professional training.
2. An empirical research ascertaining strategy has been developed. It was discovered that respondents' general activity had reliable connections with all parameters of motivation: internal ($r_s=.208$; $p<.01$), external negative ($r_s=.099$; $p<.05$), and external positive ($r_s=.128$; $p<.05$), however, creative activity was only reliably connected with internal motivation ($r_s=.198$; $p<.01$). We explain this by pointing out that in the formation of social and professional activity, creative and problem-solving technologies rely solely on internal motivation.
3. It has been established that creative activity had four reliable correlations with key personality self-regulation parameters: modeling ($r_s=.088$; $p<.05$), programming ($r_s=.112$; $p<.05$), flexibility ($r_s=.228$; $p<.01$), and independence ($r_s=.245$; $p<.01$). It was determined that creative activity is critical in the formation of socio-professional activity as a component of the social maturity of the future specialist's personality.
4. The purpose has been met, and the hypothesis has been proven. It is concluded that it is recommendable to operationalize received scientific facts into educational and professional training and professional development of future masters of pedagogy.

Bibliographic references

- Adler, A. (1956). In H. Ansbacher, & R. R. Ansbacher (Eds.), *The individual psychology of Alfred Adler* (p. 1956). New York: Harper & Row. <https://doi.org/10.1086/222097>
- Blynova, O., Chervinska, I., Kazibekova, V., Bokshan, H., Yakovleva, S., Zaverukha, O., & Popovych, I. (2020a). Social and Psychological Manifestations of Professional Identity Crisis of Labor Migrants. *Revista Inclusiones*, 7(3), 93-105. <http://www.revistainclusiones.org/index.php/inclu/article/view/1318>
- Blynova, O., Kisil, Z., Tkach, T., Semenova, N., Semenov, O., Kaminska, S., & Popovych, I. (2020b). Psychological manifestations of professional marginality of future social welfare professionals. *Revista Inclusiones*, 7(SI), 218-233. <http://www.revistainclusiones.org/index.php/inclu/article/view/1229>
- Blynova, O., Moiseienko, V., Los, O., Burlakova, I., Yevdokimova, O., Toba, M., & Popovych, I. S. (2020c). Assertiveness as a Factor of Students' Choice of Behavior Strategies in Social Interaction. *Revista Inclusiones*, 7(4), 259-272. <http://www.revistainclusiones.org/index.php/inclu/article/view/1551>
- Blynova, O., Popovych, I., Semenova, N., Kashyryna, Ye., Ursulenko, O., & Kononenko, O. (2020d). Personality Factors of Choosing Adaptation Strategies in a Different Cultural Environment by Labor Migrants from Ukraine. *Amazonia Investiga*, 9(32), 45-54. Retrieved from <http://dx.doi.org/10.34069/AI/2020.32.08.5>
- Halian, A., Halian, I., Burlakova, I., Shevchenko, R., Lappo, V., Zhigarenko, I., & Popovych, I. (2020a). Emotional Intelligence in the Structure of Adaptation Process of Future Healthcare Professionals. *Revista Inclusiones*, 7(3), 447-460. <http://www.revistainclusiones.org/index.php/inclu/article/view/1347>
- Halian, A., Halian, I., Popovych, I., Zavatskyi, Y., Semenov, O., & Semenova, N. (2021). Stress Resistance in the Situation of Uncertainty as a Factor of Development of Adaptive Ability of Medical Personnel. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(1), 251-264. <https://doi.org/10.18662/brain/12.1/181>
- Halian, I. M., Halian, O. I., Gusak, L. Ye., Bokshan, H. I., & Popovych, I. S. (2020b). Communicative Competence in Training Future Language and Literature Teachers.

- Amazonia Investiga, 9(29), 530–541. <https://doi.org/10.34069/AI/2020.29.05.58>
- Halian, I. (2019). Personal determinants of responsibility of future educators. *Insight: the psychological dimensions of society*, 1, 15–21. <https://doi.org/10.32999/2663-970X/2019-1-2>
- Hudimova, A. Kh. (2021). Psychological well-being and social media users' behavioral online patterns in everyday life and during COVID-19 pandemic. *Insight: the psychological dimensions of society*, 5, 133–147. <https://doi.org/10.32999/2663-970X/2021-5-9>
- Hulias, I. (2020). Axiopsychological projection of life achievements of the personality. Kyiv: Lyudmila Publishing House. <https://archer.chnu.edu.ua/xmlui/handle/123456789/1565>
- Hulias, I. A., & Hoian, I. M. (2022). Explication of factors of the axiopsychological design of life achievements of modern youth. *Insight: the psychological dimensions of society*, 7, 41–57. <https://doi.org/10.32999/2663-970X/2022-7-4>
- Kazibekova, V. F. (2019). Psychological features of communicative competence of future professionals. *Insight: the psychological dimensions of society*, 2, 64–71. <https://doi.org/10.32999/2663-970X/2019-2-9>
- Kulich, A., Radul, V., Haleta, Ya., Filonenko, O., & Karikh, I. (2020). The Newest Digital Technologies in Education and The Prospects of Their Implementation in Ukraine. *Propósitos Y Representaciones*, 8(SPE2), e684. <https://doi.org/10.20511/pyr2020.v8nSPE2.684>
- Merlin, V. S. (2009). Psychology of individuality. Moscow: MPSU. <https://fb2lib.ru/obshchaya-psikhologiya/psikhologiya-individualnosti/>
- Milman, V. E. (1990). The method of studying the motivational sphere of personality. Workshop on psychodiagnostics. Psychodiagnostics of motivation and self-regulation. Moscow: MSU. <https://vdoc.pub/documents/-5fuluj58eev0>
- Morosanova, V. I. (1991). Stylistic Features Of Personality Self-Regulation. *Questions of Psychology*, 1, 121–127. <http://www.voppsy.ru/issues/1991/911/911121.htm>
- Nosov, P.S., Cherniavskiy, V.V., Zinchenko, S.M., Popovych, I.S., Nahrybelnyi, Ya.A., & Nosova, H.V. (2021). Identification of Marine Emergency Response of Electronic Navigation Operator. *Radio Electronics, Computer Science, Control*, 1(56), 208–223. <https://doi.org/10.15588/1607-3274-2021-1-20>
- Nosov, P.S., Popovych, I.S., Cherniavskiy, V.V., Zinchenko, S.M., Prokopchuk Y.A., & Makarchuk D.V. (2020a). Automated identification of an operator anticipation on marine transport. *Radio Electronics, Computer Science, Control*, 3, 158–172. <https://doi.org/10.15588/1607-3274-2020-3-15>
- Nosov, P. S., Zinchenko, S. M., Popovych, I. S., Ben, A. P., Nahrybelnyi, Y. A., & Mateychuk, V. M. (2020b). Diagnostic system of perception of navigation danger when implementation complicated maneuvers. *Electronics, Computer Science, Control*, 1, 146–161. <https://doi.org/10.15588/1607-3274-2020-1-15>
- Novikov, B. V. (1998). Creativity As a Way Of Realizing Humanism: Kyiv: NTUU - KPIT. <https://proza.ru/2011/03/13/593>
- Plokhikh, V. V. (2021). Assessment of subject's readiness for urgent actions using the variations of sensorimotor response tasks. *Insight: the psychological dimensions of society*, 5, 46–65. <http://doi.org/10.32999/2663-970X/2021-5-4>
- Plokhikh, V., Popovych, I., Zavatska, N., Losiyevska, O., Zinchenko, S., Nosov, P., & Aleksieieva, M. (2021). Time Synthesis in Organization of Sensorimotor Action. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(4), 164–188. <https://doi.org/10.18662/brain/12.4/243>
- Popovych, I., Arbeláez-Campillo, D. F., Rojas-Bahamón, M. J., Burlakova, I., Kobets, V., & Bokshan, H. (2021a). Time perspective in the professional activity of specialists of economic sphere. *Cuestiones Políticas*, 39(69), 424–445. <https://doi.org/10.46398/cuestpol.3969.27>
- Popovych, I., Blynova, O., Zhuravlova, A., Toba, M., Tkach, T., & Zavatska, N. (2020a). Optimization of development and psychocorrection of social expectations of students of foreign philology. *Revista Inclusiones*, 7(SI), 82–94. <http://www.revistainclusiones.org/index.php/inclu/article/view/1657>
- Popovych, I., Chervinskyi, A., Kazibekova, V., Chervinska, I., & Machynska, N. (2021b). Empirical research of the typology of social expectations of the personality. *Amazonia Investiga*, 10(43), 112–122. <https://doi.org/10.34069/AI/2021.43.07.11>

- Popovych, I., Lymarenko, L., Tereshenko, N., Kornisheva, T., Yevdokimova, O., Koverznieva, A., & Aleksieieva, M. (2020b). Research on the Effectiveness of Training Technologies' Implementation in Student Theater. *Revista Inclusiones*, 7(2), 104-121. <http://www.revistainclusiones.org/index.php/inclu/article/view/261>
- Popovych, I., Shevchenko, A., Galvez, L. M., & Klenina, K. (2021c). Research of the relationship between social desirability and value orientations of adolescents. *Revista Notas Historicas y Geograficas*, 26(1), 241-268. <https://www.revistanotashistoricasygeograficas.cl/index.php/nhyg/article/view/339>
- Radul, S., Kharlamova, L., Lomakina, M., Zelenska, L., & Tymchenko, S. (2022). Socio-cultural competence in foreign language training of future aviation specialists. *Amazonia Investiga*, 11(52), 74-85. <https://doi.org/10.34069/AI/2022.52.04.8>
- Radul, V. V. (2011a). Social Activity In The Structure Of Social Maturity (Theoretical And Methodological Aspect). Kirovohrad: Imex-LTD. https://scholar.google.com.ua/citations?view_op=view_citation&hl=ru&user=VtrLuB8A AAAJ&citation_for_view=VtrLuB8AAAAJ :GnPB-g6toBAC
- Radul, V. V. (2011b). Social Maturity As The Peak Of The Acmeological Development Of The Individual. *Native School*, 3, 15-20. http://nbuv.gov.ua/UJRN/rsh_2011_3_5
- Rean, A. A., Kudashev, A. R., & Baranov, A. A. (2006). Psychology of personality adaptation. St. Petersburg: Prime-EUROSNAK. <http://portal.iapm.edu.ua/portal/media/books/1fd5366754d940159f1525e47aaa992.pdf>
- Shevchenko, R., Cherniavskiy, V., Zinchenko, S., Palchynska, M., Bondarevich, S., Nosov, P., & Popovych, I. (2020a). (2020). Research of psychophysiological features of response to stress situations by future sailors. *Revista Inclusiones*, 7(SI), 566-579. <http://www.revistainclusiones.org/index.php/inclu/article/view/1780>
- Shevchenko, R., Popovych, I., Spytka, L., Nosov, P., Zinchenko, S., Mateichuk, V., & Blynova, O. (2020b). Comparative analysis of emotional personality traits of the students of maritime science majors caused by long-term staying at sea. *Revista Inclusiones*, 7(SI), 538-554. <http://www.revistainclusiones.org/index.php/inclu/article/view/1309>
- Stupak, O. Yu. (2021). Theory and Practice of Developing Youth Social Activity at Civil Society Institutions. (Doctor's thesis). State Higher Educational Institution "Donbas State Pedagogical University". Sloviansk. https://ddpu.edu.ua/images/stories/news/specrada/25260221/Stupak_dis.pdf
- Tsiuniak, O., Pyslar, A., Lialiuk, G., Bondarenko, V., Kovtun, O., Los, O., & Popovych, I. (2020). Research of interdependence of variables and factor structure of masters' readiness for innovative pedagogical activity. *Revista Inclusiones*, 7(3), 427-452. <http://www.revistainclusiones.org/index.php/inclu/article/view/1645>
- Zaverukha, O., Popovych, I., Karpenko, Y., Kozmenko, O., Stelmakh, O., Borysenko, O., Hulas, I., & Kovalchuk, Z. (2022). Dynamics of Successful Formation of Professional Identity of Future Psychologists in Higher Education Institutions. *Romanian Magazine for Multidimensional Education [Revista Romaneasca pentru Educatie Multidimensionala]*, 14(1), 139-157. <https://doi.org/10.18662/rrem/14.1/511>
- Zeer, E. F. (2011). Psychology Of Professional Development. Ekaterinburg: RGPPU. <https://urait.ru/bcode/477499>
- Zinchenko, S. M., Ben, A. P., Nosov, P. S., Popovych, I. S., Mamenko, P. P. & Mateychuk V. M. (2020). Improving the Accuracy and Reliability of Automatic Vessel Moution Control System. *Radio Electronics, Computer Science, Control*, 2(53), 183-195. <https://doi.org/10.15588/1607-3274-2020-2-19>

DOI: <https://doi.org/10.34069/AI/2022.56.08.3>

How to Cite:

Nechytailo, I., Kovaliuk, O., & Gorodyska, O. (2022). Eastern Romance borrowings in Ukrainian dialects (Indo-European retrospective). *Amazonia Investiga*, 11(56), 28-37. <https://doi.org/10.34069/AI/2022.56.08.3>

Eastern Romance borrowings in Ukrainian dialects (Indo-European retrospective)

Східнороманські запозичення в українських діалектах (індоєвропейська ретроспектива)

Received: August 20, 2022

Accepted: September 22, 2022

Written by:

Iryna Nechytailo⁷<https://orcid.org/0000-0001-8595-5874>**Olha Kovaliuk**⁸<https://orcid.org/0000-0002-4251-3432>**Olga Gorodyska**⁹<https://orcid.org/0000-0003-2125-0618>

Abstract

The article deals with the original Eastern Romance vocabulary recorded in the dialects of the Ukrainian language and its proto-forms, as well as examines the formation of the semantics of Eastern Romance borrowings from the Proto-Indo-European period to the present. To achieve the goal, the author compiles a corpus of original Romance words presented in Ukrainian dialects, determines their Indo-European, Italic and Latin proto-forms, corrects those of them indicated in the etymological literature, and establishes regularities of semantic transformations of various thematic groups on the axis of Proto-Indo-European language – Proto-Italic – Latin – ancient and modern Eastern Romance languages and dialects – Ukrainian dialects. The study proves that the Proto-Indo-European origins of Eastern Romance dialectisms, which had the meanings “action” and “state”, as a result of natural changes in the semantic structure, acquired the meanings of objects of practical human activity and became the basis for naming the animal and plant world of the Carpathian region, tools and the results of the work of the ancient population of the West of Ukraine.

Key words: Eastern Romance borrowings, Ukrainian dialects, etymology, Proto-Indo-European stems, regularities of semantic development.

Анотація

У статті розглядається питома східнороманська лексика, зафіксована в діалектах української мови, та її давні праформи, досліджено формування семантики східних романізмів від праіндоєвропейської пори до сьогодення. Для досягнення поставленої мети складено корпус питомої романської лексики, представленої в українських діалектах, визначено їх індоєвропейські, італійські та латинські праформи, скориговано ті з них, що вказано в етимологічній літературі, встановлено закономірності семантичних перетворень романізмів різних тематичних груп на осі праіндоєвропейська мова – праіталійська мова – латинська мова – давні та сучасні східнороманські мови та діалекти – українські діалекти. Доведено, що праіндоєвропейські витоки східних романізмів, які мали значення “дія” та “стан”, в результаті закономірних змін семантичної структури набули значень об’єктів практичної діяльності людини і стали базою для найменування тваринного й рослинного світу Карпатського регіону, знарядь та результатів праці давнього населення Заходу України.

Ключові слова: східнороманські запозичення, українські діалекти, етимологія, праіндоєвропейські основи, закономірності семантичного розвитку.

⁷ DSc in Linguistics, Professor, Professor of the Department of Slavic Studies of Kyiv National Linguistic University, Ukraine.

⁸ PhD in Philology, Associate Professor of the Department of Philological and Natural Sciences of the Institute of International Cooperation and Education of the National Aviation University, Ukraine.

⁹ Lecturer at Borys Grinchenko Kyiv Metropolitan University, Ukraine.



Introduction

In the last few decades, Ukrainian etymological science has paid considerable attention to dialectological issues, successfully combining the conceptual apparatus of dialectology and the reconstruction of proto-lingual states. Due to this, numerous cases of lexical borrowings of the languages bordering on peripheral dialects of Ukraine fell into its circle of interests. Studies of ways and means of assimilation of Eastern Romance words by Ukrainian dialects stand out against this background. Scientific findings in this field have become diagnostically valuable in determining migration flows and contacts of Proto-Slavs and ancient Slavs, for the reconstruction of the Slavic proto-lingual area.

Specialists in Slavic studies and Eastern Romance studies conducted large-scale studies of the influence of the Romanian, Moldavian, and Aromanian languages on the formation of the vocabulary of Western and South-Western Ukrainian dialects. The analysis of borrowings was carried out in the general language context (Popescu, 2007; Nechytailo, 2011; Holovach, 2012, Cozmei, 2014; Burduja, 2020) or on the material of certain sayings (Verkhratsky, 1902; Lysenko, 1974; Karpenko, & Lukyaniuk, 1971–1979; Pradid, 2006; Huzar, & Zakrevska, 1997; Miroshnychenko, 2005; Huyvanyuk, 2005; Mohyla, & Kondratenko, 2022), as well as focused on separate thematic groups of borrowings (Lobiuc, 1971; Vişovan, 2001; Kozhukhar, 2014; Kovaliuk, 2017).

Etymologists consider the main practical tasks in the field of Romance loanwords in the Ukrainian language to be an in-depth search for the origins of Romanisms, their etymological analysis, a comprehensive study of ways of adapting loanwords in all possible aspects, establishing the regularities of their semantic transformations on the axis of *Proto-Indo-European language – Proto-Italic language – Latin – modern Eastern Romance languages and dialects – Ukrainian dialects*.

The subject of the paper

The object of the research is the original Eastern Romance vocabulary recorded in the dialects of the Ukrainian language and its proto-forms.

The aim of the article

The purpose of the article is to study the formation of the semantics of Eastern Romanisms from Proto-Indo-European times to

the present. To achieve the goal, the author plans to compile a corpus of specific Romance vocabulary presented in Ukrainian dialects, to determine their Indo-European, Italian and Latin proto-forms, if necessary correcting those of them that are presented in the etymological literature, as well as to establish the types of semantic transformations of Romanisms on the axis of *Proto-Indo-European language – Proto-Italic language – Latin language – ancient and modern Eastern Romance languages and dialects – Ukrainian dialects*.

Research background

The multifaceted problem of the interaction of Ukrainian and Eastern Romance languages, lexical borrowings, their chronology and protolingual sources, as well as semantic and formal transformations of protostems remain relevant even in our time. Until the beginning of the 21st century, Ukrainian dialectological romance philology accumulated a significant amount of specific material in the context of etymological research, which increasingly requires deepening of etymological research.

Researchers of Eastern Romance loanwords did not always manage to cross the “Latin border” of reconstruction. In his works on this issue, E. Vrabie in particular based on the etymological dictionaries of the Ukrainian language, made a convincing attempt to subject the Romanian and Moldavian elements inherent in the Ukrainian language to a deeper interpretation (Vrabie, 1991; Rudnyc'kyj, 1962–1982). Here, as well as in (Vrabie, 1967), a large dialect layer of words is reconstructed in compliance with the diachronic depth of the basic vocabulary and fixed mainly in Latin as the source language.

A considerable number of Romanian and Moldavian loanwords are collected in the Etymological Dictionary of the Ukrainian Language: here the ways of their penetration into Ukrainian dialects are explained, the intermediary languages are indicated, and the Latin source of each of the registered words is highlighted (Melnychuk, 1982–2012; Lukinova, 2013).

The etymology of both entire lexical-semantic microsystems and individual dialectisms attracts the attention of researchers. While studying the oronyms of the Ukrainian Carpathians, Yu. O. Karpenko was able to distinguish in this lexical array both the Proto-Slavic layer and the

Romance contribution to the onymy of the western region (Karpenko, 1999). Versions about the Romanian borrowing of the dialectal words *къча, жбир, грун, грехит, глижа, клечец*, etc. he refutes it by appealing not only to Proto-Slavic and Latin, but also to Proto-Indo-European stems.

The level of etymological research of N. I. Pashkova is deepening more often. The extensive dialectological, lexicographic, and etymological material of the comparative-historical study of the dialect element *кошапа*, the involvement of Indo-European proto-forms allowed her to shed light on the origins of this Carpathianism (Pashkova, 2020).

Etymological dictionaries of the Romanian language significantly enrich our understanding of the history of the emergence of Romanisms. The Etymological Dictionary of the Romanian Language (Ciorănescu, 2001), contains serious substantiations of Latin words as the source of most of the Eastern Romance lexicon and a large list of Slavisms. The more ancient origins of Romanianisms in the Ukrainian language can be revealed by turning to the Etymological Dictionary of the Romanian Language by M. Vinereanu (Vinereanu, 2008), because the author recognizes Indo-European antiquity as the oldest level of origin of words.

To specify the successive semantic changes of Indo-European proto-forms, it is worth referring to M. de Vaan's Etymological Dictionary of the Latin Language: by comparing Romance lexemes, the researcher recreates the Proto-Italic etymon as a significant stage of development from the Proto-Indo-European base to modern languages (Vaan, 2008). This explanatory impulse is a strong point of the proposed reconstruction.

At the time, the need for deepening reconstructions of the Romanian-Moldavian stratum, etymologizing it to the Indo-European and even Proto-Indo-European level is felt more and more.

Methodology

The analysis of the lexical microsystem of Eastern Romance dialectisms was carried out using a complex methodology, which ensured the identification of diachronic and synchronic characteristics essential for their retrospective study. The diachronic approach involved the analysis of the semantic history of proto-lingual stems and made it possible to trace the

regularities of their evolution. The main method of research is *comparative-historical*, with the help of which the meaning dynamics of protostems are traced and the regularities of the semantic formation of Romanisms are established on the axis of *Proto-Indo-European language – Proto-Italic language – Latin language – modern Eastern Romance languages and dialects – Ukrainian dialects*. Collection of factual material from dictionaries was conducted by the continuous sampling method.

The method of semantic parallels contributed to revealing the regularity of semantic transformations of Indo-European proto-stems in the formation of dialectisms of Eastern Romance origin.

Results and Discussion

The diachronic study of Romanisms in the composition of Ukrainian dialects aims to reconstruct their morphological and semantic state not only in the Latin, but also in the Proto-Italic and Proto-Indo-European periods. At this point, the research is faced with the problem of the peculiarities of the semantics of proto-stems. Proto-forms are presented as nouns or as verb stems in etymological dictionaries. Those the proto-stems with process-event semantics can be considered earlier, because in the human mind, the system of verbal meanings qualifies as a decisive factor in the formation of the linguistic picture of the world. Through action, a person enters an active relationship with reality, because action is a coordination centre that regulates the relationship between a person and the world (Kubryakova, 1992), so the verb shows the greatest semantic-derivative ability.

The next stage of the existence of the proto-form is the formation of verb nouns, the meanings of which are motivated by the specifics of the semantics of the verb.

Tracing the directions of the semantic derivation of Romanisms from the Indo-European proto-language to our time will be carried out according to thematic groups.

Let us consider the Eastern Romance borrowings, which reflect the eternal occupation of Ukrainians in the Western and south-western regions – animal husbandry. These are primarily **zoonyms**.

The Western Ukrainian dialectal *барза* “black sheep with white breast” or “white goat”, borrowed from the Romanian language (*barză*

“black stork with white wings and white breast”), shows extreme antiquity and is characterized by a certain opacity of etymology. A. Ciorănescu considers it to be derived from Latin **gardea, ardea* “black heron” with primary *b-, M. Vinereanu prefers Albanian origin (*barth* “white”). It is possible that its Italic root is **boþjo-*, derived from Proto-Indo-European **bherāgos / bherāgā* with the semantics “shine, light, white color” and, more deeply, **bherēg-* “white, to shine” (Melnychuk, 1982, I, p. 142; Trubachev, 1974, I, p. 202; Ciorănescu, 2001, p. 704; Vinereanu, 2008, p. 118; Pokorny, 1959, 2, p. 166; Vaan, 2008, p. 67–68). The proto-lingual meaning “action”, “state” here changed to “colour” and created the zoonym in the Romanian language based on the colour of the animal. There was a transition of the content on the basis of Ukrainian dialect: ornithonym – zoonym.

The names of sheeps by the color recorded in the Carpathians *omiua*, as well as *вотіша, вотішер* are explained as the result of borrowing from the Moldavian or Romanian languages: *oacheș(ă)* and dialect variants *uótișă, oat'eșă, oakishî* “sheep with black near the eyes” are derived from Romanian *oachiu* “eye” and earlier from Latin *oculus*. We find their origins in the Proto-Italic **ok(e)lo-*, Proto-Indo-European root **okw-* “to see”. The basis of the nomination of sheep of this breed is a bright sign – black colour around the eyes (Melnychuk, 2003, 4, p. 233, Pokorny, I, p. 4; Vinereanu, p. 591; Vaan, p. 425).

The Hutsul dialectism *буча* “black goat with a white face”, *буче* “the name of a sheep”, as well as *бучка* “a black sheep with a white face”, *бучко* “the name of a ram” underwent significant semantic changes, because in the Romanian language, where it came from, *bucă* means “cheek”, as in Latin *bucca* “swollen, filled cheek”, a continuation of Proto-Italic **bukka-*. The Indo-European proto-root of this name can be considered **b^hew-* “to swell” (Melnychuk, 1982, I, p. 313; Pokorny, 2, p. 114; Vinereanu, p. 160; Vaan, p. 76). The verb meaning of the original proto-form was transformed into the name of a body part. It is noted that the zoonym is based on a distinctive feature of the animal’s appearance.

The nickname of the cow *Мургуза*, a modified loanword from the Moldavian language (Moldavian *мургує* or Romanian *murgúță* “also”), is a diminutive form of *мурзэ (murgă)* “roan” from the Latin *merus* “pure, unmixed; clear, clean”, derived from the Proto-Italic base **mero-*. Its original Proto-Indo-European form is

considered to be **mau-ro-* “weak, dark” – from *mer-, merk-, mer(e)k-, mer(e)gh-* “to twinkle, to shine” (Melnychuk, 1989, 3, p. 391–392; Pokorny, 2, p. 223; Vinereanu, p. 557; Vaan, p. 376). Here we also trace the development of semantics in the direction: *action – sign by action – zoonym*.

According to the same principle, the Hutsul dialectism *корнута* “horned sheep” and Bukovinian *корнуца* “sheep with straight horns”, and *курнута* “sheep with small horns”, which come from the Romanian *cornúță* “horned” and, further, from the Latin *cornūta* “also”, related to the noun *cornū* “horn”. The name was also based on an external feature – the presence of horns, with specification in Ukrainian dialects. Latin *cornūta, cornū* reflect Proto-Italic **komu-, *komo-* “horn” and Indo-European proto-form **k^her-, *k^herā- : *k^hrā-, *k^herei-, *k^hereu-* “horn” (from **(s)ker-4, (s)kerā-, (s)krē-* “to cut off”) (Melnychuk, 1989, 3, p. 32; Pokorny, 1, p. 403; Vaan, p. 136–137).

The dialectism *курма* “squat-tailed shepherd” is also borrowed from the Romanian language, but in Romanian *Curtu* is the name of a tailless dog, from Latin *curtus* “short”, from Proto-Italic **kortos* and, further, from Proto-Indo-European **(s)kr^h tós* “short” from **(s)ker-* “to cut” (Melnychuk, 1989, 3, p. 158; Vaan, p. 157–158).

Fertility, as one of the most important abilities of domestic animals, can also be the basis for the name. The noun *умура* “barren sheep” from Romanian *știră* “barren” (about animals), less often “barren” (about women), which may have been inherited from the Latin language (*sterilis* “barren”), is especially revealing here. Its hypothetical Proto-Italic form **ster-eli-, *ster-f-*, Proto-Indo-European – **ster-* “hard, frozen” (Melnychuk, 2012, 6, p. 477, Pokorny, 2, p. 627; Vinereanu, p. 813; Vaan, p. 586). The original name underwent a semantic narrowing in Ukrainian.

The issue of the origin of the south-western dialectism *куцилей* “little dog”, borrowed from Moldavian language (*кэцел* “puppy; baby carnivore” from Latin *catellus* “puppy, dog” and from *catulus* “small animal (mainly kitten, puppy)”), is limited only by Proto-Italic **kat-elo* “also” with the assumption of motivation **katlo-* “sacrificial animal” (Melnychuk, 3, p. 166; Vaan, 2008, p. 98). For them, A. Walde also proposed a common verb-noun Proto-Indo-European root **kat-* “to give birth to young”, “baby animal” (Walde, 1906, 1, p. 183). Thus, the deverbative Latin name retained its meaning

in the Romanian and Moldavian languages and underwent semantic modification in Ukrainian.

The verbal method of formation is also demonstrated by the names of groups of animals. For example, Boyki dialect word *турма* “flock, pack; band, crowd, herd” is a formation with a generalization of the meaning from the Romanian *turmă* “flock”, which comes from the Latin *turma* “squadron; crowd”. Roots are set for it: Pre-Latin **torba*, then Proto-Italic **trf-ā* and, ultimately, Proto-Indo-European **(s)trbh-* “confusion (disorderly movement, commotion)” and the verb proto-stem **tuer-*, **tur-* “to move quickly, spin” (Melnychuk, 2006, 5, p. 682; Pokorny, 1, p. 749; Vinereanu, p. 853; Vaan, p. 634).

A limited number of zoonyms have a noun origin. Let us turn to the zoonyms of the Eastern Romance source for the designation of cubs. For example, the name *laituk* “young goat” in Western dialects was derived from the modified Moldavian *vetui* “goat (one-year-old)” or Romanian *vătuî*, *vătuie* “young buck; one-year-old goat until lambing”. Its source is defined as Latin *vitulus* “calf; young animal”, derived from Proto-Italic **wet-elo-* “year-old calf”, Indo-European proto-form **wet-* “year”. (Melnychuk, 1982, 1, p. 366; 3, p. 185; Pokorny, 1, p. 251; Vaan, p. 687).

Age is defined here as the basis for naming in the Pre-Italic period. In the Romanian and Moldavian languages, we observe a shift of meaning to another kind of animal.

Let us turn to dialect ornithonyms, such as, for example, Western Ukrainian *nikip* “field lark, *Alauda arvensis* L.” and Boyki *нікєр* “wagtail”, also derived from the Romanian dialect *pichere* “guinea fowl, *Numida meleagris*”. These names are formed from the Romanian onomatopoeic *píchiri* (Melnychuk, 2003, 4, p. 402), motivated by the onomatopoeia of *pik*. It can be assumed that they are reflexes of onomatopoeia: Proto-Italic **piko-*, **peikā-* and Proto-Indo-European *(s)pīko-* (Vinereanu, p. 633–634; Vaan, p. 464; Pokorny, 2, p. 81).

Another name of the skylark, noted in the West of Ukraine, *туртулії*, as well as *тутулії* “crested lark, *Galerida cristata* L.”, is derived from the Romanian ornithonym *turtureá* “turtledove, *Streptopelia turtur* L.”, *tuturél* “also (male)”. They are inherited from the Latin language: *turturilla* (*turturella*) are derived from *turtur* “turtledove” with an onomatopoeic stem (Melnychuk, 2006, 5, p. 684). According to the

specification of M. de Vaan, this form goes back to Proto-Italic **torzdo-*. Proto-Indo-European **(s)treig-*, *st Reid(h)-*, defined by Yu. Pokorny as “to hiss” (Vaan, p. 634–635; Pokorny, 2, p. 651), or **ret(e)r-* “to croak”, **tu*, **tutu* “to imitate birds or some dull sounds” (Vinereanu, p. 855).

Phytonyms are found among East Romance dialect borrowings, for example, *куреки* “head cabbage, *Brassica oleracea* L.”. The name comes from Moldavian (*курець* “cabbage”) or Romanian (*curéchi* “also”) languages. They go back to the Latin names *coliculus* (*cauliculus*) “stem, shoot, sprout” – diminutives of *caulis* “stem (mainly cabbage), cob”. At the Proto-Italic level, they correspond to **kauli-* “stem”, at Proto-Indo-European – **(s)keh₂u-l-i* “plant root, trunk”, motivated by **(s)ker-4*, *(s)kerā-*, *(s)krē-* “to cut off” (Melnychuk, 3, p. 153; Vaan, p. 100; Pokorny, 1, p. 422, 2, p. 573). Etymologically related to them is the phytonym *курнум* “thorny weed” (from Moldavian *курнуц* “needweed, *Xanthium* L.”, Romanian *cornút* “field hornwort, *Cerastium arvense* L.”, because they come from the same Proto-Indo-European root (Melnychuk, 3, p. 156; Pokorny, 1, p. 403). In the development of the semantics of the Indo-European proto-form, we trace the stages: *action – root, trunk of a plant – plant – cabbage – (Ukrainian) a type of cabbage*.

The agricultural work of the ancestors of South-Western Ukrainians is reflected in the name *люта* “heap of reed sheaves” borrowed from the Moldavian language. Moldavian *лугэ*, as well as Romanian *glúgă*, “hood; shock” comes from the Latin *cuculla* “hood” and, according to etymologists, is a loan word from the Illyrian or Gaulish language. It is considered a reduplication of the Proto-Indo-European stem *(s)keu₂ə* : *(s)kū-* “to cover, roll up, bend”, which on the Romance base was transformed into a name due to the similarity of the form (*to cover – covering – headdress – cone-shaped pile*) (Melnychuk, 1, p. 531; Pokorny, 2, p. 546; Vinereanu, p. 398–399).

Most of the Romanian and Moldavian borrowings relate to *animal husbandry and its products*. A direct borrowing from Romanian is *шкaм* “first-class wool”. Romanian *scámă* “wool or cotton thread, fibre, carp” continues Latin *squama* “scale”, motivated by Proto-Indo-European **(s)kewH-* “to cover” (Melnychuk, 4, p. 426; Vaan, p. 583–584; Pokorny, 2, p. 546). Therefore, the development of this Romanianism can be represented by a scheme: *surface action – coating (scale) – wool, fiber – first-class wool*. A similar way of formation is demonstrated by the

name of the lamb's wool of the autumn shearing *myuupa* (from Romanian *tușiră, tușină* “wool from shorn sheep”), which continues Folk-Latin **tonsionare* and Latin *tondere* “to cut”, Proto-Italic **tond-eje* and Proto-Indo-European **tond-eie* “to cut” (Melnychuk, 2006, 5, p. 689; Vaan, p. 622).

Let us try to trace the development of the Hutsul word *лял* “part of the stomach of a ruminant animal, used for fermenting milk”, as well as its variants *ляк, ллі, ляга, ляги, лел, кляк* “also”, borrowed from the Romanian language, where *chiag*, Aromanian, Megleno-Romanian *chiag* are derived from Latin *coāgulum* “leaven, enzyme, sourdough”. In turn, *coāgulum* comes from *cogo* “connect, thicken, condense” < *co-āgo*, where *āgo* “bring, lead” continues Proto-Italic **ag- e/o-* “to do, to act” and Proto-Indo-European **ag-* “to lead” (Melnychuk, 1982, 1, p. 531; Vaan, p. 30–31; Pokorny, 1, p. 35).

We will also find out the semantic dynamics of proto-forms for **instrumental names**. For example, the south-western lexeme *рашка* “part of a spinning wheel, a frame with teeth in which the spool is turned and through which the spun thread is wound onto the spool”, is related to Romanian *rășchiá* “to wind on a reel”, *rășchitór* “reel” and Folk Latin **rasclare* “to scrape”. We consider its proto-form to be Proto-Indo-European **rēd-2: rōd-: rəd-* “to scratch” (Melnychuk, 2006, 5, p. 35; Pokorny, 2, p. 369). The instrumental name is motivated by the verbal designation of the action that the device should perform when spinning.

The south-western dialectism *фурка* “a pitchfork with three horns” (from the Romanian *furcă* “a pitchfork”, derived from the Latin *furca* “a two-pronged pitchfork, a pitchfork” does not have a reliable etymology until now. M. de Vaan suggests that the proto-form **ghorka* > **fo/urca* entered Latin from one of the substratum dialects. Then, according to J. Pokorny, the Proto-Indo-European form **ghrebh-1, *gherbh-* “to grab, to seize”, **g'hei-* “to catch, to take” became the origin of this Romanian name (Melnychuk, 2012, 6, p. 140; Vaan, p. 251–252; Pokorny, 1, p. 652; Vinereanu, p. 371). Romanianism acquired a concrete meaning in the Ukrainian dialect.

Among the dialectisms there are the names of **household items**, it is worth referring to the Bukovinian *дзестра, дзестри* “dowry”, *зестра, зестре, зестри, зястра* “also”, borrowed from Romanian (*zestre* “dowry”) or Moldavian (*зестре* “also; property”) languages.

They are united by the Latin *dextrae* “gift; solemn promise”, which comes from *dextra* “right hand”. The specified lexemes reflect the Proto-Italic **dextero-*; **deks(i)wo-*, Proto-Indo-European **deks-tero-* “right; to the right”, **deks-(i)uo-* “that which is right” and finally **dek-* “to take” (Melnychuk, 1985, 2, p. 58; Vaan, p. 168; Pokorny, 1, p. 782).

Let us trace the origin of the **names of clothes** inherent in the dialects that bordered on the Eastern Romance languages. Regarding the Hutsul name *немек* (as well as *немак, немок*) “a type of half-captan”, there is an opinion that they are borrowed from the Romanian or Moldavian languages, where *pétec* “patch, piece, rag” is derived from the Middle Latin *pettadium* “a piece of cloth”, which in Latin means “piece of parchment or cloth”. Although there are no deeper studies of *pettadium*, we assume its origin from Proto-Italic **pet-e/o-*, which continues Proto-Indo-European **pt-(e)i-* “to fly” (by analogy with the formation of Ukrainian *латка* from Proto-Slavic **lata* “patch”, **latati* “to fly, to scatter, to dangle” (Melnychuk, 2003, 4, p. 361; Trubachev, 1987, 14, p. 47–48; Vaan, p. 463–464; Pokorny, 1, p. 19).

Landscape names are essential for farming.

The landscape name *арушця* “steep mountain, sunny side of the mountain” is defined as borrowing from Eastern Romance languages: Moldavian *арушцэ* “heat”, Romanian *ârșița* “also; pasture on a hill, in a forest on the sunny side” come from the Folk-Latin **apcicia* “burning” (Latin *ardeo* “burning”, *apci* “I burned”). Its origins can be seen in Proto-Italic **ās-ē* “to be dry”, Proto-Indo-European **h₂eh-* “also”, *ai-dh-, i-dh-, i-n-dh-* “to burn” (Melnychuk, 1982, 1, p. 91; Vaan, p. 53; Pokorny, 2, p. 5). The modern meaning has gone through the stages of formation from the name of an action, a state, a sign, and a place with this sign.

The etymology of the dialectal *грунь* “hill”, *грунь* “top, mountain ridge”, *грунь* “also” and (old) *грунь* (XIV–XV centuries) as a loanwords from the Romanian language (*grúiu* “hill, top of a hill”) needs clarification. In our opinion, *grúiu* continues Latin *grumus* “heap of earth, hill”, Proto-Italic **gromo-* “heap”, which became the deverbative of Proto-Indo-European **ger-* “to wrap” (Melnychuk, 1982, 1, p. 606; Vaan, p. 273; Pokorny, 1, p. 593).

A group of Romanic borrowings (the names of water bodies) attracts attention. Ukrainian

dialectal *balma* “liquid swamp, swamp” comes from Romanian *băltă* or Moldavian *bălmă*. These names are sometimes compared with Latin *blatea* “dirt” and are considered to be a Thracian-Illyrian borrowing derived from the Indo-European proto-form **bhol(ə)to-m / *bhol(ə)ta*, derived from the colour-signifying **bhā-l-* “bright, white” (Melnychuk, 1982, 1, p. 128; Trubachev, 1975, 2, p. 179–182; Vinereanu, p. 113). Yu. Pokorny attributed this proto-form to the Indo-European root **bhā-1*, **bhō-*, **bhə-* “to shine” (Pokorny, 2, p. 122).

The word *лак* “lake with swampy shores” also found its way into Ukrainian dialects from the Moldavian (*лак*) or Romanian (*lac*) languages, the origins of which can be seen in Latin (*lacus* “lake, pond; bath, tub, pit”) and, more deeply, in Poto-Italic (**laku-*) and Proto-Indo-European (*lok-u* “lake”). For *lacus*, **laku-* Yu. Pokorny advocates the Indo-European proto-form **laku-* with the procedural meaning “accumulation of water in a pit, pool, lake” (Melnychuk, 1989, 3, p. 186; Vaan 336; Pokorny, 2, p. 380; Vinereanu, p. 475).

The dialectal *чара*, in addition to meaning “crowd”, is defined as “foreign party”. It came from the Romanian language: *țară* “country, region”, “commoners, peasants”) and comes from the Latin *terra* “earth”. The study of the deeper origins of this name allows us to name its Proto-Italic form **tersa-* “land”, **terso-* “land, region” and Proto-Indo-European *ter-s-* “to dry, to wither” (hence, “dry area, dry land”) (Melnychuk, 2012, 6, p. 228; Vaan, p. 616–617; Pokorny, 1, p. 737; Vinereanu, p. 856).

Socionyms and professionalisms make up an important group of names that identify a person’s role in society. For example, *флут*, *флутур*, which in Western dialects mean “swindler, scoundrel”, represent a semantically modified borrowing from Romanian language: *fluture* “butterfly” comes from Latin *flūtulus*, possibly related to *flūto* “to flow, float”. Its origins can be seen in the Proto-Italic root **flow-e/o-* and Proto-Indo-European **bhleuH-(e/o-)*, **bhleu-* “to flow; to blow” (Melnychuk, 2012, 6, p. 112; Vaan, p. 228; Vinereanu, p. 362; Pokorny, 2, p. 213).

We agree that the dialectal *журат* “judge” comes from Romanian, where *jurát* means “one who has sworn; implacable; juror” and is related to *jurá* “to swear”. Experts see its origins in Latin *jūro* “I swear”, as well as in Proto-Italic

**jowos*, **jowes-* “oath, law”, Proto-Indo-European **h₂oi-u-* “life force, eternity” or **i eu os-* “norm, right” (from **i eu-* “to join”) (Vaan, p. 316–317; Pokorny, 1, p. 203; Vinereanu, p. 472). The ancient ritual of swearing consisted in touching the object with which one swore (Melnychuk, 1985, 2, p. 210).

Conclusions

As a result of the study of Eastern Romance loanwords in the dialects of Western Ukraine, Ukrainian dialectology and etymology faced the task of establishing the Indo-European origins of Romanian and Moldavian words learned in the Ukrainian language.

In the south-western dialectal area of Ukraine (Hutsul, Bukovyna, Boyki, Lemki dialects), these borrowings (285 units) are differentiated by thematic groups: names of animals, birds, plants, products and work tools, household items, landscape names and definitions of human social roles.

Each group in diachrony shows specific semantic and word-forming features. Thus, the names of animals were formed from Proto-Indo-European names of actions or states, which were transformed into the names of the performer of the specified action or the bearer of a certain characteristic. In the Latin period, definitions were formed, which in Romanian and Moldavian languages ended as a noun – the name of an animal based on a special external feature. On the Ukrainian basis, such Romanisms undergo a narrowing of meaning.

Proto-lingual onomatopoeia cause the formation of bird names, which in Ukrainian dialects undergo a shift in meanings. The origin of phytonyms is based on Proto-Indo-European names of forms of plants (stem, root, horn, pile, etc.), which were also mostly formed in Latin and are de-verbatives in Indo-European retrospective.

The basis of the formation of the vocabulary of animal husbandry products, as well as the names of tools and household items, are the actions performed during their production (*cutting, thickening, scraping, catching, taking, covering*, etc.). Landscape names developed on the base of the verbal meanings of the original Indo-European proto-stems and went through a long path of transformation: “action” (“state”) – “sign (form)” – “name of the area”.

Thus, Romance borrowings in Ukrainian dialects developed from Indo-European proto-stems with the semantics of action, and finally acquired substantive meanings in the Proto-Italic and Latin eras. Romanian and Moldavian lexemes inherited Latin meanings with certain modifications, and in dialects of the Ukrainian language their adaptation took place in the direction of semantic concretization.

Knowledge of the regularities of the semantic development of loanwords on the axis *Proto-Indo-European language – Proto-Italic language – Latin language – Eastern Romance languages – Ukrainian dialectisms* can help in the reconstruction of Romanisms in other Slavic languages, as well as in reproducing the picture of Romance-Slavic language contacts in the Carpathian region.

Bibliographic references

- Burduja, V. N. (2020). The influence of the Romanian language on the lexicon of the Ukrainian language [Influența limbii române asupra lexicului limbii ucrainene]. IASI [Iași]. [in Romanian] URL: http://mail.lit.uaic.ro/scoala_doctorala/DOCUMENTE/CV%20drd%2020/Rezumatul%20N%20Burduja.pdf.
- Ciorănescu, A. (2001). The etymological dictionary of the Romanian language [Dicționarul etimologic al limbii române]. Saeculum I. O. Publishing House, Bucharest [Editura Saeculum I. O., București]. [in Romanian]
- Cozmei, A. (2014). Romanian-Ukrainian linguistic interference (doctoral thesis) [Interferențe lingvistice româno-ucrainene, (teză de doctorat)], Suceava, “Stephen the Great” University from Suceava [Suceava, Universitatea “Ștefan cel Mare” din Suceava]. [In Romanian]. URL: http://exlibris.usv.ro:8991/F/EYJNP62HMSJPUMDNTV9XFJVQKSCRK2FB4FDV71QJF1RV8UTC3V-57196?func=find-acc&acc_sequence=000733457
- Holovach, N. M. (2012). Lexical Romanisms in the Ukrainian language at the dialectal and literary normative levels (doctoral thesis) [Leksychni rumunizmy v ukrainskii movi na dialektnomu ta literaturnonormatyvnomu rivniakh, (dysertatsiia)]. Yuri Fedkovich Chernivtsi National University, Chernivtsi [Chernivetskyi natsionalnyi universytet imeni Yurii Fedkovycha]. [In Ukrainian].
- Huyvanyuk, N. V. (2005). Dictionary of Bukovinian idioms [Slovyk bukovynskykh hovirok]. Chernivtsi: Ruta Publishing House [Vydavnytstvo Ruta]. [In Ukrainian]
- Huzar, G., & Zakrevska, Ya. (1997). Hutsul idioms: A short dictionary [Hutsulski hovirky: korotkyi slovnyk]. Lviv: Institute of Ukrainian Studies of the National Academy of Sciences. [In Ukrainian]
- Karpenko, Yu. O. (1999). Proto-Slavic oronymy of the Ukrainian Carpathians. Notes on onomastics [Praslov'ianska oronimiia Ukrainskykh Karpat. Zapysky z onomastyky]. Odesa: Astroprint. Vol. 7, p. 17–23. [In Ukrainian]. URL: <http://dSPACE.onu.edu.ua:8080/bitstream/123456789/18200/1/17-26.pdf>
- Karpenko, Yu. O., & Lukyaniuk, K. M. (1971–1979). Materials for the dictionary of Bukovinian sayings [Materialy do slovnyka bukovynskykh hovirok]. Chernivtsi: Chernivets State University [In Ukrainian]. URL: <http://194.44.152.155/elib/local/sk352306.pdf>
- Kovaliuk, O. (2017) Borrowed token denoting the emotional state of nervous excitement in the old Ukrainian language of XIV–XVI centuries [Modern Science]. Prague: Forests [Nemoros]. Num. 5, p. 151–159.
- Kozhukhar, E. S. (2014). Eastern Romance borrowings in the names of food and drinks in the Ukrainian dialects of the Republic of Moldova [Vostochnoromanskije zaimstvovaniya v nazvaniyah pishchi i napitkov v ukrainskikh govorah Respubliki Moldova]. Slavic Readings [Slavyanskije chteniya], Num. 3(9). [In Russian]
- Kubryakova, E. S. (1992). Verbs of action through their cognitive characteristics [Glagoly dejstviya cherez ih kognitivnye harakteristiki]. Logical analysis of language. Models of action [Logicheskij analiz yazyka. Modeli dejstviya]. Moscow: Science [Nauka], p. 84–90. [In Russian]
- Legchilina, E. (2020). Designing of social and labor relations in the context of transformation: principles, organizational and institutional aspects. Revista Cientifica Del Amazonas, 3(5), 43-53. <https://doi.org/10.34069/RC/2020.5.04>
- Lobiuc, I. (1971). Romanian loans in zoonimia huță [Împrumuturi românești în zoonimia huțulă]. Yearbook of Linguistics and Literary History XXII, Academy Publishing House [Anuar de Lingvistică și Istorie Literară XXII, Editura Academiei], Iasi [Iași]. [In Romanian]
- Lukinova, T. B. (2013). Ukrainian vocabulary: semantic changes in borrowed words [Ukrainska leksyka: semantychni zminy v

- zapozychenykh slovakh]. Linguistics [Movoznavstvo], p. 18–38. [In Ukrainian]
- Lysenko, Ya. S. (1974). Dictionary of Polissya dialects [Slovnnyk poliskykh hovoriv]. Kyiv: Nauk. [In Ukrainian]. URL: http://irbis-nbuv.gov.ua/cgi-bin/ua/elib.exe?Z21ID=&I21DBN=UKRLIB&P21DBN=UKRLIB&S21STN=1&S21REF=10&S21FMT=online_book&C21COM=S&S21CNR=20&S21P01=0&S21P02=0&S21P03=FF=&S21STR=ukr0001576
- Melnychuk, O. S. (Ed.). (1982–2012). Etymological dictionary of the Ukrainian language [Etymologichnyi slovnnyk ukrainskoi movy]. Vol. 1 (1982), A–D [A–Г]. Vol. 2 (1985), D–Koptsi [Д–Копці]. Vol. 3 (1989), Kora–M [Кора–М]. Vol. 4 (2003), N–P [Н–П]. Vol. 5 (2006), R–T [Р–Т]. Vol. 6 (2012), Y–Z [Y–Я]. Kyiv: Scientific opinion [Naukova dumka]. [In Ukrainian]. URL: http://litopys.org.ua/djvu/etymolog_slovnnyk.htm
- Miroshnychenko, O. (2005). Eastern Romance loanwords in Ukrainian South Bessarabian dialects [Skhidnoromanski zapozychennia v ukrainskykh pivdenobessarabskykh hovirkakh]. Lviv: Dialectological studies [Dialektolohichni studii] 5, p. 279–284. [In Ukrainian]. URL: <http://www.inst-ukr.lviv.ua/uk/publications/materials/documents/?newsid=184>
- Mohyla, O., & Kondratenko, L. (2022). Romanian lexical elements in the Carpathian dialects of the Ukrainian language [Rumunski leksychni elementy v karpatskykh hovirkakh ukrainskoi movy]. World dimensions of educational trends [Svitovi vymiry osvityk tendentsii]. Kyiv: NAU, p. 15–22. [In Ukrainian]. URL: https://drive.google.com/file/d/1UT_oamfmSwyXwdilPixYmew3RNQGi4ip/view?usp=sharing
- Nechytailo, I. M. (2011). Paleo-Slavia and the semantics of dialectisms [Paleoslavia i semantyka dialektyzmiv]. Scientific journal of the NPU named after M. P. Drahomanov. Modern trends in language development [Naukovyi chasopys NPU imeni M. P. Drahomanova. Suchasni tendentsii rozvytku mov], Vol. 6, p. 163–167. [In Ukrainian]
- Pashkova, N. (2020). Genesis of the Carpathism Koshara. Slavia Orientalis, vol. LXIX, No 4, p. 899. URL: <https://journals.pan.pl/dlibra/results?action=AdvancedSearchAction&type=-3&val1=Source:%22Slavia+Orientalis%5C%3B+2020%5C%3B+vol.+LXIX%5C%3B+No+4%5C%3B+899%5C-912%22>
- Pokorny, J. (1959). Indo-European Etymological Dictionary [Indogermanisches etymologisches Wörterbuch], Bern – Munich, 2 Bde. [In German].
- Popescu, I. (2007). Romanian elements in the Ukrainian language [Rumunski element v ukrainskii movi]. Chernivtsi: Ruta Publishing House [Vydavnytstvo Ruta]. [In Ukrainian]. URL: <https://bit.ly/3eRB8eh>
- Pradid, Yu. F. (2006). From observations on dialect phraseology (based on the material of Boyki's sayings) [Iz sposterezhen nad dialektnoi frazeolohiieiu (na materialii boikivskykh hovirok)]. In the field of linguistics and law [U tsaryni linhvistyky i prava.]. Simferopol, p. 21–24. [In Ukrainian]. URL: <https://search.rsl.ru/ru/record/01002940903>
- Rudnyck'kyj, J. B. (1962–1982). An Etymological Dictionary of the Ukrainian Language: Vol. I (A–Г), (1962–1972). Winnipeg Vol. II (Д–Б), (1982). Ottawa: Ukrainain Mohylo-Mazepian Academy of Sciences. URL: https://archive.org/details/rudnycky_slovnnyk_tom1.cropped.ocr, https://archive.org/details/rudnycky_slovnnyk_tom2.cropped.ocr
- Trubachev, O. N. (Ed.). (1974–1987). Etymological Dictionary of Slavic Languages: Proto-Slavic Lexical Fund [Etimologicheskij slovar' slavyanskikh yazykov: Praslavyanskij leksicheskij fond]. Moscow: Science [Nauka]. Vol. 1 (A—*besǫdъlivъ) (1974); vol. 2 (*bez—*bratъ) (1975); vol. 14 (*labati—*lǫteplъjъ) (1987). [In Russian]. URL: <https://etymolog.ruslang.ru/index.php?act=essja>
- Vaan, M., de (2008). Etymological Dictionary of Latin and the other Italic Languages. Boston: Leiden.
- Verkhratsky, I. (1902). About the speech of the Galician Lemkos [Pro hovir halytskykh lemktiv]. Lviv: National Academy of Sciences. [In Ukrainian]. URL: http://irbis-nbuv.gov.ua/cgi-bin/ua/elib.exe?Z21ID=&I21DBN=UKRLIB&P21DBN=UKRLIB&S21STN=1&S21REF=10&S21FMT=online_book&C21COM=S&S21CNR=20&S21P01=0&S21P02=0&S21P03=FF=&S21STR=00004689
- Vinereanu, M. (2008). Etymological dictionary of the Romanian language based on Indo-European studies. [Dicționar etimologic al limbii române pe baza cercetărilor de indoeuropeanistica]. Bucharest [București]. [In Romanian].



- Vişovan, Ş. (2001). Romanian-Ukrainian interference in the toponymy of Maramureş. [Interferențe româno-ucrainene în toponimia Maramureşului]. Umbria Publishing House, Baia Mare. [Editura Umbria, Baia Mare]. [In Romanian].
- Vrabie, E. (1991). New and revised romanian etymologies. University Park, Pa, Vol. 31 (3-4), p. 153-162. URL: https://idiscover.lib.cam.ac.uk/permalink/f/1kas1sp/TN_cdi_proquest_miscellaneous_85554322
- Vrabie, E. (1967). The influence of the Romanian language on the Ukrainian language [Influenza limbii romane asupra limbii ucrainene]. Romanoslavica, XIV, Bucharest [Romanoslavica, XIV, Bucureşti], p. 183-184. [In Romanian].
- Walde, A. (1906). Latin Etymological Dictionary [Lateinisches etymologisches Wörterbuch]. 1st edition [1 Auflage]. Heidelberg: Winter. [In German].

DOI: <https://doi.org/10.34069/AI/2022.56.08.4>

How to Cite:

Asieieva, Y., Morvaniuk, H., Voznyi, D., Chetveryk-Burchak, A., & Storozh, V. (2022). Efficiency of the complex program of psychocorrection of cyber-addictions among middle and late adolescents. *Amazonia Investiga*, 11(56), 38-47. <https://doi.org/10.34069/AI/2022.56.08.4>

Efficiency of the complex program of psychocorrection of cyber-addictions among middle and late adolescents

ЕФЕКТИВНІСТЬ КОМПЛЕКСНОЇ ПРОГРАМИ ПСИХОКОРЕКЦІЇ КІБЕР-АДИКЦІЙ СЕРЕД ОСІБ ПІДЛІТКОВОГО ТА ЮНАЦЬКОГО ВІКУ

Received: August 30, 2022

Accepted: September 28, 2022

Written by:

Asieieva Yuliia¹⁰<https://orcid.org/0000-0003-3086-3993>**Morvaniuk Hanna¹¹**<https://orcid.org/0000-0001-7161-1202>**Voznyi Denis¹²**<https://orcid.org/0000-0002-2712-5861>**Chetveryk-Burchak Alina¹³**<https://orcid.org/0000-0002-6589-416X>**Storozh Victoriia¹⁴**<https://orcid.org/0000-0001-9502-8716>

Abstract

In this work, the authors conduct a statistical analysis of the problem, examine the experience of various states and possible measures of psychocorrection of cyber-addictions among the younger generation. It is also worth noting that in order for this work to be effective, it must relate to all spheres of an individual's life: family, educational environment, social life. Having considered the world experience in working with cyber-addictions, the authors proposed and conducted his own comprehensive program of psychocorrection of cyber-addictions, which is aimed at reducing the degree of addiction and includes the following areas of work: individual, group, family psychocorrectional and psycho-educative work. According to the results of the work carried out, it was found that the developed program gave positive results since the 3rd degree of addiction was reduced in all groups and types of cyber-addictions, and after psychocorrection, people appear who have ceased to show pathological signs of addiction

Анотація

У роботі автори проводять статистичний аналіз проблеми, розглядають досвід різних держав та можливі заходи щодо психокорекції кібер-адикцій серед молодого покоління. Варто також зазначити, задля того, щоб дана робота була дієвою вона повинна торкатися всіх сфер життя особистості: сім'ї, освітнього середовища, суспільного життя. Розглянувши світовий досвід щодо роботи із кібер-адиктами авторами запропоновано та проведено власну комплексну програму психокорекційних заходів із кібер-адиктами, яка була спрямована на зниження ступеню залежності та включила наступні напрямки роботи: індивідуальну, групову, сімейну психокорекційну та психоед'юкативну роботу. За результатами проведеної роботи визначено, що розроблена програма надала позитивні результати оскільки 3-й ступінь залежності було знижено по всіх групах та видам кібер-адикцій, також після психокорекції з'являються особи що перестали виявляти патологічні ознаки адикції (по групах

¹⁰ MD, Doctor of Psychological Sciences, Head of the Department of Language and Psychological and Pedagogical Training Odessa National Economic University, Odessa, Ukraine.

¹¹ PhD, Psychiatrist Odessa Regional Medical Center of Mental Health, Ukraine.

¹² PhD, senior lecturer of the department of criminal law, criminal process and criminology of ONU named after Mechnikova and a narcologist of the highest category of the toxicological and narcological department of the KNP "OOMTCPZ" OOR, Ukraine.

¹³ PhD, Associate professor, Department of Educational and Developmental Psychology Oles Honchar Dnipro National University, Ukraine.

¹⁴ PhD, Senior Lecturer at the Department of Family and Special Pedagogy and Psychology, Derzhavnyy zaklad «South Ukrainian National Pedagogical University named after K. D. Ushynsky» Ukraine.



(for groups it is from 2% to 17%). It should be noted that significant results in reducing the degree of addiction were achieved in selfitis, cyber-communicative and game addictions.

Keywords: cyberspace, adolescents, cyber-addictions, psychocorrection, addiction to cyberspace, non-chemical addictions.

Introduction

Increasingly, researches confirm that a part of current young people, instead of being actively involved in social institutions, organizing family unions and focusing on creative activities, regularly immerse themselves in cyberspace. Thus, according to a study conducted by the Factum Group research company commissioned by the Internet Association of Ukraine, it is noted that the share of Internet users increased from 65% (in 2018) to 71% (in 2020). Ukrainians aged 15 to 24 are the most active on the Internet – among them the share of Internet users is 97%, people aged 25 to 34 – 96%, users over 65 – already 29% (a year ago it was only 14%) (World Health Organization, 2017; Kemp Digital, 2020).

Constant online presence gradually interferes with real life, however, there is a fear of being in an information vacuum, new types of addictions are formed. Meeting the needs of self-realization, self-identification, recognition and search for new types of entertainment through the network leads to the formation of passion not only for the network, but also for gadgets and new types of online games. The WHO has now included a "gaming disorder" in the updated International Classification of Diseases (ICD-11). The official recognition of gaming addiction to the disease suggests that its consequences are so significant that they require medical intervention. In the WHO classification, it is assigned the 6C51 code, and it falls into the category of mental, behavioral disorders and disorders of the nervous system. However, gaming addiction can officially be considered a disease no earlier than 2026, as it is necessary to perform another revision of the Korean Standard Classification of Diseases and Causes of Death (KCD) which is scheduled for 2025. The criteria for diagnosing gaming disorders, according to the WHO, are the loss of control over participation in the game and the prioritization of games to the detriment of other daily activities. To establish a diagnosis, signs of such behavior must be present for at least 12 months, but in the case of particularly severe symptoms, this period may be shorter (Block,

це від 2 % до 17 %). Слід зауважити, що значних результатів по зниженню ступеню адикції вдалось досягти по селфітіс, кіберкомунікативній та ігровій адикції.

Ключові слова: кіберпростір, молоде покоління, кібер-адикції, психокорекція, залежність від кіберпростору, нехімічні залежності.

2008; Hsieh, 2018; World Health Organization, 2017; Rumpf, Achab & Billieux, 2018).

Although in the new ICD-11, gaming addiction is considered a disorder that has "serious deviations in behavior that negatively affect personal, family, social, educational, professional or other important aspects of life" (World Health Organization, 2017; Rumpf, Achab & Billieux, 2018). However, even before the entry into force of the new ICF-11, the majority of countries have already gradually started implementing preventive, treatment and rehabilitation programs.

The goal is to analyze the problem and develop a program of psychocorrection of cyber-addictions among middle and late adolescents.

Research methods

Theoretical and methodological analysis of the literature on the issue; psychodiagnostic research methods and methods of mathematical and statistical data processing ("SPSS 26.0 for Windows XP" and "Microsoft Excel, XP").

To conduct the experimental part of the study, a psychodiagnostic technique was used which was aimed at determining the predisposition to addictive behavior and the degree of manifestation of certain types of cyber-addictions, and was conducted using: "Test-questionnaire to detect cyber-addiction" (TQC) Asieieva Y.O., Aymedov C.V., including 102 questions, the answers are rated on a five-point scale to determine the severity of the following types of cyber-addictions: computer addiction (PC), Internet-addiction, game addiction, gadget addiction, cybercommunication addiction, and selfitis.

The study was conducted in accordance with the principles of bioethics and deontology. The main bases of the study were: Odesa National Medical University; Odessa Institute of PJSC IAPM; Public Utility "Student Health Clinic" of the

Odesa City Council, NGO "LGBT Association "LEAGUE". All respondents were announced the topic and purpose of scientific work, written consent was received from all participants in the study.

The sample consisted of 408 people – who had manifestations of certain types of cyber-addictions in the age category from 14 to 21 years. To determine the effectiveness of a comprehensive psycho-correctional program, all respondents were divided into three blocks: 1) from 14 to 15 years, it is EGB1 – 59 young men with signs of addiction; EGG1 – 65 girls with signs of addiction; 2) from 16 to 18 years old, it is EGB2 – 72 young men with signs of addiction; EGG2 – 76 girls with signs of addiction; 3) from 19 to 21 years old, it is EGB3 – 67 young men with signs of addiction; EGG3 – 69 girls with signs of addiction. This study describes only the results of the main groups before and after psychocorrection.

Analysis of recent research and publications.

Today, many scientists from different fields of science (psychology, medicine, sociology and pedagogy). Cyber-addiction is studied as a phenomenon of addictive behavior (Aarseth et al., 2017; Mozgova, Skrypnikov, Vyun, Asieieva, Leshchyna, Kozhyn & Khaustov, 2021), their definitions, socio-psychological factors (Markova, 2013; Moskalenko, 2013), symptoms and stages, age characteristics, clinical aspects, classifications and typologies are determined, issues of children's and youth's interaction with the computer, behavioral features are investigated users in the "Internet " (Aymedov, Asieieva, Tolmachev & Tabachnik, 2020; Asieieva, Druz, Kozhyna & Chernenko, 2021; Otte, Streb & Franke, 2019; Young, 1996).

A lot of attention is paid to the research of psychoprophylactic and psychocorrective measures of Internet-addiction: risk factors and prevention of Internet-addiction among young people are determined (Ilnytska, 2012; Griffiths, Kuss & Billieux, 2016; Rzhevsky, 2018; Young, 1996); approaches to upbringing, family functionality (Wu, Wong, Yu, Fok, Yeung, Lam & Liu, 2016) and the psychological and pedagogical problem of forming safe behavior of younger schoolchildren and teenagers on the Internet are studied (Bartkiv & Makhnovets, 2018); attention is paid to overcoming and prevention of cyber-bullying (virtual terror) among teenagers (Naidyonova, 2014); pedagogical conditions of prevention and correction of Internet-addiction among teenagers

are investigated (Hsieh, 2018; Asieieva, Druz, Kozhyna & Chernenko, 2021).

Results and Discussion

Given that the new WHO classification is expected to enter into force from January 1, 2022, and with it the aid protocols. However, gaming addiction is already being treated in different countries. Gamers are admitted to the Kurihama Medical and Addiction Center in Kanagawa Prefecture, Japan, and at Geneva University Hospitals. In England, the Broadway Lodge Rehabilitation Center has a branch that specializes in working with gamblers; the program, consisting of twelve stages, is designed for both children and adults. In China, where about 13% of World Wide Web users are addicted to online games or the Internet, a summer rehabilitation camp and a militarized camp where addicts are forced to play sports and some of them to take sedatives and antidepressants were opened in 2007 (Aarseth et al., 2017; Hsieh, 2018; Wu, Wong, Yu, Fok, Yeung, Lam & Liu, 2016).

Thus, most countries have already gradually begun to implement prevention, treatment and rehabilitation programs before the new ICD-11 enters into force. After analyzing the experience of various countries, we conducted our own research on this issue and developed a comprehensive psycho-correctional program for people with cyber-addictions.

In the process of analyzing the existing theoretical and methodological approaches and world experience in working with cyber addicts, we decided to focus on a integrated approach, which included the following main areas of work: individual, group, family psychocorrectional and psychoeducational work. The family therapy unit, in which parents participated along with cyber-addicts, focused on establishing child-parent relationships that have a significant impact on the severity of addiction in adolescents. Family therapy included psychoeducation activities for parents, as well as group social and psychological training. Working with cyber-addicts included individual and group psycho-correction sessions.

Individual psychocorrection. It included a short course of individual psycho-correctional counseling, which was aimed at identifying the problem, its acceptance and the creation or adjustment of values and training their proactivity in the real life of cyber-addiction.

Individual psychocorrection was a variant of a short-term “Acceptance and Commitment Therapy” (ACT) with inclusion in the sessions of “Eye movement desensitization and reprocessing” (EMDR) and was conducted in the form of 8 sessions: once a week, including 3 sessions of 60 minutes each, and 5 sessions of 40 minutes each. Individual psycho-correctional work also included individual consultations with parents – 3 sessions of 60 minutes each. The whole cycle consisted of an initial, diagnostic stage – included two sessions: one with parents, and one individual with an addict; the stage of active interaction included 2 sessions with parents and 5 sessions directly with the addict, as well as the stage of consolidating the results and summarizing the work done (2 sessions individually with the addict). The sessions were structured according to the clarity of the tasks, with a dosed emotional and information load, obligatory discussion of the difficulties and achievements of the addicts.

The main targets of psychocorrection were: activation of the addict's own personal resources (cognitive modality); developing skills of managing addictive urges and emotional response by joining positive feelings (modality of feelings); approbation and consolidation of behavior, which contributed to the extinction of addiction; resource elaboration of conflict and stressful situations related to the relations of addicts with the immediate environment (modality of interpersonal relations). The focus is aimed at overcoming the disharmonious intrapersonal mechanisms of the adolescent's response to his cyber-addiction, which did not allow the full use of personal resources in their development and in interpersonal interactions in real life.

Group psychocorrection included two blocks: group social and communicative training for adolescents and their parents; group psycho-correctional sessions with addicts.

Group social and communicative training for adolescents and their parents (GSCT). Communicative training consisted of 6 training sessions, the total duration of one training session was 2 hours. Each lesson contained tasks from each of the four stages of training.

The GSCT addressed behavioral problems that arise in the family in the relationship with cyber-addiction. An important focus of work with the family was the formation of an adaptive behavior strategy in relation to the adolescent: the focus on interrupting symbiotic addiction, manipulative

communication, ignoring the interests of the adolescent. The task of GSCT was to develop motivation to form a strategy of cooperation, which means the joint solution of problems related to the state of the adolescent in the process of growing up.

Group psycho-correction sessions with addicts (GPSA) included 5 sessions lasting 90 minutes each, groups were formed from cyber-addicts during psycho-correction work, they were closed, this was done to build trust between group members, the group consisted of 8-12 people. The work of GPSA was based on the principles of rational emotive behavior therapy (REBT).

The work of each GPSA was divided into three blocks: analysis of thinking and identification of irrational beliefs; confrontation with these beliefs and their revision; mitigation of these beliefs and requirements with the emergence of new, already rational. The moderator of the group used the “ABC-scheme” (A – any events, feelings or thoughts associated with them, memories of past experiences; B – our beliefs, persuasions and rules; C – consequences that include emotions, behavioral and bodily reactions) to analyze the thinking and behavior of group members, where the moderator only determined the direction of movement, helped to see the irrational beliefs of group members, but the main work was done by addicts themselves. The purpose of GPSA was to teach addicts to build interpersonal communication in real life, help to understand their irrational beliefs and affirm the desire to work with them and form new rational beliefs, the formation of such life attitudes that allow you to live in harmony with your “I” and others in the real world with minimal use of cyberspace, gadgets, computers and other electronic devices.

At the final diagnostic stage of the study in all main groups during psychological testing the dynamics of the mental state of addicts was assessed to verify the effectiveness of individual psychocorrectional work and GSCT and GPSA in working with adolescents with cyber-addiction. This study is devoted to the analysis of the effectiveness of the developed integrated psychocorrection program using “Test-questionnaire for the detection of cyber-addiction” (TQC) (Asieieva Y.O., Aymedov C.V.) psychodiagnostic method which allowed to identify the degree of addiction before and after psychocorrection (tab. 1-6).

According to the results of a psychodiagnostic study when considering changes in addiction to

PC, it was found that after complex psychotherapy (table 1) for all groups there is a significant decrease in the degree of addiction, as from 3% to 13% of people stopped showing pathological signs of addiction. The highest rates of reduction of 52.24% of the manifestation of the 3rd degree of addiction were found among young men in the age category from 19 to 21 years and among young men in the age category from 16 to 18 years the level of manifestation of the 3rd addiction degree decreased by 47.22%. Among girls, the highest rates of reduction of the 3rd degree of addiction were found in the age

group from 19 to 21 years – after treatment the rate decreased by 37.68%, and among girls in the age group from 16 to 18 years the rate decreased by 28.95%. Psycho-correctional work significantly affected young people in the age group from 14 to 15 years – 11.86% of addicts stopped showing signs of addiction and the number of people with the 1st degree of addiction in this age category increased by 38.99%, which indicates the effectiveness of therapy and achievement of the goal of reducing the degree of addictive behavior among addicts.

Table 1.
The results of the psycho-correctional work on the subscale “Addiction to PC”

Groups	Before psychocorrection					After psychocorrection				
	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction
Addiction to PC										
Before psychocorrection										
EGB1	0,00	0,00	15,25	44,07	40,68	0,00	11,86	54,24	23,73	10,17
EGG1	0,00	0,00	20,00	41,54	38,46	0,00	7,69	41,54	33,85	16,92
EGB2	0,00	0,00	8,33	33,33	58,33	0,00	5,56	51,39	31,94	11,11
EGG2	0,00	0,00	15,79	47,37	36,84	0,00	7,89	50,00	34,21	7,89
EGB3	0,00	0,00	4,48	23,88	71,64	0,00	2,99	41,79	35,82	19,40
EGG3	0,00	0,00	10,14	46,38	43,48	0,00	13,04	59,42	21,74	5,80

Source: (Own authorship)

When considering the results of psychocorrection on Internet-addiction (Table 2), it can be noted that the degree of addiction is significantly reduced, as there is a category of respondents who do not show pathological signs of addiction, their percentage in groups of respondents in all ages is from 2% to 10%, in contrast to the indicators that were before the start of an integrated psychocorrectional program (complete absence of respondents on the indicators of “no addiction” and “no pathological signs of addiction”). It should also be noted that the indicators for the 3rd degree of Internet addiction are reduced. The highest rates

of decline among boys are in the age categories from 16 to 18 years and from 19 to 21 years, a decrease of 51.39% and 56.71%, respectively, among girls in these age categories as well the 3rd addiction degree was reduced in EGG3 – by 40.58% and in EGG2 – 36.84%. We also consider that the number of addicts with the 1st and 2nd degree of addiction increased due to the reduction of the 3rd degree of addiction as positive changes that were achieved due to the conducted psychocorrection program. It is possible to note that the goal of the psychocorrectional program to reduce the level of addiction to Internet has been achieved.

Table 2.
The results of psycho-correctional work on the subscale "Internet-addiction"

Groups	Internet-addiction					Internet-addiction				
	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction
	Before psychocorrection					After psychocorrection				
EGB1	0,00	0,00	11,86	38,98	49,15	0,00	8,47	47,46	28,81	15,25
EGG1	0,00	0,00	15,38	33,85	50,77	0,00	6,15	40,00	35,38	18,46
EGB2	0,00	0,00	5,56	29,17	65,28	0,00	6,94	45,83	33,33	13,89
EGG2	0,00	0,00	11,84	40,79	47,37	0,00	9,21	44,74	35,53	10,53
EGB3	0,00	0,00	2,99	19,40	77,61	0,00	1,49	40,30	37,31	20,90
EGG3	0,00	0,00	4,35	40,58	55,07	0,00	5,80	52,17	27,54	14,49

Source: (Own authorship)

Further, the results of psychocorrectional work on game addiction were analyzed (Table 3).

Table 3.
The results of psycho-correctional work on the subscale "Game addiction"

Groups	Game addiction					Game addiction				
	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction
	Before psychocorrection					After psychocorrection				
EGB1	0,00	0,00	27,12	32,20	40,68	0,00	8,47	47,46	27,12	16,95
EGG1	0,00	0,00	27,69	36,92	35,38	0,00	9,23	38,46	35,38	16,92
EGB2	0,00	0,00	20,83	27,78	51,39	0,00	9,72	41,67	36,11	12,50
EGG2	0,00	0,00	23,68	34,21	42,11	0,00	6,58	44,74	35,53	13,16
EGB3	0,00	0,00	17,91	20,90	61,19	0,00	5,97	31,34	38,81	23,88
EGG3	0,00	0,00	20,29	26,09	53,62	0,00	10,14	33,33	36,23	20,29

Source: (Own authorship)

When considering the obtained data (Table 3), it is possible to note positive changes among respondents with gaming addiction, as well as for previous types of cyber-addictions, there is a significant decrease in the degree of addiction. It was found that the percentage of addicts with the 3rd degree of addiction decreases, and the number of people with the 1st and 2nd degree of addiction increases, which indicates the effectiveness of the developed program. It should also be noted that among the respondents with gaming addiction there is a category of people who have stopped showing signs of pathological

addiction and in all groups this percentage is from 5% to 10% of respondents.

Analyzing the results of the effectiveness of the psychocorrection program on the degree of manifestation of gadget addictions (Table 4) among respondents it can be noted that in comparison with previous types of cyber addictions, although there is from 2% to 5% of people who no longer show pathological signs of addiction, however, they are less than in Internet addiction, addiction to PC and game addiction where the number of people in some groups is almost 10%.

Table 4.
The results of the psycho-correctional work on the subscale "Gadget-addiction"

Groups	Before psychocorrection					After psychocorrection				
	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction
Gadget-addiction										
EGB1	0,00	0,00	23,73	33,90	42,37	0,00	5,08	37,29	40,68	16,95
EGB2	0,00	0,00	23,61	30,56	45,83	0,00	5,56	36,11	41,67	16,67
EGB3	0,00	0,00	20,90	25,37	53,73	0,00	2,99	29,85	43,28	23,88
EGG1	0,00	0,00	23,08	40,00	36,92	0,00	3,08	32,31	40,00	24,62
EGG2	0,00	0,00	25,00	35,53	39,47	0,00	3,95	32,89	40,79	22,37
EGG3	0,00	0,00	23,19	28,99	47,83	0,00	4,35	31,88	39,13	24,64

Source: (Own authorship)

It should be noted that the 3rd degree of addiction on gadgets (Table 4) is significantly reduced among young people in all age categories (in EGB1 by 25.42%, in EGB2 by 29.16%, in EGB3 by 29.85%), among girls there is also a decrease in the 3rd degree of gadget addiction, but the indicators are not as high as among boys (in EGG1 by 12.30%, in EGG2 by 17.10%, in EGG3 by 23.19%). So it is possible to note that boys were better at psychocorrection in terms of gadget addiction than girls in the age category from 14 to 21 years.

When analyzing the results of psychocorrection of cybercommunicative addiction (Table 5), it is

possible to note the positivity of the results, i.e. there are respondents who no longer show pathological signs of this type of addiction (from 5% to 11% in all groups), significantly reduced 3rd degree addiction (from 30% to 52% in all groups), addiction passes into a safer degree of manifestation (1st and 2nd degree of addiction). Significant results of reduction of the 3rd degree of addiction were noted among girls in the age categories from 16 to 18 years and from 19 to 21 years (in EGG2 by 52.63% and in EGG3 by 52.18%). Among young men in all age categories the 3rd degree of cybercommunicative addiction is reduced by more than 40% (EGB1 by 44.07%, in EGB2 by 43.50%, in EGB3 by 44.78%)

Table 5.
The results of psycho-correctional work on the subscale "Cybercommunicative addiction"

Groups	Before psychocorrection					After psychocorrection				
	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction
Cybercommunicative addiction										
EGB1	0,00	0,00	20,34	25,42	54,24	0,00	10,17	45,76	33,90	10,17
EGB2	0,00	0,00	19,44	23,61	56,94	0,00	5,56	45,83	34,72	13,89
EGB3	0,00	0,00	8,96	26,87	64,18	0,00	7,46	43,28	29,85	19,40
EGG1	0,00	0,00	20,00	26,15	53,85	0,00	6,15	40,00	36,92	16,92
EGG2	0,00	0,00	14,47	21,05	64,47	0,00	9,21	50,00	28,95	11,84
EGG3	0,00	0,00	14,49	23,19	62,32	0,00	11,59	43,48	34,78	10,14

Source: (Own authorship)

The last type of cyber-addiction that was influenced was selfitis (Table 6). This type of addiction was mostly suffered by girls, especially in the age group from 19 to 21 years (EGG3 – 72.46% of respondents), after psychocorrection the 3rd degree of addiction among girls was significantly reduced by 40.58% (EGG3 – 31.88 % of respondents). Significant changes were also found in other groups of girls, so in EGG1 the 3rd degree of addiction was reduced by 32.30%, and in EGG2 by 30.27%. Among young men of all

groups there is also a decrease in the 3rd degree of selfitis: in EGB1 by 23.73%, in EGB2 by 22.22%, in EGB3 by 17.91%. It should be noted that among boys (EGB1 – 10.17% of respondents, EGB2 – 13.89% of respondents, in EGB3 – 17.91% of respondents) more than among girls (EGG1 – 6.15% of respondents, EGG2 – 6.58% respondents, EGG3 – 10.14% of respondents) there are respondents who do not show pathological signs of addiction.

Table 6.
The results of psycho-correctional work on the subscale “Selfitis”

Groups	Before psychocorrection					After psychocorrection				
	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction	no addiction	no pathological signs of addiction	1st degree of addiction	2nd degree of addiction	3rd degree of addiction
Selfitis										
EGB1	0,00	0,00	23,73	30,51	45,76	0,00	10,17	30,51	37,29	22,03
EGG1	0,00	0,00	18,46	24,62	56,92	0,00	6,15	30,77	38,46	24,62
EGB2	0,00	0,00	27,78	33,33	38,89	0,00	13,89	29,17	40,28	16,67
EGG2	0,00	0,00	15,79	21,05	63,16	0,00	6,58	25,00	35,53	32,89
EGB3	0,00	0,00	28,36	32,84	38,81	0,00	17,91	26,87	34,33	20,90
EGG3	0,00	0,00	11,59	15,94	72,46	0,00	10,14	23,19	34,78	31,88

Source: (Own authorship)

Thus, it is possible to note that the main goal of an integrated program of psychocorrection of cyber-addictions was achieved, as the level of dangerous addictions on all subscales of the test was significantly reduced, although no complete type of cyber-addiction was achieved, but no signs of pathological addiction for all types of addictions almost up to 13%.

Conclusions

After analyzing the theoretical and experimental achievements of modernity, we came to the conclusion that the problem of the prevalence of cyber-addictions among the younger generation of Ukrainians is becoming relevant. To date, it is not recognized as a type of non-chemical addiction in ICD-10, but the new classifier includes proposals for including gaming, Internet addiction and addiction to PC. Even before the entry of the ICD-11, prevention, treatment, psychocorrection programs are already being developed in some countries, and measures to control the use of cyberspace are being

implemented at the state level, as the number of addicted young people is growing every year.

Having considered the world experience in working with cyber-addicts, we have developed a comprehensive psycho-correctional program that includes the following areas of work: individual, group, family psycho-correctional and psycho-educational work. At the end of the work with addicts, the results were compared in terms of the severity of the degree of addiction before and after psychocorrection. It was determined that the developed program had positive results because the 3rd degree of addiction was reduced in all groups and types of cyber-addictions, and after psychocorrection there are people who have stopped showing pathological signs of addiction (in groups it is from 2% to 17%). It should be noted that significant results in reducing the degree of addiction were achieved in selfitis, cybercommunicative and gaming addiction. The highest rates of reduction of all types of cyber-addictions were found among young people in the age category from 19 to 21 years, especially

significant results were achieved in reducing the level of addiction to PC, Internet and gaming addiction. The girls also underwent psycho-correctional work, especially to reduce their addiction on selfies and cybercommunicative addiction.

In addition to psychocorrection programs with cyber-addicts, the issue of psycho-prevention and global state prevention and informational and educational work on the prevalence of cyber-addictions among the younger generation remains unresolved. In our opinion, preventive measures to prevent the spread of cyber-addictions among the younger generation of Ukrainians should be addressed at the state level with the experience of other countries, recommendations of the WHO and other international organizations.

Bibliographic references

- Aarseth, E., Bean, A.M., Boonen, H., Colder Carras, M., Coulson, M., Das, D., Deleuze, J., Dunkels, E., Edman, J., Ferguson, C.J., Haagsma, M.C., Helmersson Bergmark, K., Hussain, Z., Jansz, J., Kardefelt-Winther, D., Kutner, L., Markey, P., Nielsen, R.K.L., Prause, N., Przybylski, A., Quandt, T., Schimmenti, A., Starcevic, V., Stutman, G., Van Looy, J., & Van Rooij, A.J. (2017) Scholars' open debate paper on the World Health Organization ICD-11 Gaming Disorder proposal. *Journal of Behavioral Addictions: Journal*, 6(3), 267-270. DOI: 10.1556/2006.5.2016.088 (in English).
- Aymedov, K.V., Asieieva, Yu.A., Tolmachev, A.A., & Tabachnik, S.I. (2020), Psychological characteristics of persons prone to cybercommunicative addiction on the example of the INSTAGRAM social network. *Psychiatry, psychotherapy and clinical psychology*, 11(4), p. 731-738. <https://doi.org/10.34883/PI.2020.11.4.006> (in Russian)
- Asieieva, Yu., Druz, O., Kozhyna, H., & Chernenko, I. (2021) Cyber-addiction psychoprophylaxis program for young generation of Ukraine. *Amazonia Investiga*, 10(40), pp. 17–28. <https://doi.org/10.34069/AI/2021.40.04.2> (in English).
- Bartkiv, O., & Makhnovets, V. (2018) Study of students' propensity to Internet addiction. *Youth and the market*, 2(121), p. 141-146 http://nbuv.gov.ua/UJRN/Mir_2015_2_31 (in Ukraine)
- Block, J.J. (2008) Issues for DSM-V: Internet-addiction. *Am. J. Psychiatry*, 165(3), pp. 306-307. <https://doi.org/10.1176/appi.ajp.2007.07101556>. (in English).
- Griffiths, M.D., Kuss, D.J., & Billieux, J. (2016) The evolution of Internet addiction: A global perspective. *Addictive Behaviors*, 53, 193-195 (in English)
- Hsieh, Y. (2018) Internet-addiction: A Closer Look at Multidimensional Parenting Practices and Child Mental Health, *Cyberpsychology, Behavior, and Social Networking*, 21(12), pp. 68-73. <https://doi.org/10.1089/cyber.2018.0435> (in English)
- Ilnytska, L.A. (2012) Ways to provide psychological support to people addicted to the Internet in adolescence. *Science and education: scientific-practical. magazine. south Science. center of the National Academy of Pedagogical Sciences of Ukraine*, 11, 57–61. https://scienceandeducation.pdpu.edu.ua/doc/2011/11_2011/16.pdf (in Ukraine)
- Kemp Digital (2020) Global Overview Report, for The Next Web. [Online]. Available: <https://datareportal.com/reports/digital-2020-global-digital-overview>
- Markova, M.V. (2013) Addictive status of student youth of Kyiv: psychosocial, clinical and structural analysis. *Medical psychology*, 8(3), 34–41. http://www.mps.kh.ua/authors/105/markova_m_v (in Ukraine)
- Moskalenko, V.V. (2013) Socialization of personality: monograph. K.: Phoenix, 540 p. <https://bit.ly/3eS54a7> (in Ukraine)
- Mozgova, T. P., Skrypnykov, A. M., Vyun, V. V., Asieieva, Yu. O., Leshchyna, I. V., Kozhyn, M. I., & Khaustov, M. M. (2021) Syndromal comorbidity in patients with non-chemical addiction. *World of Medicine and Biology*, 2(76), pp. 98–103. <http://repo.knmu.edu.ua/handle/123456789/29316> (in English).
- Naidyonova, L.A. (2014) Cyberbullying or aggression on the Internet: methods of recognition and protection of the child. *Guidelines*. K., 80 p. <http://mediaosvita.org.ua/wp-content/uploads/2017/11/KIBERBULLING-ABO-AGRESIYA-V-INTERNETI-SPOSOBY-ROZPIZNANNYA-I-ZAHYST-DYTYNY-.pdf> (in Ukraine)
- Otte, S., Streb, J., & Franke, I. (2019) Self-aggression, reactive aggression, and spontaneous aggression: Mediating effects of self-esteem and psychopathology.



- Aggressive Behavior, 45, p. 31-34 (in English)
- Rzhevsky, G.M. (2018) Analysis of personal characteristics and causes of Internet addiction in students of higher educational institutions. *World Science*, 5(1(29)), p. 50-60, 2018 URL: <https://www.elibrary.ru/item.asp?id=32314974> (in Ukraine)
- Rumpf, H.J., Achab, S., & Billieux, J. (2018). Including gaming disorder in the ICD-11: The need to do so from a clinical and public health perspective. *J. Behav Addict*, 7(3), 556-561. <https://doi.org/10.1556/2006.7.2018.59> (in English)
- World Health Organization (2017) Depression and Other Common Mental Disorders Global Health Estimates [Online]. Available: <https://apps.who.int/iris/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf> (in English)
- Wu, C. S. T., Wong, H. T., Yu, K. F., Fok, K. W., Yeung, S. M., Lam, C. H., & Liu, K. M. (2016) Parenting approaches, family functionality, and internet addiction among Hong Kong adolescents. *BMC Pediatr*, 16(1), 1-10. <https://doi.org/10.1186/s12887-016-0666-y> (in English)
- Young, K.S. (1996) Psychology of computer use: addictive use of the internet: a case that breaks the stereotype. *Psychological reports*, 79, p. 899-902. <https://doi.org/10.2466/pr0.1996.79.3.899> (in English)

DOI: <https://doi.org/10.34069/AI/2022.56.08.5>

How to Cite:

Senyk, S., Churpita, H., Borovska, I., Kucher, T., & Petrovskiy, A. (2022). The problems of defining the legal nature of the court judgement. *Amazonia Investiga*, 11(56), 48-55. <https://doi.org/10.34069/AI/2022.56.08.5>

The problems of defining the legal nature of the court judgement

Проблеми визначення правової природи судової ухвали

Received: September 13, 2022

Accepted: October 13, 2022

Written by:

Senyk Svitlana¹⁵<https://orcid.org/0000-0003-3492-5282>**Churpita Hanna**¹⁶<https://orcid.org/0000-0003-3915-347X>**Borovska Iryna**¹⁷<https://orcid.org/0000-0002-4961-9707>**Kucher Tetiana**¹⁸<https://orcid.org/0000-0002-0750-7782>**Petrovskiy Andrii**¹⁹<https://orcid.org/0000-0001-8607-282X>

Abstract

Description: The purpose of the article is to consider the procedural legislation on the functioning of court decisions as one of the types of court decisions. The subject of the study is court rulings in the Civil Procedure of Ukraine. The scientific study of judgments in civil proceedings was conducted on the basis of the complex use of general scientific and special methods of scientific knowledge, namely: dialectical, formal and dogmatic, system analysis, system and structural, hermeneutic, legal and comparative, legal and modeling, method of theoretical generalization. Results of the research. The formation and development of the doctrine of court decisions is analyzed. The notion of a court decision, a court decision is defined, and also the provisions of normative legal acts on this issue are considered. The features inherent in a court decision and a court decision in particular, as well as the rules for issuing court decisions are considered. Practical meaning. The clear system of requirements for a court decision as a procedural document and law enforcement act is established. Value / originality. Emphasis is placed on the need for

Анотація

Опис: Метою статті є розгляд процесуального законодавства щодо функціонування судових ухвал як одного із видів судового рішення. Предметом дослідження є судові ухвали в Цивільному процесі України. Наукове дослідження судових рішень у цивільному процесі проводилось на основі комплексного використання загальнонаукових та спеціальних методів наукового пізнання, а саме: діалектичного, формально-догматичного, системного аналізу, системно-структурного, герменевтичного, порівняльно-правового, правового моделювання, теоретичного узагальнення. Результати дослідження. Проаналізовано становлення та розвиток вчення про судові рішення. Визначено поняття судового рішення, судової ухвали, а також розглянуто положення нормативно-правових актів з даного питання. Розглянуто ознаки, які притаманні судовому рішенню та судовій ухвалі зокрема, а також правила оформлення судових ухвал. Практичне значення. Встановлено чітку систему вимог, які висуваються до ухвали суду як процесуального документу та правозастосовного акту.

¹⁵ PhD in Law, Associate Professor of Civil Law and Legal Proceedings Department Ivan Franko National University of Lviv, Ukraine.

¹⁶ Doctor of Law, Professor, Professor of the Department of Civil Law Disciplines of the National Academy of Internal Affairs, Ukraine.

¹⁷ PhD in Law, Associate Professor, Associate Professor of the Department of the Department Civil Law Disciplines of the National Academy of Internal Affairs, Ukraine.

¹⁸ Doctor of Law, Associate Professor of the Department of Theoretical and Private Law Disciplines of the Private Institution of Higher Education "Kyiv International University", Ukraine.

¹⁹ PhD in Law, Associate Professor, Associate Professor of the Department of Civil Law Disciplines of the National Academy of Internal Affairs, Ukraine.



further research to reveal the essence of the court decision as one of the elements of the mechanism for regulating legal relations.

Key words: civil proceedings, court decision, judicial act, rule of law, judicial practice, legality, establishment of circumstances.

Introduction

An individual, his (her) rights and liberties are the pinnacle of all virtues in the legal sector. Consequently, the State is responsible for ensuring and approving them. Proper implementation of the State's obligations is due to the effective operation of the entire law enforcement system. Justice plays a special role in ensuring the interests of the people.

The purpose of the court is to ensure the right to due process, which is guaranteed by the Main Law and the relevant legal instruments of Ukraine (Law of Ukraine No. 1402-VIII, 2016). The trial ends with a court decision, which has a procedural form enshrined by law. The authority of each legal decision affects the public consciousness, implements an educational function, and helps to solve the problem of legal nihilism. Therefore, the court decision, regulating certain legal relations between the interested parties, is designed to guarantee the defense of violated rights and freedoms, safeguarded by the law.

In particular, by issuing a decision, the court establishes liability for failure of the parties to the proceedings to perform their duties, adjusts their powers and obligations, ensures access to justice, the rule of law, etc. Thus, a comprehensive description of the legal nature of a judgment will allow us to investigate certain features inherent in it, given: the absence of the concept of "court decision" in national legislation; different approaches to the essence of legal relations that arise at the stage of its execution; study of the judgment in terms of its proper implementation; legal consequences after its enforcement; the need to improve the current civil procedural legislation, etc.

On the grounds of the research conducted, the Authors propose their own definition of judgment, what will contribute to increasing its theoretical and practical value as an element of the mechanism of legal regulation of civil legal relations.

Цінність/оригінальність. Акцентовано увагу на необхідності проведення подальшого дослідження для розкриття сутності ухвали суду як одного із елементів механізму регулювання правових відносин.

Ключові слова: цивільне судочинство, рішення суду, судовий акт, норма права, судова практика, законність, встановлення обставин.

Methodology

The scientific study of court decisions in civil proceedings was conducted on the basis of the complex use of general scientific and special methods of scientific knowledge in their mutual connection and complementation of each other.

The application of the dialectical method made it possible to establish the relationship between the form and content of the judgment, the combination of the characteristics of its essence and manifestation as a law enforcement act and a procedural document.

The formal and dogmatic method was used in the analysis of the rules of the current civil procedure legislation of Ukraine and the practice of its application.

System analysis method made it possible to consider the place of a judgment as a separate element in the system of civil procedure relations and an independent system of interconnected structural elements.

System and structural method was helpful in the study of the form and content of the judgment and the allocation of its structural elements.

The interpretation of the texts of legal instruments and materials of court practice was carried out using the hermeneutic method.

Legal and comparative method enabled to equate various types of court decisions (rulings) within the current legislation in accordance with the European standards.

Legal and modeling method enables to draft the authors' determination of the term "judgment".

The method of theoretical generalization made it possible to substantiate the findings, which represent the results of the research.

Literature Review

Formation and development of court decisions in civil proceedings has been the subject matter of the research by many foreign and domestic scholars.

Thus, Andronov indicates in his work “Judgment in the civil proceedings of Ukraine” (2018) that judgment is a procedural document that resolves procedural issues related to the progress of the case in court. The author considers such a concept traditional. The dissertation analyzes the development and formation of judgments, the features that distinguish them from court decisions.

Mayka (2019), having investigated the issue of execution of judgments in civil proceedings notes that by issuing a judgment the court responds to violations of legal norms by the party, provides access of any person to justice and has the right to influence the enforcement of the enacted judgment. The classification of judgments in civil proceedings is given and the proposal to supplement the Civil Procedure Code with the article entitled “Execution of court rulings” is made.

Pidchenko examines in his dissertation “Court decisions in cases of special proceedings” (2019) judgments that can be adopted in cases of incidental proceedings. The author believes that judgments are court decisions that address issues related to the initiation of civil proceedings. The paper describes the types of judgments that can be issued in cases of incidental proceedings. In particular, attention is paid to special cases of issuing a separate judgment in incidental proceeding.

Sivakumar (2016) drew the line between the judgment and judicial opinion and stated that a court decision should be clear, explicit, articulate and understandable even to the average person.

Qureshi (2020) distinguished between court judgement, decree and order, examined their features and peculiarities of the presentation.

The article also uses the corresponded judgments of the European Court of Human Rights, legal instruments regulating the issue under consideration as well as court practice.

Results and Discussion

Court decision as the most important act of justice

As it has been already mentioned, justice, which, in accordance with Article 124 of the Constitution of Ukraine (Law of Ukraine No. 254k/96-VR, 1996), is administered exclusively by courts, is among the main means of effective promotion and protection of human rights.

The court should ensure fair trial in order to establish the violation of the disputed laws and freedoms of an individual, legal entity and the interests of the State in compliance with the provision of substantive and procedural law. The outcome of such an argument is court decision made in conformity with the demands of the applicable law (Andronov, 2012, p. 287).

According to the decision of the Plenum of the Supreme Court of Ukraine No. 14 (2009), court decision is the most important act of justice, which aims to protect human rights and freedoms in accordance with the rule of law. In this regard, courts should strictly adhere to the requirements of legality and legitimacy when making a court decision (Law of Ukraine No. 1618-IV, 2004). Thus, court decision, which concludes the case, testifies to its value not only for the participants in the process, but also for society as a whole.

Andronov indicates that at the beginning of the 20th century, the attention of researchers was paid to the lower court’s decision (Andronov, 2018, p. 228). It was believed that the role of a court decision is a response to an appeal to the court, to a lawsuit. And the decision of the court proclaimed the right of the parties. Accordingly, the detailed examination of the form of action for the protection of rights began, which was reflected in numerous scientific works. It is believed that this approach is the result of the classification of court decisions that exists nowadays.

Types of court decisions

Currently, there are the following types of judgments in line with Article 258 of the Civil Procedure Code of Ukraine (Law of Ukraine No. 1618-IV, 2004) (hereinafter – the CPC of Ukraine): 1) judgments; 2) decisions; 3) resolutions; 4) court orders. Each of these procedural acts can be considered a decision, as it expresses the mental activity of the court and the result of resolving disputes. But with regard

to the decision of the courts on different procedural issues, there should be a difference in procedural forms, i.e. the procedural document adopted by the court – the decision, judgment, resolution or court order – by its very nature must also correspond to the legal content.

We propose to consider in more detail this type of court decision as a court decision.

According to the Legal Dictionary-manual (2021), judgment in civil proceedings is a document, to which individual questions put to the court are addressed. In other sources, the following definition can be found: it is an oral or written court decision that resolves issues related to the proceedings (OnlineCorrector, 2021). Zahainova (2007, p. 313) states that judgment is a judicial act issued in the manner prescribed by law and in the appropriate procedural form, which resolves issues related to the administration of justice in civil proceedings". Frolova (2014, p. 76) notes that "it is not only the results of interim issues of civil proceedings that are processed through judgments, but also the completion of the process without resolving the case on the merits".

The concept of judgment

Unfortunately, the domestic civil procedural legislation does not enshrine the concept of "judgment" or "court judgment", just sets requirements for its resolution. Among them: the content of the judgment (Article 260 of the CPC), the procedure for entry into force of the judgment (Article 261 of the CPC), the procedure for issuing a separate judgment (Article 262 of the CPC), etc.

Most scholars consider judgment to be a procedural document that addresses the problems of the progress of a case. However, in some cases, judgment can be issued by a court before and after the trial, so this approach has lost its relevance.

Zeider (1959) indicates that judgments and decisions are the types of court rulings, but they are different in their procedural nature, as judgments address certain issues that arise in the case.

Abdullina (1964) notes that judgments are the acts of justice that are issued in conformity with the law and resolve a number of issues that arise in the process, but do not resolve the case on the merits. That is, one can see that the views of scientists in this regard are similar. But is such a

definition relevant nowadays? To answer this question, it is necessary to consider the properties of court judgments and the requirements imposed on them.

Requirements that are put forward to a court judgment

Let's start with the requirements that are inherent in both court judgments in particular and court decisions in general, namely: legality; validity; completeness; clarity; precision; motivation; compliance with the procedural form in conformity with the law. The listed requirements are also supplemented by comprehensiveness, fairness, clarity, etc. But there are two main ones among them – validity and legality.

According to Art. 263 of the Civil Procedure Code of Ukraine (Law of Ukraine No. 1618-IV, 2004), a decision made by a court pursuant to the rules of substantive law under the norms of procedural law is legal one. Reasonable is the decision made on the grounds of completely and thoroughly investigated facts, to which the litigants appeal as the cause of action, supported by the evidence that was studied at the trial. At the same time, such term as the «motivation» of a judgment arises in the civil procedural legal field. Opinion № 11 on the quality of judicial decisions (Council of Europe, 2008) states that clear reasons and justifications are the key demands for judgments and a core element of the right to a just process. The Code of Civil Procedure does not provide for such a requirement, but the Code of Criminal Procedure does. According to Art. 370 of the Criminal Procedure Code of Ukraine (Law of Ukraine No. 4651-VI, 2012), the motivated decision shall contain an appropriate and sufficient reasons and grounds for its adoption.

According to the case law of the European Court of Human Rights, the criteria for the motivation of a court decision are: the decision is a statement that the parties have been heard by the trial; verdict is the result of the judge's examination of the evidence, which was carried out impartially and reasonably; the decision describes the reasonable actions by the court; the decision clearly indicates the reasons for the trial, which gives grounds to properly analyze its position, etc. (Morozov, 2019).

Moreover, adequate reasoning requires that judges have sufficient time to prepare decisions. Thus, the court decision must contain answers to the arguments of the parties; examination of the circumstances of the case and issues of law; if

necessary, interpretation of the law, etc. In this regard, the judgment of the European Court of Human Rights in the case of *Hadjiyannakou v. Greece* (2019) states that “the court must clearly indicate the grounds, on which its decision is based” (Judgment of the ECHR, 2019). That is, we can state that the concepts of “motivation” and “reasonableness” are identical in civil proceedings, so there is no need to apply them in combination.

Similar legal view is enshrined in the judgment by the ECHR in the proceedings “*Seryavin and others v. Ukraine*” (2011). Thus, the Court stated that “judgments and other dispute settlement agencies should properly justify the reasons, upon which they are based. The extent, to which the court should fulfill the duty to justify the decision may vary depending on the nature of the decision [...] Another purpose of a substantiated judgment is to show the litigators that they have been heard. In addition, a well-founded decision allows a party to challenge it and to have it reviewed by a higher authority. Only with a reasoned decision can public control over administration of justice be ensured.

Besides, clarity is one of the important components of court decisions; it means that court decision must be made clear and understandable, contain logically structured decisions, and therefore be clear to the parties and the public. All of the above applies to judgments as a type of court decisions.

An interesting criterion for a good judgment is an accessible style. The in Consultative Council of European Judges in its Opinion № 11 (Council of Europe, 2008) emphasizes that “decisions must be clear [...], but each judge is allowed to select his (her) own fashion or use standards-based patterns”. That is, the decision should be clear and simple, but with an individual approach. Each judge can determine his own style, which will help him to better present the material, which will be clear to the parties. Consequently, the European Court of Human Rights is the flagship in new approaches to judgment writing, in each decision of which there is a balanced emotional pattern, selection of logically consistent headings, numbering of each paragraph, etc.

Content of a judgment

Civil procedural legislation clearly defines the content of judgments, which are executed in the form of a procedural document. Accordingly, judgment consists of: 1) the introductory part indicating the date and place of its resolution;

name of the courthouse, surname and initials of the judge; names (titles) of the litigants; 2) descriptive part indicating the essence of the petition and the name (title) of the person who filed it, or another issue to be resolved by the resolution; 3) motivating part, indicating the grounds, on which the judge reached the findings, and the law that he (she) applied when issuing the decision; 4) operative part, indicating the conclusions of the court, the time limit and the procedure for making the judgment enforceable and for appealing against it (Art. 260 of the Civil Procedure Code of Ukraine). However, the content of the judgment is not always the same, it depends on the procedural order of its decision. For example, the name and initials of the court clerk may be missing from the introductory part, or only participants identified in the statement of claim are specified. That is, it all depends on the case.

ECtHR practice, documents of international organizations – the Committee of Ministers of the Council of Europe, the OSCE, the Advisory Council of European Judges; principles and standards of the Council of Europe, OSCE, EU, the provisions of the Convention for the Protection of Human Rights and Fundamental Freedoms should be considered when making judicial decisions in national proceedings. It follows that the court decision must meet the requirements of international standards, by which the Ukrainian parliament has agreed to be bound.

Separate judgment

The CPC of Ukraine (Law of Ukraine No. 1618-IV, 2004) also enshrines the content of separate judgment. Thus, the court may issue a separate decision in the following cases: 1) finding violations of the law in the resolution of the dispute or deficiencies in the activities of legal entities, government agencies or other bodies; 2) in cases of abuse of procedural rights, violation of procedural duties, improper performance of professional duties; 3) in relation to a state executor, a private executor, if the court concludes that there are signs of a criminal offense in the actions of such persons; 4) in the case of false testimony by witness, expert or translator, false expert opinion or incorrect translation, falsification of evidence (Article 262 of Civil Procedural Code of Ukraine).

Let’s consider some examples. Thus, on September 08, 2020, the Shyshaky District Court of Poltava Region (2020) in the case № 551/506/20 in relation to the discovery of false

testimony provided by witness PERSON_1 by a court, issued a separate judgment on immediate sending copies of case materials to Shyshaky police department to make a decision on the merits.

Donetsk Court of Appeal in Civil Cases (2019) issued a separate judgment in the case 237/3829/19 for fail to meet the requirements of procedural law on just, unbiased and prompt handling and addressing civil cases by the presiding judge. That is, we can state that a separate judgment in civil proceedings in these cases is a court decision, by which the court responds to the violations of the law found in civil proceedings by any party, as well as establishing the causes and conditions of such violations. The main thing is that such separate judgments meet the demands laid down by law.

The separate judgment of Ivano-Frankivsk Court of Appeal (2021) in the case No. 344/5006/16-ts, decided to notify Ivano-Frankivsk City Council of violations discovered during the consideration of a civil case in order to eliminate them, what must be reported to the Court of Appeal within three months of receipt of a separate judgment.

Kropyvnytskyi Court of Appeal (2012) in its separate judgment in case No. 398/3650/17, decided to send a copy of the specified separate judgment to JSC "Ukrposhta" in order to take measures to prevent a repetition of the shortcomings in the work of postal branches identified by the Court of Appeals in the future.

The CPC of Ukraine (Law of Ukraine No. 1618-IV, 2004) stipulates that the judgment comes into force immediately after its promulgation. Decisions rendered by a court outside the court or in court, in case of absence of all participants in the case, examination of the case without notice (summons) of participants in the case, come into force after signing by the judge (judges) (Article 261 of the CPC of Ukraine).

Basing on the ideas of the scientists on this issue, we can observe that there are controversial issues related to various ways to comprehension of the essence of the law itself. Enforceability is inherent only in a court decision, and not in individual judgments, as that is the decision that resolves the dispute.

We do not agree with this opinion, since judgment is the type of court decision, so why can't it come into force? Hurvich (1955) is of the same opinion; he emphasized that court decisions

are endowed with legal force, as courts resolve a number of issues that are necessary for justice.

However, the judgment of the European Court of Human Rights in the case of *Sovtransavto Holding v. Ukraine* (2002) states that "one of the main elements of the primacy of law is the principle of legal safety, which provides that court decision in any dispute, which has entered into force, cannot be questioned. That is, the legality of the court decision lies in the strict observance of the applicable rules of law provided for in this decision, its content and purpose, and cannot be questioned.

Conclusion

Summing up, we can conclude that judgment is a type of court decision. The requirements for judgments are: legality, reasonableness, motivation, accuracy, compliance with a certain procedural form, accessible style. Judgment is an independent document, which consists of introductory, descriptive, narrative and operative parts. International standards must be taken into account when adjudication. Judgment comes into force immediately after its promulgation and may be appealed within the period specified by law.

The understanding of the judgment by the participants of legal relations as a legal act will contribute to increasing its theoretical and practical value as an element of the mechanism of legal regulation of civil legal relations. This will also ensure the fastest and most effective enforcement of the litigant's rights. To achieve this, it is necessary to understand what is court decision is and which are its features.

Based on the analyzed material, we propose our own definition of the judgment: judgment in civil proceedings is a lawful and reasonable court decision, which considers a civil case on the merits and resolves a dispute to defend rights, freedoms and legitimate interests of the person. At the same time, judgment is not only a legal way to protect them, but also a legal means for the court to fulfill its main social purpose – the administration of justice.

Bibliographic references

Abdullina, Z. (1964). Ruling of the court of first instance in the Soviet civil proceedings. (PhD Dissertation). Lomonosov Moscow State University, Moscow, Russian Federation.

- Andronov, I. (2012). Court decisions in the Civil Procedure of Ukraine: problems of terminology. *Current issues of State and Law*, 66, pp. 287 – 293.
- Andronov, I. (2018). Court decisions in the Civil Procedure of Ukraine. (PhD Dissertation). National University “Odesa Law Academy”. Odesa, Ukraine. Retrieved September 22, 2022 from <https://bit.ly/3Tw5m5L>
- Case No. 22-ts/804/2567/19 (2019). Separate Judgment of Donetsk Court of Appeal in Civil Cases. Unified state register of court decisions. Kyiv, Ukraine. September 18, 2019. Retrieved from <https://reyestr.court.gov.ua/Review/84374719>
- Case No. 551/506/20 (2020). Separate Judgment by Shyshaky District Court of Poltava Region. Unified state register of court decisions. Kyiv, Ukraine. September 08, 2020. Retrieved from <https://reyestr.court.gov.ua/Review/91386474>
- Case No. 344/5006/16-ts (2021). Separate Judgment of Ivano-Frankivsk Court of Appeal. Unified state register of court decisions. Kyiv, Ukraine. September 22, 2022. Retrieved from <https://reyestr.court.gov.ua/Review/102218808>
- Case No. 398/3650/17 (2021). Separate Judgment of Kropyvnytskyi Court of Appeal. Unified state register of court decisions. Kyiv, Ukraine. September 22, 2022. Retrieved from <https://reyestr.court.gov.ua/Review/102499582>
- Case “Sovtransavto Holding v. Ukraine” (Application No. 48553/99) Decision of the European Court of Human Rights on the (July 25, 2002). Retrieved from <https://hudoc.echr.coe.int/fre#%7B%22itemid%22%3A%22002-5236%22%7D>
- Case “Seryavin and others v. Ukraine” (Application no. 4909/04) Decision of the European Court of Human Rights on the February 10, 2011 Retrieved from <https://jurinfo.jep.gov.co/normograma/complacion/docs/pdf/CASE%20OF%20SERVIA%20AND%20OTHERS%20v.%20UKRAINE.PDF>
- Case “Chatzigiannakou v. Greece” Application No. 58774/12. Decision of the European Court of Human Rights (July 18, 2019). Retrieved from <https://bit.ly/3N3Hm7I>
- Council of Europe (2008). Opinion No.11 (2008) of the Consultative Council of European Judges (CCJE) to the attention of the Committee of Ministers of the Council of Europe on the quality of judicial decisions. Retrieved September 22, 2022 from http://www.euromed-justice.eu/en/system/files/20100716094018_10.CCJE_OPn11.pdf
- Frolova, O. (2014). The place of court decisions in the system of judicial acts. *Scientific Bulletin of Kherson State University. Series "Legal Sciences"*, 1(3), pp. 76 – 80.
- Hurvich, M. (1955). Court decision in legal proceedings. Moscow: VYUZI.
- Law of Ukraine No. 1618-IV (2004). Civil Procedure Code of Ukraine. Official Web site of the Verkhovna Rada of Ukraine, March 18, 2004. Available online. In: <https://zakon.rada.gov.ua/laws/show/1618-15/conv#n7950>
- Law of Ukraine No. 4651-VI (2012). Criminal Procedure Code of Ukraine. Official Web site of the Verkhovna Rada of Ukraine, April 13, 2012. Available online. In: <https://zakon.rada.gov.ua/laws/show/4651-17#Text>
- Law of Ukraine No. 1402-VIII (2016). On the Judicial System and Status of Judges. Official Web site of the Verkhovna Rada of Ukraine, June 02, 2016. Available online. In: <https://zakon.rada.gov.ua/laws/show/1402-19#Text>
- Law of Ukraine No. 254k/96-VR (1996). Constitution of Ukraine. Official Web site of the Verkhovna Rada of Ukraine, June 28, 1996. Available online. In: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text>
- Legal Dictionary-manual (2021). Judgment. Retrieved September 22, 2022 from <https://subject.com.ua/pravo/dict/1175.html>
- Mayka, M. B. (2019). Execution of court orders in civil process. (PhD Dissertation Abstract). Ivan Franko National University of Lviv. Lviv, Ukraine. https://law.lnu.edu.ua/wp-content/uploads/2019/06/Avtoref_Majka_web.pdf
- Morozov, Ye. (2019). Criteria for reasoning of a judgement. Lawyer Morozov Evgeny Alexandrovich. Retrieved September 22, 2022 from <https://alibi.dp.ua/1208-kriterij-motivovanosti-sudovogo-rishennya>
- OnlineCorrector (2021). Judgment, ruling, sentence, determination and definition. Retrieved September 22, 2022 from <https://bit.ly/3Dq5qyc>
- Pidchenko, Y. O. (2019). Court decisions in cases of special proceedings. (PhD Dissertation). National Academy of Internal Affairs, Kyiv, Ukraine. http://elar.naiu.kiev.ua/bitstream/123456789/14693/1/dysertatsia_pidchenko.pdf

- Plenum of the Supreme Court of Ukraine No. 14. "On court decisions in civil cases". Verkhovna Rada of Ukraine of December 18, 2009. Retrieved from <https://zakon.rada.gov.ua/laws/show/v0014700-09#Text>
- Qureshi, L. (2020). Differentiate between Judgement, Decree and Order. Academia. Retrieved June 02, 2021 from: https://webcache.googleusercontent.com/search?q=cache:NaV-tNSUswYJ:https://www.academia.edu/41864972/Differentiate_between_Judgement_De
- cree_and_Order&cd=39&hl=ru&ct=clnk&gl=ua
- Sivakumar, S. (2016). Judgment or judicial opinion: how to read and analyse. *Journal of the Indian Law Institute*, 58(3), 273–312. <http://www.jstor.org/stable/45163393>
- Zahainova, S. (2007). *Judicial acts in the machinery for the exercise of judicial power in civil and arbitration proceedings*. Russia Federation: Wolters Kluwer Russia.
- Zeider, N. (1959). *Court session and judgment in the Soviet civil procedure: Textbook*. Saratov.

DOI: <https://doi.org/10.34069/AI/2022.56.08.6>

How to Cite:

Kosiachenko, K., Pochtovyi, M., Kyrychenko, H., Spilnyk, S., & Mozol, V. (2022). Activity of NGOs as a constituent element of policy in the field of combating crime. *Amazonia Investiga*, 11(56), 56-65. <https://doi.org/10.34069/AI/2022.56.08.6>

Activity of NGOs as a constituent element of policy in the field of combating crime

Діяльність неурядових організацій як складовий елемент політики у сфері боротьби зі злочинністю

Received: September 10, 2022

Accepted: October 5, 2022

Written by:

Kosiachenko Kseniia²⁰<https://orcid.org/0000-0002-1380-218X>**Pochtovyi Maksym**²¹<https://orcid.org/0000-0003-0633-205X>**Kyrychenko Hanna**²²<https://orcid.org/0000-0001-8742-1091>**Spilnyk Serhiy**²³<https://orcid.org/0000-0002-8532-798X>**Mozol Viktoriia**²⁴<https://orcid.org/0000-0003-0835-1019>

Abstract

The purpose of the article is to study the activities of non-governmental organizations as a constituent element of the policy in the area of combating crime. The methodology for the article consists of a system of the following methods: hermeneutics, scientific analysis, deduction and induction, systematic, categorical and etymological analysis, logical and semantic, formal and logical. Research results. The authors are convinced that criminological policy as a subsystem of policy in the area of fighting crime directly depends on the effectiveness and stability of the mechanism of implementation of criminological activities of non-governmental organizations. At the same time, according to the authors, it is necessary to clearly distinguish between "public policy" and "State policy" precisely at the expense of subject composition. Taking into account this criterion, public policy is broader than State policy. Practical implementation. It has been proven that when talking about the criminological activity of non-governmental organizations, it is appropriate to

Анотація

Метою статті є дослідження діяльності неурядових організацій як складового елемента політики у сфері боротьби зі злочинністю. Методологію статті складає система наступних методів: герменевтики, наукового аналізу, дедукції та індукції, системного, категоріально-етимологічного аналізу, логіко-семантичного, формально-логічного. Результати дослідження. Автори переконують, що від дієвості та налагодженості механізму реалізації кримінологічної діяльності неурядових організацій безпосередньо залежить кримінологічна політика як підсистема політики у сфері боротьби зі злочинністю. Разом із тим, на думку авторів, необхідно чітко розмежовувати «публічну політику» від «державної політики» саме за рахунок суб'єктного складу. Зокрема, публічна політика характеризується участю у політичній діяльності громадянського суспільства. В той час коли державна політика здійснюється тільки суб'єктами державної форми власності.

²⁰ Candidate of Law Sciences, Associate Professor of the Department of Civil Law Disciplines of the Educational and Scientific Institute of Law and Innovative Education of Dnipropetrovsk State University of Internal Affairs, Ukraine.

²¹ Doctor of Law Sciences, Professor of the Department of Criminal Law Disciplines of the Educational and Scientific Institute of Law and Innovative Education of Dnipropetrovsk State University of Internal Affairs, Ukraine.

²² Candidate of Law Sciences, Associate Professor of the Department of Criminal Law Disciplines of the Educational and Scientific Institute of Law and Innovative Education of Dnipropetrovsk State University of Internal Affairs, Ukraine.

²³ Doctor of Law Science, Associate Professor, Deputy Head of the Dnipropetrovsk Regional Prosecutor's Office, Ukraine.

²⁴ Candidate of Law Sciences, Senior Researcher of the Scientific Laboratory for Preventive Activities and Prevention of Corruption of the Educational and Scientific Institute №3 of the National Academy of Internal Affairs (Kyiv, Ukraine)



use the concept of public policy, because it is within its framework that the criminological activity of non-governmental organizations can be conducted. Value/originality. In the future, a promising direction of scientific research is the study of information and analytical support and scientific support of criminological activities of non-governmental organizations.

Keywords: criminological activity, non-governmental organizations, public organizations, public policy, State policy.

Introduction

In accordance with the Art. 3 of the Constitution of Ukraine (Law of Ukraine No. 254k/96-VR, 1996), the human being, his or her life and health, honor and dignity, inviolability and security are recognized in Ukraine as the highest social value. Human rights and freedoms and their guarantees determine the content and direction of the State activity. Government is accountable to the individual for its actions. Affirmation and provision of human rights and freedoms is the main duty of the State. In particular, the policy in the area of combating crime is aimed at ensuring this constitutional provision. The policy in this area, in turn, requires constant scientific research, because with the development of society, the activities of the entities, who conduct work in this direction change and need improvement.

Criminological activities of non-governmental organizations are not an exception in this respect. Important elements of global civil society are non-governmental organizations (NGOs), international non-governmental organizations (INGOs), which share common interests and values outside formal State bodies and not acting for profit. Non-governmental organizations are created, as a rule, in response to one or another specific situation and are the product of social actions. An important feature of NGOs is that people self-organize, and do not use traditional state structures.

There are three main types of NGOs:

- research and consulting NGOs focused on scientific research, consultation and dissemination of information to decision-makers and the general public;

Враховуючи це, публічна політика є ширшим за державну. Практичні результати. Доведено, що говорячи про кримінологічну діяльність неурядових організацій доцільно використовувати поняття публічної політики, адже, саме в її рамках може провадитися кримінологічна діяльність неурядових організацій. Цінність/оригінальність. У подальшому перспективним напрямом наукового пошуку є дослідження інформаційно-аналітичного забезпечення та наукового супроводження кримінологічної діяльності неурядових організацій.

Ключові слова: кримінологічна діяльність, неурядові організації, громадські організації, публічна політика, державна політика.

- lobbying NGOs that focus their activities on the protection or opposition of specific political courses implemented by governments or international organizations;
- intermediary NGOs that provide network services. They establish contacts within countries and on the international arena and disseminate information on the issues important to them. Such networks play an important role in establishing connections and organizing cooperation between different organizations

The role of NGOs has especially increased during the Russian-Ukrainian war, though some of them have completely discredited themselves. Thus, Russia's attack on Ukraine caused a surge in sexual violence by occupants over peaceful population, as some scientists have already written about (Rufanova et al., 2022). Russia bombs the cities of Ukraine, destroying the homes of civilians, infrastructure facilities, strikes power and critical life support objects, takes Ukrainian children to its territory, when international organizations designed to protect the rights and interests of civilians and monitor the implementation of international agreements are inactive.

Therefore, the purpose of the article is to study the criminological activities of non-governmental organizations as a constituent element of the policy in the area of combating crime.

Methodology

The following methods were used in the course of the research:

Hermeneutic method contributed to the analysis of scientific publications by the authors, who considered the issue under consideration.

The method of general scientific analysis was applied during the review of legal instruments regulating the activities of non-governmental organizations in the fighting crime.

Deduction and induction methods made it possible to determine the correlation between the State and public policy in combating crime.

Systemic method was useful in the study of criminological policy as a subsystem of the policy of fighting crime in order to determine the place of non-governmental organizations in the system of the relevant actors.

The method of categorical and etymological analysis was applied when clarifying the basic concepts of the research such as “policy”, “politics”, “public policy”, “State policy”, “criminal law policy”.

Logical and semantic method was used to clearly define the concept and features of criminal law policy, as well as to identify its levels and connection with other types of policy.

Formal and logical method was helpful when presenting judgments, intermediate conclusions and relevant views.

Literature Review

Modern science cannot stand apart from the international scientific discourse, so it is worth highlighting a number of foreign works, including textbooks on the science of criminology, monographs, scientific articles, etc.

First of all, it is rational to consider the fundamental research – the “Encyclopedia of Criminology and Criminal Justice” (Bruinsma & Weisburd 2014), issued in 2014 in the USA. This work represents the current state of knowledge in this science. The team of authors includes 311 scientists in the area of criminology and criminal law. The encyclopedia consists of 10 volumes, reflecting the state of modern criminology and criminal justice. Thus, the book provides a complete and systematic coverage of the world science of criminology.

In particular, the scientists Moody and Marvel (2008) made an attempt to investigate the issue of the need to use the results of criminological research in the adoption of need to use the results

of criminology research in power-making in the article “Can and should criminology research influence policy?”

“Comparative criminal justice policy-making in the United States and the United Kingdom” is a separate scientific study by Jones and Newburn (2005), in which the authors examine the influence of the private sector on the process of formation and modification of crime prevention State policy through the prism of the activities of private prisons in the specified countries.

Since the subject matter of this study is non-governmental organizations, it is worth paying attention to the work “What is the role of the public in crime prevention and criminal justice? The debate in the United Nations” by Joutsen (2017). In the first part of the study, the scientist uses the historical method to analyze the development of the role of non-governmental organizations in the activities of the United Nations in general and in the Criminal Program of the United Nations in particular. The second part examines which legal instruments of the UN were adopted with the direct participation of the public sector.

The modern understanding of non-governmental organizations is clarified in the works by the representatives of Cambridge University “NGOs and Corporations: Conflict and Collaboration”). A separate section of this study (“Classifying NGOs: definitions, typologies and networks”) is devoted to the study of definitions, classifications and systems of non-governmental organizations. The authors state that the public sector of the 21st century is characterized by the rapid development of a powerful non-governmental or “third” (Yaziji & Doh 2009).

Scientific article “Interpretation of the concept of non-governmental organization in international legal documents” includes the results of a study on how the term «non-governmental organizations» became part of international legislation and how it was interpreted in various legal acts (Matkarimova 2021).

Results and Discussion

As Vasylevych (2020, p. 98) correctly pointed out, in the investigation of criminological activities of any subject it is necessary to proceed, first of all, from the fact that the criminological activity is a constituent element of the criminological policy of the State. Therefore, the formation of criminological activities of non-

governmental organizations should take into account the criminological policy of the State.

According to Kovbasiuk et al., (2014, p. 7) politics in the traditional sense is interpreted as an environment of interaction between different social groups, parties, nations, peoples, States, authorities and the population, as well as citizens and their associations. This is the most important and most complex layer of social life, “an independent world of political values”. Modern political scientists, based on the writings of the thinkers of the past (Aristotle defined politics as the art of State management; Democritus considered such art the highest of all arts), point out that politics is also the art of the possible, the art of compromises, the art of agreeing on a desirable and objectively achievable. At the same time, the scientist emphasizes that politics means the ability to achieve goals through peaceful means, not through the use of force. This applies both to the harmonization of relations between large States, and to the resolution of intra-national regional, local, conflicts. Politics is a balanced system of goals, interests and priorities. This is primarily a struggle of intellects, public minds, ideas, as well as a search for agreement and parity.

Sadkovyi et al., (2019, p. 4) emphasizes that the word “politics” in Ukrainian scientific terminology corresponds to two different concepts, for which other languages, particularly English, use different words (policy and politics). Typical examples of definitions of these two concepts, according to the scientist, can be considered the following:

1. Politics is the sphere of relations between different social groups and individuals regarding the use of institutions of public power for the realization of their socially significant interests and needs. Politics in this sense is studied and analyzed mainly by political scientists. It is about it when they say: “Well, this is already politics” or “politics is a dirty business”.
2. Policy in general is a plan, a course of action or a course of actions accepted and followed by the government, leader, political party, etc.” It is in this sense that the word “policy” is used when talking about State policy and its directions (external, internal, economic, social), it is policy as a course of action is the subject of policy analysis.

According to Zhadko and Voitov (2010, p. 90), politics (Greek: *politiká* – public and civic affairs) is an organizational, regulatory and

control sphere of society, within which social activity, aimed mainly at achieving, maintaining and realizing power by individuals and social groups in order to assert their own requests and needs, is carried out. Politics is the art of managing the entire set of interests that act as the driving force of its development in any society. State is the most effective political tool.

At the same time, policy can be carried out at the internal and external level depending on the area of influence and interaction of the entities, in other words, according to the object of action.

Thus, according to the Encyclopedic Dictionary of modern political science edited by Khoma (2015, pp. 213–214), internal politics is the activity of State authorities, institutions and ruling parties aimed at harmonizing the interests of various social groups, their subordination and the possible satisfaction of their interests under given conditions, the preservation of the existing State order or its purposeful reformation, ensuring the integrity, interrelationship and interaction of individual spheres of society, spiritual and industrial progress. The policy defines tasks in the financial, investment, tax, economic, social, humanitarian, scientific and technical, regional, ecological, law enforcement spheres, defense capability and national security.

Almost identical to the above definition of domestic policy is offered by Bohatchuk (2010, p. 17). Thus, according to the author, it is the activities of State bodies, institutions, and ruling parties aimed at coordinating the interests and meeting the needs of social groups and communities, the stable development or transformation of all spheres of society. In this regard, according to the author, the objects of domestic policy are production and distribution, protection of public order and guarantee of State security, health care, education, culture, etc.

A slightly different definition of domestic policy is offered by Tomakhiv (2018, p. 21). In his opinion, domestic policy is the activity of the State, as well as other political institutions in various spheres of public life – economic, social, spiritual ones. At the same time, the author offers a definition of foreign policy and compares them. According to the scientist, foreign policy is the regulation of relations with other States and international organizations. Its actor is only the State; other political associations of the country cannot be independent subjects of foreign policy and act just on behalf of the State. Internal policy and foreign policy are dialectically connected –

internal policy affects the content, means, social direction of external policy and vice versa.

In turn, Vlasov (2015, pp. 3 – 4) notes that foreign policy acts as the final link in the chain “foreign policy needs – foreign policy interests, foreign policy strategy and tactics – foreign policy activity” and is designed to ensure the realization of the needs of the country’s socio-economic and political development, refracted through the prism of their understanding by the ruling elite based on the specific historical conditions of the system of international relations, the possibilities of the State and its place in the system of interstate relations. Foreign policy activity is the embodiment of foreign policy strategy and tactics, as well as the political will of the country’s leadership to realize the set goals. Besides, the author emphasizes that foreign policy activity reflects the art of political leadership, its ability to political prediction and forecasting, preparing diplomacy for a skilful foreign policy game.

Separately, it should be emphasized that the main principles of the implementation of the internal and foreign policy of Ukraine are regulated in accordance with the Law of Ukraine “On the Principles of Domestic and Foreign Policy” (Law of Ukraine No. 2411-VI, 2021).

Thus, according to this Law, the principles of internal and foreign policy are based on the unconditional observance of the Constitution of Ukraine, ensuring the rights and freedoms of an individual and citizen of Ukraine and guaranteeing the rights and freedoms proclaimed by the Constitution of Ukraine, on the generally recognized principles and rules of international law, ensuring the social orientation of Ukraine’s economy and sustainable socio-economic development of Ukraine, strengthening the democratic foundations of social and State life, implementing the rule of law, economic and political independence of the State, protection of its national interests, the establishment of Ukraine as a full and authoritative member of the world community.

Thus, one can see that the internal policy is carried out within the State, and the external policy transcends borders, enters the international arena. That is, depending on the zone of influence, the object of State policy also changes.

It should also be noted that the doctrine regarding the concept of “State policy” has been introduced relatively recently in Ukraine, as evidenced by

the following expression by Dombrovska (Sadkovyi, Dombrovska, Lopatchenko and Antonov 2019, pp. 6 – 7) “the formation of the institutional support for the State policy analysis procedures in Ukraine began in the mid-1990s at the initiative of the professor Kravchenko at the Institute of State Administration and Self-Government under the Cabinet of Ministers of Ukraine. With the support of the International Renaissance Foundation (IFV) and the Open Society Institute (Budapest), the first scientific and methodological publications on the analysis of State policy were published, and non-governmental organizations began to conduct relevant research. A special role in the formation of policy analysis was played by the four-year project of the Canadian Bureau of International Education (CBIE) “Capacity-building for public policy formulation and analysis” and the three-year project “Canadian-Ukrainian-Baltic economic training program”, which were financed by the Canadian International Development Agency (CIDA). Within the framework of these two projects alone, more than a hundred textbooks, study guides, monographs, collections of documents and materials, researches of Ukrainian and foreign authors were prepared and published”.

Thus, according to Tertychka (2002, p. 83), State policy is a relatively stable, organized and purposeful activity/omission of State institutions, performed by them directly or indirectly in relation to certain problem or set of problems, which affects the life of society.

Along with the above, public policy is considered not only because it affects society, but also because the starting stage of its formation is the government or other State agencies. Besides, the use by scientists of different terms, imperfectly and ambiguously translated from a foreign language, caused confusion in the interpretation of the terms “politics” (policy and politics), “State policy” (public policy and State policy) and “study (research) of public policy” (public policy study and State policy study). Carrying out the in-depth analysis of the State policy (formation, adjustment, implementation, estimation) largely depends on the constructiveness and clarity of the interpretation of the conceptual framework (Lavruk 2018, p. 258).

In the context of examining the criminological policy of non-governmental organizations, it should be noted that sometimes State policy is equated with public policy, although, in our opinion, they are different in essence and content.

Among modern scientists, two theories of the relationship between State and public policy prevail. Thus, some of them emphasize that these concepts should be considered as synonyms, while the other believe that public and State policy are different in content and essence, although reflecting almost identical meanings.

Thus, according to Pukhkal and Homoliako (2017, p. 111) State policy and public policy may be identified, and to make different concepts depending on the mechanism of their elaboration. State policy ceases to be State policy as such and acquires the signs of publicity in the sense that the State is recognized as the subject that acts and establishes its policy and manages the public sphere. Therefore, according to the above-mentioned researchers, public policy is a broader concept, since it covers not only State policy, but also policy that is carried out (or can be carried out) by non-governmental organizations, associations of State and public agencies, or even private structures and agencies.

Demianchuk (2000, p. 32), in turn, emphasizes that in a democracy, when the level of development of civil society is sufficiently high, the State's authority cedes some of its powers to the self-government authorities, and in this case it really makes sense to talk about "public authority" as a combination of State power and public self-government. In this context, according to the scientist, public policy is a broader concept, as it covers not only State policy, but also policy that is carried out (or can be carried out) by non-governmental organizations, associations of State and public bodies, or even private structures and agencies. In a democratic society (unlike in totalitarian regime) the non-governmental sector of public life plays a significant role in initiating, developing and implementing policies in the interests of certain population groups, regions or the entire nation as a whole, that is, the "public". Therefore, the author believes that the use of the term "public policy" instead of the term "State policy" is more generalizing one. Moreover, in the postcommunist countries, we don't have to talk about a developed civil society, and in fact public policy is equated with State policy. But, regardless of the difference in terminology, the goal of this policy should be to satisfy the interests of society, individual social groups and individuals, solving urgent and prospective problems, ensuring the development of the components of social activity (economy, politics, social sphere, etc.) and the nation in as a whole.

The same opinion is held by Nedilko, Zadorozhnyi and Boiko (2018, p. 17). In particular, according to the scientist, "State policy", "State administration" are now undergoing significant transformations under the influence of new social structures (networks), globalization (global governance), information technologies (electronic governance). Public sphere is gaining importance as a platform for interactions and development of public interests, formulation of public goals and tasks. State policy ceases to be State policy as such and acquires the signs of publicity in the sense that the State is recognized as an actor that acts and establishes its policy and manages public sphere. The author emphasizes the fact that «publicity» in the context of consideration of the concept of "public policy" is not just "policy presented to the public or public discussion". "Publicity" involves the implementation of various types of activities to achieve public goals. Accordingly, the publicity of the interest, according to the lawyer, means that its subject (carrier) is society as an organic whole. Society as a whole (public interests) has the greatest degree of community. They reflect the basic needs of people and in many cases are determined by the need for social development.

Therefore, the main criterion for distinguishing "public policy" from "State policy", according to the above-mentioned jurists, is that "public policy" is carried out by State actors and non-state ones, in particular, non-governmental organizations. At the same time, let us consider the opinions of individual lawyers who equate "public policy" with "State policy".

Thus, Palahnyuk (2012, pp. 66–67) came to the conclusion that in domestic scientific literature, State policy is usually considered as a stable, organized and purposeful activity of the government in relation to one or another problem; this activity is carried out directly by the government and affects the life of society. According to her personal observation, some Ukrainian scientists differentiate this understanding of "State policy" from "public policy", which is used in Western literature and means the inclusion of civil society in the process of formation, implementation and evaluation of the State policy. However, different definitions of public (State) policy have common key elements regardless of whether the definition of the term is too broad or narrower. State policy (or public policy) is a strategic course aimed at the development of the State, its individual spheres, and which is followed by State administration bodies and the public. Based on a comparison

and detailed analysis of the approaches to defining the meaning of “State policy” (or “public policy”), the author offers her own vision of the definition of this concept – it is a constitutionally based, participatory strategic decision with a clear definition of results as a means of ensuring public needs in one or another sphere and is implemented by State administration bodies).

Hornyk and Kravchenko (2018, pp. 2–3) equate State and public policy when defining their analysis. Thus, in particular, the scientists note that in many countries, a relatively new area of professional activity has emerged – the analysis of State (public) policy as a set of processes and procedures for making recommendations to State (public) authorities regarding the best possible course of action solving public problems regarding estimating and monitoring the results and consequences of these actions.

Thus, public policy is separated from State policy precisely because of its subject composition. In particular, public policy is characterized by civil society participation in the political activities, when State policy is implemented only by State actors. Given this, public policy is broader than State policy. Therefore, when talking about the criminological activities of non-governmental organizations, it is appropriate to use the concept of public policy. After all, it is within the framework of public policy that criminological activities of non-governmental organizations can be carried out.

Moreover, it is necessary to understand that the criminological activity of non-governmental organizations is carried out as an interdependent element in the system of the general policy of the State in the area of fighting crime.

Thus, according to Fris (2016, p. 110) policy in the area of fighting crime should be consistent with crime indicators in society. At the same time, in his opinion, not only general indicators are important, but also structural ones, as they determine the priorities of its implementation. In addition to purely criminological indicators, sociological ones should also be taken into account for its development, because without them, it is impossible to develop legal and other mechanisms to combat crime. The scientist does not object to the fact that, in general, policy in the area of fighting crime is the art of managing activities aimed at reducing crime rates in the country. Its effectiveness (which is determined by the existence of a developed doctrine, concepts, both in general and in terms of

individual components) is clearly demonstrated by these indicators. And today they are not just sad, but shocking, notes the scientist. Thus, the growing level of crime in Ukraine, in his opinion, is a clear confirmation of the actual collapse of the entire policy in the area of fighting crime in Ukraine and its individual components. What caused the crisis of politics in the fight against crime. There is no clear answer to this question – a number of factors are at work here. And the basic one is the general crisis of society in all spheres of social and economic life. The policy in the area of fighting crime, as a constituent element of the internal legal policy of the State, could not stay away from the vortex of this general crisis. However, it is overlaid with reflection and some specific factors.

In this regard Kozych (2018, p. 126) notes that the modern legal policy of Ukraine is a set of various means of influence on society with the aim of ensuring its consolidation and development stability with the help of legal regulation and protection. Taking into account this fact, the author emphasizes, that the Ukrainian policy has a social orientation, so it can be stated that under the conditions of the effectiveness of the social legal policy, a complex social network of relations between the State and society, social communities and individuals is formed and functions. All these cases determine the position of people in the social structure of society, expressing the degree of equality, justice, freedom, satisfaction with material and cultural benefits. Politics plays a significant role in the fight against crime; its main task is criminal-legal, criminal-procedural, criminal-executive and criminological (preventive) protection of the most important social relations, goods, values and interests. At the same time, the author emphasizes that all policy subsystems in the field of combating crime have a single object of influence – crime. In this regard, functional linkages between all subsystems in the area of fighting crime can be observed. But each of them has its own tools and means, techniques and methods, established by law on the basis of the general principles of a single policy in the field of combating crime.

Criminal law policy is a guiding force that forms legislation on the fight against crime, procedures for the application of this legislation and for the enforcement and correction of convicts. This policy also directs the practical activity of State agencies, local self-government bodies and public organizations in the fight against crime, defines the content of measures to fight crime and prevent offences, which are applied by the

above-mentioned agencies, organizations and individual citizens in strict accordance with the law. This policy is enshrined in the norms of the Constitution of Ukraine, criminal, criminal procedural and penal legislation and is specific, clear and unconditional for all policy subsystems in the area of combating crime, without excluding the independent role of each of the named subsystems in this field. Despite the fact that each of the subsystems has its own tasks, they functionally constitute a single policy system in the named area as a direction of State policy (Kozych 2020, p. 251).

Thus, we can conclude that although the policy in the field of combating crime is a certain monolith, it involves a division into subsystems (criminological, criminal and legal, criminal procedural and penal. Although each subsystem has a separate focus, the effectiveness of the policy in the area under consideration is achieved only by the established interaction of all the above-mentioned subsystems.

Krevsun (2017, p. 37), confirming the above statement, notes that criminal executive policy is related to both criminal legal policy and criminal procedural policy. For example, having committed a crime (criminal legal policy), the person was convicted of an offence to a specific form of punishment (criminal procedural policy) and served this punishment in places of deprivation of liberty (penal policy).

At the same time, criminological policy must not be forgotten. On the one hand, it may seem that criminological policy is not in direct connection with criminal and legal, criminal procedural and penal policy. However, this is a premature conclusion. It is necessary to pay attention to the fact that crime cannot be completely overcome. This implies that, in the event of an effective and smooth criminological policy implementation mechanism, a positive trend of a decrease in the crime rate in the State will be formed. And this, in turn, will reduce the burden on criminal law policy (fewer people will commit a criminal offense), criminal procedural policy (fewer people will be convicted) and penal policy (prisons will not be overcrowded, etc.).

One of the tenets of criminological science is that crime prevention is carried out at three levels:

general and social one (in society as a whole);
special one (regarding certain types (groups) of offenses);
individual one (regarding a specific offender).
Some scientists distinguish the fourth level of

crime prevention at the regional or branch level. Some scientists call these levels somewhat differently, but their content is approximately the same, and, most importantly, they are all aimed at forming in each of us a sense of protection from violating the norms of law, morality, traditions, etc. Scientific provision of crime prevention is impossible without an appropriate economic basis. The complexity of such studies lies in the fact that from the end of 2013 until today, the development of Ukraine has been marked by the acuteness of the problem of ensuring security in the full sense of the word and leveling the security of an individual (Shablysty and Prymachenko 2019). The occupation of a large part of the territory of Ukraine by Russian troops only exacerbated this problem, which can be solved with the help of international non-governmental organizations.

Conclusion

So, summing up all of the above, we can note that criminological policy, as a subsystem of policy in the field of fighting crime, directly depends on the effectiveness and well-being of the mechanism of implementation of criminological activities of non-governmental organizations.

At the same time, it is necessary to clearly distinguish “public policy” from “State policy” precisely by its subject composition. In particular, public policy is characterized by participation of civil society in the political activities, when State policy is carried out only by State-owned entities. Given this, public policy is broader than the State one. Therefore, when talking about the criminological activities of non-governmental organizations, it is appropriate to use the concept of public policy. After all, it is within the framework of public policy that criminological activities of non-governmental organizations can be carried out.

In the future, attention should be drawn to the study of information and analytical support and scientific support of criminological activities of non-governmental organizations.

Bibliographic references

Bohatchuk, S.S. (2010). Political science: methodological recommendations and plans for seminar classes for full-time and part-time students of the Faculty of Agriculture. Vinnytsia: Vinnytsia National Agrarian University.
http://socrates.vsau.org/repository/view_doc.php?filename=2926.pdf.

- Bruinsma, G., & Weisburd, D. (2014). *Encyclopedia of criminology and criminal justice*. New York: SpringerReference. <https://hostnezt.com/cssfiles/Criminology/Encyclopedia%20of%20Criminology%20and%20Criminal%20Justice%202014%20By%20Gerben%20Bruinsma%20&%20David%20Weisburd.pdf>
- Demianchuk, O.P. (2000). "State policy" and "public policy": a variant of the transition period". *Scientific Notes, Series: Political Sciences*, 18, pp. 31–36. http://ekmair.ukma.edu.ua/bitstream/handle/123456789/9715/Demyanchuk_Derzhavna_polityka.pdf?sequence=1&isAllowed=y
- Fris, P. L. (2016). "Politics in the field of fighting crime is an illusion of existence // In the collection "Policy in the field of combating crime" of the International Scientific and Practical Conference (pp. 110 – 115). *Ivano-Frankivsk, Ukraine*. <http://lib.pnu.edu.ua/files/konferensions/conf-zlo.pdf>
- Hornyk V.G., & Kravchenko S.O. (2018). *Politics in public administration: lecture notes*. Kyiv: Tavri National University named after V.I. Vernadsky. https://tnu.edu.ua/sites/default/files/normativ_basa/ppek.pdf
- Jones, T., & Newburn, T. (2005). "Comparative Criminal Justice Policy-Making in the United States and the United Kingdom: The Case of Private Prisons". *The British Journal of Criminology*, 45(1), pp. 58–80. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=905409
- Joutsen, M. (2017). "What is the role of the public in crime prevention and criminal justice? The debate in the United Nations". In: *Resource material series*, 105, pp. 49-69. https://www.unafei.or.jp/publications/pdf/R_S_No105/No105_9_VE_Joutsen_2.pdf
- Khoma, N. M. (2015). *Modern political vocabulary: encyclopedic dictionary-reference*. Lviv: "Novyi Svit-2000". <https://bit.ly/3DqxCAZ>
- Kovbasiuk, Yu., Vashchenko, K.O., & Surmin, Yu.P. (2014). *State policy: a textbook*. Kyiv: NADU. <https://ktpu.kpi.ua/wp-content/uploads/2014/02/DERZHAVNA-POLITIKA.pdf>
- Kozych, I.V. (2018). "Functional correlation of criminal law and criminological policy in the field of fighting crime". *Actual problems of improving the current legislation of Ukraine: a collection of scientific articles*, 48, pp. 126–134. http://nbuv.gov.ua/UJRN/apvchzu_2018_48_15
- Kozych, I.V. (2020). "Functional interaction of crime policy subsystems". *Scientific Law Journal*, 10, pp. 248–253. http://legalnovels.in.ua/journal/10_2020/10_2020.pdf#page=248
- Krevsun, O.M. (2017). "The fight against crime – priority component of National Policy of Ukraine". *Bulletin of the Penitentiary Association of Ukraine*, 1, pp. 32–38. https://webcache.googleusercontent.com/search?q=cache:Z5-FosaU_UAJ:https://visnykpau.com/index.php/journal/article/download/34/8/&cd=2&hl=uk&ct=clnk&gl=ua
- Lavruk, O.V. (2018). "The essence of the concept of State policy". *University scientific notes*, 67–68, pp. 254–263. <http://old.univer.km.ua/visnyk/1803.pdf>
- Law of Ukraine No. 2411-VI. *On the Principles of Domestic and Foreign Policy*. Official Web site of the Verkhovna Rada of Ukraine, July 01, 2021. Available online. In: <https://zakon.rada.gov.ua/laws/show/2411-17#Text>
- Law of Ukraine No. 254k/96-VR (1996). *Constitution of Ukraine*. Official Web site of the Verkhovna Rada of Ukraine, June 28, 1996. Available online. In: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text>
- Matkarimova, J. (2021). "Interpretation of the concept of non-governmental organization in international legal documents". *German International Journal of Modern Science*, 11, pp. 40–42. <https://cyberleninka.ru/article/n/interpretation-of-the-concept-of-non-governmental-organization-in-international-legal-documents>
- Moody, C. E., & Marvell, T. B. (2008). "Can and Should Criminology Research Influence Policy? Suggestions from Time-Series Cross-Section Studies". In: *Criminology & Public Policy*, 7(3), pp. 359–365. https://www.academia.edu/14967990/CAN_AND_SHOULD_CRIMINOLOGY_RESEARCH_INFLUENCE_POLICY_SUGGESTIONS_FOR_TIME-SERIES_CROSS-SECTION_STUDIES
- Nedilko, A.I., Zadorozhnyi, V. P., & Boiko, V.V. (2018). *Public policy: a study guide*. Poltava: PolNTU. <http://reposit.nupp.edu.ua/bitstream/PolNTU/8518/1/%D0%9D%D0%B0%D0%B2%D1%87%20%D0%BF%D0%BE%D1%81%D1%96%D0%B1%20%D0%9F%D0%9F%D0%BE%D1%81%D1%82.pdf>

- Palahnyuk, Yu.V. (2012). "State policy" and "public policy": theoretical aspect". In: Scientific works, Series: Governance, 181(169), pp. 63–67. https://www.researchgate.net/publication/338951879_DERZAVNA_POLITIKA_TA_PUBLICNA_POLITIKA_TEORETICNIJ_A_SPEKT
- Pukhkal, O. H., & Homoliako, O. V. (2017). "Public and State policy: unity and differences". In: Investments: practice and experience, Series "Public Management", 24, pp. 106–112. http://www.investplan.com.ua/pdf/24_2017/20.pdf
- Rufanova, V., Shablysty, V., Spilnyk, S., Sydorenko, N., & Mozol, S. (2022). Conflict-related sexual violence as a threat to peace and security of the world. *Amazonia Investiga*, 11(53), pp. 220-226. <https://doi.org/10.34069/AI/2022.53.05.22>.
- Sadkovyi, V. P., Dombrovska, S. M., Lopatchenko, I. M., & Antonov, A.V. (2019). State policy: analysis and mechanisms of implementation: lecture notes. Kharkiv: NUZZU.
- Shablysty, V., & Prymachenko, V. (2019). "Results of sociological study of economic factors of effectiveness of victimological prevention of security of living environment". *Baltic Journal of Economic Studies*, 5(5), pp. 204-212. <https://doi.org/10.30525/2256-0742/2019-5-5-204-212>.
- Tertychka, V. (2002). State policy: analysis and implementation in Ukraine. Kyiv: Publishing House by Solomia Pavlychko "Osnovy". https://docs.google.com/viewer?url=https%3A%2F%2Fshron1.chtyvo.org.ua%2FTertychka_Valerii%2FDerzhavna_polityka_analiz_t_a_zdiisnennia_v_Ukraini.pdf
- Tomakhiv, V. (2018). Political science: study guide. Ternopil: TNEU. <http://dspace.wunu.edu.ua/bitstream/316497/33282/1/%D0%A2%D0%BE%D0%BC%D0%B0%D1%85%D1%96%D0%B2%20%D0%BF%D0%BE%D1%81%D1%96%D0%B1%D0%BD%D0%B8%D0%BA.PDF>
- Vasylevych, V. (2020). Criminological policy of Ukraine: monograph. Kyiv: National Academy of Internal Affairs.
- Vlasov, V. H. (2015). Content and mechanism of the foreign policy of the modern State. In: *International Relations, Part "Political Sciences"*, 8, pp. 1-14. http://journals.iir.kiev.ua/index.php/pol_n/article/view/2570/2279
- Yaziji, M., & Doh, J. (2009). *Classifying NGOs: Definitions, typologies and networks / NGOs and Corporations: Conflict and Collaboration (Business, Value Creation, and Society)*. Cambridge: Cambridge University Press, pp. 3–14. https://assets.cambridge.org/97805218/66842/excerpt/9780521866842_excerpt.pdf
- Zhadko, V. A., & Voitov, V. V. (2010). *Political Dictionary: educational and methodical manual for students*. Zaporizhzhia: ZDMU. <https://bit.ly/3N2f65b>

DOI: <https://doi.org/10.34069/AI/2022.56.08.7>

How to Cite:

Romanov, M., Sergiienko, N., Yevdokymov, D., Odnolko, I., & Panimash, Y. (2022). The essence and content of illegal obstruction of the organization or holding meetings, rallies, marches and demonstrations and forensic aspects of its analysis. *Amazonia Investiga*, 11(56), 66-72. <https://doi.org/10.34069/AI/2022.56.08.7>

The essence and content of illegal obstruction of the organization or holding meetings, rallies, marches and demonstrations and forensic aspects of its analysis

Сутність та зміст незаконного перешкодження організації або проведенню зборів, мітингів, походів і демонстрацій та криміналістичні аспекти його аналізу

Received: September 9, 2022

Accepted: October 11, 2022

Written by:

Maksym Romanov²⁵<https://orcid.org/0000-0003-2443-7744>**Nataliia Sergiienko**²⁶<https://orcid.org/0000-0002-6681-5961>**Dmytro Yevdokymov**²⁷<https://orcid.org/0000-0003-3572-1636>**Inna Odnolko**²⁸<https://orcid.org/0000-0002-4896-4728>**Yuliia Panimash**²⁹<https://orcid.org/0000-0002-5337-6613>

Abstract

The aim of the article lies in improving the institution of pre-trial investigation in particular and criminal liability for committing illegal obstruction of the organization or holding of meetings, rallies, marches and demonstrations in general. The object of the analysis is the social relations that arise in the process of organizing or holding meetings, rallies, marches and demonstrations by citizens of Ukraine. Methodology. Taking into account the outlined research object, it is considered appropriate to use the following methods: analysis, logical, interpretation, system analyzes, hermeneutic, generalization. Research results. The article, based on the examination of the scientific views and the relevant legal basis, outlines the essence and content of illegal obstruction of the organization or holding of meetings, rallies, marches and demonstrations and the forensic aspects of its analysis. Practical implementation. The content of obstruction is aimed at

Анотація

Метою статті є удосконалення інституту досудового розслідування зокрема та кримінальної відповідальності за вчинення незаконного перешкодження організації чи проведенню зборів, мітингів, походів і демонстрацій загалом. Об'єктом аналізу є суспільні відносини, що виникають у процесі організації чи проведення зборів, мітингів, походів і демонстрацій громадян України. Методологія. Зважаючи на окреслений об'єкт дослідження, доцільним вбачається застосування наступних методів: аналізу, логічного, тлумачення, системного аналізу, герменевтичного, узагальнення. Результати дослідження. У статті, на підставі характеристики наукових позицій учених і дослідників, а також нормативно-правового підґрунтя окреслено сутність та зміст незаконного перешкодження організації або проведенню зборів, мітингів, походів і демонстрацій та криміналістичні аспекти його

²⁵ Police major, Research officer of the research laboratory on problems of prevention of criminal offenses of Faculty № 3 of the Donetsk State University of Internal Affairs (Kropyvnytskyi, Ukraine).

²⁶ PhD in Law, Associate Professor at the Department of Private Law of the Faculty of Law and International Relations of Borys Grinchenko Kyiv University (Kyiv, Ukraine).

²⁷ PhD in Law, Associate Professor of the Police Law Department of the National Academy of Internal Affairs (Kyiv, Ukraine).

²⁸ PhD in Law, Associate Professor, Leading Specialist of National Agency of Ukraine for finding, tracing and management of assets derived from corruption and other crimes (Kyiv, Ukraine).

²⁹ Candidate of Pedagogical Sciences, Associate Professor of Chernobyl Heroes Fire Safety Institute of the National University of Civil Defense of Ukraine (Ukraine).



impossibility of the realization of the relevant rights, which is characterized by the intention, understanding by the person, who does this, all the features of the activity, its focus and anticipation of a positive result. Value/originality. These characteristics are treated as elements of a criminal offence through the prism of provisions and rules of criminal law and play a main or auxiliary role both in the qualification of such an act and during the conduct of a pre-trial investigation depending on objective circumstances and certainty in the legislation of Ukraine.

Keywords: criminal prosecution, forensics, obstruction, peaceful assembly, pre-trial investigation.

Introduction

The rights and freedoms of an individual and a citizen determine the content and orientation of the public policy and fundamentally regulate the functioning of all State processes, and that is why, even under the conditions of Covid-19 pandemic, which threatens the lives and health of people, the stable functioning of economic mechanisms, and the social existence of society (Kharytonov et al., 2021, p. 158) and full-scale military operations in connection with the Russian army's invasion on the territory of independent and sovereign Ukrainian lands, they remain a priority.

Modernity demonstrates that even the right to assemble peacefully, unarmed, can not only be a tool for influencing public policy and individual politicians and statesmen, but can also serve as a means of countering the invasion of occupation troops (in particular, the most famous example is the Kherson public, when citizens prevented enemies from entering the city by holding meeting).

Within the proposed object of the article, we will consider certain aspects of pre-trial investigation of illegal obstruction of the organization or holding meetings, rallies, marches and demonstrations and the forensic aspects of its analysis, since its significant public resonance cause the need for additional scientific investigations and studies, which may affect the formation of a positive trend towards the disclosure of the specified facts of committing criminal offenses in the future.

аналізу. Практичні наслідки. Зміст перешкоджання спрямовується на унеможливлення реалізації відповідних прав, що характеризується умислом, розумінням особою, що це вчиняє всіх супутніх характеристик своєї діяльності, її цілеспрямованості та очікування на позитивний результат такої діяльності. Цінність/оригінальність. Крізь призму положень і норм кримінального права, дані характеристики трактуються як елементи складу кримінального правопорушення й у залежності від об'єктивних обставин і визначеності в законодавстві України грають основну чи допоміжну роль як у кваліфікації такого діяння так і під час здійснення досудового розслідування безпосередньо.

Ключові слова: кримінальне переслідування, криміналістика перешкоджання, мирні зібрання, досудове розслідування.

It should be noted that the number of recorded criminal proceedings under this article of the Criminal Code of Ukraine is insignificant in the general structure of crime in Ukraine (in 2013 – 1; in 2014 – 39; in 2015 – 21; in 2016 – 12; in 2017 – 179; in 2018 – 14; in 2019 – 4; in 2020 – 3; in 2021 and during 2022 – 0) (Attorney General's Office, 2022), but has a significant public resonance.

On the other hand, the dynamics of the process of disclosure of relevant criminal proceedings is of particular concern, since more than 273 facts have been recorded in the last 10 years, whereas only 43 persons were served with suspicion (this indicator is critically low).

At the same time, through the prism of the forms of completion of the corresponding pre-trial investigation, it should be noted that only 22 proceedings were referred to the court during this period, while 42 were terminated, which undoubtedly indicates the high complexity of conducting pre-trial investigation of the corresponding category of criminal offenses and requires significant scientific analysis of problems in the main criminological directions.

Methodology

Considering the stated object of the Article, the use of the analysis approach makes it possible to investigate the scholars' thoughts on the institution of criminal liability for obstructing the organization or holding peaceful assemblies.

Logical method helps to highlight the main tendencies and regularities of implementing people's right to peaceful meetings at all phases of the society development, as well as to establish the meaning and essence of illegal obstruction as a form of activity of a person (several persons) in the context of committing a corresponding criminal offense.

The method of interpretation is used in the clarification of legal instruments constituting the institution of bringing to criminal liability for obstructing the organization and holding peaceful assemblies.

System analyzes method makes it possible to systematize the core outcomes and to determine the procedure for making them/

Hermeneutic approach is used for equating the scientists' opinion about the investigated issue.

The generalization method makes it possible to develop suggestions for eliminating the identified flaws and solving the stated problem.

Literature Review

The issue of the essence and content of illegal obstruction of the organization or holding meetings, rallies, marches and demonstrations has not been studied in detail. Instead, some problematic issues of the functioning of the institution of peaceful assemblies within various branches of law (administrative, constitutional, as well as theory and philosophy of law) are quite popular. Among the most global studies that essentially demonstrate the category of "organization and holding peaceful assembly", a significant contribution was made by such researchers as Filoretova ("Peaceful assembly as an object of administrative courts protection") (2021), Melnyk ("The right to freedom of peaceful assembly: theory and practice") (2015); Shcarnega ("Proceedings for the right to peaceful assembly") (2016), Sereda ("The right to peaceful assembly: theoretical, practical and comparative aspects") (2019), Zahorodniuk ("The constitutional right of citizens to assemblies, rallies, marches, and demonstrations: questions of theory and practice") (2021) and other.

At the same time, it should be emphasized that these researchers devote a significant part of their works to the topics directly related to law enforcement. However, criminal and legal institutions for the protection of the right to assemble peacefully, unarmed, namely the

development of forensic methods of conducting pre-trial investigation of illegal obstruction of the organization or holding meetings, rallies, marches and demonstrations remain outside the field attention of scientists.

In our opinion, taking into account the popularity of the implementation of the corresponding right by the citizens of Ukraine, its significance and functionality, as well as its fundamental role in the defense of state interests, territorial integrity and sovereignty of Ukraine in the conditions of a full-scale invasion of Russia, it is extremely important to work out the main ways and methods of improving the corresponding institution, in particular, by the development of the understanding of the essential (conceptual and terminological) categories.

Thus, the aim of the article lies in improving the institution of pre-trial investigation in particular and criminal liability for committing illegal obstruction of the organization or holding meetings, rallies, marches and demonstrations in general by analyzing the scientific views of the researchers, the results of law enforcement, the relevant regulatory and legal basis and other important foundations within the science of criminology.

The object of the analysis is the social relations that arise in the process of organizing or holding meetings, rallies, marches and demonstrations by citizens of Ukraine.

Results and Discussion

The outlined directions, in the context of providing a scientific characterization of the main theoretical and applied aspects of the formation of the forensic methodology of conducting a pre-trial investigation of illegal obstruction of the organization or the holding of meetings, rallies, marches and demonstrations, require a thorough analysis of the conceptual and categorical apparatus through the prism of Ukrainian legislation and law enforcement practice, that is why we propose to begin with an understanding of the term "obstruction" in the legal context in general and through the prism of the object of a scientific article, in particular.

Ermolaeva-Zadorozhna (2017), researching issues related to the obstruction of the official activities of law enforcement officers, draws attention to the fact that the unifying feature of this social phenomenon is that it covers numerous specific types of socially dangerous illegal behavior (acts and activities), related to

illegal influence on the proper performance of official duties by law enforcement officers. Accordingly, attention should be paid to the fact that a similar set of features can be applied in the context of a pre-trial investigation of unlawful obstruction of the organization and conduct of a peaceful assembly, since this socio-legal act is defined as illegal and criminally punishable; such acts are directed by the subject in relation to the expected result not only in relation to the organization of such assembly, but also to prevent the exercise of social will in the form of meetings, rallies or other forms of peaceful assembly.

The above emphasizes the fact that contrary to the will of one or more persons, the absence of a legal prohibition to carry out such actions and the availability of all legal tools for the realization of the corresponding constitutional right, the meaning of obstruction is aimed at impossibility of the realization of the corresponding rights, characterized by intent, the understanding by the person that he (she) commits all the accompanying all the associated characteristics of his (her) activity, its focus and expectations for a positive result of such activity. These characteristics are interpreted as elements of the composition of a criminal offense and, depending on the objective circumstances and certainty in the legislation of Ukraine play a basic or auxiliary role both in the qualification of such an act and during the conduct of a pre-trial investigation directly.

It is important, in our opinion, to pay attention to the fact that hindering the organization or holding of meetings, rallies, marches and demonstrations is of an illegal nature. This characteristic is understood by us in two aspects: narrow one (outlined above) lies in the fact that the content and essence of the illegality of the activity of the subject of a criminal offense is determined by objective factors (for example, in the form of abuse of official position or use of physical violence), while broad one (proposed by the scientific community) is that the legality of meetings, rallies, marches and demonstrations, which is obstructed, is the basis for bringing a person to criminal responsibility, since if the conduct was prohibited, the activity to prevent it automatically acquires legal features.

Similarly, the Constitution of Ukraine (Law of Ukraine No. 254k/96-VR, 1996) interprets the mentioned situation, enshrining that restrictions on the exercise of this right may be established by a court in accordance with the law and only in the interests of national security and public order,

with the purpose of preventing disturbances or crimes, protecting the health of the population, or protecting the rights and freedoms of other persons. Accordingly, the circumstances determining the specified types of gatherings as illegal (those that were legally restricted) and the actions aimed at preventing such gatherings are mutually exclusive.

The composition of the criminal offense that entails responsibility contains a number of large but substantively crowded categories such as “organization” and “holding” meetings, rallies, marches and demonstrations. At the same time, in addition to the fact that the composition of the corresponding criminal offense does not include responsibility for similar actions in relation to other forms of realization of the constitutional right to assemble peacefully, unarmed, in our opinion, organization and implementation processes should be described, noting the likely ways to discourage them.

The Constitutional Court of Ukraine (2001) significantly expanded by its decision the understanding of some basic categories and aspects, namely, regarding the need for advance notification (period from the day of such notification to the date of holding the mass meeting) to the executive authorities or local self-government through the organizers of mass assemblies. Besides, the court emphasized that “the period of advance notice should be sufficient for executive authorities or local self-government to determine to what extent the holding of such gatherings complies with the law”, as well as “definition of specific advance notice dates, taking into account specifics of the forms peaceful assemblies, their mass, place, time, etc., are the subject of legislative regulation”. This distinction, which appears in the legislation of Ukraine, serves as a direct indication of one of the ways of committing this criminal offense, reflecting the meaning of such obstruction. The commission of this act by an official of a local self-government body, whose competence overlaps with the authority to decide, in accordance with the law, issues regarding holding of meetings, rallies, and demonstrations, sports, entertainment and other mass events; exercising control over the provision of public safety and order, reflects the fact of using official position and functional responsibilities, rights and powers aimed at ensuring the implementation of the corresponding right, namely its initial stage – carrying out organizational actions regarding the further holding of the meeting.

Among the most widespread methods of precisely this type of obstruction to the holding of peaceful assemblies may be: failure to accept (not register) a report of a peaceful assembly; late notification of the ban on holding a peaceful assembly; lack of motivation for the ban on such gathering, etc.

Previously highlighted interpretations of the essence and content of various forms of holding peaceful assemblies, taking into account the division defined by the legislation of Ukraine, enable a preliminary analysis of the methods and means that can be used to prevent holding of assemblies, including their specific features.

Taking into account the identity of the concepts “meeting” and “assembly”, which are meaningfully identical in essence and are literally interpreted as the temporary presence of two or more persons in any public or other place not prohibited by the legislation of Ukraine for the purpose of publicly demonstrating their views on the issues important to society, as well as the relevance (with the exception of certain features of the content of the meeting) of the concept of a rally as a form of peaceful assembly (Drozd et al., 2022). It should be noted that the meaning of preventing an assembly (meeting) or rally lies in, for the most part: simultaneous holding of a certain event by the decision of other persons in the same place that was planned for the holding of a peaceful meeting; intimidation and destructive motivation of the participants of meetings (assemblies) or rallies with the aim of influencing the turnout; preliminary creation of artificial circumstances, which will give signs of public danger and threat to State and national interests to such a peaceful assembly; integration into the circle of persons, who gather peacefully, as provocateurs (including those who possess weapons or objects similar to them) with the aim of creating real grounds for law enforcement agencies to prosecute them for related criminal offenses.

Besides, it should be noted that the proposed forms of hindering organizing or holding meetings, rallies, marches and demonstrations clearly reflect the content of such activity and form a basic idea about it, while hindering marches and demonstrations can be done in similar ways, taking into account certain features that are proposed to be explored later.

Since we previously noted that the march is a form of peaceful assembly aimed to publicly demonstrate the view of one or more persons regarding important social problems, the vector

of State policy, has a route and is carried out by the way of movement of participants from the initial to the endpoint (Romanov, 2021), it is logical to assume that one of the most widespread ways of preventing such a peaceful assembly as a march can be the creation of obstacles on the route of movement, or knowingly improperly laying such a route by the persons responsible for it (for example, impassable terrain).

A demonstration is a visual reproduction of any elements, objects, images, and other manifestations during a peaceful assembly (in the form of meetings, rallies, marches, etc.), including with the help of video, sound amplification, and any other equipment. That is, demonstration, as a form of expressing view during a meeting, aims to interpret the oral position on a problematic social issue, for example, by demonstrating posters or other symbolic objects, as well as holding public performances, etc. (Drozd et al., 2022). Accordingly, obstruction of the demonstration, in our opinion, mainly lies in the measures taken to eliminate the tools of the demonstration (posters, costumes for performances, sound-amplifying and video-reproducing equipment and other props that enable the demonstration of something and are the main tool of such a process).

Based on the analysis of 43 criminal proceedings for unlawful interference with an organization or holding meetings, rallies, marches and demonstrations, we can state that the most common ways of committing the relevant offense are:

forceful obstruction of holding (60% of cases), which is associated with the forcible seizure of sound amplification equipment, posters, symbols (about 60%), often – physical influence on persons, aimed at forcing them to leave the meeting and refuse to implement the relevant rights (a little more than 40%);

obstruction of the organization of a peaceful assembly in the preparatory stage, since such activity is more often associated with the use of official position by relevant officials (in 40% of cases in general); taking into account the significant public resonance and attention of society to the realization of the right to assemble peacefully, any actions are carried out in this way, can be documented, and the persons involved in such interference can be identified;

interesting is the fact of illegal obstruction to the preparation of a peaceful assembly with the use of official powers (typical of the times of

Ukrainian statehood in the period of 2010 – 2014); for example, by placing at the place of the peaceful assembly the dimensional structures or simultaneous holding of another event on the initiative of self-government bodies or State authorities.

Thus, it should be noted that the content and essence of illegal obstruction of the organization or holding meetings, rallies, marches and demonstrations lies in the implementation of a certain activity or omission in relation to the process of orderly and unimpeded implementation of the constitutional right to assemble peacefully aimed at intentionally causing its non-realization.

Conclusions

Thus, on the basis of the research, we stress on the need to comprehensively improve the functioning of the institution of criminal liability for illegal obstruction of the organization or holding meetings, rallies, marches and demonstrations. The analysis of the essence and content of illegal obstruction of the specified types of exercise of the right to assemble peacefully, unarmed, made it possible to justify a number of important scientific and theoretical provisions, the most significant, in our opinion, among which are the following:

1. The content of obstruction is aimed at impossibility of the realization of the relevant rights, which is characterized by the intention, understanding by the person, who does this, all the features of the activity, its focus and anticipation of a positive result. These characteristics are interpreted as the elements of the composition of a criminal offense and, depending on the objective circumstances and certainty in the legislation of Ukraine, play a main or auxiliary role both in the qualification of such an act and during the conduct of a pre-trial investigation.
2. The decisive factor in defining the illegality of obstruction is the legality of the peaceful assembly itself. We understand this in two aspects: narrow one (outlined above) lies in the fact that the content and essence of the illegality of the activity of the subject of a criminal offense is determined by objective factors (for example, in the form of abuse of official position or use of physical violence), while broad one (proposed by the scientific community) is that the legality of meetings, rallies, marches and demonstrations, which is obstructed, is the basis for bringing a

person to criminal responsibility, since if the conduct was prohibited, the activity to prevent it automatically acquires legal features.

3. Clearly negative presence in the list of forms of criminal offence of specific types of peaceful assembly, which significantly reduces the possibility of bringing to criminal liability those guilty of obstructing the exercise of the right to assemble peacefully in other, more progressive forms (for example, car races). The proposal for improvement lies in the fact that the composition of the corresponding article of the Criminal Code of Ukraine should be expanded by defining the object specifically illegal obstruction of the right to peaceful assembly.

Besides, given the gravity of the committed criminal offense, as well as the importance and high social significance of the institution of peaceful assembly in Ukrainian society, it is logical to increase criminal responsibility for the specified act and divide its modalities and other circumstances into a number of stable theoretical and legal constructions (separate parts of the article), which would not only add the necessary additional penalties to the main ones, but greatly simplify enforcement in general.

Bibliographic references

- Attorney General's Office (2022). Statistical information of the Office of the Prosecutor General. <https://gp.gov.ua/ua/posts/pro-zareyestrovani-kriminalni-pravoporushennya-ta-rezultati-yih-dosudovogo-rozsliduvannya-2>
- Constitutional Court of Ukraine (2001). Decision in the case on the constitutional petition of the Ministry of Internal Affairs of Ukraine on the official interpretation of the first part of Article 39 of the Constitution of Ukraine on prior notification of the executive or local government bodies on holding meetings, rallies, marches and demonstrations (Case of Advance Notice on Peaceful Assemblies) No. 4-rp / 2001. Official Web site of the Verkhovna Rada of Ukraine, April 19, 2001. Available online. In: <https://zakon.rada.gov.ua/laws/show/v004p710-01#Text>
- Drozd, O., Romanov, M., Moroz, V., Stremenovskyi, S., & Zelenyi, V. (2022). "The right of citizens to assemble peacefully, unarmed, to hold rallies and demonstrations: historical origins and genesis of formation".

- Amazonia Investiga, 11(51), pp. 257-266.
<https://doi.org/10.34069/AI/2022.51.03.26>
- Ermolaeva-Zadorozhna, S. V. (2017). "Obstructing official activities of law enforcement: concept, forms, methods". *The issues of fighting crime*, 33 (2017), p. 261-271.
<http://pbz.nlu.edu.ua/article/view/154563>
- Filoretova, M. V. (2021). Peaceful assembly as an object of administrative courts protection. (PhD Dissertation). Taras Shevchenko National University of Kyiv, Kyiv, Ukraine.
http://scc.univ.kiev.ua/upload/iblock/3e1/dis_Filoretova%20M.V..pdf
- Kharytonov, E., Kharytonova, O., Kolodin, D., Tkalych, M., Larkin, M., Tolmachevska, Y., Rojas-Bahamon, M.J., Arbeláez-Campillo, D.F., & Panchenko, O.I. (2021). "Distance learning in the conditions of Covid-19: problems and prospects of their solution". *Amazonia Investiga*, 10(48), pp. 157-69.
<https://doi.org/10.34069/AI/2021.48.12.17>
- Law of Ukraine No. 254K/96-VR. The Constitution of Ukraine. Official Web site of the Verkhovna Rada of Ukraine, June 28, 1996. Available online. In: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text>
- Melnyk, R. S. (2015). The right to freedom of peaceful assembly: theory and practice. Kyiv: Vaite Publishing House.
<https://www.osce.org/files/f/documents/0/e/233491.pdf>
- Qadri, F. (2020). The Financial Statement Analysis of Commercial Banks in Bahrain: A case study of Ahli United Bank. *Revista Científica Del Amazonas*, 3(5), 18-31.
<https://doi.org/10.34069/RC/2020.5.02>
- Romanov, M. (2021). "Forms of peaceful assemblies under the legislation of Ukraine: regulatory and legal analysis". In: *Scientific Bulletin of the Dnipropetrovsk State University of Internal Affairs*, 4, pp. 110-117. DOI: <https://doi.org/10.31733/2078-3566-2021-4-110-117>
- Shcarnega, O.S. (2016). Proceedings for the right to peaceful assembly. (PhD Dissertation Abstract). National University «Odesa Academy of Law». Odesa, Ukraine.
http://dspace.onua.edu.ua/bitstream/handle/11300/5315/Aref_Shcarnega.pdf?sequence=1&isAllowed=y
- Sereda, M. (2019). The right to peaceful assembly: theoretical, practical and comparative aspects. (PhD Dissertation Abstract). National University of «Kyiv-Mohyla Academy». Kyiv, Ukraine.
http://ekmair.ukma.edu.ua/bitstream/handle/123456789/15430/Sereda_Pravo_na_myryni_zibrannia_teoretychni_praktychni.pdf?sequence=1&isAllowed=y
- Zahorodniuk, A. H. (2021). The constitutional right of citizens to assemblies, rallies, marches, and demonstrations: questions of theory and practice. (PhD Dissertation). Vasyl Stus Donetsk National University, Vinnytsia, Ukraine.
<https://abstracts.donnu.edu.ua/article/view/9958>

DOI: <https://doi.org/10.34069/AI/2022.56.08.8>

How to Cite:

Bilotserkovets, M., Fomenko, T., Klochkova, T., Shcherbyna, Y., & Korniienko, L. (2022). Forming ESP oral communication skills of students by means of Zoom. *Amazonia Investiga*, 11(56), 73-81. <https://doi.org/10.34069/AI/2022.56.08.8>

Forming ESP oral communication skills of students by means of Zoom

Формування у студентів навичок усного професійно орієнтованого спілкування англійською мовою засобами програми Zoom

Received: September 20, 2022

Accepted: October 18, 2022

Written by:

Marina Bilotserkovets³⁰<https://orcid.org/0000-0003-4692-3444>**Tatiana Fomenko**³¹<https://orcid.org/0000-0002-3048-7097>**Tetiana Klochkova**³²<https://orcid.org/0000-0002-1173-6211>**Yuliia Shcherbyna**³³<https://orcid.org/0000-0002-1646-0867>**Liudmyla Korniienko**³⁴<https://orcid.org/0000-0002-0727-3250>

Abstract

The paper revealed the outcomes of the research on the efficacy of the formation of ESP oral communication skills of “International Law” students who studied via online platforms in the period of the emergency state. The practical research was targeted to explore the issues of an appropriate organization for the efficient students’ online ESP oral communication skills formation and the advantages for their development provided by online ESP classes. Systematization and comparison of the data of placement and progress tests from the period of the offline academic process (September-November 2021) and the outcomes of online academic period (March-May 2022) were mathematically processed and presented. It was concluded that e-learning using online platforms does not impede the productive formation of ESP oral communicative skills by students, due to the organization of synchronous online communication between the lecturer and students in a remote format, providing students with genuine language practice, increasing their motivation by preparing for performing future professional duties in the virtual environment.

Анотація

У роботі розкрито результати дослідження ефективності формування навичок усного професійно орієнтованого мовлення англійською мовою у студентів спеціальності «Міжнародне право», які навчалися через онлайн-платформи в умовах надзвичайного стану. Практичне дослідження було спрямоване на вивчення питань відповідної організації формування ефективних навичок усного спілкування студентів з англійської мови в Інтернеті та переваг для їх розвитку, які надають онлайн-заняття з англійської мови. Математично оброблено та представлено систематизацію та порівняння даних початкових і контрольних тестів періоду навчального процесу офлайн (вересень-листопад 2021 р.) та результатів навчального періоду онлайн (березень-травень 2022 р.). Зроблено висновок, що дистанційне навчання з використанням онлайн-платформ не перешкоджає продуктивному формуванню студентами навичок усного мовлення ESP завдяки організації синхронного онлайн-спілкування викладача зі студентами у дистанційному форматі, забезпечує студентам справжню мовну практику, підвищує їхню мотивацію шляхом підготовки до виконання

³⁰ PhD in Pedagogy, Associate Professor, Sumy National Agrarian University, Ukraine.

³¹ PhD in Pedagogy, Associate Professor, Sumy National Agrarian University, Ukraine.

³² PhD in Pedagogy, Associate Professor, Sumy National Agrarian University, Ukraine.

³³ Senior Lecturer, Sumy National Agrarian University, Ukraine.

³⁴ Senior Lecturer, Sumy National Agrarian University, Ukraine.

Keywords: e-learning, ESP, “International Law” students, oral skills, virtual communication.

майбутніх професійних обов'язків у віртуальному середовищі.

Ключові слова: електронне навчання; англійська мова для професійно орієнтованого спілкування; студенти спеціальності «Міжнародне право»; навички усного мовлення; віртуальне спілкування.

Introduction

In the period of the global lockdown the entire educational system in Ukraine as well as in the whole world was transmitted to emergent remote study. Students, teachers and university professors were torn off from each other and began to cooperate using electronic means of communication. Indeed, the learning outcomes during that period will be understood only after the end of the pandemic situation, so it is too early to give any assessments now. Meanwhile, many academicians have already revealed that the quality of education has significantly decreased, as facing the force majeure situation, they were not equipped with all necessary knowledge and technologies that could fully replace offline teaching (Bugreeva, 2021; Mazlan et al., 2021; Suardi, 2020).

Nevertheless, when the state of emergency in Ukraine in spring 2022, caused by the full-scale military invasion, has led to the immediate transition to the distant mode of learning in all the educational establishments, academicians have already been experienced in applying various digital tools. Besides, the need for skills of professional virtual communication, that enables efficient fulfillment of working duties under conditions of emergency states, time or distance obstacles, the lack of mobility, were highlighted.

This study is targeted to explore the possibilities of training English for Special Purposes (ESP) oral communication skills of “International Law” students in a digital network. It is essential as, according to Ukrainian educational standards, university graduates, who major in “International Law”, must have “the ability to communicate in oral and written forms in native and foreign languages, solving the problems of interpersonal and intercultural professional interactions” (Zapara et al., 2022). Besides, in the context of a global pandemic or any other state of emergency, there is an increasing need for the study of teaching foreign languages for international professional communication not only in-person, but also in an online format, because currently

many international conferences, forums, and meetings are held remotely (Bates, 2015).

Theoretical Framework

Apparently, the aspect of “speaking” plays a key role in the professional activity of future International Law graduates (Chinvinijkul, 2014; Adewumi & Bamgbose, 2015). According to the professional qualification requirements, the ESP training for students, who are majoring in International Law, is vectored to their preparation for writing and oral communication while conducting business negotiations with partners from other countries; advising foreign colleagues or clients on legal issues; public representation of the interests of Ukrainian companies or clients in international judicial bodies; implementation of legal support for the economic, political or civil international activities of organizations; participation in international conferences and professional development programs (González Ramírez, & Ramírez, 2015; Bykonja et al., 2020).

The linguistic component of the ESP training content includes: a) a certain command of lexical and grammatical means of ESP oral communication in the field of jurisprudence; b) speech, sociocultural, intercultural, professional knowledge; c) types of dialogues and monologues used in oral communication in the field of jurisprudence; d) spheres and topics of oral intercultural communication; e) texts on the legal specialty; f) situations of oral intercultural communication in the field of jurisprudence; g) paralinguistic means of oral communication of a lawyer (facial expressions, gestures, posture, etc.) (Chinvinijkul, 2014; Bykonja et al., 2020).

Oral communication is impossible without understanding the speech of an interlocutor, since in the process of verbal communication, everyone acts as both a speaker and a listener. The process of teaching ESP speaking can be presented in stages as follows: reproduction of sounds and sound patterns; use of stress in words and sentences, intonation patterns and rhythm;

selection of appropriate words and sentences depending on the social environment, audience, situation and topic; organization of narration in a logical sequence; using English as a means of expressing values and judgments; the ability to speak fluently and with few necessary pauses. Oral communication can be distinguished into dialogue and monologue forms. The dialogue form involves two or more participants in the communication chain. Dialogue speech affects the communicative functions of the language, so, it implies the desire of the interlocutors to hear and understand each other, the ability to ask a question correctly, the ability to express joy, regret, agreement / disagreement. Monologue speech consists of such units as a sentence and a logically related text, representing a “subject / object” type of communication (report, presentation, message, retelling) (Gürbüz & Cabaroğlu, 2021).

The main requirement for efficient monologue and dialogue communication is the knowledge of the educational material (vocabulary, speech patterns, grammar, visual materials), which is provided by speech exercises and tasks aimed at the development of ESP skills of oral intercultural communication in the field of jurisprudence. These learning communicative exercises and tasks of a professional and intercultural orientation, contribute to the boosting of independent communicative and creative activities of students through the reproduction of real conditions of the professional communication of a lawyer. The result of performing speech exercises and assignments is the ability of the future bachelors to participate in all types of oral communication in the field of jurisprudence in compliance with the linguistic and cultural norms of speech and non-speech behaviour of a lawyer, adopted in the foreign professional subculture of lawyers (Adewumi & Bamgbose, 2015).

Teaching to speak a foreign language on a digital network is not the same as training oral speech in a face-to-face classroom.

On the one hand, the study of scientific sources for the study exposed the widespread belief that online learning is less effective, that students cannot be engaged in a distance learning in the appropriate way, that a teacher, while conducting a lesson online, puts forward less strict criteria for assessing students' work than in a regular lesson in the classroom (Supiano, 2020, April 23). Many educators treated online mode with disapproval, they revealed that it required constant tension and control from the teacher,

dependency on digital tools that impeded the opportunities to listen and see students, monitor the correctness of their language and pronunciation; provide feedback to encourage students' efforts (Al-Nouh et al., 2015; Thakker et al., 2021). Such digital platform, as a free version of Zoom software, for instance, has a number of significant restrictions on time, settings and number of participants. Academicians experienced a number of difficulties related to external factors, such as: technical problems with connection and video broadcasting; the need to register participants and provide access to each conference through a password or personal teacher ID; lack of experience with the program; emotional complications associated with the embarrassment of students to speak on camera, ask questions in chat or go online from their workplace due to different socio-economic conditions of residence (Önalın & Kurt, 2020).

On the other hand, digital modes can contribute to a foreign language training as well. Many video conferencing platforms have the technical ability that enables students hearing sound as loud and clear as possible. The use of the format of webinars in foreign language classes promotes students' genuine language practice and direct acquaintance with the foreign language culture by contacting with native speakers. The organization of webinars with representatives of various companies, having previously agreed on the topics discussions, for example, about undergraduates' internship in companies and institutions, about their careers in a specific field of professional activity, increases the motivation of students to learn a foreign language, the quality of knowledge and their level of communication skills (Kobzhev et al., 2020).

In both contexts, offline and online, it is vital for the instructor to sustainably meet the individual needs of the learner and continually improve own professional, linguistic and computer competencies in order to provide quality teaching (Sosas, 2021).

Methodology

Theoretical analysis, synthesis and generalization of scientific sources were used to prepare the conditions and the materials for the survey. The study was held by lecturers who were watching students' progress during practical classes. In order to confirm or deny the efficacy of ESP oral communication skills by means of Zoom in comparison to offline classes, the data of placement and progress tests from the

period of the offline academic process (September-November 2021) and the outcomes of online academic period (March-May 2022) were systematized and compared. Mathematical methods were applied to measure and assess the results of the experiment.

A sample of 70 second- and third-year students who were majoring in “International Law” was determined for the survey. The research was carried out in Sumy National Agrarian

University (SNAU), Ukraine. According to the target of the study, the most important variable in it was the academic environment. So, the authors explored the dynamics of ESP oral communication skills formation of the same group of participants during their offline and online studies. The participants were voluntarily involved in this study. The data concerning the features of students-participants of the experiment are resumed in Table 1.

Table 1.
Students-participants' features

Participants' features	Participants
Age	18-19 years old
Gender	54% female, 46% male
English language knowledge level	A 2 (according to the international certification levels)
Amount of ESP classes a week	3
Quantity of students	70

Source: Authors own conception

The academic discipline “English for International Law students” is aimed to form students' communicative competence, which implies their knowledge, skills and abilities of oral and written communication in English in situations of intercultural and professional interaction. In the course of offline classes, ESP oral communication skills, necessary for a specific future professional activity of students were fostering in an artificially created educational linguistic environment. The students read professional original texts in English, worked out professional vocabulary and terminology in English, watched / listened to audio-video material in English according to students' specialization, studied professional documentation in English, prepared presentations on professional topics in English, followed by discussion.

When the entire academic process in SNAU was transferred online because of the state of emergency, Zoom was chosen for the organization of distance learning of English. Zoom service enabled the organization of synchronous online communication between the lecturer and students in a remote format, where a large number of participants with a camera and a microphone could simultaneously connect to the video conference for a group discussion of topics. Those online classes were reminiscent of face-to-face classes, in a way that they were directed towards discussion, frontal work of the

teacher with the group, and work in pairs and small groups in real time. Various forms of information interaction between all participants in the educational process (oral and written communication) took part in Zoom conferences and chat rooms, providing either prepared or spontaneous responses of students with the integrated use of ICT. The application of the format of webinars in ESP classes enabled teachers to create an English-speaking online environment for communication through: exchange of written, audio and video information; inviting guests (experts, foreign specialists, etc.), conducting students' surveys, interviews and their online broadcast. If necessary, the teacher and students could display Power Point presentations, videos, photos, pictures, connect podcasts for all participants and even an interactive whiteboard on which important information could be written; there was also a chat for messages, which was available to all conference participants.

The experience of the previous application of e-learning tools (during the lockdown period in 2020-2021) in the practice of teaching English at the university enabled the authors to elaborate a step-by-step algorithm for working on the platform online using tools of the Zoom program to solve the problems of students' ESP oral communication skills development. This step-by-step algorithm is presented in Table 2.

Table 2.
Algorithm for organizing phased work in Zoom

Learning phase	Tools of Zoom	Types of learning activity
Stage of learning material presentation	Message board	Explanation of lexical and grammatical learning material, question and answers tasks
	Screen demonstration	
	Chat box for questions Reaction (“Raise hand” option)	
Training stage	Message board	Development of learning material in training exercises (writing, speaking, listening)
	Screen demonstration	
	Breakout rooms	
	Message board	
Application stage	Screen demonstration	Practice of writing and speaking
	Chat box for questions	
	Reaction	
	Breakout rooms	
Control stage	Breakout rooms	Discussion, report with presentation, project
	Screen demonstration	

Source: Authors own conception

Criteria for assessing the oral speech of the subjects were worked out as follows: 1) mastering lexical and grammatical means of oral English communication in the field of jurisprudence; 2) the volume of the statement and the rate of speech; 3) the consistency of disclosing the subject of the message (Conrad & Openo, 2018). Students’ statements were assessed on a 5-point scale. Exploring students’ levels of ESP oral communication skills formation, the authors distinguished minimum, medium, and high levels. The presented criteria for evaluating the oral statements of the subjects clearly demonstrated that the average result in the range of 4.5-5 points indicated a high level of the student’s ESP oral communication skills in the field of jurisprudence; the result in the range of 4-4.4 points revealed the medium level; result in the range of 3-3.9 points presented the minimum level; the result is 2.9 points and below corresponds to the lack of the required skills.

Assessment of lexical and grammatical means of ESP oral communication in the field of jurisprudence was carried out through the control of: a) knowledge of English-language legal terms, lexical units, speech clichés and grammatical constructions from texts on the legal specialty and dialogues of legal topics, speech clichés of oral communication in the field of jurisprudence; b) the formation of the skill of lexical and grammatical design of an oral statement on a legal topic. 5 points were received by students who did not experience a shortage of the indicated means of communication and accurately used language units and speech clichés in their statements, without replacing these units with vocabulary and grammar from the everyday sphere of communication; 4 points

– were given to those students who made 1-2 mistakes in the use of English-language legal terms and lexical units or did not use 1-2 etiquette phrases and applied 1-2 substitutions; 3 points were received by students who made 3-4 mistakes in use or absence of 2-3 speech clichés and 3-4 substitutions; 0 points received for an answer meant that more than 4 mistakes in use were made, as well as the absence of more than 3 necessary speech clichés and the use of more than 4 substitutions.

The volume of the utterance and the rate of speech were assessed according to the program requirements: students received 5 points for answers of 11-12 replicas / sentences, with a speech rate of 150 or more syllables per minute; 4 points – were given for the answers of 9-10 replicas / sentences, 130-149 syllables per minute; 3 points – were received by students for the answers of 7-8 replicas / sentences, 110-129 syllables per minute; 0 points – meant that the students’ answers consisted of less than 7 remarks / sentences, less than 109 syllables per minute.

The consistency of the statement revealed the student’s ability to express his/her thoughts coherently and logically, with the development of the main idea in subsequent sentences or remarks in accordance with the communication situation. In monologue communication, the means of ensuring consistency were the structuring of the statement (introduction, main part, conclusion) and causal adverbs. In dialogical communication, this function was performed by causal adverbs and the maintenance of the main idea in the entire dialogue. Evaluation scale according to the

criterion is the following: 5 points were received for students' logical statement, in which two means of logical expression of thoughts were used in a dialogue or monologue; 4 points were given for answers, in which one means was used, though in general the consistency is not violated; 3 points were received by students for the answers, in which one means was used, but there were violations of the consistency of the main idea; 0 points revealed that the consistency of the statement was violated, the main idea was not traced due to the lack of means of expressing consistency. Placement test assessment was taken in the beginning of the offline and online learning terms which coincided with the start of autumn and spring semesters of the 2021-2022 academic year correspondently. Progress test assessment was taken in the end of the offline and online learning terms which coincided with the end of autumn and spring semesters 2021-2022 academic year correspondently. The findings of the research were limited to the sample of its

participants and the institution where it took place. The sample, consisting of 70 participants determined the margin of error (at the 95% confidence level) for this research at about 4%. The time interval for this survey was limited with the above mentioned term. The obtained data was verified by cross-checking and member-checking. The reliability factor for the diagnostic techniques had a value from 0.85 to 0.91 (at $p < 0.01$), that proves their high reliability.

Results and Discussion

The offline learning process was started with the indication of the level of the ESP oral communication skills of students-participants by holding placement test. In the end of the semester the progress test was taken to check in what way the level of the ESP oral communication skills of students-participants had changed. Their oral answers were assessed according to the above mentioned criteria and systematized in Table 3.

Table 3.

The amount of students-participants, showing certain levels of the ESP oral communication skills during the placement and progress tests in the period of offline studies

Students' skills Test	Skills are not developed (less than 2,9 points)	Minimum level (3-3,9 points)	Medium level (4-4,4 points)	High level (4,5-5 points)
Placement test	22	27	16	5
Progress test	18	24	19	9

Source: Authors own conception

After obtaining the data about students-participants' levels of the ESP oral communication skills during the placement and progress tests in the period of offline studies, the authors calculated the ratio of efficacy (Re) for the whole students' group (Bespalko, 2002):

$$Re = a / n,$$

where a is the number of subjects who showed a generally positive result on oral tasks (average score of 3 points and above); n is the total number

of subjects in the group (N = 70). So, the received data were the following:

$$\begin{aligned} Re \text{ (placement test)} &= 48/70 = 0.68; \\ Re \text{ (progress test)} &= 52/70 = 0.74; \\ Re \text{ dynamics} &= (0.74 - 0.68) = 0.06 \end{aligned}$$

Further, by analogy with the processing of data from the previous semester, the level of development of the ESP oral communication skills during the placement and progress tests in the period of online studies was determined. The obtained data are shown in Table 4.

Table 4.

The amount of students-participants, showing certain levels of the ESP oral communication skills during the placement and progress tests in the period of online studies

Students' Skills Test	Skills are not developed (less than 2,9 points)	Minimum level (3-3,9 points)	Medium level (4-4,4 points)	High level (4,5-5 points)
Placement test	18	24	19	9
Progress test	15	25	20	10

Source: Authors own conception

We calculated for the whole students' group levels of the ESP oral communication skills during the placement and progress tests in the period of online studies according to the same formula (Bespalko, 2002). The received data were the following:

Re (placement) is $52/70 = 0.74$; Re (progress) is $55/70 = 0.78$;

Re dynamics is $(0.78 - 0.74) = 0.04$.

Comparative analysis of the data obtained from the offline and online sections showed a positive dynamics of changes in the indicators of students' ESP oral communication skills development, by the insignificant difference between the online and offline ESP learning outcomes (Re dynamics offline = 0.06 versus Re dynamics online = 0.04). Results of the study enabled authors' revealing that, albeit teaching ESP online is different from communicating face-to-face with a lecturer and group-mates in the classroom, but that does not mean that it should be less effective.

Indeed, the quality of education nowadays depends greatly on the ability of people to learn independently throughout life, see the advantages of studying in a place convenient for them, according to an individual schedule and with the possibility of contact with a trainer by means various technical tools. However, educators, who belong to earlier generations, are inherent to operate within the traditional classroom education system (Zawackki-Richter & Latchem, 2018). Furthermore, they state that the use of computers and special software cannot fully replace the 'live' communication and emotional exchange available in the traditional classroom form of education, which complicates the perception of information and reduces the degree of its assimilation (Zvacek et al., 2019; Bugreeva, 2021). Though, there are obvious difficulties with the perception of the traditional frontal learning format among representatives of Generation Z, which teachers are gradually pointing out. Among them, the frontal learning as a strategy for obtaining information that is not characteristic of the centennials. The linearity of presentation, own passivity in perception, the lack of a quick practical result, large amounts of information make this form difficult to integrate into students' own picture of the world (Grajek, 2016; Yundayani et al., 2021).

Results of the study contributed to the working out methodical recommendations how to make the process of online ESP learning as fruitful for students as the offline one. They regarded

functions of an instructor and students, peculiarities of learning materials and technical tools usage.

Apparently, the introduction of online learning requires a restructuring of educational approaches on the part of teachers: they need to get used to the new roles of tutors (facilitators, mentors), who now rely on individual pedagogical support, coordination of the learning process, provision of individual consultations, management of educational projects, etc. In general, the passive form of material perception is a thing of the past. Academicians truly need to realize the necessity to move away from the passive-declarative style of teaching towards the active learning, that involves students' research instead of reading, challenges for students either by discussing some issues or by passing interactive tests instead of teachers' direct control (Bilotserkovets et al., 2021). Given the socio-psychological characteristics of modern students, various options for mostly individualized training, such as "blended learning", "flipped classroom" or "flexible learning", instead of the traditional classroom system, will strengthen their ability to learn thoughtfully and independently, using the enormous capabilities of the Internet, by implying not obedience, but self-organization (Fomenko et al., 2021).

Creative learning materials for the online class should be more dynamic, but prepared according to the principles of micro learning. They should be divided into small but complete modules or blocks of materials. Each module should have three phases: a strategic one – for students to understand what this piece of material is used for. The phase of performance is directed into the practical functioning of the learning material. The self-assessment phase enables students' checking the acquired knowledge (Chamberlin-Quinlisk, 2012). The use of technology needs a general orchestration of the training session conducted on the platform (Sharples, 2013). The essential features of planning and managing classes in online format are associated with the ability to adjust and regulate technologies in a certain way, so that interactivity does not interfere, but promotes effective synchronous communication, as well as the expansion of the geography format due to the possibility of video conferencing with foreign peer students, experts, foreign specialists strengthens students' engagement and motivation.

Conclusions

To sum it up, e-learning using online platforms, caused by the current situation with the state of emergency, does not impede the improvement of the quality of the educational process. In general, work in the virtual educational environment is convenient, understandable and, undoubtedly, contributes to an increase in the efficiency of students' comprehension of the English oral speech; development of their ability to adequately communicate in professionally situations; systematization of their knowledge of ESP. The efficient implementation of Zoom in the online ESP teaching should necessarily include the following aspects: clear planning of the training session and the selection of the essential educational content in conjunction with the use of certain program tools for the best presentation of the material; teachers' and students' digital competence to work with the program; the style of pedagogical communication and didactic technologies of involving students in online interaction, students' abilities for self-organization and motivation.

Bibliographic references

- Adeyemi, A. A., & Bamgbose, O. A. (2015). Attitude of Students to Clinical Legal Education: A Case Study of Faculty of Law, University of Ibadan. *Asian Journal of Legal Education*, 3(1), 106-116. <https://doi.org/10.1177/2322005815607142>
- Al-Nouh, N. A., Abdul-Kareem, M. M., & Taqi, H. A. (2015). EFL college students' perceptions of the difficulties in oral presentation as a form of assessment. *International Journal of Higher Education*, 4(1), 136-150. <https://doi.org/10.5430/ijhe.v4n1p136>
- Bates, T. (2015). Teaching in a Digital Age. BCcampus. <https://opentextbc.ca/teachinginadigitalage>
- Bespalko, V. P. (2002). Education and learning with computers participation (Pedagogy of the third millennium) [Obrazovanie i obuchenie s uchastiem komp'yuterov (Pedagogika tretego tysyacheletiya)]. Moscow: MODEC.
- Bilotserkovets, M., Fomenko, T., Gubina, O., Klochkova, T., Lytvynko, O., Boichenko, M., & Lazareva, O. (2021). Fostering Media Literacy Skills in the EFL Virtual Classroom: A Case Study in the COVID-19 Lockdown Period. *International Journal of Learning, Teaching and Educational Research*, 20(2), 251-269. <https://doi.org/10.26803/ijlter.20.2.14>
- Bugreeva, E. A. (2021). Edutainment and infotainment in distance learning and teaching English to university students and adult learners. *The Journal of Teaching English for Specific and Academic Purposes*, 9(2), 169-179. <https://doi.org/10.22190/JTESAP2102169B>
- Bykonina, O. P., Borysenko, I. V., Gruba, T. L., Mosenkis, I. L., & Chystiak, D. O. (2020). Main Approaches of Business English Teaching to Future Lawyers: A Case Study of Ukrainian Higher Institutions. *International Journal of Learning, Teaching and Educational Research*, 19(6), 46-61. <https://doi.org/10.26803/ijlter.19.6.3>
- Chamberlin-Quinlisk, C. (2012). TESOL and Media Education: Navigating Our Screen-Saturated Worlds. *TESOL Quarterly*, 46(1), 152-164. <https://doi.org/10.1002/tesq.7>
- Chinvinijkul, L. R. B. S. (2014). Preparing Law Students for Global Practice: An Innovative Model for Teaching Lawyering Skills and Social Justice in a Large Enrolment Law Course. *Asian Journal of Legal Education*, 1(1), 1-13. <https://doi.org/10.1177/2321005813505456>
- Conrad, D., & Openo, J. (2018). Assessment Strategies for Online Learning. Engagement and Authenticity. Edmonton, AB: Athabasca University Press.
- Fomenko, T., Bilotserkovets, M., Sbruieva, A., Kovalenko, A., & Bagatska, O. (2021). Social media projects for boosting intercultural communication by means of learning English. *Amazonia Investiga*, 10(48), 89-96. <https://doi.org/10.34069/AI/2021.48.12.10>
- González Ramírez, C., & Ramirez, C. G. (2015). English for Specific Purposes: Brief History and Definitions. *Revista de Lenguas Modernas*, 23, 379-386. <https://doi.org/10.15517/rlm.v0i23.22359>
- Grajek, S. (2016, December 12). The Digitization Of Higher Education: Charting the course. *Educause Review*. <https://er.educause.edu/articles/2016/12/the-digitization-of-higher-education-charting-the-course>
- Gürbüz, C., & Cabaroğlu, N. (2021). EFL students' perceptions of oral presentations: Implications for motivation, language ability and speech anxiety. *Journal of Language and Linguistic Studies*, 17(1), 600-614. <https://search.informit.org/doi/abs/10.3316/informit.221298132069959>
- Kobzhev, A., Bilotserkovets, M., Fomenko, T., Gubina, O., Berestok, O., & Shcherbyna, Y. (2020). Measurement and Assessment of Virtual Internationalization Outcomes in Higher Agrarian Education. *Postmodern*



- Openings, 11(Sup1), 78-92.
<https://doi.org/10.18662/po/11.1sup1/124>
- Legchilina, E. (2020). Designing of social and labor relations in the context of transformation: principles, organizational and institutional aspects. *Revista Científica Del Amazonas*, 3(5), 43-53.
<https://doi.org/10.34069/RC/2020.5.04>
- Mazlan, N. A., Zolkapli, N. M., Ismail, W. M., Norwahi, N. A., & Saad, M. F. M. (2021). The impact of COVID-19 lockdown on UiTM Melaka Students' learning session. *Journal of Language and Linguistic Studies*, 17(2), 1045-1057.
<https://search.informit.org/doi/abs/10.3316/informit.216546724399118>
- Önalán, O., & Kurt, G. (2020). Exploring Turkish EFL teachers' perceptions of the factors affecting technology integration: A case study. *Journal of Language and Linguistic Studies*, 16(2), 626-646.
<https://doi.org/10.17263/jlls.759264>
- Sharples, M. (2013). Shared orchestration within and beyond the classroom. *Computers & Education*, 69, 504-506.
<https://doi.org/10.1016/j.compedu.2013.04.014>
- Sosas, R. V. (2021). Technology in teaching speaking and its effects to students learning English. *Journal of Language and Linguistic Studies*, 17(2), 958-970.
<https://doi.org/10.52462/jlls.66>
- Suardi, M. (2020). The Effectiveness of Using the ZOOM Cloud Meetings Application in the Learning Process. *Proceeding of The International Conference on Science and Advanced Technology (ICSAT)* (pp. 591-602).
<https://ojs.unm.ac.id/icsat/article/view/17730/9651>
- Supiano, B. (2020, April 23). Why is Zoom so exhausting? *The Chronicle of Higher Education*.
<https://www.chronicle.com/article/why-is-zoom-so-exhausting/>
- Thakker, Sh. V., Parab, J., & Kaisare, Sh. (2021). Systematic research of e-learning platforms for solving challenges faced by Indian engineering students. *Journal Asian Association of Open Universities Journal*, 16(1), 1-19. <https://doi.org/10.1108/AAOUJ-09-2020-0078>
- Yundayani, A., Abdullah, F., Tandiana, S., & Sutrisno, B. (2021). Students' cognitive engagement during emergency remote teaching: Evidence from the Indonesian EFL milieu. *Journal of Language and Linguistic Studies*, 17(1), 17-33.
<https://doi.org/10.52462/jlls.2>
- Zapara, S. I., Yasynok, M. M., Klochko, A. M., Kurylo, O. M., & Volchenko, N. V. (2022). Educational and Professional Program in specialty 293 "International Law" first (bachelor's) level of higher education. Sumy: SNAU. <https://snau.edu.ua/wp-content/uploads/2022/10/Pravo-minarodne.pdf>
- Zawacki-Richter, O., & Latchem, C. (2018). Exploring four decades of research in computers & education. *Computers & Education*, 122, 136-152.
<https://doi.org/10.1016/j.compedu.2018.04.001>
- Zvacek, S., Smaldino, S., & Simonson, M. (2019). *Teaching and Learning at a Distance*. (7th ed.). Charlotte, NC: Information Age Publishing.

DOI: <https://doi.org/10.34069/AI/2022.56.08.9>

How to Cite:

Kryvoruchko, L., Kucher, O., Husieva, V., Timush, I., & Timush, D. (2022). Legal and organizational principles of person identification by appearance during the investigation of criminal offenses in Ukraine. *Amazonia Investiga*, 11(56), 82-90. <https://doi.org/10.34069/AI/2022.56.08.9>

Legal and organizational principles of person identification by appearance during the investigation of criminal offenses in Ukraine

Правові та організаційні засади ідентифікації особи за ознаками зовнішності під час розслідування кримінальних правопорушень в Україні

Received: September 22, 2022

Accepted: October 20, 2022

Written by:

Larysa Kryvoruchko³⁵<https://orcid.org/0000-0001-6635-2381>**Oleksii Kucher**³⁶<https://orcid.org/0000-0003-3742-2154>**Vlada Husieva**³⁷<https://orcid.org/0000-0001-8614-1573>**Iryna Timush**³⁸<https://orcid.org/0000-0002-8090-4450>**Diana Timush**³⁹<https://orcid.org/0000-0002-8555-1770>

Abstract

The purpose of the study is to determine the legal and organizational basis for identifying a person based on appearance during the investigation of criminal offenses in Ukraine.

In order to achieve the goal of the article, the authors used methods of synthesis and analysis. Statistical methods were also used, with the help of which the problems that make it impossible to carry out portrait examinations based on the materials of video recordings and photographs, as well as other revealing ones, are defined and displayed in percentage form. The logical method and the method of generalization were used when formulating the conclusions of the conducted research.

The authors have determined the legal and organizational aspects of presentation for identification, conducting portrait examinations, and identification based on subjective portraits. Recommendations for improving the current criminal procedural legislation have been formulated. The factors that negatively affect the implementation of the researched methods of

Анотація

Метою дослідження є визначення правових та організаційних засад ідентифікації особи за ознаками зовнішності під час розслідування кримінальних правопорушень в Україні.

Задля досягнення мети статті авторами використано методи синтезу та аналізу. Також використано статистичні методи, за допомогою яких визначені та відображенні у відсотковому вигляді проблеми, що унеможливають проведення портретних експертиз за матеріалами відеозаписів і фотознімків, а також інші показники. Логічний метод і метод узагальнення використовувалися під час формулювання висновків проведеного дослідження.

Авторами визначено правові й організаційні аспекти пред'явлення для впізнання, проведення портретних експертиз, ідентифікації за суб'єктивними портретами. Сформульовано рекомендації щодо удосконалення чинного кримінального процесуального законодавства. Визначено чинники, що негативно позначаються на

³⁵ Leading Researcher of the Department of Scientific and Legal Expertise and Draft Law of the Scientific Institute of Public Law, Doctor of Law, Kyiv, Ukraine.

³⁶ Head of the State Regulatory Service of Ukraine, Candidate of Law, Kyiv, Ukraine.

³⁷ Professor of the Department of Criminalistics, Forensic Science and Pre-medical care of Kharkiv National University of Internal Affairs, Professor, Doctor of Law, Kharkiv, Ukraine.

³⁸ Professor of the Department of Economic, Air and Space Law of the Faculty of Law of the National Aviation University, Professor, Doctor of Law, Kyiv, Ukraine.

³⁹ Postgraduate of the Faculty of Law of the National Aviation University, Kyiv, Ukraine.



identification of a person based on appearance are determined.

Keywords: identification, signs of appearance, recognition, portrait examination, photo work.

Introduction

Identifying a person involved in criminal offenses is one of the most difficult tasks of a pre-trial investigation. The identification of the offender can be done in different ways. The choice of a specific set of identification methods is determined by the investigative situation that has developed at the relevant stage of the investigation and the set of collected source information.

Law enforcement agencies use both procedural and non-procedural methods to identify the offender. The difference between these methods is that the methods of implementing procedural methods are clearly regulated by criminal procedural law, and the results of their application can be obtained procedural sources of evidence. The use of non-procedural methods of identification does not involve obtaining evidence, but helps to solve search problems. Under such conditions, the information obtained will be indicative.

Currently, the results of such implementation, genotypic methods of personal identification, as well as methods of personal identification on the basis of appearance, gait, speech, etc. are being actively implemented in practice. The active development of these methods of identification and their wide application in the field of criminal justice is due to the rapid development of science and technology.

Our attention is drawn to the methods of identifying a person by appearance. The analysis of the materials of investigative and judicial practice, as well as the work of scientists, shows that this process is not without a number of difficulties. The facts of falsification of evidence in order to bring a person to criminal responsibility are quite common in the practice of law enforcement agencies. The scholar notes that in most cases this is justified by the lack or lack of funding. This argument is unconvincing given the damage (both material and moral) that can cause incorrect identification of a person in criminal proceedings. Because it will be much greater than all costs development of appropriate methods of identification (Izotov, 2016, p. 108),

реалізації досліджених методах ідентифікації особи за ознаками зовнішності.

Ключові слова: ідентифікація, ознаки зовнішності, впізнання, портретна експертиза, фоторобот.

as well as compensation to the victim for illegally prosecuting him.

The prosecution also uses non-procedural methods of identification in criminal proceedings. Therefore, we propose to determine the legal and organizational basis for the identification of a person by appearance during the investigation of criminal offenses in Ukraine, in order to prevent their violation and promote the formation of unambiguous practices of their use.

Methodology

The authors of the study used methods of synthesis and analysis, which allowed to determine the legal and organizational aspects of identification of a person by appearance during the investigation of criminal offenses in Ukraine. Statistical methods were also used. They allowed to identify problems that make it impossible to conduct portrait examinations on the basis of videos and photographs and to display them as a percentage, as well as other illustrative ones. The logical method and the method of generalization were used in formulating the conclusions of the study.

Literature Review

Scientists have been studying the problems of human identification by appearance for a long time. The scientific basis for the use of features of human appearance in the investigation of crimes was laid in the 70s of the XIX century by French criminologist Alphonse Bertillon. A. Bertillon called his system "anthropometric identification" (Sanchez, 2012). In 1904, a student and follower of A. Bertillon, professor at the University of Lausanne Rodolphe Archibald Reiss published a textbook "Verbal portrait. Recognition and identification of personality by the method of Alphonse Bertillon". In this book, the scientist accompanied the photographic fragments of images of parts of the face with schematic drawings of its individual elements (Mathyer, 1984). The contribution of these scientists is that they laid the fundamental

foundations of the doctrine of "habitoscopia (habitology)".

Among the researches of Ukrainian scientists, it should be noted the work of those who followed a comprehensive approach in the study of procedural methods of identification based on appearance. Given that for a long time the most tried and tested was the identification of a person on the basis of appearance, which was carried out during presentation for identification, the work by I. Zholnovych was considered innovative, in which the scientist explored theoretical problems and practice of forensic description of the person researched on appearance (Zholnovych, 2007). Some provisions of this work are still relevant for the theory of Ukrainian criminology. Recent work also includes a thorough study of the tactics of identifying a person in an imaginary manner during presentation for identification. B. Bezkorovainy carried it out (Bezkorovoiny, 2018).

Scientists are currently conducting research aimed at simplifying the procedure of identifying a person by appearance and obtaining more accurate results. Scientists are proposing to introduce new methods, such as iris identification. Scientists are coming up with ideas to simplify the process of recognizing a person. In some countries, for example, it has been proposed to provide recognition by videoconference (Bertovsky, Ryzhkova & Ryzhkov, 2021, p. 21). According to the analysis of modern research of domestic and foreign scientists, it should also be noted that they are quite actively discussing the ideas of research on the identification of a person by the peculiarities of gait, speech, etc. (Khakhanovskiy, & Chashnytska, 2020; Ibn Khedher, El-Yacoubi & Dorizzi, 2017; Khan, Farid & Grzegorzec, 2021).

Gait identification is a new biometric modality for automatic visual observation and monitoring, as gait patterns correlate strongly with the subject's personality. The amount of research on the identification of people on the move has increased dramatically over the past two decades due to several advantages. These techniques do not require active cooperation with users and can be carried out without their participation. In addition, gait is difficult to simulate, and identification can be accomplished by analyzing low-resolution videos and using simple instruments (Khan, Farid & Grzegorzec, 2021). At the same time, it should be emphasized that currently in Ukraine such methods of forensic examinations are not registered, and therefore the results of these studies cannot be used as

procedural sources of evidence, which highlights the need to study other ways of identifying people.

A significant contribution to the issues we study is made by scientists who are developing and improving methods of identifying people who are in crowded places (in the crowd) on the basis of video recordings. Modern approaches allow solving this problem by using software that allows the process of identifying people as individuals, avoiding the fact that they often form groups or move in crowds. Interestingly, in some countries, such as Italy, the visual identification of a person appearing in the fixation area of various cameras, ie video footage, is defined as the re-identification of a person. At the same time, under such conditions, scientists try to study not only the video itself. They also use information provided by others who were also in the camera range and in close proximity to the person to be identified. It can provide appropriate visual context for improving the efficiency of re-identification of individuals in the group (Lisanti, Martinel, Micheloni, Del Bimbo & Foresti, 2019). Because the videos used to identify a person may be of poor quality, in order to effectively improve facial recognition on video, scientists are exploring various technologies to improve this process. For example, representatives of Guangzhou University suggest synthesizing facial images based on 3D facial modeling and blurring. In the proposed algorithm, they first used a high-resolution 2D front face to build a 3D face model, then several virtual faces with different poses were synthesized from the 3D model, and finally some degraded face images were built from the original and virtual faces. through the blurring process (Hu, Peng, Wang, Yang & Li, 2017). Somewhat similar techniques are used again to identify a person by gait (Huynh-The, Hua, Tu & Kim, 2020).

The developments of these scientists and some provisions of their research confirm the fact that the identification of a person because of appearance was and remains a topical issue. We propose to focus our efforts on determining the legal and organizational basis for the identification of a person by appearance during the investigation of criminal offenses in Ukraine.

Results and discussion

The process of identification is a common skill that has largely gone unnoticed in psychology and cognitive neuroscience. Neuroscientists who study the process of identifying a person

remembered from a previous meeting indicate that the identification of another person is due to activation differences in the medial prefrontal cortex, left lower frontal cortex, left and right lower parietal lobe, precuneus (inner part bark), lateral occipital crusts and thalamus (Tholen, Schurz, & Perner, 2019; Gupta, Punj & Pillai, 2022).

At the same time, the processes that take place in the cerebral cortex and provide the possibility of human identification of others occur as a result of our perception of certain properties of the appearance of others. These include individuality, relative stability and reflexivity.

The individuality of a person's appearance is its uniqueness, the difference from the appearance of others, which is determined by the complexity of a person's appearance, a huge number of features of appearance and their variants. Signs of human appearance are classified on various grounds. As a rule, in the legal literature, all features of appearance are divided into three groups:

- Anatomical (characterize the external structure of the human body: height, physique, head shape, facial features, etc.);
- Functional (motor, speech, etc., which are manifested externally, including signs of behavior: gait, posture, gestures, facial expressions, voice, habits, etc.);
- Signs of clothing, shoes, etc., which were worn constantly. They are also called concomitant.

The relative stability of appearance is largely due to the fact that anatomical features of appearance change only after significant periods of time. The reasons for this may be disease or medical intervention (eg, plastic surgery).

Reflexivity means the ability to accurately reflect the signs of appearance on a variety of media, namely: material and ideal.

Procedural methods of identification of a person based on appearance are the identification of a person during the investigative (search) action, in particular during the presentation of a person for identification, as well as during the forensic examination - portrait examination. We propose to consider the legal and organizational principles of their implementation, because they are a guarantee of a positive result.

Identification during the investigation of criminal offenses is relatively infrequent in the

investigative practice of Ukraine. The main subject of the identification process in this case is an eyewitness. Eyewitnesses who were able to provide a detailed description of a person's appearance and later identify the perpetrator were found in only 19% of the criminal proceedings we analyzed, recorded in 2021 in the category of serious and especially serious crimes. As a rule, these crimes are committed under obvious conditions. These mainly include hooliganism, hooliganism, robbery, robbery, extortion, etc. Under such conditions, presenting a person for identification is a key investigative (search) action, based on which the accusation is based, a person is identified in the commission of a criminal offense. The results of this investigative action, which are similar in probative value, can not be obtained in any other way. This is because the information stored in the eyewitness's memory is a perfect reflection.

The essence of presenting for identification is to identify in an imaginary way. The structure of this process, scientists determine as follows: 1) the psychological mechanism of recognition; 2) forensic mechanism of identification; 3) the nature of the object of perception; 4) the integrity of the process of forensic identification; 5) the identity of the subject of recognition; 6) the nature of the formation of mental image; 7) the results of recognition; 8) procedural registration of results (Bezkorovoiny, 2018, pp. 82-83).

The identification process is possible if there are legal and factual grounds. The legal grounds include:

- the presence of a person who will recognize;
- the protocol of her interrogation, in which the testimony about the signs and peculiarities of the person, about the circumstances under which she perceived her was recorded. In accordance with Part 1 of Art. 228 of the CPC of Ukraine, before presenting a person for identification, the investigator, prosecutor preliminarily finds out whether the person who recognizes can recognize this person, interviews him about the appearance and characteristics of this person, as well as the circumstances under whom she saw this person, about which she draws up a report. If a person states that he / she cannot name the features by which he / she recognizes a person, but can recognize him / her by a set of features, the protocol shall indicate by which set of features he / she can recognize a person (Law of Ukraine No. 4651-VI, 2012);

- the presence of a person subject to identification. It is prohibited to show it in advance to a person who recognizes and provides other information about the signs of this person (Law of Ukraine No. 4651-VI, 2012);
- the presence of outwardly similar persons (extras), who will be presented together with the person of identification.

The factual grounds for presenting for identification include the presence of the investigator's data, which allows to draw a conclusion about the necessity, expediency and possibility of conducting this investigative (search) action (Hrynenko, 2020). After all, the grounds for conducting an investigative (search) action are the availability of sufficient information indicating the possibility of achieving its goal (Law of Ukraine No. 4651-VI, 2012).

As for the organizational principles, they are most often presented to identify the suspect. The need to present a suspect to establish the identity arises in cases: when he takes responsibility for the crime, but the evidence in the case refutes this fact; when the suspect is issued by another person or does not have identity documents; when the victim or witness saw the person who committed the criminal offense and can recognize him. In cases where the persons to be involved in the identification were previous acquaintances or had a case of eye contact not related to the event of a criminal offense, this action is not allowed.

The current criminal procedure law does not contain such an indication as to the procedural status of the person to be presented for identification. We believe that it is unacceptable to identify a person who does not have procedural status in criminal proceedings. In this case, her right to defense is violated, and the evidence obtained will be declared inadmissible by the court.

Also during the investigation, there is often a need to identify the corpse of an unidentified person (Boiarov, Larkin, Dudorov, Pyrozhkova & Legkykh, 2020, pp. 284-285). We believe that the current legislation should specify that it is advisable to involve close relatives and family members for this action, and only in their absence - to involve third parties (colleagues, neighbors, acquaintances, etc.).

Recognition can be carried out based on photographs and video materials. At the same time, such methods of identification will exclude

the possibility of further presentation of the person for identification (Law of Ukraine No. 4651-VI, 2012).

The legal and organizational basis for video identification should be determined separately. This is because according to our analysis, the results of such investigative (search) actions were often considered inadmissible evidence. According to our analysis of the investigative and judicial practice of investigating serious and especially serious crimes recorded in 2021, only 3% of the proceedings contained videos that met the requirements for those that can be presented for identification.

Identification videos must meet a number of requirements. These include, but are not limited to, the video must show at least four people who must be of the same sex and not have sharp differences in age, appearance and clothing with the person to be identified. During the preparation of the presentation for identification, the investigator in the presence of a specialist selects the frame of the video, where without significant changes and distortions most fully and accurately reflected the appearance of the person presented for identification (Antoshchuk & Hrynenko, 2021). You should also determine whether the material offered for identification is the original or a copy of how it was removed. In judicial practice, there are cases when, according to the defense counsel's complaints, the results of video identification were recognized as inadequate evidence in the case, as it is unknown how and where the received videos were seized.

Given the urgency of this issue, it should be emphasized that the problems that have made the process of identification impossible for scientists have been studied for a long time. The main ones are procedural errors made by investigators. They are conventionally called subjective, and the other group is called - objective. The latter do not depend on the activities of the subjects of criminal procedure.

Subjective factors include: 1) failure to conduct a preliminary interrogation with a detailed reflection in the protocol of signs of appearance by which she will be able to identify the person; 2) the presence of prior visual contact between the person who recognizes and the person he will recognize or the demonstration of a photograph of the latter; 3) selection of extras who do not correspond to the features of appearance as defined in the criminal procedure legislation or photographs that have different shapes or other features that significantly affect the perception of

the image; 4) failure to involve the required number of extras or photographs or video showing less than four people; 5) absence of witnesses during the specified investigative (search) action or continuous video recording of the course of the specified action; 6) the absence in the protocol of signatures of all participants in the investigative (search) action (Husieva, 2021, p. 116); 7) improper method of removing videos that will be presented for identification, etc.

Objective problems include those that are not due to the activities of the prosecution and due to changes in the "object" of identification, if the person who is recognized or other factors. Among them are: 1) change in appearance due to surgery (plastic surgery); 2) change of appearance due to cosmetic procedures (bio revitalization; mesotherapy; stack hyloclifting; face modeling with fillers; botulinum toxin injections, etc.); 3) cosmetic design (makeup); 4) change in appearance due to age changes; 5) change in appearance due to illness or injury (for example, the appearance of spots due to psoriasis, improperly fused nasal bones after a fracture, etc.); 6) impossibility of recognition due to the expiration of a long period of time (forgetting the features of the object of recognition); 7) evasion of the subject of recognition from solving identification tasks due to fear or desire to hide certain facts that are known to him, etc. (Husieva, 2021, p. 117).

Another procedural way to identify a person by appearance is a portrait examination. Its main task is to identify the person (corpse) by photograph (photograph, negative) and video. This separate type of identification research consists in separate and comparative analysis of external features of a person, which are reflected in photographic images, using special methods of comparison, alignment, graphic modeling and calculations of the mutual location of facial features.

The basis for the forensic examination is the relevant court decision or the decision of the pre-trial investigation body, or a contract with an expert or expert institution - if others commission the examination. During the investigation of criminal offenses, the need for a portrait examination to identify an unidentified corpse arises in the absence of persons who could identify the deceased or living relatives of the latter, from whom samples could be taken for molecular genetic identification.

It is more common to appoint a portrait examination to identify the identity of the

offender based on the received materials recorded on video surveillance cameras, photographs, etc. The analysis of the materials of criminal proceedings shows that in order to identify living persons, video recordings, which record the illegal activities of these persons, are most often sent to experts for research. The use of video materials in law enforcement activities is due to the relative completeness and effectiveness of the recording of the event (time, conditions, and nature of actions) and its participants (Chashnytska, 2021).

Many factors affect the accuracy of the reflection of a person's appearance on video. The specialist must consider them when analyzing the characteristics of the elements of appearance during the implementation of expert research. They include:

- factors directly related to the process of photography and video (shooting conditions, including type and nature of lighting, position of the human head and body, optical and technical characteristics of photographic and video equipment, properties of photographic and video media, features of technological processes during making hard copies);
- the scale of the image of the person's face relative to the whole image;
- factors related to the condition of the person's appearance (cosmetic design of appearance; - makeup, facial expressions, the possibility of surgery, artificial changes in appearance without surgery) (Chashnytska, 2021);
- factors related to the conditions of use and storage of photographic and video information media (long-term storage, original or copy, low resolution video or digital image).

Based on the generalization of expert practice, we conclude that the main problematic issues that made it impossible to conduct portrait examinations on the basis of video and photographs are as follows: 1) low quality of samples (37%); 2) optical deformation of comparative samples, which is due to the peculiarities of the video camera (24%); 3) a specific angle of photo, video image (usually "top-down"); 4) lack of lighting during the fixation of the environment (17%); 5) fixation of the person during active movement (14%) 6) the condition of the subject's clothing and his emotional state (6%), etc. Similar problems, with the exception of the last two, arise during the

portrait examination, the object of which is the study of photographs.

It should be noted that the low quality of the samples provided is one of the most common reasons for the inability to obtain a categorical expert opinion. In order to solve this problem, ie to improve the image quality, it is possible to involve specialists in photographic research, who study methods to improve the quality of video images (video frames). Such research uses special programs to improve video quality and remove artifacts. They can be used to: eliminate noise; increase the resolution of the video image (increases the number of dots (pixels) in the image vertically and horizontally); elimination of the "shake" defect (digital image stabilization); improving the sharpness of blurred areas of the image; contrast enhancement; correction of brightness and color saturation; video trimming; image rotation; eliminate the pixelation artifact of the frame while increasing the video resolution.

Particular attention should be paid to obtaining comparative materials for the portrait examination of photographs, because they depend on the ability of a forensic expert to identify identification tasks. Such images are made according to the rules of cognitive (signaling) shooting: three busts are made - in the right profile, full face (front) and with the head turned to the right (half profile). To obtain the most accurate image of the appearance of the person being photographed, when shooting in front and in profile should be in a vertical position. When shooting in half profile, the person's head should be slightly raised and turned to the right so that the left auricle is clearly visible. Shooting is done from the so-called "normal point" (the position of the camera at which the slightest perspective distortion of the subject; when photographing the head, this point will be the location of the camera at eye level of the person being photographed). When shooting in profile and full face, the person being photographed must be depicted with a normal facial expression, without a hat and other clothing that hides any objects; her hair should be combed (women's hair should not cover the auricle). Shooting is carried out under lighting, which allows you to most fully identify the relief of the face and its features. Combined lighting is usually used, which consists of one sufficiently intense light source (window, spotlight) with a reflective screen made of white fabric or paper. The crucial point is the correct illumination of the auricle: the picture should clearly reflect all its features. Use a flat, relatively light, neutral

background when shooting. It is desirable that among the comparative samples were images close to the study time, image angle, and lighting.

For non-procedural methods of identification of a person by appearance, they should include identification by subjective portraits (photographs). This activity is not regulated by the current legislation of Ukraine, so the results of their use will not contribute to obtaining additional sources of evidence. As a rule, they are used to solve search tasks: 1) establishing the identity of an unknown criminal; 2) establishing the location of a known criminal.

In order to create subjective portraits, either artists or specialists from the departments of portrait examinations are involved. At the same time, a number of organizational difficulties characterizes this activity. In particular, there are currently problems with the appropriate staffing of the relevant specialists of the portrait examination departments of the forensic research centers. There are also significant problems with proper technical support (there are no new technologies for assembling photo robots), as well as proper information support, which is manifested in the inability to verify the compiled photo work on databases.

We believe that the solution of these problems would be facilitated by the introduction into practice of software and hardware for the manufacture of three-dimensional model of the face (three-dimensional photo-robots). This will not only increase the recognition of the wanted person, but also provide an opportunity to identify the person who was observed by a person (including persons with visual impairments) through tactile contact (Demchyshak, 2021; Antoshchuk, 2021, p. 76).

Conclusion

Identification of a person based on appearance is ensured by the individuality, relative stability and reflexivity of these features. Procedural methods of identification based on appearance are the presentation of a person for identification and portrait examination. A non-procedural method of identifying a person by appearance is the use of subjective portraits, which are used to identify third parties.

Presentation of a person for identification belongs to those investigative (search) actions, the results of which, according to the probative value, can not be obtained in any other way. The main factors that make it impossible to identify a

person by appearance during the presentation of a person for identification should be classified into two groups: subjective and objective. Objective factors that are not related to the person being identified and to the person being identified are difficult to eliminate, as they sometimes make it impossible to carry out the specified investigative (search) action. Subjective factors can be addressed by enhancing the professional competence of the prosecution, as well as by reforming the provisions of current criminal procedure law.

The legal provisions governing the procedure for presenting for identification need to be clarified. In particular, Art. 228 of the CPC of Ukraine should be supplemented with the following provisions:

- 1) close relatives, family members of the deceased may be invited to present the corpse for identification, in exceptional cases (if it is impossible to establish them) - third parties may be involved;
- 2) the suspect, witness, victim may be presented for identification;
- 3) receipt of video recording materials presented for identification must be carried out in the manner prescribed by the Code.

Portrait examination is a procedural way of identifying a person or corpse by appearance. This forensic examination is unique in its probative value, because it allows you to solve a number of identification problems, which will result in a procedural source of evidence. Carrying out of portrait examinations is possible only according to the recommendations, which are approved in the form of a technique of carrying out examination of this kind.

Factors that often make it impossible to solve identification tasks during a portrait examination are: low quality of comparative samples, which is due to the resolution of the camera and the conditions under which the video or photos were taken (distance, angle, lighting, etc.). In this regard, the main task of the prosecution is to produce comparative materials in compliance with the relevant requirements in the case of photographs. Existing software and hardware components used in portrait research need to be improved.

Non-procedural method of identification of a person based on appearance is the identification of a person by a subjective portrait (photo robot). At present, this activity is not regulated by the current legislation of Ukraine, and therefore the

results obtained due to such identification are indicative. Currently, there are problems with improving the technical support used in expert institutions to create subjective portraits, including three-dimensional projections.

The need to identify a person by appearance arises more and more often, which increases the relevance of the research problem. In the context of the research question, scientists should focus their efforts on the formation of scientific and practical recommendations for law enforcement agencies, the development of new and improvement of modern software to ensure the effective implementation of this process.

Bibliographic References

- Antoshchuk, A. O., & Hrynenko, K. V. (2021). Features of presentation a person for identification by video materials. *Scientific Journal of the National Pedagogical University named after M. P. Drahomanov. Series 18. Law, 36, 3-9.* <https://doi.org/10.31392/NPU-nc.series18.2021.36.01>
- Antoshchuk, A. (2021). The significance of subjective portraits in the investigation of criminal offenses. *Sciences of Europe, 64, 12-14.* Retrieved from <https://cyberleninka.ru/article/n/znachennya-sub-ektivnih-portretiv-pri-rozsliduvanni-kriminalnih-pravoporushen/viewer>
- Bertovsky, L. V., Ryzhkova, I. A., & Ryzhkov, S. A. (2021). Innovative technologies and principles of criminal proceeding when conducting investigative actions. *Amazonia Investiga, 10(48), 18-25.* <https://doi.org/10.34069/AI/2021.48.12.2>
- Bezkorovoiny, B. V. (2018). *Forensic identity by imagining when presented for identification.* Kyiv: National Academy of Internal Affairs. Retrieved from http://elar.naiu.kiev.ua/bitstream/123456789/10180/1/Dis_bezkorovainyi.pdf
- Boiarov, V., Larkin, M., Dudorov, O., Pyrozhkova, Y., & Legkykh, K. (2020). Interrogation of the victims during the investigation of crimes committed by youth extremist groups. *Amazonia Investiga, 9(28), 281-287.* <https://doi.org/10.34069/AI/2020.28.04.31>
- Chashnytska, T. H. (2021). Reflection of personal appearance in video materials. *Scientific Notes of Lviv University of Business and Law, 29, 279-284.* Retrieved from <http://dx.doi.org/10.5281/zenodo.5795769>

- Demchyshak, R. (2021). The use of three-dimensional modeling as a way of information and technical support of forensic registration. *International scientific journal «Internauka». Series: «Juridical sciences»*, 10(44), 72-78. <https://doi.org/10.25313/2520-2308-2021-10-7631>
- Gupta, A., Punj, D., & Pillai, A. (2022). Face recognition system based on Convolutional Neural Network (CNN) for criminal identification. *Mobile Radio Communications and 5G Networks*, 21-33. https://doi.org/10.1007/978-981-16-7018-3_2
- Hrynenko, K. V. (2020) Organizational and tactic principles of submission of a person for recognition based on appearance. *The South Ukrainian Law Journal*, 1, 155-159. <https://doi.org/10.32850/sulj.2020.1.32>
- Hu, X., Peng, S., Wang, L., Yang, Z., & Li, Z. (2017). Surveillance video face recognition with single sample per person based on 3D modeling and blurring. *Neurocomputing*, 235, 46-58. <https://doi.org/10.1016/j.neucom.2016.12.059>
- Husieva, V. (2021). Problems of human identification by appearance in investigation of criminal offenses. *Theory and Practice of Forensic Science and Criminalistics*, 2(24), 109-122. <https://doi.org/10.32353/khrife.2.2021.07>
- Huynh-The, T., Hua, C.-H., Tu, N. A., & Kim, D.-S. (2020). Learning 3D spatiotemporal gait feature by Convolutional Network for person identification. *Neurocomputing*, 397, 192-202. <https://doi.org/10.1016/j.neucom.2020.02.048>
- Ibn Khedher, M., El-Yacoubi, M. A., & Dorizzi, B. (2017). Fusion of appearance and motion-based sparse representations for multi-shot person re-identification. *Neurocomputing*, 248, 94-104. <https://doi.org/10.1016/j.neucom.2016.11.073>
- Izotov, O. (2016). Persons identification during pre-trial investigation. *Journal of the National Prosecution Academy of Ukraine*, 3, 102-109
- Retrieved from <http://www.chasopysnapu.gp.gov.ua/ua/pdf/11-2016/izotov.pdf>
- Khakhanovskiy, V., & Chashnytska, T. H. (2020). Personal identification, recorded in video materials. *Forensic Bulletin*, 1(33), 72-80. <https://doi.org/10.37025/1992-4437/2020-33-1-72>
- Khan, M. H., Farid, M. S., & Grzegorzec, M. (2021). Vision-based approaches towards person identification using gait. *Computer Science Review*, 42, 100432. DOI: <https://doi.org/10.1016/j.cosrev.2021.100432>
- Law of Ukraine No. 4651-VI. Criminal Procedure Codes of Ukraine (2012). Web site of the Verkhovna Rada of Ukraine, October 04, 2021. Retrieved from <https://zakon.rada.gov.ua/laws/show/4651-17#Text>
- Lisanti, G., Martinel, N., Micheloni, C., Del Bimbo, A., & Foresti, G. L. (2019). From person to group re-identification via unsupervised transfer of sparse features. *Image and Vision Computing*, 83-84, 29-38. <https://doi.org/10.1016/j.imavis.2019.02.009>
- Mathyer, J. (1984). Professor RA Reiss: A pioneer of forensic science. *Journal of the Forensic Science Society*, 24(2), 131-142. [https://doi.org/10.1016/s0015-7368\(84\)72306-1](https://doi.org/10.1016/s0015-7368(84)72306-1)
- Sanchez, J.-L. (2012). Alphonse Bertillon et la Méthode Anthropométrique. *Sens-Dessous*, 10(1), 64-74. <https://doi.org/10.3917/sdes.010.0064>
- Tholen, M. G., Schurz, M., & Perner, J. (2019). The role of the IPL in person identification. *Neuropsychologia*, 129, 164-170. <https://doi.org/10.1016/j.neuropsychologia.2019.03.019>
- Zholnovych, I. V. (2007). Theoretical problems and practical issues of criminalistic description of a person's appearance. Kyiv: Academy of Advocacy of Ukraine. Retrieved from http://194.44.11.130/cgi-bin/irbis_nbuvcgiiirbis_64.exe?C21COM=2&I21DBN=ARD&P21DBN=ARD&IMAG E_FILE_DOWNLOAD=1&Z21ID=&Image_file_name=DOC/2007/07jivooz.zip



DOI: <https://doi.org/10.34069/AI/2022.56.08.10>

How to Cite:

Melnyk, N., Dyshleva, G., Davydenko, A., Matviichuk, T., & Zhytar, I. (2022). The linguistic concept of phraseological units denoting the personality inner world in the modern Ukrainian and English languages. *Amazonia Investiga*, 11(56), 91-102. <https://doi.org/10.34069/AI/2022.56.08.10>

The linguistic concept of phraseological units denoting the personality inner world in the modern Ukrainian and English languages

Лінгвістичний концепт фразеологізмів, що позначають внутрішній світ особистості в сучасній українській та англійській мовах

Received: September 20, 2022

Accepted: October 22, 2022

Written by:

Nataliia Melnyk⁴⁰<https://orcid.org/0000-0002-6641-0649>Scopus ID <https://www.scopus.com/authid/detail.uri?authorId=57211464512>**Ganna Dyshleva⁴¹**<https://orcid.org/0000-0003-0586-330X>**Alla Davydenko⁴²**<https://orcid.org/0000-0001-8499-6674>Scopus ID <https://www.scopus.com/authid/detail.uri?authorId=57222993714>**Tetiana Matviichuk⁴³**<https://orcid.org/0000-0002-6512-3269>**Iryna Zhytar⁴⁴**<https://orcid.org/0000-0002-1336-7931>

Abstract

The article is devoted to the definition of the peculiarities of the metaphorization of phraseological units to denote the inner world of a person in the Ukrainian language. The main purpose of the article is the definition of the peculiarities of phraseological units which denote the inner world of a person in the Ukrainian and English languages. The object of the investigation is the phraseological units expressing the feelings and emotions of a person (emotional phraseological unit). The methodology of the study was based on the cognitive-pragmatic and structural approaches, the descriptive method was used in the work, which made it possible to single out the studied units in the phraseological system of the Ukrainian and English languages and carry out their systematization. The linguistic study has demonstrated that, phraseological units (PhU) expressing human emotions and feelings

Анотація

Стаття присвячена визначенню особливостей метафоризації фразеологізмів на позначення внутрішнього світу людини в українській мові. Основною метою статті є визначення особливостей фразеологізмів, які позначають внутрішній світ людини в українській та англійській мовах. Об'єктом дослідження є фразеологізми, що виражають почуття та емоції людини (емоційні фразеологізми). Методологія дослідження ґрунтувалася на когнітивно-прагматичному та структурному підходах, у роботі використано дескриптивний метод, що дало змогу виокремити досліджувані одиниці у фразеологічній системі української та англійської мов та здійснити провести їх систематизацію. Лінгвістичне дослідження показало, що фразеологічні одиниці (ФО), які виражають людські емоції та почуття (емоційні фразеологізми) в українській та англійській мовах становлять одну з найбільш значущих і

⁴⁰ D.Sc., Associate Professor, Professor of Foreign languages and translation Department, National Aviation University, Kyiv, Ukraine. (Corresponding author)

⁴¹ Lecturer at the Department of Foreign Languages, National Aviation University, Liubomyra Huzara ave. 1, Kyiv, Ukraine, graduate student of the Department of Ukrainian Language, National Pedagogical Dragomanov University, Kyiv, Ukraine.

⁴² PhD, Associate Professor of Foreign languages and translation Department, The Faculty of Linguistics and Social Communications, National Aviation University, Kyiv, Ukraine.

⁴³ PhD in Philological Sciences, Associate Professor, Associate Professor of the Department of Language Subjects, State University of Infrastructure and Technologies, Kyiv, Ukraine.

⁴⁴ PhD in Philological Sciences, Senior Lecturer, Department of Ukrainian Business Communication, National Academy of Security Service of Ukraine, Kyiv, Ukraine.

(emotional phraseological units) in Ukrainian and English represent one of the most significant and expressive groups of phraseological fund units in the language system. Due to the linguistic ambiguity and diffuseness of emotions, one and the same phraseological unit can denote two or more subgroups, but this is not characteristic of all phraseological units. Thus, in the phraseological field "Emotions and human feelings" there are diffuse zones, the units of which are included in different semantic groups. The authors proved, that phraseological units based on physiological sensations, gestures, and facial expressions are generally similar in the two languages due to the weak fate of control on the part of the human, the universally felt nature, and the universal tendency to phraseologize metaphorical word combinations that call these sensations and gestures.

Key words: phraseological unit, inner world of the individual, semantic subgroups, metaphorization of phraseological units, expressiveness.

Introduction

In his speech activity, a person not only informs about the surrounding world, but also expresses his attitude towards it. One of the signs of the expressiveness of the speaker's thoughts, the level of linguistic richness is, in particular, the use of phraseological units. Formation of phraseological units, their appearance is a living and constant process, caused by the very need of human communication. The process of understanding and analyzing the phraseological composition of the language is a way to get to know the mentality of the people, their ideas about the world and their perception of themselves in this world.

Interest in the manifestation of the "human factor" in language includes interest in the image of a person as a component of the linguistic picture of the world, and in verbalization, linguistic conceptualization of various sides and levels of the human personality. That is why it is necessary and important to analyze phraseology with the designation of emotions, the personal or inner world of a person as a component, as well as the study of the issue of mono- and polysemanticity of these units.

The **main purpose of the article** is the definition of the peculiarities of the metaphorization of phraseological units to denote the inner world of a person in the Ukrainian and English languages.

експресивних груп одиниць фразеологічного фонду в системі мови. Через мовну неоднозначність і розсіяність емоцій один і той же фразеологізм може позначати дві або більше підгруп, але це характерно не для всіх фразеологізмів. Таким чином, у фразеологічному полі «Емоції та почуття людини» виділяються дифузні зони, одиниці яких входять до різних семантичних груп. Авторами доведено, що фразеологічні одиниці, засновані на фізіологічних відчуттях, жестах, міміці, загалом подібні у двох мов через слабку долю контролю з боку людини, універсальну відчутну природу та універсальну тенденцію до фразеологізації метафоричних словосполучень, які називають ці відчуття та жести.

Ключові слова: фразеологічна одиниця, внутрішній світ особистості, семантичні підгрупи, метафоризації фразеологізмів, експресивність.

Achieving the set goal involves solving the following **tasks**:

- 1) to substantiate the basic principles of phraseological units to indicate the inner world of a person in Ukrainian and English languages;
- 2) to determine differences and similarities between phraseological units which indicate the inner world of a person and to point out a general classification by groups.

Literature review

At present, the formation of the anthropocentric paradigm has led to a turn of linguistic research in the direction of man. Ukrainian and foreign linguists such as A. A. Taranenko (1989), O. V. Trofimova (2011), V. D. Uzhenko, D. V. Uzhenko (2007) and other scientists devoted their scientific works to the study of this direction. Increasing interest is caused not by the processes occurring within the language, but by the processes of the relationship between language and thinking, language and culture, language and society, language and psychology. The study of conceptual categories is carried out at the intersection of various disciplines: cognitive linguistics, ethnolinguistics, linguoculturology, psycholinguistics. The work under review is made at the intersection of linguistics and psychology, and is devoted to a

comparative study of the phraseology of different system languages, which are Ukrainian and English. This study is a comparative analysis of semantic features, internal form and imagery of phraseological units expressing human emotions and feelings in the two involved languages.

The group of phraseological units expressing the feelings and emotions of a person (emotional phraseological unit) was not chosen by chance, since, firstly, the phraseological units themselves characterize the manifestations of a person's inner emotional life and reflect them through a kind of "mirror of human feelings, perceptions and evaluations" (Cowie, 1998, Gläser, 1998), and secondly, it is this group of phraseological units that fixes the basic emotions, helps to understand how they are activated, how they are manifested and experienced, what functions each of them performs in communication, namely in the speech of people on example of phraseological units. A separate aspect of the research of phraseological units to indicate the inner world of a person in the context of connotation and ethnic aspect (Melnyk, N. I., Modestova, T. V., Krsek, O. Ye., & Uschnevych, S. E. (2021); Melnyk, Biletska, Ponomarova, Buranova & Davydenko (2021)). However, this was not enough to finally solve the problem of metaphorizing phraseological units.

The relevance of the proposed research determines the general focus of modern linguistics on the study of man in language, which is, as is known, one of its priorities. Anthropocentrism involves shifting the interests of the researcher from the objects of knowledge to the subject of knowledge and acts as a product of culture and a factor in the formation of cultural codes. Therefore, it is important for anthropocentric phraseology to study the linguistic meanings of phraseological units, because the phraseological meaning encodes thought information, which is also reflected by the human psyche. It is with the help of metaphors that a native speaker expresses his psychological states, experiences, attitude to life, various feelings, gives figurative assessments.

Methodology

To solve the tasks and based on cognitive-pragmatic and structural approaches, the descriptive method was used in the work, which made it possible to single out the studied units in the phraseological system of the Ukrainian language and carry out their systematization; component analysis is applied to interpret the

meanings of phraseological units and their components. The use of these methods was subordinated to the general research algorithm, which is built on the basis of the tasks set before the work.

The present study is a synchronous and comparative description of the analyzed material, based on the study and generalization of the main achievements of modern linguistic science and the theory of phraseology, their core concepts.

The main methods are: the comparative-topological method and the method of phraseological analysis by A.V. Kunin (2005), which includes the method of phraseological identification used in the selection of phraseological material in combination with the method of dictionary definitions, the component analysis method, the semantic field method, the statistical method processing results.

The practical methods were the method of observation, the method of description and the method of questioning informants – native speakers.

Results and discussions

Interest in the manifestation of the "human factor" in language includes interest in both the image of a person, which is a component of the linguistic picture of the world, and the verbalization, linguistic conceptualization of various sides and levels of the human personality. A special place among the means of designation and interpretation of the components of a person's linguistic image belongs to phraseology, which is the most important means of preserving and expressing general and specific sociocultural stereotypes, models and values.

The heterogeneity of the figurative semantics of a phraseological unit is due to the figurative meaning of its core component, as well as the global reinterpretation of the original free word combination. The imagery of a phraseological unit is created by a living internal form that provides an imaginative associative perception of the original situation. According to V. M. Mokienko, an active figurative means of creating phraseological units, in addition to comparison, is metaphor Mokienko (1989, p. 167). The metaphor mechanism allows you to use it to create new linguistic meanings, as a result of which a metaphor from a figure of speech turns into a linguistic sign, which leads to the loss of the previous reference by a word or phrase and the acquisition of a new one

(Uzhenko & Uzhemko (2007), p. 79). Through semantic associations with the help of metaphors, the native speaker expresses his psychological states, experiences, attitude to life, various feelings, gives figurative assessments (Potebnia 1985, (p. 30). Thus, linguists consider metaphor as a secondary indirect nomination with the mandatory preservation of semantic duality and a figurative element. Richards, 1990 (p. 108) and forces us to see one object through the prism of another. As noted by V. D. Uzhchenko, a metaphor that most often uses signs of one conceptual sphere to denote another Lakoff D. (2008), as an attempt to define the unknown through the known Evans V. (2006), to use vivid and vivid ideas Skandera Paul (2007) is powerful communicative and conceptual tool Glucksberg, 2003 (p. 164). Metaphorization leads to a radical restructuring of the very model of world understanding: "the traditional categorical grid is destroyed, but it does not disappear without a trace" (Trofimova (2011), p. 51), but gives rise to a new formation. As A. Richards (1990) correctly notes, when using a metaphor, we have two thoughts about two different things, and these thoughts interact with each other in the middle of a single expression, the meaning of which is precisely the result of the interaction Potebnia, 1985 (p. 46). The core of the combination of these two opinions is the basis of their comparison, which goes from a free word combination to a phraseological one; the first is the inner form of the second. Adjacent links are combined by the basis of comparison. Therefore, V. D. Uzhchenko's statement that "...the metaphor attributes to the union of two sets seven features that are characteristic of the "intersection" of these sets, leaving out the other seven" is very convincing. Metaphorization, as a cognitive process, according to N.F. Alefirenko (2002), consists of the following thinking steps:

- a) selection of the brightest and well-known analogue (source of comparison);
- b) transfer of the relevant part of knowledge, part of empirical experience from the sphere of the base, or source, to the area of the object of knowledge and naming;
- c) generation of new meanings as a result of the interaction of two ideas.

However, the process of anthroponymization is not limited to the mentioned phraseological expressions. By continuous selection from phraseological dictionaries of the Ukrainian language, phraseological units were selected, which can be grouped according to the above-mentioned division:

- 1) transfer from an object to a person: the abyss of wisdom, the makita of the mind, the ten-pointed wheel in the wheel, the gray beard, the blue stocking, the gray retinue, the unkempt unshaven, the eighteenth fog, the tyuUL with the watering nose, the shirttail, the berry of our field, the berry from one field, the fifth column;
- 2) transfer from creature to person: white crow, Buridan's donkey, Valaam's donkey, crow in peacock feathers, yellow-mouthed chick, sea wolf, wise pichkur, look like a wolf, deaf grouse, hare soul, lost sheep, wolf in sheep's clothing, scapegoat, beaten a dog, a calf of God).

In Western linguistics, there are also different opinions regarding the understanding of the essence of phraseological units. Often, all stable combinations and even useful combinations of words are often called idioms. In the English and American linguistic literature, however, there are few works devoted to the theory of phraseology, therefore, in German studies there is no generally accepted term for this discipline. Idiom collections include any stable combinations. Sweet (H. Sweet) noted that "the meaning of each idiom is an isolated entity that cannot be deduced from the meaning of the words from which the idiom is composed." Pie called this concept of idiom a lexical group, Lees described them as semantically exocentric expressions, but they were also referred to as phrases, phrases, frozen phrases (Atherton, 1991). The representative of the Prague Linguistic School, Frantýšek Cermak, believes that "a distinctive feature of any idiom is any anomaly of at least one of its components, if we touch on its paradigmatic or syntagmatic aspects." In Western linguistics, a phraseological unit is considered a unique and fixed combination of at least two elements, some of which do not work in other situations, or work, but only in a very limited number. The basic typological constant is "combinatorics" (Phraseological unit – PhU).

Universal for both compared languages are such properties as a too weak compositional function among the meanings of the constituent parts, a deficit of their transformation, a peculiarity of formation without any rules that does not allow them to be used in other, similar constructions and conditions.

Phraseologisms in the language act as stereotypes of national consciousness, serve as landmarks in the system of folk representations of life, formed under the influence of customs and traditions, the way of life of society, and

religious convictions. PhU can capture real historical events, customs, traditions, religious rites, biblical or Koranic stories.

Most linguists distinguish three main macrocomponents in the structure of phraseological meaning: denotative, significative, and connotative.

Accordingly, when considering phraseological units denoting the human condition, the following groups can be distinguished:

- 1) denoting the physical condition of a person: illness, fatigue, hunger, cold, drunkenness (stomach rumbles - the stomach rumbles; get very hungry; drunk in the insole, the eyes have fallen into a hole; to walk against the wind - to lose weight, too thin in the Ukrainian language (UL) and Look like a drowned cat - lit. - be weak (O man), breathe incense in English (EL));
- 2) denoting the psychological and moral condition of a person: joy, sadness, love, etc.: mouth to ears - to be very happy; I turned white to the wall - it turned pale (from fear), my soul hid in my heels - I was very scared, my soul went to my heels; I got

angry, got out of myself in UL and From ear to ear - smile widely, Be in a cold sweat - be in a cold sweat from fear, One's eyes stand out of one's head - letters, someone's eyes came out of one's head; the eyes climbed onto the forehead (from музыныя) in EL).

It is known that one and the same feeling can be realized in different emotions. This is due to the complexity of the phenomena, multifacetedness and multiplicity of their connections with each other. For example, in one and the same feeling, emotions of different signs (positive and negative) often merge, unite, and become one another. This explains such a property of feeling as duality (ambivalence).

The work considers an emotional phraseological unit expressing 6 emotions (fear, excitement, anger, sadness, shame, surprise, joy) and 2 feelings (happiness, love). According to the nature of the evaluative meaning, two groups of phraseological units are distinguished: turns with negative evaluative semantics (fear, excitement, anger, sadness, shame) and turns capable of expressing a positive evaluative meaning (surprise, joy, love).

Table 1.
Quantitative characteristics in UL and EL

PhU,	Denoting and expressing emotions		Human feelings Number of FBs % ratio	
	In UL	In EL	In UL, %	In EL, %
Negative emotions	968	713 66	7	64.5
Fear, fright, fear, horror, panic	125	103	8.62	9.32
Anxiety, agitation, restlessness; suffering	315	157	21.7	14.2
Irritation, anger, rage	235	265	16.2	24
Sadness, sadness, boredom, despondency, longing	202	144	13.9	13.04
Shame, embarrassment	91	44	6.3	4
Neutral and positive emotions	482	392	33.2	35.5
Surprise, astonishment	104	64	7.2	5.8
Joy, happiness, pleasure, satisfaction	215	225	14.8	20.4
Infatuation, love	163	103	11.2	9.3
Total	1450	1105	100	100

The authorship: Nataliia Melnyk, Ganna Dyshleva, Tetiana Matviichuk

The most numerous group in UL is the PhU subgroup expressing the emotion of excitement, followed in descending order by the subgroups of anger, joy, sadness, love, fear, surprise, and

shame. In EL, the subgroup of anger is the most numerous, followed by the subgroups of joy, excitement, sadness, fear and love, surprise and shame.

Table 2.
Representativeness of emotions in UL and EL phraseology, in descending order of abundance

№	UL	EL
1	Excitement	Anger
2	Anger	Joy
3	Joy	Excitement
4	Sadness	Sadness
5	Love	Fear and Love
6	Fear	
7	Surprise	Surprise
8	Shame	Shame

The authorship: Nataliia Melnyk, Alla Davydenko, Iryna Zhytar

Phraseology is a valuable material for the study of the regularities of updating the "national" conceptual picture of the world created by the language. Linguistic or "naive" picture of the world is characteristic of everyday human consciousness and reflects everyday knowledge in contrast to the scientific picture of the world, where encyclopedic knowledge is presented. there are two views on the nature of PhU imagery.

According to the first, the figurative motivation of idioms is based on abstract ways of interpreting some entities in terms of others. This is a "*conceptual-metaphorical hypothesis*" supported by R. Gibbs (2017), Lakoff (2008), Taranenko A. A. (1989), N. Melnyk, I. Biletska and others (2021). According to the second view, the "*hypothesis of interference*" - idioms evoke images in the mind due to the literal reading of the idiom (S. Glaksberg). Analyzing the internal form of PhU, we rely on the advantages of both hypotheses.

The meaning of any PhU to one degree or another is encoded information, which in order to understand the meaning of the expression must be decoded based on the known image, the expression of a rational and emotional assessment of what is happening, orientation in the speech situation. The actual meaning of PhU is the ratio of literal and idiomatic meanings. The fact that combinations of words subjected to phraseology are included in complex semantic processes is obvious. The internal form, the phraseological image, which is the basis of the content of PhU, is created by comparing two denotations: the denotation of PhU and the denotation of the verbal complex - the prototype of this PhU. This comparison is presented in PhU as a result of the activity of the nation's linguistic consciousness.

In language, an image is a specific way of storing information. The special significance of the image for linguistic studies, primarily comparative ones, is that the image is associated with a certain association that causes a mental (emotional-evaluative) reaction. These associations and reactions reveal what is common and what is different in the worldview of speakers of different languages. The image of PhU is one of the main components of the connotation, and therefore reflects the peculiarities of the national mentality.

5 fields (subgroups) of the PhU phraseological unit with their semantic models are considered: fear, excitement, anger, sadness, shame. The distribution of PhU into phraseological subgroups was carried out on the basis of their identification with separate lexemes, word combinations or detailed descriptions in lexicographic sources, as well as literal translation carried out by the author.

The analysis was carried out on the basis of single criteria for the description of PhU:

1. The results of the study of one or another emotion, feeling in psychology were summarized (Uzhenko V.D. & Uzhenko D.V. (2007) Carroll E. Izard (1979) and others).
2. The gradation of emotion (feeling) according to the intensity of its (ego) manifestation, which is reflected in an emotional phraseological unit, was carried out as much as possible. For example, in fear, there is an intensification of the state of feeling - that is fear, horror to panic (actually fear: *вкритися потом* - to be covered with cold sweat (from fear); to be in mortal fear in UL and *Shake (or shiver) in one's boots* - to shake from fear, tremble like an aspen leaf in EL, fright: *Душа в н'ятках* - to be very frightened; letters, the soul came to the to

heel in UL and *Look as if one had seen a ghost* - to be very frightened (exactly saw a ghost) in EL, horror.

3. The phenomenon of diffusion within one subgroup and between groups was observed. Emotional phraseological units do not have a clearly defined denotation, as the feelings denoted by them are diffuse. That is why it is possible to talk about the preferential use of this or that emotional phraseological unit to denote this or that emotion. So, for example, PhU *серце тьохнуло* in UL and *One's hair stands on end* in

EL can denote fear and fright at the same time. The diffuseness of the emotional phraseological unit is explained by the diffuseness of the emotions and feelings themselves. With the similarity of symptoms, the nature of the subject's reaction may be different, which allows us to conclude that in different feeling-states there are identical reactions and symptoms, which, as it appears, is one of the reasons for the diffusion of the meaning of idioms, which for this reason can denote different feelings-states, activating in them one or another signs similar to them (Melnyk, Modestova, Krsek & Uschnevych (2021). Some PhU *заклякнути як пень* - freeze, stiffen; freeze (from fear, surprise, etc.); *вкритися потом* - cover yourself with cold sweat; *Душа в н'ятках* - literally, the soul has come to the heel; get very scared; get out (from anxiety, worry) in UL and *Jump out of one's skin* - buke, jump out of one's skin; jump up, shudder (from fear, surprises) to be very frightened, surprised, shocked, *One's tongue glued itself to the roof of one's mouth* laziness, bewilderment, fear in EL. This explains the interfield diffusivity of PhUs denoting feelings-states, which occurs if the script of this feeling contains a fragment that testifies to one or another symptom-like reaction.

4. On the figurative basis of the internal form, semantic models of the emotional phraseological unit were distinguished. The study of the Ukrainian and English languages revealed a variety of PhU prototypes expressing human emotions and feelings. The variety of types of the internal form of PhU, based on metaphor, was generally reduced to three corresponding elements of feeling distinguished in psychology:

- 1) physiological changes of internal organs and physiological sensations of the face in a certain emotional state;

- 2) behavioral reaction of a person, including facial expressions, gestures, body movements and active actions of a person;
- 3) internal experiences of the state.

Within the framework of the article, it is difficult to give a description of all identified phraseological-semantic groups, so we will demonstrate them results of the analysis on the example of one subgroup - emotional phraseological units of fear.

The following semantic models are distinguished in the PhU subgroup with the meaning "fear":

1. Sensation of cold (rarely heat), denoting a state of fear, felt by the face as cold *збліднути* - freeze (from fear, surprise, etc.); cover with cold sweat, *кинуло в жар* - thrown into the heat in UL, *One's blood turned to ice* - the blood freezes in the veins from fear in EL.
2. Shivering, chills, defecation, denoting a state of fear (*зуб на зуб не попадає* - they chatter their teeth, *накласти в штани* - put in their pants (with fear) in UL, *Shake like an aspen leaf* - shake like an aspen leaf, *Shake (or shiver) in one's boots* - lit., to shake in one's boots; to shake with fear, to tremble like an aspen leaf in EL).
3. Change in the color of the face (paleness), denoting a state of fear (*зблід, як стіна* - turn pale in UL, *Be as white as a sheet* - lit. in EL).
4. Unpleasant tactile sensations, indicating a state of fear (*покритися гусячою шкірою* - get goosebumps; experience fear in UL, *Curl smb's hair*-buke, twist someone's hair; someone's hair stands on end (of fear), to shock in EL).
5. Loss of the usual location of an internal organ (heart, soul, liver), indicating a state of fear (*душа в н'ятки* - literally, the soul came to the heel; to be very scared, *серце з грудей вискакує* - lit., the heart is in the mouth; get very scared in UL, *Smb's heart is in one's mouth* - lit. Jump out of one's skin - letters, jump out of the skin; be very surprised, shocked, scared in EL).
6. Violation of the rhythm of breathing or increased heartbeat, indicating a state of fear (*дух перехопило* - stop breathing from fear, *серце стало* - letters, palpitations; heart failure (from fear, excitement), *пульс пропав* - beats the pulse (from fear) in UL, *Hold one's breath* - hold one's breath in EL).
7. A borderline condition between life and death, denoting a state of fear (*кров в жилах похолола* - letters, someone's blood has

- dried up; to be very scared, *в очах потемніло* - letters, bile has exploded; to be very afraid, *Наче Бога побачив* - letters, sometimes to give the soul, then to take it away; tormented, tormented; mortally afraid in UL, *Be more dead than alive* - be neither alive nor dead in EL).
8. A person's loss of consciousness, reason, slowing down of thinking, denoting a state of fear (*втрапити голову* - literally, the mind jumped out; they lose head, go crazy (from fear), that something bad will happen in UL and *Be scared out of one's senses (wits)* - be scared to the point of losing consciousness, Scare smb. out of their wits - scare someone into unconsciousness in EL).
 9. Numbness of organs and parts of the body, indicating a state of fear:
 - a) numbness of the tongue (*язик проковтнути* - swallow a small tongue in UL, *One's tongue glued itself to the roof of one's mouth* - someone's tongue stuck to the larynx; *язик took to EL*);
 - b) numbness, numbness of the legs (*ноги підкосились* - the legs are numb, but they stand on their feet (from fatigue, fear, excitement), *руки і ноги як ватні стали, руки і ноги потерпли* - literally, the arm and leg are numb; to be numb from fear, cold; *остовніти, захолонутти на місці* - to be stunned, petrified in UL).
 10. A feeling of pain in the heart, indicating a person's internal experience of a state of fear (*серце лопнуло* - it hurts - about the heart; they freeze from fear; *серце тріпочеться, як шалене* - the heart throbbed; *ранити в саме серце* - letter, narrows the soul (in some place); escape and hide, *душу (серце) лоскоче* - experience severe pain due to fear in UL and *Be sick at heart* - letter, heart hurts; worried, yearning in EL).
 11. Wide open eyes; tic, denoting a state of fear (*баньки вирячити, витріщитись як баран на нові ворота* - stare out the eyes (from surprise, fear), *око муляти, заглядати, як сорока в кістку* - letters, the eye is frightened; to save, to hide; to be frightened, to be frightened in UL and *Look as if one had seen a ghost* - to be very frightened, as if seeing a ghost; to look very frightened in EL).
 12. a) Desire to hide (passive fear) and b) flight (active fear), i.e. outwardly expressed behavioral reaction of a person, denoting a state of fear: (*ховатися по закутках* - hide in nooks and crannies, do not show yourself in front of someone, hide from someone in

fear, *розбігтися, як миші по норах, розбігтися хто куди* - literally, like mice to run away into their holes; in UL, *Move like a scalded cat* - move like a scalded cat in EL).

13. a) Scream, exclamation, i.e. verbal actions denoting a state of fear: *Господи помилуй! Хай Бог милує! Дідько б тебе взяв!* (expresses fear, surprise, excitement) in UL and *Cry (shout) blue murder- letters, shout the blue killer* - shout the guard, shout no with his voice, he screams wildly in EL) and b) silent (*А ні напу з вуст!* - don't make a sound, don't you dare die, *Цить!* - don't make a sound in UL).

The following conclusion can be drawn from the presented semantic models: in general, the figurative basis of the PhU subgroup of fear in UL and EL is similar due to the physiological manifestations of the emotion of fear, which is not controlled by a person. The exception is only models 9-6, 12-a and 12-b, identified only in UL.

Semantic analysis of PhU expressing neutral and positive human emotions and feelings in Ukrainian and English languages" is devoted to a comparative analysis of the semantic features of an emotional phraseological unit with the meaning 'surprise', 'joy' and 'love', a description of their internal form and figurative component. In the third chapter, the national and cultural specifics of the emotional phraseological units are established, and the psychological features of the Ukrainian and English speakers are reflected in them.

We will demonstrate the results of the analysis using the example of one subgroup - the emotional phraseological unit of joy, happiness, and pleasure.

In the subgroup PhU with the meaning "joy, happiness, pleasure" the following semantic models are distinguished:

1. A feeling of lightness when moving, denoting a state of joy (*Не чути ніг під землею! Йти як пава від щастя!* - don't feel your feet under you from joy in UL and *Tread on air* - don't feel your feet under you from joy in EL).
2. Being in heaven, in paradise, denoting a state of happiness and joy (*На сьомому небі від щастя!* - to be on top of bliss, to be in rapture, to be on the seventh heaven in UL and *On cloud seven* (or nine; i.e. On Cloud Nine or on Cloud 9) open - infinitely happy; in the seventh heaven in EL).

3. The image of a soft pillow and a blanket, denoting a state of contentment (*Як на царських перинах спати! Як у Бога за пазухою!* - letters, on a down pillow and click a nut; live in peace, prosper in UL and *A security blanket* - letters, a safe blanket; something that gives a feeling of confidence, safety and comfort, cozy in EL).
4. Clouding of consciousness, loss of self-control, denoting a state of joy (*Втратити голову! Радити до нестями!* - lose one's head, be without memory (from love, happiness) in UL and *Laugh one's head off* - letters, laugh madly; die of laughter; laugh to tears, laugh a lot in EL).
5. The predetermination of happiness through the image of fate, the benevolence of the stars. (*В сорочці народитися! Народитися під щасливою зіркою!* - literally, the mother gave birth to him on the night of destiny, the mother gave birth to him in a shirt (be born in a shirt, be born under a lucky star) in UL and *Be born under a lucky star* - be born under a lucky star in EL); luck in the game, lottery, etc. (*Везунчик! Щасливчик! Багатенький Бураттино! Три очка!* - letters, a six fell out - the position of the dice when playing backgammon; to find a lucky chance, unexpected luck in UL and *Strike lucky (strike it lucky)* - to have a lucky coincidence, luck, for example, win the lottery in EL).
6. The sun, a sunny day, denoting a state of joy and happiness (*Пішло в руку!* - to be happy, smile - about happiness in UL and *A ray of sunshine* - a ray of light, something joyful in EL).
7. Shining in the eyes, a smile, denoting joy (*Очі світяться від щастя!* - letters, the eyes are laughing inside; shining with joy - about the eyes, *Бути не собі від радості, либитись, як дурний!* - mouth to ears in UL and *Be bright-eyed and bushy tailed* - letters, to be with bright eyes and a fluffy tail; to be full of energy and strength, Grin from ear to ear - letters, to grin from ear to ear; to grin, to smile with their whole mouth in EL).
8. a) Laughter, body shaking, i.e. outwardly expressed behavioral reaction of a person, namely physical EL reaction (action actions), indicating a state of joy (*Заходиться сміхом покотом! Лягти зі сміху!* - roll with laughter, laugh (laugh) to the point of falling, *Сміятися до сліз!* - laugh to tears in UL and *Hold one's sides (with laughing, laughter)* - laugh, hold on to the side in EL); b) Scream, exclamation, i.e. speech reaction (verbal actions) denoting a state of joy (*Радість серця мого! Світло очей моїх!* - Joy of my heart, the light of my eyes! in UL; express joy, experience a sense of satisfaction (expression) in EL); c) a lack of words that describe the intense state of joy (*Я була наскільки щасливо, що важко навіть описати!* - I was so happy that it is difficult to convey with words in UL).
9. a) Holiday, fun (including songs, dances, playing a non-instrumental instrument), dresses, decorations, indicating a state of joy (*Радість в косу вплести!* - bouquet, weave gold threads into braids; go crazy with joy, be very happy, Bayram etmek - буре, to celebrate; to be happy in UL and *(As) merry as a marriage* - lit., merry as a wedding; very merry in EL); b) Increased excitability, which manifests itself in the inability to sit still and indicates a state of joy (*Не може собі місця знайти від радості (хвилювання чи стривоження)* - letters, the soul does not fit in the soul; it does not find itself a place (from joy, excitement) in UL).
10. Gesticulation denoting satisfaction with life and pleasure (*Потирати руки від радості, від нетерпіння, в очікуванні чогось! Розправити плечі!* - letters, hands folded in elbows; carefree, contented with their position in UL and *Rub one's hands* - rubbing hands (meaning pleasure or gloating) in EL); Gestures denoting joy (*Підкинути капелуха вгору!* - letters, throw up a hat (or joy) in UL and *Applaud (or cheer) to the echo* - to applaud hotly, noisily; arrange a stormy ovation in EL).
11. A perceptual-physical reaction, denoting a state of joy (*Білого світу не бачить!* - literally, the eye does not see the world; очен радоваться, jubilate, be on top of bliss in UL).
12. White, pink, red colors, denoting a state of happiness, satisfaction (*Бачити все у рожевих окулярах!*) - see everything, the world in pink light (tsvete), look at the world through rose-tinted spectacles in UL and *Look through rose tinted spectacles (rose-colored glasses)* - look at something through rose-colored glasses in EL).
13. Pleasant taste sensations and delicious food, denoting a state of pleasure and happiness (*Як мед так ложкою! Жити, як вареник в маслі!* - to eat honey with big portions; to live carefree in UL and *Look like the cat that got the cream* - to look like a cat that ate cream; to look contented and happy, *Be full of beans - to be full of peas*; to be happy, full of energy in EL).

14. Wealth, luxury, denoting a state of joy, happiness and pleasure (*Як мед так ложкою!* found wealth; pleasure in UL and *Feel like a million dollars (American open)* - letters, feel like a million dollars; it's great to feel yourself in EL).
15. Pleasant sensations (including warmth, coolness) in the heart, soul, head, denoting the internal experience of a state of joy, happiness, pleasure (*Душа спокійна!* - literally, the soul is pleased; be (remain) satisfied, be happy, *Як нова копійка!* - feel good, live in contentment, *Грїти серце (душу)!* - letters, the heart has cooled down; calm down, relax from the heart; cheer up UL и *Warm the cockles of one's heart* - letters, warm the mollusks of the heart; rejoice, warm heart; will bring great pleasure, great joy, be liked in EL).
16. Behavioral reaction, denoting a state of joy, happiness and pleasure (*Ayagina sicak su dökmek* - to meet with joy (according to the Ukrainian tradition of meeting a dear guest in UL and *Take to smth. like a duck to water* - letters, take something like a duck to water; to have an innate ability to do something and to do it with pleasure, it is easy to learn, *Count one's chickens before they are hatched* - to rejoice before the time, divides the skin of an unkilld bear; chicks are counted in EL).
17. Somewhat aside are PhUs, which denote and express gloating, i.e. in this case, joy is not a positive, but a negative emotion (*Biyik altından gülmek* - letters, laugh from under the mustache; grin, smile, *Sakalina gülmek (birinin)* - laugh in the face, openly laugh at someone in UL and *Laugh in the beard* - laugh secretly, secretly, *Rub one's hands* - rub one's hands .

This subgroup contains a phraseological unit with a causative element, which are directed at another person with the aim of causing him a state of joy or pleasures. *Радувати очи!* - delight the eye (sight), admire, amaze, - caress, delight the eye (sight) in UL and *Be a sight for sore eyes* - be a pleasant sight, give pleasure, delight the eye, etc. in EL.

Internal experiences that are perceived as ease of movement, staying in an unusual place, etc. become the basis of images that motivate the meaning of the phraseological unit of the subgroup of joy and happiness. The phraseological unit of the subgroup of joy, happiness, pleasure is expressive, since they are motivated by a large number of images that convey the inner experiences of a person in a

state of joy, his feelings and the outwardly expressed reaction of a happy or joyful person.

National and cultural specificity of phraseological units expressing positive emotions and human feelings. In our work, we adhere to the opinion of the majority of scientists and believe that language cannot be considered separately from culture, because each language is characterized by national and cultural features, background knowledge is expressed both explicitly and implicitly, at all levels of the language, especially at the phraseological level. National-cultural specificity is a traditional topic for research in the field of phraseology (Melnyk, N. I., Modestova, T. V., Krsek, O. Ye., & Uschnevych, S. E. (2021).

The national-cultural elements of the semantics of phraseological units can be manifested at three different levels of the content plan:

- 1) in the aggregate phraseological meaning (*Rub one's hands*- rub one's hands; feel satisfaction, gloating about something, *Raise one's hands*- letters, raise one's hands; they will be extremely surprised, confused; spread their hands in the English language);
- 2) in the meaning of individual lexical components of Phraseological units (words-realities) (*sweet holiday* - letters, sweet holiday; in the Ukrainian language and *Beer and skittles* - letters, beer and skittles; entertainment, sheer pleasure in English language);
- 3) in the direct meaning of the free phrase, which has been figuratively reinterpreted (in prototype phraseological units) (*bow to the feet* - letters, meet with joy in the Ukrainian language and *Wear one's heart on one's sleeve* - letters, wear one's heart on your sleeve; don't know how to hold back your emotions in the English language) (Melnyk, Biletska, Ponomarova, Buranova & Davydenko (2021)).

Most of the emotional phraseological units analyzed by us in the Ukrainian language are not recognized as absolute equivalents in the English language. In such phraseological units, the figurative components of the content plan of phraseological units that are close in meaning differ, or the actual meaning does not coincide with the proximity of internal forms, which speaks in favor of the national-cultural color of phraseological units. Figurative motivation inherent in phraseological units is "directly connected with the worldview of the native people".

External manifestations of emotions, representing a synthesis of involuntary and arbitrary human reactions, largely depend on the cultural characteristics of the given people. A well-known, for example, tradition of English education is to not show your emotions outwardly. This feature is traced by us in the subgroup of emotional phraseological units "sadness, longing, despondency". In the English PhU, the "individualism" of Western cultures is manifested, and in the Ukrainian - the "collectivism" of the Eastern ones. The latter are characterized by considerable imprecision and indeterminacy of the discourse, the desire to avoid categoricalness in things. In addition, eastern cultures, which include Ukrainian culture, are characterized by greater differentiation of emotional categories, which is manifested in the richness of language tools used to express emotions

Thus, the Ukrainian and English languages differ not only genetically, but also represent different linguistic and cognitive world pictures. The researched material showed that such semantic features of the emotional phraseological unit as the motivation of the meaning of the phraseology by the meaning of its components, the presence of an internal form, expressive-emotional coloring determine the special role of emotional phraseological units in the expression of the value picture of the speaking world. Most of the emotional phraseological unit reflects the historical, cultural, ethnographic context, particularities of the worldview and worldview of the people.

Conclusions and further discussions

Phraseological units (PhU) expressing human emotions and feelings (emotional phraseological units) in Ukrainian and English represent one of the most significant and expressive groups of phraseological fund units in the language system.

Due to the linguistic ambiguity and diffuseness of emotions, one and the same phraseological unit can denote two or more subgroups, but this is not characteristic of all phraseological units. Thus, in the phraseological field "Emotions and human feelings" there are diffuse zones, the units of which are included in different semantic groups.

Within the semantic subgroups of emotional phraseological units, the relative gradation of expressed emotional states (for example, fright - horror - panic) is traced, which indicates the special expressiveness of PhU in the considered

phraseological field. This is especially evident in emotional phraseological units with the meaning of fear, anger, and joy.

As a means of embodying cultural and national specificity, an emotional phraseological unit serves as a figurative component of the content plan, and the way to indicate this specificity is the interpretation of the image in the mirror of the national culture of the given language community. This kind of interpretation of an emotional phraseological unit based on the correlation of their associative-figurative perceptions with stereotypes reflecting the national mentality reveals their cultural-national meaning and character, which is the content of the national-cultural connotation.

Phraseological units of the studied group, which have similar semantics at the denotative level, differ significantly in their prototypes.

The similarity of phraseological units in the two languages indicates a certain commonality of associative-figurative thinking of representatives of different types of cultures — Ukrainian and English. The presence of an emotional phraseological unit in the phraseological funds of attractive languages is explained by the individuality of historical experience, the uniqueness of culture, and the peculiarity of the mental makeup of the Ukrainian and English peoples.

Prospective tasks include of phraseological equivalents studying, an analog emotional phraseological unit of the Ukrainian and English languages, as well as an analysis of ways of translating non-equivalent emotional phraseological units from one language to another.

It is advisable to study phraseological units expressing those emotions that remained beyond the scope of the analysis, as well as phraseological units denoting the physical state of a person (fatigue, hunger, cold, intoxication), including the relationship between emotions and physical state.

Bibliographic References

Alefrenko, N.F. (2002) Poetic energy of the word. Synergetics of language, consciousness and culture: monograph [Poeticheskaya energiya slova. Sinergetika yazyka, soznaniya i kul'tury monografiya]. Moscow: Academia. 394 s. <https://cyberleninka.ru/article/n/alefrenko->

- n-f-poeticheskaya-energiya-slova-sinergetika-yazyka-soznaniya-i-kultury-m-academia-2002
- Atherton, M. (1991) Henry Sweet's idea of totality: a nineteenth-century philologist's approach to the practical study of language. The University of New-York.
- Carroll, E. I. (1979) Emotions in personality and psychopathology / edited by Carroll E. Izard. New York: Plenum Press. xx, 597 p.
- Cowie, A.P. (1998). Phraseology: Theory, Analysis, and Applications. Oxford: Oxford University Press.
https://books.google.se/books/about/Phraseology.html?id=Df-iQpNMLcgC&redir_esc=y
- Evans, V. (2006) Cognitive linguistics. Edinburgh University Press.
- Gibbs, R. W. (2017). Metaphor Wars: Conceptual Metaphors in Human Life. Cambridge: Cambridge University Press, 328 pp. ISBN 9781107071148
- Gläser, R. (1998). The Stylistic Potential of Phraselological Units in the Light of Genre Analysis In A.P. Cowie (ed.), Phraseology. Oxford: Clarendon Press.
- Glucksberg, S. (2003). Understanding Figurative Language. Oxford University Press, Oxford. Good M.
- Lakoff, D. (2008) Metaphors we live by [Metafori, kotorimi mi zhivem] / Lakoff D. & Jonson, D. Pod red. A.N. Baranova. -M.: Publishing house LKI [Izdatelstvo LKI]. – 256 p. [in Russian]
- Melnyk, N. I., Modestova, T. V., Krsek, O. Ye., & Uschnevych, S. E. (2021). The phenomenon of ethnicity in the context of linguistics and its significance in the concept of European transcultural educational centers functioning. Journal of Language and Linguistic Studies, 17(3), 1392-1401. Doi: 10.52462/jlls.100
- Melnyk, N., Biletska, I.O., Ponomarova, O.A., Buranova, A.V., & Davydenko, A.O. (2021). Representation of Ethnicity in lexicographic discourse. Rupkatha journal on interdisciplinary studies in humanities, 13(1), january-march. 1-18. doi: <https://dx.doi.org/10.21659/rupkatha.v13n1.22>
- Richards, A. A. (1990) Philosophy of rhetoric. Theory of metaphor [Filosofiya ritoriki. Teoriya metaphory] / pod. red. A. A. Richardsa. Moscow: Progress. S. 44-67.
<http://www.philology.ru/linguistics1/richards-90.htm>
- Skandera, P. (2007) Phraseology and Culture in English. Topics in English Linguistics. De Gruyter
- Trofimova, O.V. (2011) Phraseological representation of negative emotions in English and Ukrainian national world pictures [Text]: (thesis.... Ph.D. philol. Sciences) Donetsk national Univ. - Donetsk.

LIST OF SOURCES FROM Library

- Kunin, A.V. (2005) A course on modern English phraseology. Dubna: Dubna: Izd. centr «Feniks», p- 488.
- Mokienko, V. M. (1989) Slavic phraseology: textbook. allowance [Slaviznskaya phraseologiya: ucheb. Posobie]. Moscow: Vyssh. shk. 287 s.
- Potebnia, O. O. (1985) Aesthetics and poetics of the word: monograph [Estetyka I poetyka slova: monographiya]. Kyiv: Art [Mystetstvo]. 320 s.
https://chtyvo.org.ua/authors/Potebnia_Olek_sandr/Estetyka_i_poetyka_slova/
- Taranenko, A. A. (1989) Linguistic semantics in its dynamic aspects (basic semantics processes): monograph [Yazykovaya semantika v yeye dinamicheskikh aspektakh (osnovnye semanticheskie protsessy): monographiya]. Kiev: Nauk. Dumka, 256 s.
- Uzhenko, V.D., & Uzhemko, D. V. (2007) Phraseology of the modern Ukrainian language: teaching. Manual [Phraseologiya suchasnoyi ukrayins'koyi movy: navch. Posib]. Kyiv: Knowledge [Znannia]. 494 s.

DOI: <https://doi.org/10.34069/AI/2022.56.08.11>

How to Cite:

Melnyk, N., Pukhovska, L., Kovtun, O., Biletska, I., & Ladohubets, N. (2022). Current trends of teacher education in the Ukraine and EU countries under conditions of pospandemia and russian invasion. *Amazonia Investiga*, 11(56), 103-113. <https://doi.org/10.34069/AI/2022.56.08.11>

Current trends of teacher education in the Ukraine and EU countries under conditions of pospandemia and russian invasion

Сучасні тенденції педагогічної освіти в Україні та країнах ЄС в умовах поспандемії та російського вторгнення

Received: September 25, 2022

Accepted: October 10, 2022

Written by:

Nataliia Melnyk⁴⁵<https://orcid.org/0000-0002-6641-0649>**Liudmyla Pukhovska⁴⁶**<https://orcid.org/0000-0002-0313-7761>**Olena Kovtun⁴⁷**<https://orcid.org/0000-0001-5216-6350>**Iryna Biletska⁴⁸**<https://orcid.org/0000-0002-3372-9100>**Nataliia Ladohubets⁴⁹**<https://orcid.org/0000-0003-4321-3201>

Abstract

The article is dedicated to the determination of what are the general (European) and local (Ukrainian) trends in teachers' education. The formulation of the goal is determined by the need to find out how the challenges faced by Ukrainian universities in the conditions of the war and post-pandemic affect the development trends of European pedagogical education as a whole. The object of study was trends of pedagogical education in Ukraine and Europe. The authors analyzed processes of adaptation of university pedagogical education to functioning Ukraine – in conditions of war and post-pandemic, and in Europe – in conditions of massive integration of the Ukrainian university community, both students and teachers, in European institutions of higher pedagogical education.

The comparative analysis demonstrated, that educational programs, lists of educational literature, including those with the possibility of using electronic textbooks, manuals, and

Анотація

Стаття присвячена визначенню загальних (європейських) та локальних (українських) тенденцій у педагогічній освіті, які можна спостерігати в українських та європейських педагогічних університетах. Формулювання мети зумовлене необхідністю з'ясувати, як виклики, з якими стикаються українські університети в умовах війни та постпандемії, впливають на тенденції розвитку європейської педагогічної освіти в цілому. Об'єктом дослідження стали тенденції розвитку педагогічної освіти в Україні та Європі. Автори проаналізували процеси адаптації університетської педагогічної освіти до функціонування в Україні – в умовах війни та постпандемії, а в Європі – в умовах масової інтеграції української університетської спільноти, як студентів, так і викладачів.

Порівняльний аналіз показав, що навчальні програми, переліки навчальної літератури, в тому числі з можливістю використання електронних підручників, посібників,

⁴⁵ Doctor of Science in Pedagogics, Associate Professor, Professor of the Department of Foreign Languages and Translation, Faculty of Linguistics and Social Communications, National Aviation University, Kyiv, Ukraine.

⁴⁶ Doctor of Science in Pedagogics, Professor, Department of Philosophy and Adult Education, State Institution of Higher Education, University of Education Management, National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine.

⁴⁷ Doctor of Science in Pedagogics, Professor, Department of Foreign languages and translation Faculty of Linguistics and Social Communications, National Aviation University, Kyiv, Ukraine.

⁴⁸ Doctor of Science in Pedagogics, Professor, Department of Foreign Languages Theory and Practice, Faculty of foreign languages, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine.

⁴⁹ Doctor of Philosophy in Pedagogics (Candidate of pedagogical science), Professor, Dean of the Faculty of Linguistics and Social Communications, National Aviation University, Kyiv, Ukraine.

educational applications, need to be further updated in Ukrainian Universities. The investigation proved out, that continuity needs the implementation and support for the development of an effective system of digital transformation in Ukrainian universities in the following directions: the digital educational environment is accessible and modern; development of digital competencies of participants in the educational process; the content of ICT education meets modern requirements ect.

Keywords: development trends, teacher education, post-pandemic period, university education.

Introduction

The development of modern pedagogical education in Ukraine and in Europe today is determined not only by the global trends of globalization, integration and unification, the requests of Ukrainian and European society for educational services, but also primarily by the extremely difficult conditions in which Ukrainian higher education is forced to function, and for European institutions of higher education, the question of integration and direct involvement of both Ukrainian teachers and students in the educational dimension of European education arose on a much larger scale than was the case until February 24, 2022.

It should be noted that in the last two and a half years after the beginning of the pandemic, Ukrainian higher education institutions adapted the educational process to work in a mixed format: at the beginning of the 2021–2022 academic year, a number of universities started the educational process in an offline format, later in October–November 2021 most universities have returned to the format of distance teaching and learning. However, the events of February 24, 2022 forced Ukrainian institutions to put the educational process on hold due to the rude invasion of Russian troops on the territory of our state, and the explosions that forced Ukrainians to leave their homes stopped the full

навчальних додатків, потребують подальшого оновлення в університетах України. Дослідження довело, що безперервність потребує впровадження та підтримки для розвитку ефективної системи цифрової трансформації в університетах України за такими напрямками: цифрове освітнє середовище є доступним та сучасним; розвиток цифрових компетентностей учасників освітнього процесу; зміст ІКТ-освіти відповідає сучасним вимогам тощо.

Зазначені тенденції пов'язані з тим, що за останнє десятиліття в українському науковому співтоваристві не лише активізувалося впровадження порівняльно-педагогічних досліджень, а й вибудувалась траєкторія міжнародної співпраці та кооперації, індустрія розробки наукових проектів і розвивається пошук партнерів, що позитивно впливає на загальну якість вищої педагогічної освіти в Україні.

Ключові слова: тенденції розвитку, педагогічна освіта, період постпандемії, університетська освіта.

functioning of all industries in the country and society as a whole.

The administrations of all institutions of higher education made operational decisions regarding the specifics of transformations of the educational process in the unpredictable conditions of the war, most universities took a 2- to 3-week vacation (Skarlet, 2022), which allowed all participants in the educational process to recover from the initial shock during this time. Therefore, already at the end of March and the beginning of April 2022, universities began to gradually return to the remote mode of learning and professional activity. The relevant resolutions and recommendations of the Ministry of Education and Science of Ukraine and the Government played a significant role in the efficiency of making the necessary organizational decisions, including: the resolution of the Cabinet of Ministers of Ukraine “On the peculiarities of the accreditation of educational programs for the training of higher education seekers under martial law” from March 16, 2022 (Ministry of Education and Science of Ukraine, 2022a); the decision of the Union of Rectors of Ukraine, which provided support for the initiative of the Ministry of Education and Culture regarding the cancellation of DPA, external examinations in high school, simplification of admission to the master’s

degree in 2022, cancellation of graduation from medical universities according to the “Krok” system; giving universities the right to independently determine the amount of tuition fees (if necessary) (Ministry of Education and Science of Ukraine, 2022b), etc.

The return of universities to work in wartime conditions caused mixed reactions in the teaching and student community, given the fact that critical infrastructure of the state was destroyed as a result of the Russian invasion, including universities in various regions of Ukraine. In this context, a number of studies were conducted on the readiness of the university community to return to work and study in wartime conditions. Thus, according to the study by N. Melnyk and co-authors of the project “Higher education in the post-pandemic period: transformations, challenges and prospects” (state registration number: 0122U001803)” the monitoring study demonstrated readiness (more than 54 % among the scientific and teaching and 37 % among the student contingent of respondents university community to study and professional activities in war conditions, regardless of psychological tension and physical fatigue due to stress (Melnyk, 2022; Kovtun, Kokareva & Ladogubets, 2022).

However, the focus of the survey in these studies was on the university community as a whole, as it was important to gather information about the primary challenges and responses of the university community. At the same time, we note that these studies and surveys were carried out mainly among institutions of higher education of the humanitarian profile, which prepare future teachers, social workers, psychologists, philologists, etc. In the initiated research presented on the pages of this article *the purpose is not the challenges to scientific and pedagogical personnel that arise in the conditions of war and in the post-pandemic period in Ukrainian universities, but rather the determination of what are the general (European) and local (Ukrainian) trends in teachers’ education that we can observe in Ukrainian and European pedagogical universities.*

The formulation of the goal is determined by the need to find out how the challenges faced by Ukrainian universities in the conditions of the war and post-pandemic affect the development trends of European pedagogical education as a whole, do they affect at all and do they have a global or local character?

Therefore, *the object of study* is the development trends of pedagogical education in Ukraine and Europe.

The subject of research – processes of adaptation of university pedagogical education to functioning in conditions of new social challenges (in Ukraine – in conditions of war and post-pandemic, and in Europe – in conditions of massive integration of the Ukrainian university community, both students and teachers, in European institutions of higher pedagogical education).

Methodology

The research methodology involved the gradual application of a set of interrelated methods, such as: theoretical – collection and processing of factual research material – studying and analysis of scientific articles, monographs and materials of dissertation research of Ukrainian and foreign scholars on the modern tendencies teachers’ education development, analysis of the results of empirical data, statistical and differential analysis of data collection, comparative analysis of the results; empirical – electronic questionnaires, questionnaires, direct communication with students of Ukrainian and European pedagogical universities. The research methodology involved three stages: the first – monitoring the current state of pedagogical education in Ukraine and Europe (definition of monitoring criteria); the second is the determination of the primary reactions of university pedagogical education to the challenges faced by the scientific and pedagogical community and students in Ukraine and Europe after the pandemic and with the beginning of the invasion of Russian troops into Ukraine; analysis of modern conceptual and organizational changes in university pedagogical education in Ukraine and European countries.

Research conceptual background

When determining the categorical apparatus of the initiated research, it is important to outline the main concepts that determine the levels and structure of the implementation of scientific work. Synthesizing the interpretation of the concepts “*development*” – the general principle of explaining the history of nature, society and knowledge, these are two forms of development: evolution – gradual quantitative changes of an object; revolution – qualitative changes in the structure of the object, progressive (upward) development and regressive (downward) development (Busel, 2009, p. 1235); the concept

of “*trend*” is the direction of development (irreversible change) of any phenomenon, thought, idea (Busel, 2009, p. 1440) According to Oxford Learners’ Dictionary “...trend is the direction of change or development of a situation is called a trend, thus, trends in education are teaching and learning methods being highly applicable and bringing great value to people” (Oxford Advanced Learner's Dictionary, 2022); as well as the concept of “*pedagogical education*” – a system of training pedagogical personnel (teachers, educators, etc.) for secondary schools and other educational institutions in pedagogical universities, institutes, colleges of various types and forms of ownership (Goncharenko, 1997, p. 252) and the process of teaching or learning the skills you need to be a teacher in a school (Oxford Advanced Learner's Dictionary, 2022). We offered the following general formulation of the concept of the trend of the development of pedagogical education. We understand the development trends of pedagogical education as a complex process of irreversible changes occurring in the system of professional training of specialists in pedagogical professions, which are characterized by quantitative and qualitative indicators and lead to transformations in the structure with progressive or regressive features.

Results

Current trends of teachers’ education in Ukrainian Universities

The large-scale invasion of Russia, which began on February 24, 2022, caused a complex of serious problems in Ukrainian education. First of all, this concerns the forced displacement of a significant number of the population of Ukraine and the destruction and damage of educational institutions as a result of military operations.

Over 10 million (Ukraine Data Explorer, 2022) people changed their place of residence under the pressure of circumstances: 6.5 million within the country, 3.9 million went abroad. These are mostly women and children. UNICEF reports (UNICEF, 2022) that more than half of the entire child population of Ukraine – 4.3 million children out of a total of 7.5 million – were forced to leave their homes. At the beginning of May (Koshkina, 2022), it was confirmed that more than 23,000 teaching staff and more than 600,000 students had gone abroad. But these data are not accurate. Directors and rectors say that the whereabouts of about 10–15 % of pupils and students have not been identified. 1 748 educational institutions (Ministry of

Education and Science of Ukraine, 2022d) suffered from bombings and shelling, 144 of them were completely destroyed. 34 institutions of higher education (HEIs – institutes, universities and academies), 42 institutions of professional pre-higher education (colleges) and 65 separate structural subdivisions moved (Koshkina, 2022). Every week, the number of victims of the war and displaced persons of the ZVO is increasing.

There is no doubt that the Russian armed aggression in 2022 will lead to significant changes in the higher education system of Ukraine as a whole. First of all, the reduction of state expenditures on higher education and budgetary places in higher education institutions, a decrease in the income of the population, a significant increase in “educational migration” can cause a significant decrease in the demand for domestic higher education with corresponding consequences for teachers, administrations and the network of higher education institutions. At the same time, the war rapidly accelerated the course of natural trends in the development of the higher education system regarding the optimization and correction of its structure, scope, and content.

The most obvious negative consequence of the relatively high mass of higher education was the devaluation of the received qualifications. More and more people have diplomas of higher education, and the number of jobs for them is not increasing – therefore, competition is becoming fiercer, unemployment among graduates of higher education is spreading. In fact, the inflation of higher education was taking place.

The situation has worsened due to the improper connection between the structure of teachers training in higher education institutions and the demands of the economy – this is a long-standing problem of Ukrainian higher education. There is no doubt that there is a need to bring the state order for the training of teachers in line with the real needs of the national economy, and especially in the conditions of war, with the need for the development of the war economy and post-war recovery.

Therefore, the state should first of all provide the opportunity to obtain higher education free of charge (in whole or in part):

1. by specialties and in volumes that are really needed by the state sector of the economy and systems of providing critical public goods (defence, education, medicine, etc.),

as well as by those specialties and in those volumes for which there are reliable (confirmed by employers and the expert community) forecasts regarding demand for them in the private sector of the economy;

2. applicants who have shown much higher than average abilities for the next study.

Restructuring and optimization of the state order for the training of teachers under the conditions of real decentralization of the higher education system, autonomy of higher education institutions, reduction of corruption and introduction of an independent system of quality control of education will not only have a positive effect on the state budget, but will also be accepted by society.

The war has *intensified and expanded the challenges already facing education due to the COVID-19 epidemic*. For the Ukrainian educational system, this test became a kind of incentive that opened a window of new opportunities, becoming a catalyst for long-overdue modernization changes in education. First of all, it is about the development of digital and distance education, in particular online. But the prospects for the transformation of education are not limited only to these areas. The development of non-formal and informal education, the creation of mechanisms for recognizing its results in the formal education system also require close attention. It is time to test and widely implement modern teaching methods using information technologies (Melnyk et al, 2022).

The investigation on challenges for scientific and pedagogical staff of universities after pandemia 2019 prove out the uneven readiness of staff and departments for online mode, lack of technical equipment and other difficulties, many students gain a completely different educational experience in the Internet environment, and it is important for universities to identify weaknesses and develop the right monitoring methods in new conditions (Melnyk et al, 2022), but at the same time *the research proved that the main trend in modern teachers' education is the introduction of the "lifelong learning" model*, which enables a person to adapt and develop their competencies and professional skills in accordance with rapid changes in the economy, technologies and labour markets. This model contains the following subsystems:

- non-formal education (by degree of institutionalization);

- distance education (according to the method of organizing the educational process);
- online education (by means of implementation);
- mixed education (combination of traditional and online means of education) (Melnyk et al, 2022).

To succeed in the innovation economy, a person must possess *new competencies – constantly updated*, even compared to the recent past. The formation of the knowledge economy and globalization processes affect the structure of the labour market, increasing the dependence of successful employment and effective professional activity of a person on the accumulated human capital, the most important role in the formation of which is played by the level and Modern trends *teachers' education in Ukraine*, the initiatives of the Ministry of Education and Science of Ukraine are also determined; proposals and recommendations were developed regarding the beginning of the school year and solving the problems of participants in the educational process under martial law in such areas as:

Proposals regarding *the implementation of state policy in the field of pedagogical education*, which are determined by the laws of Ukraine "On education", "On higher education" with amendments to these laws already in the conditions of martial law in March of this year, according to which beside the constitutional and legally enshrined right to affordable and high-quality education is one of the important factors influencing the income and employment of the country's population are added the task on the creation of *a safe educational environment* (Safe Educational Environment: New Dimensions of Safety from the State Education Quality Service; Proposals regarding the physical safety of participants in the educational process, in particular during the journey to the educational institution), organization of education in various favourable forms of distance and mixed learning, taking into account the circumstances of active hostilities or occupation, the need to monitor the implementation of state guarantees, raising parents' awareness of the conditions for children's education during wartime.

Ensuring the students' rights on education – There were peculiarities of admission to study for higher education of persons, whose place of residence is temporarily occupied territory, inhabited territory points on the contact line or who moved from such territories after January 1 2022, in terms of passing the annual assessment

and the state final attestation, obtaining a state-style document about the full general secondary school education (if the person did not receive a document on education in accordance with legislation), are determined in accordance with the Admission Procedure for obtaining higher, professional pre-higher and professional (vocational and technical) education of persons, who live in the temporarily occupied territory of the Autonomous Republic of Crimea and the city of Sevastopol, the temporarily occupied territory of certain districts Donetsk and Luhansk regions, territories of settlements on the line collision, approved by the order of the Ministry of Education and Science of Ukraine dated 01 March 2021 No. 271, registered in the Ministry of Justice of Ukraine 15, April 2021 under No. 505/36127 (hereinafter – order No. 271). (Ministry of Education and Science of Ukraine, 2022c).

Ensuring the rights of teaching staff – the recommendations included the instructions on that the educational process is organized in a safe educational environment and Methodological recommendations regarding the organization of ***the educational process in Universities*** in the 2022/2023 academic year – recommendations of the Ministry of Education and Science. The organization of the educational process can be carried out in face-to-face and remote modes, or in a mixed form that combines face-to-face and distance modes. Such a combination is possible, in particular, for different types of classes (practical, laboratory classes are conducted face-to-face, lectures are conducted remotely) (Ministry of Education and Science of Ukraine, 2022c). But as resent questioniaring has shown that some right on teaching staff have been brakes especially as for that financial protection and social package (Melnyk, Kovtun, Kokareva, Ladogubets & Luzik, 2022; Melnyk et al, 2022.).

The priority is the observance of ***academic integrity*** (Sorokina, Artyukhova & Degtyareva, 2017), the realization of the right of every student of education to a fair, impartial, objective, independent, non-discriminatory and honest evaluation of the results of his studies, regardless of the type and form of his education in the conditions of distance and mixed learning (Nedypich and Vasylenko, 2022).

Current trends of teachers' education in European Universities

The Covid-19 pandemic has created challenges and caused disruption across the Higher Education sector; university campuses closed,

and face-to-face teaching and assessment shifted to an online format. Learning from our students' experience during this period will help us shape future hybrid delivery so that it best fits Bioscience students. This pedagogical study explored Aston University's Bioscience students' experiences of studying from home, and the impact of the lockdown on mental wellbeing and quality of life. 151 students completed an online survey during August 2020, which included open and closed questions. Analysis of survey data revealed that a majority of students reported positive experiences of online open-book assessments and most would welcome this format in the future. The majority of students faced no technical issues, predominantly stating that they also had good internet connectivity. Shifting to remote learning and online classrooms uncovered conflicting preferences; despite wanting more interactive lectures, only half of the students were comfortable interacting using video cameras. Free text responses provided an insight into how some students reported an inadequate home working space/environment and lacked necessary items such as a desk, highlighting how remote working may intensify social and digital inequality – particularly for students from more deprived households. Wider detrimental experiences of lockdown included dissatisfaction with access to healthcare, decreased concentration, sleeping difficulties and a decline in mental wellbeing. Education strategies going forward will need to address the mental health needs of students who have suffered during the pandemic (Bashir et al., 2021).

The analysis of A. Zancajo and others (2022) has allowed us to identify three preponderant areas of response: the digitalization of the educational system, educational inequalities, and teachers' development. The agendas and policy instruments that international organizations have so far pushed for in relation to each of these areas do not differ substantially from the agendas and instruments they promoted in the pre-pandemic era. It is still early to assess the deepness of the transformations in course, but in most cases, prevailing responses represent the intensification of change processes initiated before the pandemic. Nonetheless, the type and intensity of country responses vary among the European Union member states. Although the pandemic represents a common thread, countries have experienced the crisis differently according to the characteristics of their educational systems and the main problems the crisis has revealed.

The investigation of OECD (2022) demonstrates that COVID-19 crisis has resulted in a significant increase in online learning by adults. Much of the training that had started as face-to-face in classroom environments has been pursued online. Furthermore, individuals are being encouraged to use the time freed up by short-time work schemes to take up new training. As such, the crisis provides a powerful test of the potential of learning online. It also highlights its key limitations, including the prerequisite of adequate digital skills, computer equipment and internet access to undertake training online, the difficulty of delivering traditional work-based learning online, and the struggle of teachers used to classroom instruction.

The digital competencies formation in European pedagogical universities. According to the investigation of Artacho, Martínez, Mart and others (2020) the arrival of information and communication technologies to the educational atmosphere has led to the development of the digital competence of teachers, which is one of the educational challenges teacher training has to face now. The authors have developed an evaluation of the development of digital competence in teachers of the Lifelong Learning stage in the community of Andalusia (Spain), which were based on existing dimensions of digital teacher competence and consists of 91 items. The authors grounded the different dimensions and the competencies such as Information and Information Literacy, Communication and Collaboration etc. The investigation's results showed a deficit of teachers in the five digital dimensions. The authors proved that there was a direct relationship between previous information and communication technology (ICT) training and the dimensions of communication and collaboration, and content creation. The investigation helped to understand that the teachers concerned with preservice ICT training in LLL perspective. At the same time the authors also emphasized, that the development of digital teaching competence continues to be a challenge for the education system which must be addressed to, and it shall continue to be a key issue in the training of current teachers, as it is indeed a fundamental pillar for promoting a new way of teaching, being the only way to develop an areal teaching innovation panorama (Artacho et al, 2020).

The problem of relationship between university students' perceptions of their *academic environment*, their approaches to study, and academic outcomes was investigated at both

university and faculty levels by the group of scientist Lizzio, Wilson & Simons (2002). The responses of a large, cross-disciplinary sample of undergraduate students were analysed using higher order path and regression analyses, and the results confirmed students' perceptions as influencing both 'hard' (academic achievement) and 'soft' (satisfaction, development of key skills) learning outcomes, both directly and mediated through their approaches to study. Perceptions of heavy workload and inappropriate assessment influenced students towards surface, and perceptions of good teaching towards deep, approaches to study. Students' perceptions of their current learning environment were a stronger predictor of learning outcomes at university than prior achievement at school. (Lizzio, Wilson & Simons, 2002).

According to Koger et al., (2012) *educational environment* is a set of spatially-objective, social, information, psychological and pedagogical influences and conditions of personality formation serves as. The functions of educational environment are adaptive, formative, educational have been analysed by Koger et al., (2012).

The Russian invasion of Ukraine has triggered international condemnation and what risks to be the worst humanitarian crisis on the European continent in 20 years. The European Students' Union, together with the Global Student Forum and the Ukrainian Association of Students issued a joint statement condemning the invasion, and many ESU member unions published their statements against the war. The response of the European civil society has been a big mobilisation across the frontiers to provide help and support to people fleeing Ukraine and to those remaining in the country (The European Students' Union, 2022). Among the useful measures of Ukrainian students and scholars support were flexibility way of transferring from Ukrainian University to European one, the financing of the scientific projects, which have been started in Ukraine, financing of scientific projects by different foundations and Universities alliances, the invitation and opening of the vacations to Ukrainian staff fleeing from war, the proposition of international internships etc. At the moment, *one of the best ways to support the Ukrainian higher education community is through international credit mobility's*, also known as KA107, as Ukrainian Universities already have strong links with many Universities of Erasmus+ programme countries. International Credit Mobility scholarships is considered is one of the best practice in EU for

substantial financial support, as it covers all the basic needs of Ukrainian students and faculty while allowing them to continue with their studies and academic careers (The European Students' Union, 2022).

These last processes are determining the current teachers training trend in the European countries, influencing greatly on the Ukrainian pedagogical better and quicker integration into European

universities' communities demencias that it has been eve before.

Discussions

The grouted analysis of the trends of teachers' education in Ukrainian and European pedagogical Universities allows to create the comparative table of the distinguished trends and to see in which points are these trends simile and where they differ.

Table 1.

Similarities and deference's of current trends of teachers' education in Ukrainian and European Universities

№	The trend	Current trends of teachers' education in Ukrainian Universities	Current trends of teachers' education in European Universities
1	The development of digital and distance and online education, under conditions of post COVID-19 period	+	+, creation of virtual learning
2	The introduction of the "lifelong learning" model	+	+ and sustainable society development conception
3	New competencies development	+	+ and creation competencies for the future
4	The implementation of state policy in The field of pedagogical education	+	+
5	A safe educational environment	+, rethinking rebuilding and development new safe educational environment	+, thinking of future educational environment
6	Ensuring the rights of education students	+, the opportunity to enter to the universities for students who temporary moved from the occupied feretories and students who moved abroad and continue studying (or entered this year)	+, the opportunity to enter to European universities for students who temporary moved from the Ukraine and its occupied territories, students who moved abroad or entered this year
7	Ensuring the rights of teaching staff	+, not always are protected financially (getting salaries), not always are aware of the shelters place at the universities; not always staff are asked about if they want to work on line	+, all social package are survived
8	The observance of academic integrity	+	+
9	Reviewing of the educational process in Universities	+, changing the organization of the educational process – squishing the schedules, providing the mixed learning – distant and on-line depending from students personal choice	+

The authorship: Nataliia Melnyk, Ludmyla Pukhovska,

As we can see in the Table 1. the comparative analysis is also demonstrates, that **educational programs**, lists of educational literature, including those with the possibility of using electronic textbooks, manuals, and educational applications, **need to be further updated** in Ukrainian Universities what is visible from the lines 1, 3, and 9. The implementation of an individual approach in the educational process, its personalization and the development of the cognitive activity of those who gets teacher education, including for students with special educational needs, will be implemented in the future what is presented by lines 4–6.

The continuity needs **the implementation and support for the development of an effective system of digital transformation** in Ukrainian universities in the following directions: the digital educational environment is accessible and modern; development of digital competencies of participants in the educational process; the content of ICT education meets modern requirements; services and processes in the field of education are transparent, convenient and efficient; introduction of electronic document flow (lines 1, 3). In the conditions of conducting an information hybrid war, it remains important **to ensure the conditions for providing access to the participants of the educational process** to the safe use of the Internet, the formation of skills of safe behaviour on the Internet, providing computers with licensed programs, technical means and other control tools that limit access to sites with unwanted content during the online behavior of children and adults.

Heads of universities actually took responsibility for making **management decisions in the new conditions of Ukrainian universities education process** (studying and work), adapting regulatory documents and recommendations of central executive bodies in the field of education (lines 9). They are recommended to use external (including scheduled/unscheduled institutional audit) and internal (conducting the procedure of self-assessment of educational and management processes, development of the internal system of ensuring the quality of education in educational institutions) tools for the development of the education quality system, adapting them to the conditions of conducting educational and management activities in the conditions of martial law and the post-war period (line 4).

Conclusions

The investigation demonstrated that in general current trends of teachers' education in

Ukrainian and European Universities are almost similar, which proves, that Ukrainian pedagogical education in universities has been well integrated into the European educational and scientific space, is developing taking into account the trends and advanced practices of universities of leading European universities. The indicated trends are also related to the fact that in the last decade in the Ukrainian scientific community, not only the implementation of comparative pedagogical research was intensified, but also the trajectory of international cooperation and cooperation was built, the industry of developing scientific projects and finding partners developed, which has a positive effect on the overall quality of higher pedagogical education in Ukraine, although the issues of student and teacher academic mobility remain open for discussion. However, the problem of academic mobility is a matter of a separate scientific analysis and requires an in-depth study of the root causes of the low interactivity of such mobility in Ukrainian universities, in particular in the pedagogical space, which is a perspective for further scientific research by the authors of this scientific project.

Bibliographic references

- Artacho, E., Martínez, T., Ortega, J., Marín-Marín, J., & García, G. (2020). Teacher Training in Lifelong Learning-The Importance of Digital Competence in the Encouragement of Teaching Innovation. *Sustainability*, 12, 1–13. Doi: 10.3390/su12072852
- Bashir, A., Bashir, S., Rana, K., Lambert, P., & Vernallis, A. (2021) Post-COVID-19 Adaptations; the Shifts Towards Online Learning, Hybrid Course Delivery and the Implications for Biosciences Courses in the Higher Education Setting. *Front. Educ*, 6, 711619. doi: 10.3389/educ.2021.711619
- Busel, V. T. (2009). A large explanatory dictionary of the modern Ukrainian language [Velykyi tlumachnyi slovnyk suchasnoi ukrainskoi movy]. K.: Irpin: VTF "Perun". [In Ukrainian]
- Goncharenko, S. (1997). Ukrainian Pedagogical Dictionary [Ukrainskyi pedahohichnyi slovnyk]. Kyiv: Lybid, 375 p. [In Ukrainian]
- Koger, S., & Scott, B. (2012). Teaching Environmentally Focused Psychology. *Ecopsychology*, 4, 77–80. Doi: 10.1089/eco.2012.0062
- Koshkina, S. (2022) Serhii Shkarlet: «Ja ne dopushchu osvithnoho maroderstva» (Sergiy Shkarlet: "I will not allow educational looting"). LB.ua.

- https://lb.ua/news/2022/05/04/515617_sergiy_shkarlet_ya_dopushchu.html [In Ukrainian].
- Kovtun, O., Kokareva, A., & Ladogubets, N. (2022). Primary reaction of the Ukrainian university community to the technological challenges of ensuring the educational process in the conditions of war. [Pershocherhova reaktsiia ukrainskoi universytetskoï spilnoty na tekhnolohichni vyklyky zabezpechennia navchalnoho protsesu v umovakh viiny] The role of foreign languages in the socio-cultural formation of the individual (in the conditions of war): coll. nauk.pr. K., pp. 72–77. (There is no electronic recourse) [In Ukrainian].
- Legchilina, E. (2020). Designing of social and labor relations in the context of transformation: principles, organizational and institutional aspects. *Revista Científica Del Amazonas*, 3(5), 43-53. <https://doi.org/10.34069/RC/2020.5.04>
- Lizzio, A., Wilson, K., & Simons, R. (2002). University Students' Perceptions of the Learning Environment and Academic Outcomes: Implications for theory and practice, *Studies in Higher Education*, 27(1), 27–52, DOI: 10.1080/03075070120099359
- Melnyk, N. I. (2022). Peculiarities of the readiness of the university community for educational and professional activities in war conditions [Osoblyvosti hotovnosti universytetskoï spilnoty do navchalno-profesiinoi diialnosti v umovakh viiny]. The role of foreign languages in the socio-cultural formation of the individual (in the conditions of war): coll. nauk.pr. K., pp. 101–110. [In Ukrainian]
- Melnyk, N., Stepanova, T., Sytchenko, A., Zaplatynska, A., & Korniienko, I. (2022). Challenges for scientific and pedagogical staff of universities after the 2019 pandemic. *Revista Eduweb*, 16 (2), 9–29. <https://doi.org/10.46502/issn.1856-7576/2022.16.02.1>
- Melnyk, N. I., Kovtun, O. V., Kokareva, A. M., Ladogubets, N. V., & Luzik, E. V. (2022). Ukrainian scientific community: work in wartime. Questionier, National Aviation University. Available at: https://docs.google.com/forms/d/1w6w48tU2-zTEhEoLfcWZcsK5IJvp_BwjMnezqPwYSd4/edit#responses
- Ministry of Education and Science of Ukraine (2022a) The Government's decision: legal prerequisites for issuing documents on higher education to graduates of higher education institutions in 2022 [Rishennia Uriadu: stvoreno pravovi peredumovy dlia vydachi dokumentiv pro vyshchu osvitu vypusknnykam zakladiv vyshchoi osvity u 2022 rotsi]. Available at: <https://mon.gov.ua/ua/news/rishennya-uryadu-stvoreno-pravovi-peredumovi-dlya-vidachi-dokumentiv-pro-vishu-osvitu-vipusknnykam-zakladiv-vishoyi-osviti-u-2022-roci>. [In Ukrainian]
- Ministry of Education and Science of Ukraine (2022b) The Union of Rectors of Ukraine made important decisions regarding the situation in higher education and the participation of its representatives in the defence of the state during martial law [Spilka rektoriv Ukrainy ukhvalyla vazhlyvi rishennia shchodo sytuatsii u vyshchii osviti ta uchasti yii predstavnykiv u zakhysti derzhavy pid chas voiennoho stanu]. Available at: <https://mon.gov.ua/ua/news/spilka-rektoriv-ukrayini-prijnyala-rishennya-shodo-situaciyi-u-vishij-shkoli-pid-chas-voyennogo-stanu>. [In Ukrainian]
- Ministry of Education and Science of Ukraine (2022c). Admission procedure for higher education in 2022 [Poriadok pryjomu dlia zdobuttia vyshchoi osvity u 2022 rotsi]. Available at: <https://mon.gov.ua/storage/app/media/vishcha-osvita/vstup2022/05.05.2022/Poryadok.pryjomu.VO>
- Ministry of Education and Science of Ukraine (2022d). Education is under threat. Available at: <https://saveschools.in.ua/>
- Nedypich, A., & Vasylenko, V. (2022). Peculiarities of compliance with academic principles. integrity: foreign experience. [Osoblyvosti dotrymanna akademichnykh pryntsyypiv. poriadnist: zarubizhnyi dosvid]. Newsletter of the DonNU student scientific society named after Vasyl Stus, 1(14), 234– 238. Available at: <https://jvestnik-sss.donnu.edu.ua> [In Ukrainian]
- OECD (2020). The potential of online learning for adults: Early lessons from the COVID-19 crisis. Retrieved from: <https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-fromthe-covid-19-crisis-ee040002/>
- Oxford Advanced Learner's Dictionary (2022) The Oxford Learner's Dictionary of Academic English. Available at: <https://www.oxfordlearnersdictionaries.com/definition/academic/trend>
- Skarlet, S. (2022). All educational institutions are recommended to stop the educational process



- and announce vacations for two weeks. Ministry of Education and Science of Ukraine [Usim navchalnym zakladam rekomendovano pryprynyty navchalnyi protses ta oholosyty kanikuly na dva tyzhni. M-vo osvity i nauky Ukrainy]. Available at: <https://mon.gov.ua/ua/news/sergij-shkarlet-vsim-zakladam-osviti-rekomendovano-privipiniti-osvitnij-proces-ta-ogolositi-kanikuly-na-dva-tizhni> [In Ukrainian]
- Sorokina, N. G., Artyukhova, A. E., & Degtyareva, I. O. (2017). Academic integrity: compliance issues and dissemination priorities among young scientists [Akademichna dobrochesnist: problemy vidpovidnosti ta priorityty poshyrennia sered molodykh naukovtsiv] Dnipro: DRIDU NADU.
- The European Students' Union (2022) Statement of the European students' union on Adapting Erasmus+ to support Ukrainian students and staff. Available at: <https://esu-online.org/?policy=statement-on-adapting-erasmus-to-support-ukrainian-students-and-staff>
- Ukraine Data Explorer. (2022) International Border Crossing, Jun 09. Multiple Sources. DATA. Available at: <https://data.humdata.org/visualization/ukraine-e-humanitarian-operations/>
- UNICEF (2022). More than half of Ukraine's children were forced to leave their homes after a month of war. Available at: <https://www.unicef.org/ukraine/press-releases/more-half-ukraines-children-displaced-after-one-month-war>
- Zancajo, A., Verger, A., & Bolea, P. (2022). Digitalization and beyond: the effects of Covid-19 on post-pandemic educational policy and delivery in Europe, *Policy and Society*, 41(1), January 2022, Pages 111–128, Available at: <https://doi.org/10.1093/polsoc/puab016>

DOI: <https://doi.org/10.34069/AI/2022.56.08.12>

How to Cite:

Kovalova, M., Alforova, Z., Sokolyuk, L., Chursin, O., & Obukh, L. (2022). The digital evolution of art: current trends in the context of the formation and development of metamodernism. *Amazonia Investiga*, 11(56), 114-123. <https://doi.org/10.34069/AI/2022.56.08.12>

The digital evolution of art: current trends in the context of the formation and development of metamodernism

Evolución digital del arte: tendencias actuales en el contexto de la formación y desarrollo del metamodernismo

Received: July 18, 2022

Accepted: September 2, 2022

Written by:

Kovalova Mariia⁵⁰<https://orcid.org/0000-0002-9254-2565>**Alforova Zoya**⁵¹<https://orcid.org/0000-0003-4698-9785>**Sokolyuk Lyudmyla**⁵²<https://orcid.org/0000-0002-9564-8672>**Chursin Oleksandr**⁵³<https://orcid.org/0000-0002-2734-0772>**Obukh Liudmyla**⁵⁴<https://orcid.org/0000-0003-3556-7587>

Abstract

The involvement of gadgets and digital technologies is becoming an increasingly integral part of everyone's personal life and work life. Art has also adapted to the rapid digital evolution and computerization in all creative fields. This trajectory of development provokes a new form and philosophy of artistic development, which is called metamodern. This article examines the theoretical foundations of metamodernism and defines the main provisions of this cultural phenomenon through the prism of the development of digital technologies and the latest means of artistic direction. The main purpose of this research work is the study and in-depth analysis of the formation and development of metamodernist intentions in the modern cultural environment and the definition of the conceptual content of metamodern art. Also, the author of the article determined the purpose of distinguishing metamodernism because of the differences in its essential characteristics from the characteristics of modernism and

Resumen

La implicación de los gadgets y las tecnologías digitales se está convirtiendo en una parte cada vez más integral de la vida personal y laboral de todos. El arte también se ha adaptado a la rápida evolución digital y a la informatización en todos los campos creativos. Esta trayectoria de desarrollo provoca una nueva forma y filosofía de desarrollo artístico, que se denomina metamoderna. En este artículo se examinan los fundamentos teóricos del metamodernismo y se definen las principales disposiciones de este fenómeno cultural a través del prisma del desarrollo de las tecnologías digitales y de los últimos medios de dirección artística. El objetivo principal de este trabajo de investigación es el estudio y el análisis en profundidad de la formación y el desarrollo de las intenciones metamodernistas en el entorno cultural moderno y la definición del contenido conceptual del arte metamoderno. Asimismo, el autor del artículo determinó el propósito de distinguir el metamodernismo por las diferencias de sus características esenciales con las del modernismo

⁵⁰ Candidate of Art History, Associate Professor at the Department of Painting Faculty of Fine Arts, Kharkiv State Academy of Design and Arts, Ukraine.

⁵¹ Doctor of Arts, Professor, Head of the Department of Methodologies of Cross-Cultural Practices Faculty of Audiovisual Arts, Kharkiv State Academy of Design and Fine Arts, Ukraine.

⁵² Doctor of Art History, Professor of the Department of Theory and History of Art, Faculty of Fine Arts, Kharkiv State Academy of Design and Fine Arts, Ukraine.

⁵³ Candidate of Study of Art Senior teacher of Department of Painting Faculty of Fine Art, Kharkiv State Academy of Design and Fine Arts, Ukraine.

⁵⁴ Ph.D (Theory and history art), Associate Professor Head of Department of Artistic Education Educational and Research Institute of Pedagogics, Zhytomyr Ivan Franko State University, Ukraine.



postmodernism. The methodological approach of the research is the search and theoretical analysis of Ukrainian and foreign sources aimed at studying the phenomenon of metamodernism in view of the digital evolution of art. The author of this article used the method of analysis, cultural-historical, descriptive, comparative and theoretical-literary methods of research. As a result of scientific research, the formation and development of digital art and metamodern art were analyzed. The author also tried to identify the nearest trends in the development of the philosophy of metamodernism in the Ukrainian artistic field.

Keywords: metamodernism, Ukrainian art, computerization, digital technologies, oscillation.

Introduction

We are now experiencing a new stage for all mankind, producing an understanding of important ideas and a revision of views on traditions that have developed over the past centuries. These steps are provoked by the formation and development of digital evolution, which has radically changed people's lives, not only in the field of art but also in general. The transition to new values together with new technologies becomes the key to new philosophical thoughts, becoming the root cause of progress and the development of active and emotional prosperity.

In exploring the digital evolution of art, let us pay attention to Bishop (2018), who, in his work exploring digital technology and the so-called computational turn in the humanities, suggested that new technologies allow us to visualize what has not been possible before. The use of photoreproduction now allows for innovatively other methodological approaches, from the formalism of Welflin, who as early as 1880 began using slides during art history lectures, to the iconographic approach of E. Warburg, who in the 1920s relied on the whole period of antiquity to modern advertising. According to Elham (2019) digital art in terms of its concept, historical influences, and technical styles is an aesthetic human condition that has developed and changed through stages of history. Life in the city, still as Petrarch said, makes a person excited, anxious, and fussy (Petrova, 2017), which generates and requires a new philosophy dictated by the times.

Fans of postmodern art in the late 20th century felt the changes in the philosophical and artistic

y el postmodernismo. El enfoque metodológico de la investigación es la búsqueda y el análisis teórico de fuentes ucranianas y extranjeras destinadas a estudiar el fenómeno del metamodernismo en vista de la evolución digital del arte. El autor de este artículo utilizó el método de análisis, cultural-histórico, descriptivo, comparativo y teórico-literario de la investigación. Como resultado de la investigación científica, se analizó la formación y el desarrollo del arte digital y del arte metamoderno. El autor también trató de identificar las tendencias más próximas en el desarrollo de la filosofía del metamodernismo en el ámbito artístico ucraniano.

Palabras clave: metamodernismo, arte ucraniano, informatización, tecnologías digitales, oscilación.

movement of their time, which led to a crisis in their chosen philosophy and worldview. A consequence of these events was the formation of the ideological current of metamodernism, combining modernist and postmodernist philosophy. A key difference from previous philosophies is oscillation, which does not allow the hero or the contemplator to stop (Shabanova, 2019). It is also important that the participant has the possibility of communication, not only representation in communication with works of art (Volynets, 2021).

This research paper investigated current trends in the digital evolution of art in the context of the work of specific cases of representatives of the flow of metamodernism. Also, the article analyzed the formation and development of the philosophical idea of metamodern art and its main components. Considering the topic of the research, the author performed a general review of theoretical studies of metamodernist thought, which form a specific picture of creative non-rest and sensual oscillation inherent in the new philosophy. In the scientific work, the works of researchers of the art current of metamodernism, philosophers, and journalists, who investigated this issue in their works, were studied and analyzed.

Even though the art of metamodern attracts the attention of the research community, which brings a number of studies by art historians and scientists, this issue requires a deeper identification of both the term metamodern itself and its proponents.

Literature Review

Recently, digital art has already become an important part of everyday life, and according to researchers Wang and Wang (2021), its advantages over traditional art should be noted. An important feature is a mobility that the digital art field has and provides jobs anywhere in the world, which is an important element of digital art for its creators.

Also, according to Sovgyra (2020) “artificial intelligence,” through which lost fragments of images can be restored, is an important and obvious digital progression of art. And according to scholar Mazur (2020), the preservation of musical audio recordings and other art forms is an important mission of digital evolution. Music phonorepositories are becoming a convenient means of storing and playing the desired works in order to obtain information quickly. According to Shmagalo (2018), the Internet and its resources testify to the development of society, which is an important basis for the formation of art, culture, and science in the world.

It is worth noting that according to Gupta (2019) the environment of digital art, which has existed for more than a century, has always attracted attention, but the digital technology of the present is a means of influence. A large number of contemporary researchers devote their work to the new phenomenon that has emerged from the digital evolution of art. Thanks to advances in scientific activities, gadgets, and computer technology have taken a leading place in people's daily lives and creativity. Against the background of the formation and rapid development of digital art, a new phenomenon and a whole era of metamodernist philosophy emerged, which continues to dominate modern society. According to Haiduk and his colleague Tarapatov (2022), metamodernism was formed based on virtual reality, as the vast majority of works are created and presented based on virtual space and social networks. Based on the scientists' work, we can conclude that the leading place in the dissemination and education of metamodern art lies precisely in social networks.

A large number of researchers, such as Westerby and Keegan (2019), Cardinali (2019), Dahlgren and his colleague Wasielewski (2020) define the era of digital art with the beginning of the digitization of museum collections, which began the transfer of the art world to virtual reality platforms.

According to a study of the new current of art by Kersten and Wilbers (2021), it was thanks to a number of scholars from around the world who gathered for a seminar at Radboud University in Nijmegen in 2015 that the era of the metamodern was established. In addition, as Tereshchenko (2020), metamodernism had a variation in the name. Consequently, it was proposed to call the new phenomenon in art and culture - hypermodernism, digital modernism, automodernism, post-postmodernism, or pseudo-modernism.

In his work B. Masters (2021) raises the question of the emergence of metamodernism based on the literary work of H. Wells and his opponent in the creative debate of H. James, arguing about the purpose of the fiction novel of his time. The researcher considers G. Wells a significant figure in the formation of modernist philosophy but finds a number of similar views in the works of A. Smith, who complemented the conceptualization of the metamodern novel, showing the direction of G. Wells to the metamodern. This development carries a special form of philosophical content, thanks to which metamodernism began to settle in art and literature.

Analyzing the Ukrainian literary heritage of recent years researcher Vertyporoh (2022) paid attention to the work of M. Brynykh and his novel “Bread with gristle”. Letting this literary asset through the prism of metamodernism, the existential perspective of the work becomes clear. Ukrainian literature returns to the sources and the truth, as indicated by both the novel “Bread with gristle” itself and its author. Another Ukrainian researcher of metamodernism in contemporary literary space Grebenyuk (2018) draws the attention of the scientific community to the totality of cultural and aesthetic trends of metamodern art and metanarratives of contemporary Ukrainian society. Under the influence of historical memory, the researcher emphasizes the importance of its influence on the modern culture of verbal art and many works based on the concept of freedom.

Researcher Harrison (2021), who studied the creative legacy of M. McCormack and focused his research on the novel “Sunny Bones”, draws attention to somewhat formal metamodern qualities of the mentioned philosophy. L. Harrison believes that Irish literature of the twenty-first century, which was formed based on the art of the metamodern, has developed a lively relationship with the heritage of modernism,

which gives a color of uncertainty to the new structure of the senses.

Horyslavets (2020) in her study of artistic strategies of metamodernism in the audiovisual arts highlights this philosophical current as the most effective way to go beyond postmodernism in cinema. According to the researcher, there was a renewal of the film language, abandoning the cynicism of the papa combined irony with sincerity, but the artists of the century are doomed to compilation in the film industry. In general, according to Horyslavets trends in the audiovisual art of both Ukraine and the world consists in the departure from the purely linear structure of the plot, which leads to a deviation from the narrative. Another researcher K. Mykhaylova (2020), who studied metamodernism in Asian auteur cinema and highlighted the structure of feelings, which carries the metamodern film industry. The philosophy of metamodernism used in the context of cinema, according to K. Mykhaylova, is based on three bases - principled, theoretical, and essence characteristics. K. Mykhaylova, comparing these three approaches to modernism, postmodernism, and metamodernism in her work analyzes and separates philosophical and artistic approaches in accordance with their foundations. Consequently, on the basis of the modernist utopian syntax and the postmodernist inescapable parataxis, a new atopic metaxis is formed, providing for a combination of space and time, being simultaneously in order and disorder. Thus, we can conclude that K. Mykhaylova, exploring the foundations of metamodernism through the prism of film art, finds elements of modernity and postmodernism based on the metamodernism of the film industry.

Analyzing metamodernism through the prism of game art we should note the studies of H. J. Backe (2022), J. Li (2022), who in their research highlight the influence of the new philosophy of metamodernism art on the game sphere. Noting the trends of development H.J Backe defines the principles of building the genre of immersive sim in game art and the implementation of metamodernism in the gamified society. Given this research, the use of postmodern sensory schemes in-game art shapes the metamodern behavior and responses of the gamified world. Drawing on the findings of another scholar J. Li, it should be noted that game art is developing and improving at a rapid pace due to the involvement of masters from other categories of artistic activity.

Researcher Volynets V. O. (2021) studied the sphere of influence of virtual, augmented, and mixed reality on contemporary audiovisual art. According to this study, the rapid development of digital and computer technologies, in particular, support the improvement and development of world art in its various manifestations.

Determining the place of virtual art in the creative arena of humanity in the second decade of the XXI century, we should also pay attention to the study of the Ukrainian scholar Machulin L. I. (2022), who in his work, which explored the impact of the phenomenon of NFT on contemporary art, draws attention to the importance of digital technology in the further development of world culture in his work the researcher hypothesized the probability of separation of digital art from the traditional vision of classical art, which opens new possibilities and forms in future.

Methodology

The methodological basis of this article on the study of the digital evolution of art and the study of current trends in the formation and development of metamodern art was the cultural-historical method of analysis, theoretical-literary, descriptive and comparative methods. With the help of the cultural-historical method, the author of the research article studied historical aspects of the formation and development of art in close connection with digital progress. Using the method of analysis, the author of the article investigated the state of metamodernism in the world and in particular. Using the theoretical-literary method of research was analyzed the literary heritage of the creators of the metamodernist style of writing and their characteristic features, allowing to highlight modern trends in writing. Using the descriptive method, the formation of digital art was described and investigated, as well as a partial prediction of possible developmental trends. The comparative method of research helped in the study and comparison of visual, audiovisual, literary art, which helped to form a complete picture of metamodernism in the study of this topic based on modern world and Ukrainian art.

In this work, a significant amount of information sources of Ukrainian, Kazakh, and American researchers on the topic of metamodernism and the general evolution of art through the digital development of mankind were investigated.

This research work on the study of the formation and development of contemporary art in the

context of a new philosophical and artistic current of metamodernism was carried out in three successive stages.

During the first phase of research, the author of this article had collected and conducted a thorough analysis of literary sources, which helped in the formation of the main issues of the study of the digital evolution of art through the prism of the formation of a new current of metamodernism in the works of authors of literary, audiovisual, visual and other genres.

Performing the second stage of work on the scientific work, a thorough analysis of the information was carried out, according to which the main accents of the study of the phenomenon of metamodernism in the modern world were established. Also, at this stage of the work the features and characteristic features of Ukrainian art of different genres, in particular, literature, which was created under the influence of the philosophy of metamodernism, were highlighted. In the course of this stage, the studies were considered, which helped to form the nearest tendencies and perspectives of formation and development of the art of metamodernism on the territory of Ukraine.

At the last stage of the scientific work were carried out summaries and results, which were formed during the work on the topic of research of the digital evolution of art, which helped in summarizing the overall results of this study.

The results of this research work can be used for further development of the research topic of the digital evolution of art.

Results and Discussion

Man of the XXI century lives in a time dominated by digital technologies, which continue to rapidly develop and become involved in everyday and creative life. This integration of civilization has led to the phenomenon of digital art. It is also important to note that “digital art” as a term was introduced by G. Cohen in the 1980s in connection with the digitization of artistic creativity, primarily the beginning of artists' work in the graphic editor “Aaron”. Creators of pop art (R. Hamilton), photographers (A. Gursky, J. Wall), artists (M. Wilson, J. Gemskern, D. Pearmans, C. Bruno) actively implemented digital technology in creative activities, which opened new opportunities and horizons for creativity (Farting, 2019). In the modern world digital art has become almost the leading form of creativity of artists.

The digitization of historical artifacts and data, the recovery of literature, and historical images, all of which form large digital repositories, are of great importance for the evolution of art. The whole movement of classical and traditional art in different countries and cultures is leading to a new era of digital art (Cardinali, 2019). Beginning in the 1960s, art museums began to engage in the digitization of their collections, using digital technology, in particular computers, to organize this digitization process, creating special online catalogs and coordinating online visitors. It is important to note that this early involvement of computer technology in the museum field and the digitization of collections is one of the important and driving steps in the digital evolution of art (Dahlgren & Wasielewski, 2020). Art history itself is being rebuilt and digitized, even catalogs of scholarly collections are being moved from conventional archives to the digital space, where materials are conveniently and more accessible to art history researchers. For example, the Art Institute of Chicago and other museums have created an online platform for cataloging museum collections since 2009, making the Chicago Institute a leader in digitizing historical artifacts and works (Westerby & Keegan, 2019).

The evolution of digital technology and its introduction into people's daily lives is the basis of the digitalization of the world. However, an important point, in addition to the use of computers and gadgets in everyday life, is gamification, which is occupying an increasingly important place in human life. Since the play has been the leading activity since childhood, the transfer of gaming elements into the realm of art for children and later adults is not such an acute issue. The gamification of digital art, based on the perfection of a variety of technologies and tools by promoting speculative design and interactive experiences of users and visitors to online museums and art archival collections, is the product of designers and digital masters (Li, 2022). With this in mind, popular contemporary games that adhere to the philosophy of the metamodern are in insane demand. One such game is Deathloop, which professes a philosophy of metamodern art that continues the idea of modernist, postmodernist aesthetics while also being a reaction to them (Backe, 2022).

In addition to the digitization of museum collections, the tradition of online art exhibitions is also spreading widely. For example, in 2017 the work of artist W. Dyson was digitized and exhibited on an online platform in the context of the Australian War Memorial “Art of the Nation:

Official Art and Photography of Australia during the First World War” (Gunn, 2020).

Paying attention to the visual arts through the prism of digital evolution, one should pay attention to the new platform for artistic artists NFT (non-interchangeable tokens). The NFT phenomenon is a phenomenon of contemporary world culture and a virtual platform for creators of the 21st century. Given the leading place that virtual art occupies in the modern world and the general outlook of people, shows the importance and strategy of the development of artistic activity for the future (Machulin, 2022).

Note that digital technology is becoming more and more deeply integrated into the field of art and not only that, because of the events of recent years, psychology has also moved to the side of digitalization. Digital art therapies have begun to be introduced more and more frequently due to the coronavirus and other global disasters that have captivated the modern world. The potential of art-therapeutic practices involving digital technology is very great because it allows all participants in the action to remain in a comfortable and safe environment, which promises greater involvement and quality of art therapy. For example, the Paparella Center for Innovative Arts at Lawson Ministries Hamilton has created and implemented an innovative new digital art therapy program for a group of people with moderate to severe autism spectrum disorders. Through this program, participants develop creative thinking and creativity, expand their abilities to use digital technology, and support group members' social engagement (Darewych, 2021).

Metamodernism in the contemporary art context is a dominant philosophical current with a large number of admirers around the world. The movement that fills everyone's life has become the root cause of the metamodern pendulum. The development of modern digital technology, computer simulations, the integration of cyberspace into people's everyday life, and the loss of familiar meanings gave rise to the philosophy of metamodernism, which, according to its proponents, can preserve and protect people from being lost in a deceptive reality. It is the collection of previous ideas of meaningfully opposite cultural paradigms that the artist of metamodernism is engaged in since the philosophy of modernity has reached a dead end, since it propagated the end of art and history, and the postmodern in its turn has exhausted its powers in the search for meanings (Shabanova, 2019).

The integral movement within metamodern philosophy, triggered by the global digital revolution and the financial crisis, combines elements of modernism and postmodernism based on relativistic viewpoints. Polarities do not always produce problematicness but opposing values can converge in the permanence of processes that do not require the choice of a particular solution (Piro, 2018).

Postmodernism in art and literature began to fail at the end of the 20th century, due to the increase in world dynamics, the constant search for new meanings and truths both in literature and in art in general, which forced artists to move along the path of metamodernist intensity, which began to move in the early 21st century. The term itself was created in the 2010s by R. van den Acker and T. Vermeulen, who described the phenomenon as an expression of the chaotic nature of the contemporary multicultural world. The humanistic bent of the prose form of literature, the variation of modernist and postmodernist writing are characteristic features of the work of artists of metamodernism. But it should be noted that researchers still do not use the term metamodernism as a new direction in literature and art in general, because the final formation of this phenomenon is still not completed (Lanova, 2022).

It should be noted that the key features of the metamodern are binary logic of events, the naivety of thinking and actions, purposeful incompleteness, rejection of absolute aesthetics, and expanding the boundaries of cognition in general (Haiduk & Tarapatov, 2022). According to the Kazakh researcher Mykhaylova (2020), who studied the peculiarities of metamodern art in Asian auteur cinema, considers the “structure of feelings” as a push for constant variables based on their changeable detection, which allows to find differences and distinguish individual parts of their characteristics. Following this view, and drawing on hitherto untypologized phenomena, one should lean toward the introduction of interdisciplinary trends in both culture and art in general. The works of artists who adhere to metamodernism highlight a whole variety of essential characteristics of the structure of feeling (Figure 1). Most importantly, these feelings go beyond the usual “good and evil,” which baffles fans of static views of art and philosophy in general.

All of the aspects of metamodernism's senses described in the figure characterize contemporary social narratives that complement the philosophical concepts of the new trend in art.

The most essential fraction of the sense structure is oscillation, which is a repeating process in varying degrees over time of changing states of the system at a point of equilibrium. The very fraction “purpose” in the word metamodern is used here to mean “between,” that is, even the

morphology of this word suggests oscillation. In the context of a work of fiction, this should be understood as the oscillation of this idea or phenomenon between stated boundaries in a philosophical or stylistic context (Shabanova, 2019).

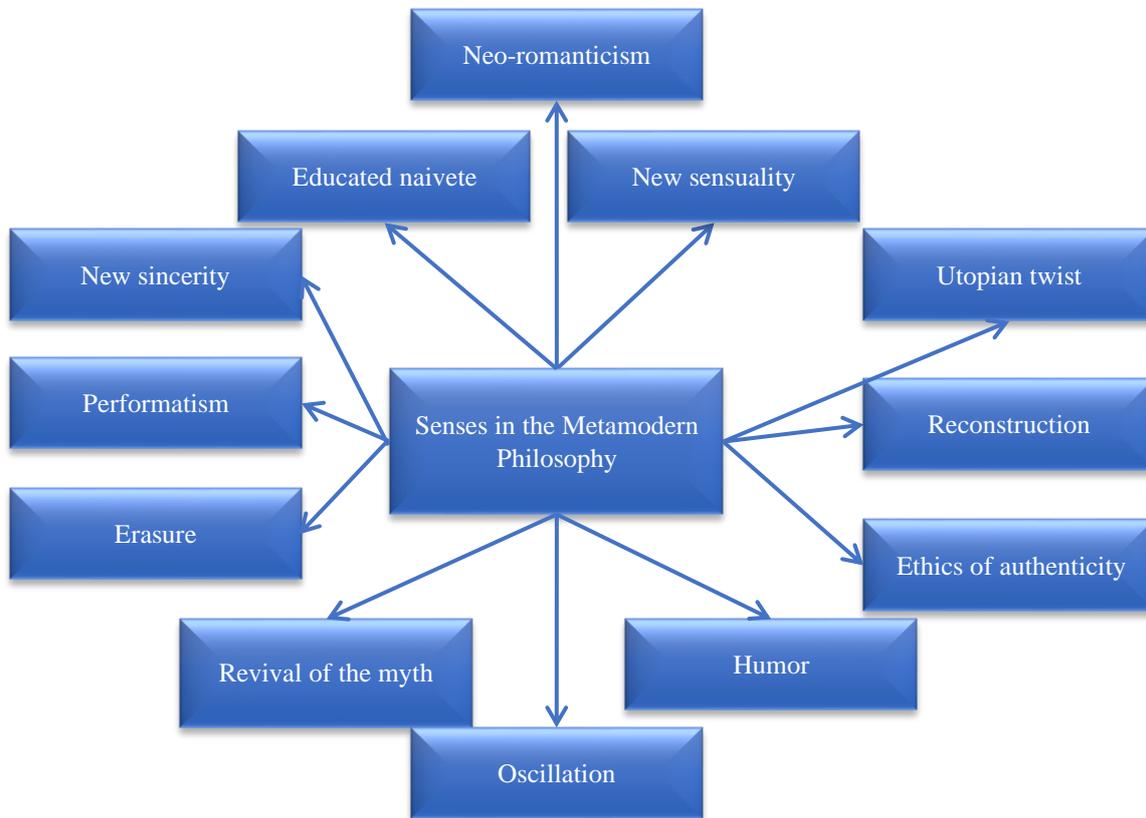


Fig. 1. Characterizing the Structure of Sense in the Metamodern Art Philosophy
Source: (Mykhaylova, 2020).

It is interesting that even in today's popular rap culture there is a characteristic manifestation of the philosophy of metamodernism in full measure. Among all things, it is in rap battles that the metamodernist influence of the oscillation between postmodernism, because there are simulacra and rejection of modernism is most clearly seen. What is important is that rap combines high and low culture, which is a characteristic metamodernism pendulum of choice (Lassan, 2018).

It is important to note that the development of digital technologies has brought virtual (VR), augmented (AR), and mixed reality into the art world, which erase spatial and temporal limitations and immerse people in an interactive creative process. With this solution, communication, rather than the representation inherent in other varieties of creativity using

computer technology, has become possible in the art space. With the help of VR and AR technologies, the process of creating theatrical performances, movies, exhibitions, performances became interactive and habitual for participants and visitors of these actions (Volynets, 2021). The theatrical stage, cinema, exhibitions, and performances have been significantly influenced by the results of digital evolution and paying attention to the fact that art always reacts fastest and shows changes in society and the world, it becomes clear such influence and scale of the introduction of innovative technologies in all its processes and forms.

Drawing attention to Ukrainian art, within the framework of large-scale events taking place within the country as of 2022 and the global natural disaster in the embodiment of COVID-

19, it should be noted the steady and continuous development of the art industry in the country. Digital design and computer graphics created by masters according to the philosophy of metamodern in Ukraine as a combination of 2D-animation and modern digital technology, UX/UI-design, concept art, 3D-painting, game design, character design produces a combination of traditional visual art and digital technology and software tools to create a variety of digital products (Osadcha & Baluta, 2021), which promises further development of this sphere.

Considering that metamodernism as a philosophical and artistic current of the XXI century embodies sincere emotions and feelings of hope, romanticism, return to the truth, it should be noted that it is postmodernism that left the devaluation of personality and emotions and became the root cause of such manifestation of sensuality. The creativity of Ukrainian artists of the word, who are looking for new themes and means of expression, in particular, S. Zhadan, H. Pahutiak, M. Dochynets, Yu. Vynnychuk, V. Lys, S. Andrukhovych, and other creators are increasingly understanding the literary genre and philosophy of the metamodern (Vertyporoh, 2022). Considering the features of the metamodern in Ukrainian literature we should pay attention to the works of S. Zhadan and his works "Talk", "Internat", "Tango of Death" by Yu. Vynnychuk, O. Zabuzhko "Museum of abandoned secrets" and other authors who used metanarratives of historical memory, which have an impact on modern writing. Analyzing such works through the prism of metamodern art, we can single out distinctive stylistic features of the new metamodern philosophy in their artistic structure. Frustration becomes a consequence of the sad and tragic events of the Ukrainian people in the past and present (Grebenyuk, 2018).

Studying and making an attempt to predict the trends of Ukrainian art development in close relationship with the rapid development of digital technology in the world, it should be noted the unstable situation in the country for 2021 but let us emphasize stable movement towards the development of Ukrainian artists, despite all the destructive aspects that affect the creative productivity within the country. Metamodern is considered as an open system of observation in the art to move between the extremes of one plane in the pursuit of balance in it, which is currently observed in the Ukrainian masters of various branches, working from the philosophy of the metamodern.

Conclusions

Summing up the results of this research work, it is worth paying attention to the formation of an inseparable connection between the world of art and digital technologies, which allowed artists of today to achieve new achievements.

According to the results of the research, it should be noted that identifying the features of the digital evolution of art and studying the formation of a new artistic current of metamodernism forces researchers to move away from the traditional vision and division of these aspects into the world of technology and the world of art, and in particular to consider these phenomena in close symbiosis. Also, according to the author of the article, it is important to take into account that the leading quality of metamodern art, formed as a consequence of the integration of art and digital technology in the worldview of people on the steady movement and oscillation - feelings, characteristic and thematic, inherent in the metamodernist ideology.

As a result of this research work, the author highlighted the following results. First, the development of digital art continues to expand its possibilities and reveals art with the help of new technologies and opportunities. Secondly, metamodern as we see it today in art and as a philosophical current has a large number of imitators, both in Ukraine and around the world, which provokes the creation of digital technology online exhibitions, performances, creates contemporary cinema, visual and literary works. Thirdly, the art in Ukraine, despite the difficult conditions for the creation of contemporary art, has great prospects for development, the appeal of Ukrainian artists to the historical past helps artists self-identify and create a nationally coherent and unique art of the XXI century.

In the process of researching the formation and development of a new artistic and philosophical current of metamodernism, the author of the article considers it necessary to continue developing the topic of research in connection with the rapid development of digital technologies that allow art to evolve and develop. Future researchers of this issue need to deepen the question of the phenomenon of the symbiosis of art and technology in the digital world, as well as to analyze the future consequences of this integration movement.

Bibliographic references

- Backe, H. J. (2022). "Deathloop": the Meta (modern) Immersive Simulation Game. *Game Studies*. http://gamestudies.org/2202/articles/gap_backe
- Bishop, C. (2018). Against digital art history. *International Journal for Digital Art History*, 3, 123-130. <https://doi.org/10.11588/dah.2018.3.49915>
- Cardinali, M. (2019). Digital Tools and Technical Views: The Intersection of Digital Art History and Technical Art History in a Digital Archive on the Painting Technique of Caravaggio and His Followers. *Visual Resources*, 35(1-2), 52-73. <https://doi.org/10.1080/01973762.2019.1555351>
- Dahlgren, A. N., & Wasielewski, A. (2020). Cultures of Digitization: A Historiographic Perspective on Digital Art History. *Visual Resources*, 36(4), 339-359. <https://doi.org/10.1080/01973762.2021.1928864>
- Darewych, O. H. (2021). The Future Is Now: Group Digital Art Therapy for Adults With Autism Spectrum Disorder (L'avenir dès maintenant: groupe d'art-thérapie numérique pour adultes ayant un trouble du spectre de l'autisme). *Canadian Journal of Art Therapy*, 34(1), 26-32. <https://doi.org/10.1080/26907240.2021.1907940>
- Elham, A. R. (2019). Digital art for the promotion of the creative aspect in the plastic art. *Global Journal of Arts, Humanities and Social Sciences*, 7(1), 1-14. <http://www.eajournals.org/wp-content/uploads/Digital-Art-for-the-Promotion-of-the-Creative-Aspect-in-the-Plastic-Art.pdf>
- Farting, S. (2019). History of art from ancient times to the present. Kharkiv: Vivat. ISBN. 978-966-942-839-4
- Grebenyuk, T. V. (2018). Freedom in the literature of the metamodern world: the Ukrainian dimension. *Journal of V. N. Karazin Kharkiv National University*, 78, 160-164.
- Gupta, S. (2019). The rise of digital art. *International Journal of Research – GRANTHAALAYAH*, 7(11), 161-164. <https://doi.org/10.29121/granthaalayah.v7.i11.2019.3729>
- Gunn, A. (2020). Art of Nation: Revisiting Will Dyson's War Work in a Digital Art Exhibition. *Journal of Australian Studies*, 44(4), 535-551. <https://doi.org/10.1080/14443058.2020.1828997>
- Harrison, L. (2021). Mike McCormack's style of post-mortem modernism. *Textual Practice*, 1-29. Recovered from <https://doi.org/10.1080/0950236X.2022.2111709>
- Haiduk, N. A., & Tarapatov, M. M. (2022). Theoretical foundation of metamodernism as a new form of modern culture. *Bulletin of the National Academy of Managers of Culture and Arts*, 1, 30-35. Doi: 10.32461/2226-3209.1.2022.257441
- Horyslavets, E. V. (04, 2020). Artistic strategies of metamodernism in the culture of audiovisual arts. V. M. Sheyko, Culture and information society of the 21st century. Kharkiv: Kharkiv State Academy of Culture. https://ic.ac.kharkov.ua/nauk_rob/konfer/konfer/2020/KIS-2020/KIS-2020_program.pdf
- Kersten, D., & Wilbers, U. (2018). Introduction: Metamodernism. *English Studies*, 99(7), 719-722. <https://doi.org/10.1080/0013838X.2018.1510657>
- Lanova, V. V. (2022). Metamodernist intentions in K. Ishiguro's novel "Clara and the Sun". *Colloquium-journal*, 19(142), 41-43. doi: 10.24412/2520-6990-2022-19142-41-43
- Lassan, E. R. (2018). Rap battles as a specific genre of modern culture. *Genres of things*, 4(20), 313-320. <https://doi.org/10.18500/2311-0740-2018-4-20-313-320>
- Li, J. (2022). Gamification of digital art: promoting speculative design and interactive experience. *Interactive Learning Environments*, 1-12. Recovered from <https://doi.org/10.1080/10494820.2022.2113099>
- Machulin, L. I. (2022). The impact of NFTs (non-fungible tokens) on the art world. *Culture of Ukraine*, 75, 67-77. <https://doi.org/10.31516/2410-5325.075.09>
- Masters, B. (2021). Adjustment-style: from H. G. Wells to Ali Smith and the metamodern novel. *Textual Practice*, 35(6), 967-995. <https://doi.org/10.1080/0950236X.2021.1935750>
- Mazur, O. (11, 2020). Ensuring the security of archival funds of music audio recordings of radio companies in conditions of digitization. S. V. Ivanov & M. G. Lutsyki, Culture and art: modern scientific dimension. Kyiv: National Academy of Managers of Culture and Arts, [In Ukrainian]
- Mykhaylova, K. (2020). Peculiarities of metamodernism in Asian auteur cinema. *Central Asian Journal of Art Studies*, 5(3),



- 50-70.
<https://cajas.kz/journal/article/view/264/237>
- Osadcha, K. P., & Baluta, V. S. (2021). The influence of modern trends in digital art on the content of training in computer graphics and digital design. *Ukrainian Journal of Educational Studies and Information Technology*, 9(1), 1-12.
<https://doi.org/10.32919/uesit.2021.01.01>
- Petrova I. (2017). The renaissance concept of permission according to the works of Petrarch. *Bulletin of the National Academy of Managers of Culture and the Arts*, 3, 3-7. Recovered from:
<https://doi.org/10.32461/2226-3209.3.2017.138665>
- Piro, J. S. (2018). Integral education within metamodernism. *Educational Philosophy and Theory*, 50(14), 1455–1456. doi: 10.1080/00131857.2018.1461401
- Shabanova, Yu. O. (2019). Oscillation as a dimension of metamodern philosophy. *Epistemological studies in Philosophy, Social and Political Sciences*, 2(2), 13-22.
<https://doi.org/10.15421/341920>
- Shmagalo, R. (2018). Creation of an educational and scientific digital resource of artistic culture and art of Ukraine. *Ethnological notebooks*, 142(4), 875-885.
<https://nz.lviv.ua/archiv/2018-4/11.pdf>
- Sovgyra, T. I. (2020). Digital technologies in modern visual art. *Bulletin of KNUKiM. Series: Art History*, 42, 65-71.
<https://doi.org/10.31866/2410-1176.42.2020.207634>
- Tereshchenko, A. V. (2020). Metamodernism is a new concept in modern Internet culture. V. O. Dubka, V. B. & Kiselyova, Fifth International Scientific and Practical Conference "Open Evolving Systems" (146-148). Kyiv: FOP Maslakov.
<http://dspace.luguniv.edu.ua/jspui/bitstream/123456789/5396/1/Tereshenko.pdf>
- Vertyporoh, O. V. (2022). Author's subjectivity in the modern prose context: from postmodernism to metamodernism. *Transcarpathian Philological Studies*, 23(1), 251-255. <https://doi.org/10.32782/tps2663-4880/2022.23.1.48>
- Volynets, V. O. (2021). Integration of virtual and augmented reality in art. *Culture and modernity: almanac*, 1, 9-16. doi: 10.32461/2226-0285.1.2021.238532
- Wang, V., & Wang, D. (2021). The Impact of the Increasing Popularity of Digital Art on the Current Job Market for Artists. *Art and Design Review*, 9(3), 242-253. doi: 10.4236/adr.2021.93019
- Westerby, G., & Keegan, K. (2019). Digital Art History and the Museum: The Online Scholarly Collection Catalogues at the Art Institute of Chicago. *Visual Resources*, 35(1-2), 141-154.
<https://doi.org/10.1080/01973762.2018.1553445>

DOI: <https://doi.org/10.34069/AI/2022.56.08.13>

How to Cite:

Sidorova, E., Dniprov, O., Yunina, M., Bobrishova, L., Mkrtchian, K. (2022). Administrative and legal principles of public control over the implementation of state policy in the humanitarian sphere. *Amazonia Investiga*, 11(56), 124-131. <https://doi.org/10.34069/AI/2022.56.08.13>

Administrative and legal principles of public control over the implementation of state policy in the humanitarian sphere

Адміністративно-правові засади публічного контролю за реалізацією державної політики в гуманітарній сфері

Received: September 28, 2022

Accepted: October 31, 2022

Written by:

Sidorova Elvira⁵⁵<https://orcid.org/0000-0002-1761-1583>**Dniprov Oleksii**⁵⁶<https://orcid.org/0000-0002-7157-9748>**Yunina Maryna**⁵⁷<https://orcid.org/0000-0003-0311-4591>**Bobrishova Liliia**⁵⁸<https://orcid.org/0000-0003-1022-4027>**Mkrtchian Karine**⁵⁹<https://orcid.org/0000-0002-4309-3900>

Abstract

The aim of the article is to study the functioning and legal regulation of public control over the implementation of State policy in the humanitarian sphere. The subject matter of the article is public control. Methodology. The following methods were used during the research: institutional, interpretation, legal and dogmatic, monographic, system, scientific abstraction, summarizing. Results. Various approaches to the concepts of "control", "supervision", "public control", proposed in the scientific domestic and foreign literature are considered. It is stressed that such control has the following forms: State, international, municipal and public; the priority of the investigated phenomenon in Ukraine in the context of European integration processes is emphasized. The lack of a unified approach in the legislation regarding the definition of this term is considered, which is the reason for its heterogeneous interpretation. Practical implementation. It is proposed to develop and adopt a single unified Law "On Public Control",

Анотація

Метою статті є дослідження питання функціонування та нормативно-правового регулювання публічного контролю за реалізацією державної політики в гуманітарній сфері. Предметом статті є публічний контроль. Методологія. Під час проведення дослідження використані наступні методи: інституційний, інтерпретаційний, юридико-догматичний, монографічний, системний, наукової абстракції, узагальнюючий. Результати. Вивчаються різні підходи в науковій вітчизняній і зарубіжній літературі щодо змісту поняття «контроль», «нагляд», «публічний контроль». Акцентується увага на тому, що такий контроль має наступні форми: державний, міжнародний контроль, муніципальний, громадський; наголошується на пріоритетності розвитку інституту громадського контролю в Україні в контексті євроінтеграційних процесів. Розглядається питання відсутності уніфікованого підходу в законодавстві щодо визначення поняття громадського контролю, що є причиною його

⁵⁵ Candidate of Legal Sciences, Associate Professor, Deputy Director of the Educational and Scientific Institute of Law and Specialist Training for National Police Units of the Dnipropetrovsk State University of Internal Affairs (Dnipro, Ukraine).

⁵⁶ Doctor of Legal Sciences, Deputy Head of the Office of the President of Ukraine (Kyiv, Ukraine).

⁵⁷ Candidate of Legal Sciences, Associate Professor, Associate Professor of the Department of Civil Law and Process of the Dnipropetrovsk State University of Internal Affairs (Dnipro, Ukraine).

⁵⁸ PhD in Law, Deputy Head of the educational and methodological department of Dnipropetrovsk State University of Internal Affairs (Dnipro, Ukraine).

⁵⁹ Lecturer of the Department of general law disciplines of Dnipropetrovsk State University of Internal Affairs (Dnipro, Ukraine).



which will regulate in detail all the issues related to the implementation of this institution. Value/originality. Based on the analysis of scientific work and legal instruments, the authors' determination of the concept of "public control over the implementation of state policy in the humanitarian sphere" is provided.

Keywords: control, municipal control, public control, State control, supervision.

Introduction

The effectiveness of State policy in the humanitarian sphere depends on control, which in turn contributes to the development of the so-called human resource and human capital, which are one of the main indicators of the country's success. In turn, education and science, for example, are key conditions for the development of human capital. By the way, we note that in successful countries, priority is given to the development of the so-called human resource and human capital, high technologies, but there is little internal demand for intelligence and new knowledge in Ukraine, although intelligence and knowledge are the main resources of the State (Yunin, Sevruk & Pavlenko, 2018, p. 362).

In order to consider the issue of administrative and legal foundations of public control over the implementation of State policy in the humanitarian sphere, it is worth paying attention first to the conceptual and categorical apparatus of the problem.

The Ukrainian legislator does not solve the discussion about the identity or difference between the concepts of «supervision» and «control» in the scientific literature, since there is no single legal instrument, where the concepts of control or State supervision would be clearly defined. "Control" and "supervision" are often used as synonyms in Ukrainian legislation (for example, the legislator emphasizes the preventive, prophylactic nature of State supervision, which is aimed at ensuring legality and law and order in a specific sphere of social relations; control and supervision are closely linked as a means of ensuring the rule of law. Besides, some researchers (for example, Shemelynets and Pozniak) (2016) stress on the use of the combined expression "supervision

різнорідного трактування. Практичне застосування. Запропоновано розробити та прийняти єдиний уніфікований Закон «Про громадський контроль», де детально врегулювати всі питання, пов'язані з реалізацією цього інституту. Цінність/оригінальність. На основі аналізу наукового доробку і нормативно-правових актів надається авторське визначення поняття «публічний контроль за реалізацією державної політики в гуманітарній сфері».

Ключові слова: контроль, муніципальний контроль, громадський контроль, державний контроль, нагляд.

(control)" in the corresponding regulations by the legislator.

That is why the aim of the Article is to reveal some issues of functioning and legal regulation of public control over the implementation of State policy in the humanitarian sphere.

Methodology

The research is based on the application of general and special legal methods. In particular, institutional method was used to investigate public control as an institution, which ensures citizens' political activity in the implementation of State policy in the humanitarian sphere, their co-operation with the representatives of public authorities and local self-government.

The method of interpretation was applied to reveal the concepts of "control" and "supervision".

Legal and dogmatic method helped to examine the rules of legal instruments, enshrining the notions of public, State, government, municipal and other types of control in Ukraine.

Monographic method was useful in investigating the works of scholars, who conducted the research on the category under consideration.

With the help of system method the types of control were identified.

The method of scientific abstraction made it possible to develop the authors' definition of the term "public control".

Summarizing method was applied to make adequate inferences and propose amendments to the current legislation.

Literature Review

For example, Musaev et al., (2020) prove that public control in the system of public administration should be implemented on a regular basis, but the lack of people's legal and political awareness impedes this process. Besides, there is certain influence and even pressure by the State and NGOs, what doesn't contribute to the development of this institution.

Dzhumabaev and Raymbaev (2019) share the opinion that fundamentally important point is the issue of participation of citizens and the public in monitoring the activities of the State apparatus and the provision of public services, therefore it is crucial to find new channels of influence of civil society on State agencies, develop accessible and understandable mechanisms for citizens to control the government activities.

Belokrylova (2017) stresses on the importance of strengthening the integration and interconnection of the still fragmented, information-driven projects for the implementation of the functions of public control by civil society over various areas of State activity. Besides, popularization of public control mechanisms is possible through advanced training of its actors, including potential ones.

According to Nironka (2019), public control is not only an integral component of public administration and local self-government, but also the most important factor in the development of civil society. It is needed, first of all, by the public authorities themselves in order to increase the efficiency of their activities and provide additional measures to protect them from being taken over by influential political and economic groups. In addition, for its successful functioning and development, the government urgently needs to constantly coordinate its actions with public needs and interests, which are expressed by the population both directly and through the institutions of civil society. Public control is one of the main means of such coordination.

Mykhailov (2020) states that public control is an important form of democracy, because it gives the people an opportunity to participate in State management, in solving state and society matters, actively influence on the public authorities' and local governments' activities.

Muzychuk (2010) emphasizes that such control is a type of social control, which is implemented by the association of citizens and by citizens themselves, is a form of democracy realization and inclusion of population to the State and society management.

Results and Discussion

Indeed, Ukrainian legislator enshrines the concept of "State supervision (control)" in some legislative acts, namely, in the Law "On the Main Principles of State Supervision (Oversight) in the Area of Commercial Activity" (Law of Ukraine No. 877-V, 2007). Thus, Par. 2, Art. 1 of this act indicates that "State supervision (oversight) shall be defined as activities of central executive authorities empowered by law, their territorial bodies, state collegial bodies, executive authorities of the Autonomous Republic of Crimea, local state administrations, local authorities (hereinafter referred to as state supervision (oversight) bodies) within the powers provided by law, to identify and prevent violations of the law by business entities and ensure the interests of society, in particular, by the proper quality of products, works and services, the permissible level of danger to the population and the environment".

From the point of view of law and legal sciences, control and supervision can also be divided into public and private. The public one is implemented in the public administrative and legal sphere, and the private one is carried out in public relations that are of private legal nature (Kravchuk, 2015, p. 211). Some researchers generally reduce public control to an arbitrary form of public participation in the supervision of the activities of management institutions. Bukhanevych (2009, pp. 29–30) follows a similar approach, relying on the scientific positions of some Western European, namely German and French researchers. On the other hand, Kravchuk (2015) states that public control in the State refers to the system of organizational and legal forms of ensuring compliance with legality in the activities of public administration, human rights and freedoms, effective performance of powers and tasks by State authorities, local governments and their officials.

There are different approaches not only to the perception of the concepts of control, supervision, public control, but also to the classification of types of control. For example, depending on the place of the subject of control in the State administration system, some researchers distinguish 8 types of control:

legislative control; by the President of Ukraine; by the Cabinet of Ministers; control by the central public authorities; by local State authorities; judiciary control; by local self-government bodies; public control. This approach does not single out such control as governmental (judicial, presidential, etc.) and public, municipal, etc.

Other researchers consider only the types of public control and, depending on the entities that have the right to exercise it, divide them into two large, relatively independent groups: the first includes presidential control, parliamentary control, control by executive bodies, control by courts of general jurisdiction (what unites them is that control is not the only function of these bodies). The second control group consists of the authorities, which have a single control function (for example, constitutional control, prosecutorial supervision, control by the Commissioner for Human Rights, control and audit bodies of the executive power) (Tsependa, 2019).

If we consider State policy in the humanitarian sphere as the formation of public and legal fundamentals of activity of subjects of authority and various institutions of civil society involved in this process in such areas as education and science, culture and information, health care, sports and tourism, development of civil society, humanitarian security, in which State authorities, local governments, civil society institutions participate, then it can be stated that public control over the implementation of State policy in the humanitarian sphere is a system of organizational and legal forms of respect for the rule of law in the activities of public authorities and local self-government, their officials, who are entrusted with the tasks of implementing State policy in the sphere of health care, education and science, cultural and informational sphere, sports and tourism, development of civil society and human capital, humanitarian security, which takes place in the form of State control, international control, municipal control and public control (which in today's conditions is highlighted as a key and priority in the context of Ukraine's European integration aspirations, as well as because of the proximity of the humanitarian sphere directly for the citizens of Ukraine).

In turn, the following can be distinguished in the State control over the implementation of State policy in the humanitarian sphere. The key, clearly, is presidential control, based on the strategically important role of the President of

Ukraine in the system of checks and balances of the branches of power in Ukraine and in the context of the overall implementation Ukraine's policy implementation in all areas of interest and benefit of the people of Ukraine. Such control can be implemented directly or through some institutions under the President of Ukraine (Office of the President or, for example, in the field of child protection and until recently through the Presidential Commissioner for the Rights of the Child).

Note that in accordance with Art. 85 of the Constitution of Ukraine (Law of Ukraine No. 254k/96-VR, 1996), the Verkhovna Rada of Ukraine, as the only body of legislative power in Ukraine, in fact, determines the foundations of both foreign and domestic policy; it approves national programs on economic, scientific and technical, social, national of cultural development, environmental protection. The Verkhovna Rada also supervises the activities of the Cabinet of Ministers of Ukraine (which is entrusted with the important task of implementing State policy, including in the humanitarian sphere).

At the same time, the Verkhovna Rada of Ukraine can exercise parliamentary control over adopting public policy in the named area through its structural subdivisions or bodies created by the legislative authority of Ukraine. The key role here belongs to the Commissioner for Human Rights of the Verkhovna Rada of Ukraine. According to the rules of the Law "On the Ukrainian Parliament Commissioner for Human Rights" (Law of Ukraine No. 776/97-VR, 1997), the Commissioner implements parliamentary control in the sphere of social relations that arise in the exercise of the liberties and freedoms of an individual and a citizen between a citizen of Ukraine regardless of his (her) place of residence, a foreigner or a stateless person, who are on the territory of Ukraine, and state authorities, local self-government bodies and their officials and employees. That is, control is performed over the observance of citizens' rights in the exercise of their non-material rights and benefits such as health care, education, etc. Specialized committees (on the issues of health care, education and science, etc.) may operate under the Council. The Law "On Committees of the Verkhovna Rada of Ukraine" (Law of Ukraine No. 116/95-VR, 1995) clearly states that committees carry out control functions, including in the form of analysis of the practice of applying legislative acts in the activities of state bodies, their officials on issues related to the committees' tasks, preparation and submission of relevant

conclusions and recommendations for consideration by the Verkhovna Rada of Ukraine.

In exceptional cases, temporary investigative measures may be taken under the Verkhovna Rada. The temporary investigative commission is formed from among People's Deputies of Ukraine; it exercises parliamentary control by conducting an investigation on the issues of public interest, including issues related to the implementation of State policy in the humanitarian sphere (Law of Ukraine No. 400-IX, 2019).

Judicial control is carried out by courts as a result of their direct activity in protecting the rights and freedoms of Ukrainian citizens, ensuring legality in Ukraine. Such control is manifested in the activity of the trial, when acts of government and local government, engaged in the implementation of State policy in the humanitarian sphere, resolution of conflicts between citizens and public agencies (including those arising as a result of the professional operation by their officials) are checked (Denysova, 2016, p. 5).

In our opinion, the administrative courts of Ukraine play a key role here, since the main task of administrative courts is the fair, impartial and timely resolution of disputes in the field of public and legal relations in order to effectively protect the rights, freedoms and interests of natural persons, legal entities from violations by subjects of authority (Law of Ukraine No. 2747-IV, 2005), which arise as a result of the actions of those actors that implement public policy in the humanitarian sphere.

If we talk about prosecutorial supervision, as a result of the 2016 reform (constitutional changes concerning the Prosecutor's Office) and on the basis of the relevant Law of Ukraine No. 1697-VI (2014), the powers of the agency in this matter were significantly narrowed, and now the it performs the function of monitoring the observance of human and civil rights and freedoms, compliance with the law on these issues by executive authorities, local self-government, their officials and employees exclusively in the form of representation of the interests of the citizen or the State in court.

The most complex and extensive in terms of the number of control bodies and relevant powers in the State control system is government control, or control by the executive branch. Such control has several levels. The Cabinet of Ministers of

Ukraine is actually at the highest level, then control is carried out at the level of central executive bodies, and the lowest is the level of local state administrations, local executive bodies. Besides, control may be over-agency or outside one, when there is lack of subordination of the controlling entity and the controlled object; departmental or internal control exists in the executive branch, local self-government, whose task is the implementation of public policy in humanitarian sphere, and it is implemented by them for subordinate units (Isakov, 2012, p. 388).

In addition, there are also specific instances in the system of executive power that exercise control over a certain specific sphere of humanitarian policy implementation, such as the Commissioner of the Verkhovna Rada of Ukraine for Human Rights. As we know, in recent years the Ukrainian authorities have paid considerable attention to ensuring the functioning of the public space of the Ukrainian language as the State language, and respectively, the post of Commissioner for the Protection of the State Language was introduced. The authorized representative ensures monitoring the implementation of the legislation on the State language, State targeted programmes to ensure comprehensive development and functioning Ukrainian language as the State one (clause 2, part 4, article 49 of the Law); carries out state control over the use of the state language by state authorities, authorities of the Autonomous Republic of Crimea, local self-government bodies, enterprises, institutions and organizations of state and communal forms of ownership, their officials and employees, as well as public associations, political parties and other legal entities persons, their officials (Law of Ukraine No. 2704-VII, 2019).

International control is quite specific one, as it can be carried out not through Ukrainian national State institutions or the State directly, but in compliance with international obligations, - through international governmental and non-governmental organizations. For example, OSCE monitoring missions, ICRC mission to Ukraine operate in our country (or have been operated, but suspended their activity as a result of full-scale aggression by the Russian Federation).

It is worth focusing on public control, which we consider to be a priority in modern conditions and trends in the development of the Ukrainian state and law, civil society. Currently, the general definition of the concept of "public control" is not unified and standardized; there is no special law determining the unified principles of the

institution of public control, public control over the implementation of State policy in the humanitarian sphere. We agree with Yunin (2021, p. 203), who, in the context of research on the issue of public control over the activities of the National Police of Ukraine, correctly notes that the absence of such a legal instrument leads to a broad interpretation of the concept of public control. The scientist presents the author's vision of public control over the activities of the National Police of Ukraine: "it is a complex of measures carried out in accordance with the Constitution and laws of Ukraine by the representatives of the public (individual citizens and/or public associations) aimed at checking (observation, supervision) compliance with the law by the National Police units or some of its officials during the performance of the tasks and duties of the National Police and its officers, as well as at the interaction of the police with the public for the preparation and implementation of joint projects, programs and measures to meet the needs of the population and improve the effectiveness of the police in meeting the stated objectives». Although this concept refers to the control of police activities, the definition is comprehensive one and can be used in our study to better understanding the concept of public control.

At the same time, this definition is also contained in Ukrainian legislation. For example, according to the Law of Ukraine No. 1556-VII (2014), public control in the area of higher education is the right of society and individual citizens, employees, students, public self-government bodies, professional unions, employers' organizations and their associations, public organizations to receive access to information at all stages of decision-making in the field of higher education and science, to make proposals and comments on them, to agree on the adoption of decisions defined by law; the actors of such control are individual citizens or public associations.

At the same time, legal instruments regulate not only of public control issues over certain sphere of policy implementation in the humanitarian sphere, such as higher education; for example, the Resolution of the Cabinet of Ministers of Ukraine No. 996 (2010) defines general principles of participation of citizens in matters of influence on decision-making regarding the establishment by the State of basic foundations for its own activities in a wide range of spheres of public life. This Resolution enshrines the main tasks of public councils at central authorities, Ministries or local administrations, and the

concept of monitoring, not control or supervision, is used. Thus, among the tasks of these councils is the involvement of representatives of interested parties in holding consultations with the public and monitoring the results of establishing and implementing the State and regional policies; conducting, in accordance with the legislation, public monitoring of the executive authority activities. In addition to public organizations, individual citizens, public councils under executive authorities at all levels, the entities are also trade unions, labor collectives, etc.

We consider it necessary to emphasize the so-called municipal or local government control. Local councils as representative bodies of local self-government, are entitled to monitor the implementation of socio-economic or cultural development programs by local executive bodies, which are part of adopting the State policy in the humanitarian sphere, they also may establish temporary supervisory commissions on certain local issues (Kravchuk, 2015, p. 213). Thus, according to the Law of Ukraine No. 280/97-VR (1997), regional and district councils can form temporary control commissions of the council to carry out control over the issues specifically determined by the council, which belong to the powers of local self-government. Besides, the objects of pre-school, school and out-of-school facilities, boarding schools; objects of health care and social security; objects of culture, physical culture and sports, etc. (which are directly engaged in the provision of services in relation to implementation by citizens of their intangible rights in the humanitarian sphere, namely the right education, health care, etc.) are among the objects of communal ownership. The relations of local self-government bodies with these institutions and organizations, which are communal property of the respective territorial communities, are established on the basis of their subordination, accountability and control to the named agencies.

Conclusion

Thus, as a result of the research, we came to the following conclusions:

- 1) There are various approaches to such definitions as "control", "supervision", "public control" in the scientific literature. The scholars often equate the concepts of control and supervision; some of them believe that supervision is a derivative of control, the others believe that control and supervision are different concepts in their

content. This situation is caused by the fact that the legislator did not unify these categories in a single legal act. We, in turn, propose the definition of public control over the implementation of State policy in the humanitarian sphere as the system of organizational and legal forms of observance of the law in the activities of State authorities and local self-government bodies, their officials that have been entrusted with the implementation of the State policy in the area of health care, education and science, cultural and information sphere, sports and tourism, development of civil society and human capital, humanitarian security, which takes place in the form of State control, international control, municipal control and public control;

- 2) public monitoring of the implementation of State humanitarian policy takes place in the form of State control, international, judicial, municipal and public control (we consider the development of the institution of public control a priority). The most complex and extensive is government control, or control by executive authorities. It is multi-level in terms of the administrative and legal status of the body exercising it in the system of executive authorities. The highest agency is the Cabinet of Ministers of Ukraine as an institution, the next level are ministries and central executive authorities, and the lowest one is the level of local State administrations and executive bodies.

There is no unified interpretation of the definition of public control in scientific literature and legislation. We believe that the Resolution No. 996 (2010) is not is not a full-fledged instrument to regulate such an important institution as public control. So, we propose to develop and adopt a unified Law On Public Control, which will govern in detail the issue of such control by State authorities (especially the executive ones and not only those bodies involved in the implementation of public policy in the humanitarian sphere, but also law enforcement ones), and local government.

At the legislative level, we propose to unify and establish a single interpretation at the conceptual categorical level of such concepts as "control" and "supervision", "public supervision".

Bibliographic references

Belokrylova, O. (2017). "Public Control Mechnisms: Efficiency Improvement

Directions. Journal of Economic Regulation", 8, pp. 57-70. 10.17835/2078-5429.2017.8.3.057-070.

https://www.researchgate.net/publication/320422213_Public_Control_Mechnisms_Efficiency_Improvement_Directions

Bukhanevych, A. (2009). "Public control in the context of modern research approaches". Bulletin of the National Academy of Public Administration under the President of Ukraine, 1, pp. 25-32. http://nbuv.gov.ua/UJRN/Vnadu_2009_1_5

Denysova, A. V. (2016). "On the control and supervision balance in the legislation: on the determining problems". Scientific Bulletin of the Uzhhorod National University. Series: Law, 41(2), pp. 22-25. [http://nbuv.gov.ua/UJRN/nvuzhpr_2016_41\(2\)_6](http://nbuv.gov.ua/UJRN/nvuzhpr_2016_41(2)_6)

Dzhumabaev, S., & Raymbaev, D. (2019). "Public control in the sphere of public administration - the mystery shoppermethod". Public Administration and Public Service, 4, pp. 11-20. <https://repository.apa.kz/bitstream/handle/123456789/66/%d0%94%d0%b6%d1%83%d0%bc%d0%b0%d0%b1%d0%b0%d0%b5%d0%b2%20%d0%a1.%d0%90.%20journal-4%2870%29-2019%20%281%29.pdf?sequence=1&isAllowed=y>

Isakov, M. H. (2012). "Types of state control in the sphere of entrepreneurial activity". Law Forum, 1, pp. 387-395. <https://globus.ua/press/publ/item-38>

Kravchuk, V. (2015). "Public control in the state". Legal Bulletin, 1, pp. 210-215. URL: http://nbuv.gov.ua/UJRN/urid_2015_1_39

Law of Ukraine No. 116/95-VR. On Committees of the Verkhovna Rada of Ukraine. Official Web site of the Verkhovna Rada of Ukraine, April 4, 1995. Available online. <https://zakon.rada.gov.ua/laws/show/116/95-%E2%F0#Text>

Law of Ukraine No. 1556-VII. On higher education. Official Web site of the Verkhovna Rada of Ukraine, July 01, 2014. Available online. <https://zakon.rada.gov.ua/laws/show/1556-18#Text>

Law of Ukraine No. 1697-VI. On the Prosecutor's Office. Official Web site of the Verkhovna Rada of Ukraine, October 14, 2014. Available online. <https://zakon.rada.gov.ua/laws/show/1697-18#Text>

Law of Ukraine No. 254K/96-VR. The Constitution of Ukraine. Official Web site of the Verkhovna Rada of Ukraine, June 28,

1996. Available online. In: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text>
- Law of Ukraine No. 2704-VII. On ensuring the functioning of the Ukrainian language as the state language. Official Web site of the Verkhovna Rada of Ukraine, April 25, 2019. Available online. <https://zakon.rada.gov.ua/laws/show/2704-19#n486>
- Law of Ukraine No. 2747-IV. Code of Administrative Proceedings of Ukraine. Official Web site of the Verkhovna Rada of Ukraine, July 6, 2005. Available online. <https://zakon.rada.gov.ua/laws/show/2747-15#Text>
- Law of Ukraine No. 280/97-VR. On local self-government. Official Web site of the Verkhovna Rada of Ukraine, May 21, 1997. Available online. <https://zakon.rada.gov.ua/laws/show/280/97-%D0%B2%D1%80#Text>
- Law of Ukraine No. 400-IX. On temporary investigative commissions and temporary special commissions of the Verkhovna Rada of Ukraine. Official Web site of the Verkhovna Rada of Ukraine, December 19, 2019. Available online. <https://zakon.rada.gov.ua/laws/show/400-20#Text>
- Law of Ukraine No. 776/97-VR. On the Ukrainian Parliament Commissioner for Human Rights. Official Web site of the Verkhovna Rada of Ukraine, 23, 1997. Available online. <https://zakon.rada.gov.ua/laws/show/776/97-%D0%B2%D1%80#Text>
- Law of Ukraine No. 877-V. On the Main Principles of State Supervision (Oversight) in the Area of Commercial Activity. Official Web site of the Verkhovna Rada of Ukraine, April 5, 2007. Available online. <https://zakon.rada.gov.ua/laws/show/877-16#Text>
- Musaev, O., Ruziyeva, R., Muhammadiyeva, O., Makhkamov, U., & Mallaeva, U. (2020). The role of public control in improving the system of public administration. "European Journal of Molecular & Clinical Medicine", 7(2), pp. 370-378. https://ejmcm.com/article_2081_1eac3072b5874f83c7f6fedb504903ad.pdf
- Muzychuk, O. (2010). "Problems of classification of control after ukrainian law enforcement agencies' activity". Law and Security, 3(35), pp. 84-89. http://dspace.univd.edu.ua/xmlui/bitstream/handle/123456789/5972/Problemy%20klyasyfikatsii%20kontroliu%20za%20diialnistiu%20pravookhoronnykh%20orhaniv%20v%20Ukraini_Muzychuk%20OM_2010.pdf?sequence=1&isAllowed=y
- Mykhailov, V. (2020). "Public control as a method of providing legality and discipline in the activities of the patrol police". European political and legal discourse [EVROPSKÝ POLITICKÝ A PRÁVNÍ DISKURZ], 7(3), pp. 234-239. DOI: 10.46340/eppd.2020.7.3.33. <https://webcache.googleusercontent.com/search?q=cache:ojMBoSFQ6KkJ:https://eppd13.cz/wp-content/uploads/2020/2020-7-3/35.pdf&cd=2&hl=uk&ct=clnk&gl=ua>
- Nironka, Yu. (2019). "The essence of public control over the activities of public authorities". Actual problems of law, 2(18), pp. 67-71. <http://appj.wunu.edu.ua/index.php/apl/article/view/704>
- Resolution of the Cabinet of Ministers of Ukraine No. 996. On ensuring public participation in the formation and implementation of state policy: Official Web site of the Verkhovna Rada of Ukraine, November 03, 2010. Available online. <https://zakon.rada.gov.ua/laws/show/996-2010-%D0%BF#Text>
- Shemelynets, I., & Pozniak, O. (2016). "Correlation of supervision and control concepts in labour legislation". In: Scientific Bulletin of Uzhorod National University, 36(1), pp. 183-186. [http://nbuv.gov.ua/UJRN/nvuzhpr_2016_36\(1\)_42](http://nbuv.gov.ua/UJRN/nvuzhpr_2016_36(1)_42)
- Tsependa, V. M. (2019). "Classification of types of state control". In: Public administration: improvement and development, 9. <http://www.dy.nayka.com.ua/?op=1&z=1613>
- Yunin, O., Sevruck, V., & Pavlenko, S. (2018). "Priorities of economic development of Ukraine in the context of European integration". Baltic Journal of Economic Studies, 4(3), pp. 358-365. DOI: <https://doi.org/10.30525/2256-0742/2018-4-3-358-365>
- Yunin, O.S. (2021). "The concept of public control over the activities of the National Police of Ukraine". Administrative Law and Procedure, 4, pp. 200-204. <http://pgp-journal.kiev.ua/archive/2021/4/31.pdf>

DOI: <https://doi.org/10.34069/AI/2022.56.08.14>

How to Cite:

Kovalevska, N., Nesterenko, I., Lutsenko, O., Nesterenko, O., & Hlushach, Y. (2022). Problems of accounting digitalization in conditions of business processes digitalization. *Amazonia Investiga*, 11(56), 132-141. <https://doi.org/10.34069/AI/2022.56.08.14>

Problems of accounting digitalization in conditions of business processes digitalization

Problemas de la digitalización de la contabilidad en condiciones de digitalización de los procesos

Received: September 1, 2022

Accepted: September 30, 2022

Written by:

Kovalevska Nadiia⁶⁰<https://orcid.org/0000-0002-2758-5972>**Nesterenko Iryna**⁶¹<https://orcid.org/0000-0002-3892-8248>**Lutsenko Olena**⁶²<https://orcid.org/0000-0002-5621-1152>**Nesterenko Oksana**⁶³<https://orcid.org/0000-0002-9516-0917>**Hlushach Yuliia**⁶⁴<https://orcid.org/0000-0002-8068-5753>

Abstract

The study of accounting digitalization in the context of business processes digitalization is an actual and modern problem. Methods used: analysis and synthesis, graphic methods, the method of comparisons, the cause-and-effect method. The purpose of the article: the determination of the stages of business processes digitalization, the formation of directions for digitalization of accounting, the identification of opportunities and threats. Tasks of the article: research of modern trends, advantages and disadvantages of digitization; determination of the features of digital technologies introducing; formation of the directions and problems of digitization of accounting. As a result, modern trends, advantages, and disadvantages of digitalization were outlined, its process was built, and the main directions of digitalization of accounting were proposed. The obtained results can be used by business managers to build the process of digitalization and determine further directions of digitalization of accounting. Further

Resumen

El estudio de la digitalización de la contabilidad en el contexto de la digitalización de los procesos empresariales es un problema actual y moderno. Métodos utilizados: análisis y síntesis, métodos gráficos, el método de las comparaciones, el método de causa y efecto. Objetivo del artículo: la determinación de las etapas de la digitalización de los procesos de negocio, la formación de direcciones para la digitalización de la contabilidad, la identificación de oportunidades y amenazas. Tareas del artículo: investigación de las tendencias modernas, ventajas y desventajas de la digitalización; determinación de las características de la introducción de tecnologías digitales; formación de las direcciones y problemas de la digitalización de la contabilidad. Como resultado, se esbozaron las tendencias modernas, las ventajas y desventajas de la digitalización, se construyó su proceso y se propusieron las principales direcciones de la digitalización de la contabilidad. Los resultados obtenidos pueden ser utilizados por los gestores de las empresas para construir el

⁶⁰ PhD in Economics, Associate Professor Department of Accounting, Audit and Taxation Faculty of Economic Relations and Finance, State Biotechnological University, Ukraine.

⁶¹ PhD in Economics, Associate Professor of the Department of Accounting, Audit and Taxation Faculty of Economic Relations and Finance, State Biotechnological University, Ukraine.

⁶² PhD in Economics, Associate Professor of the Department of Accounting, Audit and Taxation Faculty of Economic Relations and Finance, State Biotechnological University, Ukraine.

⁶³ Doctor of Economics, Professor Head of the Department of Statistics, Accounting and Audit V. N. Karazin Kharkiv National University, School of Economics, department of statistics, accounting and audit, Ukraine.

⁶⁴ PhD in Economics, Associate Professor of the Department of Statistics, Accounting and Audit V. N. Karazin Kharkiv National University, School of Economics, department of statistics, Ukraine.



research may include legal support for the digitization of accounting and its improvement.

Keywords: digitalization, accounting, digitalization of business processes, information technologies, innovations.

Introduction

Digitalization's penetration into all areas of life and society is an irreversible process that creates a number of benefits for businesses, but it also creates a long list of challenges. Otherwise, the digitalization of business processes has a direct impact on accounting. The digitalization of accounting involves its transformation from traditional to digital form, which also entails both prospects and disadvantages for businesses. The ability of a business, particularly its accounting, to adapt as quickly as possible to the current trends of digitalization depends on its future market position and existence in general. Therefore, it is relevant to investigate the opportunities, prospects, and challenges of the digitalization of accounting and the digitalization of business processes.

Accounting has evolved in parallel with information technology (Knudsen, 2020), so it can be assumed that this area will adapt to the new realities faster than others. The directions of implementation and development of digitalization of accounting in enterprises are: changes in the accounting system in terms of its methodological elements; application of new digital forms of assets, liabilities, and capital; professional development in accordance with the requirements of digital competencies of accounting personnel (Chyzhevska et al., 2021). The vast opportunities offered by digitalization for accounting are difficult for modern businesses to ignore and not use in their activities. Internet technology can significantly reduce the cost of communication and the transfer and storage of information. Electronic communications allow businesses to expand into new markets, provide ample opportunities to attract customers, significantly save time, and allow them to respond quickly to market fluctuations (Lazebnyk, 2018).

The main barriers to the implementation of digitalization are resistance to change, organizational culture, lack of trust, and the high cost of technology (Vărzaru, 2022). Separately, researchers note cybersecurity risks (Pantelei & Lazari, 2022), as well as the decline in the quality

proceso de digitalización y determinar nuevas direcciones de la digitalización de la contabilidad. Otras investigaciones pueden incluir el apoyo legal a la digitalización de la contabilidad y su mejora.

Palabras clave: digitalización, contabilidad, digitalización de los procesos empresariales, tecnologías de la información, innovaciones.

of information and the issue of the reliability of the person involved in its preservation and transmission (Agostino et al., 2021).

Researchers agree that the hope that things will remain more or less as they are now should be considered potentially dangerous. That is, digitalization will affect business processes and accounting, and technologies such as big data analytics, artificial intelligence, blockchain technology, and other advances have the potential to stop any human interference in the audit process. In particular, big data can supplement original accounts and improve the quality of reporting. In the future, artificial intelligence will be able to perform the same audit procedures and judgments as a human colleague (Tiberius & Hirth, 2019).

The process of digitalization of business processes is insufficiently covered and systematized, there is no clarity or consensus in the works of scientists regarding its main stages. There is also little coverage of specific areas of digitalization of accounting.

Thus, the purpose of this article is to define the stages of digitalization of business processes, the formation of directions of digitalization of accounting, and the identification of opportunities and threats that accompany these processes. Achieving these goals requires solving the following tasks:

Study of current trends, advantages, and disadvantages of the digitalization of business processes for business;

Defining the peculiarities of the process of implementing digital technologies;

Formation of the main directions and problems of digitalization of accounting.

Theoretical Framework or Literature Review

The problems of digitalization of accounting and digitalization of business processes, in general,

are developed in their studies by many Ukrainian and foreign researchers. Annarelli et al., (2021) in their work highlight the benefits that companies that have implemented digitalization will provide to their customers. Eller et al., (2020) devote their research entirely to examining the impact of digitalization on small and medium-sized businesses. The researchers identify the peculiarities of digital transformation of such businesses and in the conclusion provide a list of barriers to the successful implementation of digitalization related to the lack of personnel with relevant competencies. Agostino et al., (2021) worry about potential risks along with the benefits of digitalization. Researchers attach great importance to the deterioration of information quality and reliability with the implementation of digitalization and note the importance of the reliability of those responsible for its preservation and transmission. Stefanovova et al., (2020) also focus on the disadvantages of digitalization, including the neglect of human capacity and imperfect legislative enforcement. As you can see from the literature review, the focus of scholars is on the disadvantages of digitalization. But this does not mean that digitalization should be suspended or that businesses would be better off not doing it. Digitalization is a well-recognized necessity, and its benefits are known and obvious. That's why researchers are seeking to improve the efficiency and safety of the process by carefully considering and proposing ways to prevent and minimize the threats and risks of digitalization.

Methodology

As the main scientific methods for the study were selected analysis and synthesis of the scientific literature to determine the theoretical aspects of the issue under study; graphical methods for a visual representation of theoretical information; method of comparison to compare the results of research; causal method to determine the advantages and disadvantages of the aspects under study. The tools used in the research were Smart Art add-in MS Word, used to represent information in the form of drawings, as well as the software Visio to build a flowchart to determine the decision-making process on the digitalization of business and a mind map to identify the main areas of digitalization of accounting.

The complex nature of the study involves its division into stages.

The first stage identifies current trends, advantages, and disadvantages for businesses in

terms of implementing digitalization of business processes. The main trends in the development of electronic communications are considered and the advantages and disadvantages of the digitalization of business processes are identified.

The second stage includes the construction of the process of digitalization of business processes and a detailed description of each of the stages. A generalized view of the process of deciding on the digitalization of business processes with its distribution into two alternative directions is offered. The result of deciding on each of the defined directions is analyzed.

The third stage is the identification and analysis of current directions of digitalization of accounting. The main opportunities for the development of accounting through the implementation of digitalization are disclosed. The main threats and barriers associated with this process are outlined.

The final stage of the study contains a comparison of the results obtained with the conclusions of the researchers of the topic. It was found that scientists generally agree on the benefits and necessity of the digitalization process. However, in some papers, there are lists of significant disadvantages.

Results and Discussion

Theoretical aspects of the digitalization of business processes: current trends, advantages, and disadvantages for business

Digitization is an unavoidable process that covers all spheres of life and the functioning of the economy. With the global digital transformation of economies, each individual business unit sooner or later asks the question of digitizing its activities. Failure to digitize a business may result in the loss of customers and counterparties, losses, lost value, reduced competitiveness, and, ultimately, the termination of the business. Entrepreneurial business models are often divided into classic and innovative models. Classical is aimed at maximizing the return on resources, and innovative - the goal of applying all possible innovations in the enterprise, even in the absence of sufficient own resources for their implementation. Such innovations include both the latest financial tools and management models (Iorgachova et al., 2018) and the implementation of information technology. Most often such, when these models are used by the business at the same time because

to implement all possible innovations in the enterprise is impractical and too valuable, and not to implement them at all will lead to the decline of the business. Digitalization of business involves using digital technology to change the business model and provide new opportunities for profit and value creation (Bloomberg, 2018; Gobble, 2018). In other words, digitalization or digitization of business processes involves making a transition from analog to digital (Lozic, J. (2019)). The main role in the process of digitalization is played by the development of information technology and means of communication. Information becomes the most valuable resource, and most of the carriers of information tend to be converted into electronic form. This form enhances the possibilities of communication between businesses and their customers, creates new markets and

opportunities for restructuring economic processes, in particular the reorganization of business processes. The main trends in the development of electronic communications are: the digitization of business information, doing business over the Internet, minimizing physical limitations through the use of electronic networks, the development of the entire infrastructure of production based on the use of information devices, the transfer of payments into cashless form, access to information about the business, production, and product, etc. for customers. (Lazebnyk, 2018). In addition to the obvious advantages of digitalization, there are also a number of significant disadvantages to this process. Figure 1 shows the following disadvantages and advantages of implementing digitalization in the business processes of the enterprise.

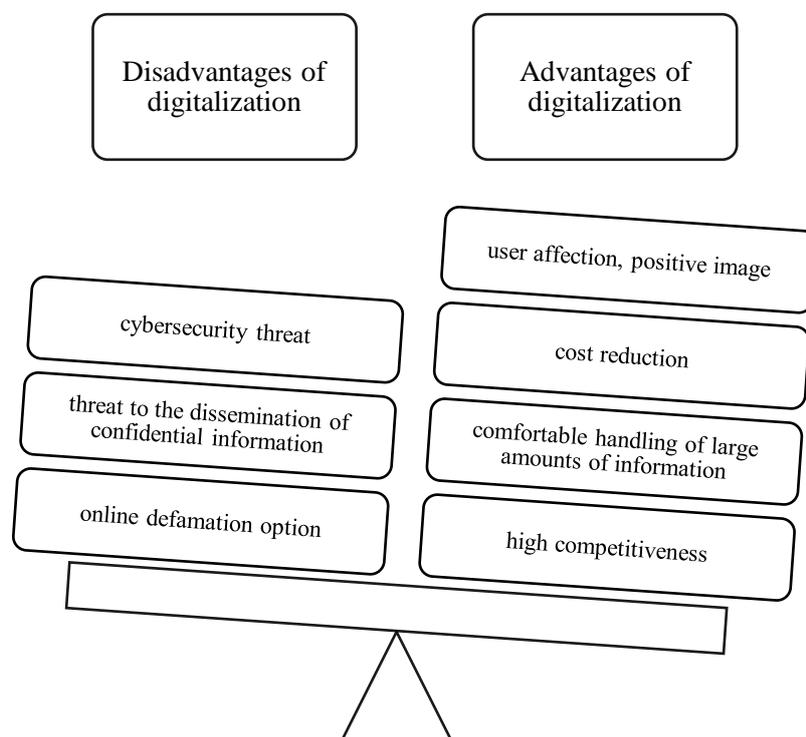


Fig. 1. Advantages and disadvantages of implementing digitalization in enterprise business processes (built by the author for (Kraus et al., 2021; Rooksby, 2018))

Figure 1 shows the risks of digitalization at the individual business entity level. If we consider the risks and threats of digitalization at the global level, we can identify many more disadvantages of this process. These are mainly social disadvantages, but they will have an impact not only on society but also on national economies. In particular, such disadvantages can include the so-called “Internet addiction”, degradation of the population through the ability to find any

information with the help of gadgets, deterioration of mental health due to the revision of inappropriate content, increasing income differences between the population, loss of jobs due to replacement of human labor with automation increased control of the state over the costs, income, movement, and its citizens, the risk of personal information, transfer of decision-making responsibility to machines, and so on. (Khandii, 2019). It should be noted that with the

globalization of all processes and activities in people's lives, all of these disadvantages will have an indirect and perhaps prolonged but weighty impact on businesses. In contrast to the disadvantages of the introduction of digitalization, this process has a number of positive effects, in particular, increasing the commitment of users, for whom it is more convenient to access information about the business, increasing the possibility of buying goods and services by ordering them at any time via the Internet, etc. Through the Internet, it is possible to create a positive image, conduct marketing campaigns. Digitalization of document flow, production, and other processes, when skillfully applied, contributes to cost reduction (from saving office materials to

speeding up the production process by times, saving significant amounts of electricity, reducing manual labor, etc.). Processing, storage, and operation of even the most significant volume of information becomes fast and convenient. All these factors increase the competitiveness and efficiency of the business.

Peculiarities of the process of implementation of digital technologies

The process of digitalization in the enterprise, as mentioned above, should be continuous, but it also has stages, which can be cyclical if new innovations need to be introduced. The three main stages of such a process are shown in Figure 2.

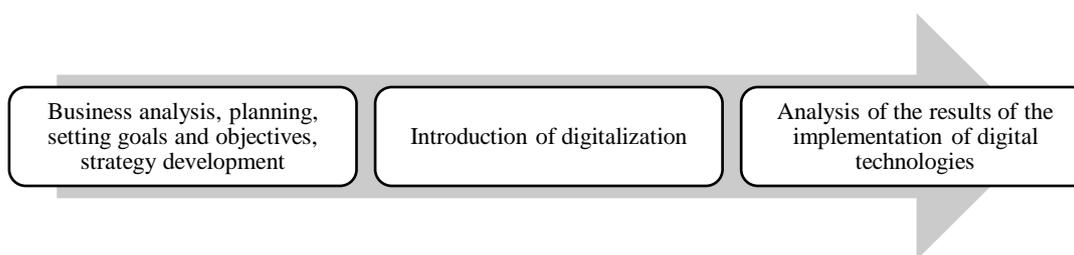


Fig. 2. Stages of implementation of digitalization (built by the author for (Husieva & Lehominova, 2018))

The first stage involves a detailed analysis of the business activities, goals, and objectives of digitalization and the development of an appropriate strategy. This stage contains the analysis of all business processes and assets of the subject of entrepreneurship. The purpose of this analysis is to identify the amount of lost value, to determine the effectiveness of each department, the efficiency of production, communications. The analysis should make it possible to evaluate the strategic result of the introduction of digitalization, to develop, implement and be able to adjust the appropriate strategy. The second stage, in which the direct implementation of digitalization technologies takes place, involves the selection and use of appropriate digital tools. Their implementation is accompanied by digital experiments that aim at progressive, consumer-oriented development and the expansion of innovation potential. For example, one of these tools is the use of low-code platforms that allow rapid creation, customization, and adjustment of experimental systems and applications.

The third step is to analyze the effectiveness of the results in detail. This includes analysis of the effectiveness of solutions for the digitalization of the business, analysis of statistics on the change in profits through the implementation of digital tools, etc. Based on the results of the analysis, conclusions are made regarding the directions of further implementation of digitalization measures (Husieva & Lehominova, 2018).

In addition to the generalized stages of digitalization implementation, each business should develop a detailed step-by-step process for the implementation of digital technologies that meets the needs and characteristics of the business. Based on this process, the organization's overall strategy will be developed. Such a process can be built again with the help of modern digital tools. Such tools include software that can be used to create, for example, roadmaps, "goal trees," other schemes and processes. As a generalized example of the process of implementation of digital technologies at an enterprise, Figure 3 shows a flowchart of decision-making on digital business transformation.

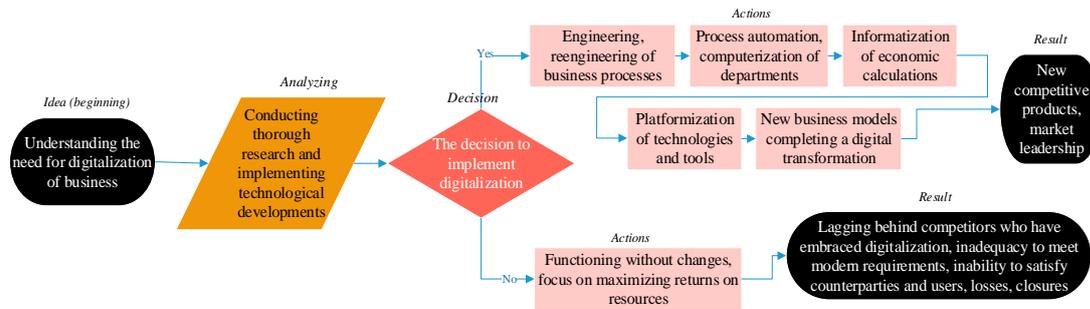


Fig 3. Decision-making block diagram for digital business transformation (developed by the author for (Szalavetz, 2019))

Figure 3 shows that the process of digitalization of business begins with an idea, which in this particular case is understood as the need to implement digitalization activities.

The next step should be an analysis associated with research, technological development, aimed at determining the feasibility, necessity, the main directions of digitalization. Based on the results of the analysis, a decision should be made to implement digitalization. In the case of the decision to refuse digitalization, to continue to function without change, focusing only on maximizing the return on resources, the result may be a significant lagging behind competitors in the industry, using the latest digital technology, inadequate market requirements, inability to satisfy counterparts and users, losses and, eventually, termination of activities. However, if the decision to digitalize can be much more positive, for example, lead to the emergence of new digital technologies. However, such an outcome is preceded by a complex process of digitalization, which can be summarized in terms of the following stages: engineering and re-engineering of business processes, automation of business processes, computerization of all departments,

informatization of economic calculations, platform technology and tools, development of new business models and final transformations.

Digitalization of accounting: main directions and problems

The digital economy envisages the following areas of change in accounting in the context of the digitalization of business processes: expanding the ability to reflect the scope of business activities in accounting, developing approaches to integrate different types of accounting, accelerating accounting, improving the way accounting information is accumulated and stored, making it convenient and safe to transmit to interested parties, etc. Such changes can be realized by applying the latest information technologies, in particular, cloud technologies, technological platforms, electronic information systems, the international standard of financial reporting XBRL, etc. (Yershova, 2020).

The systematized priority areas of digitalization of accounting in the context of the digitalization of business processes can be represented in the form of an intelligence map (Fig. 4).

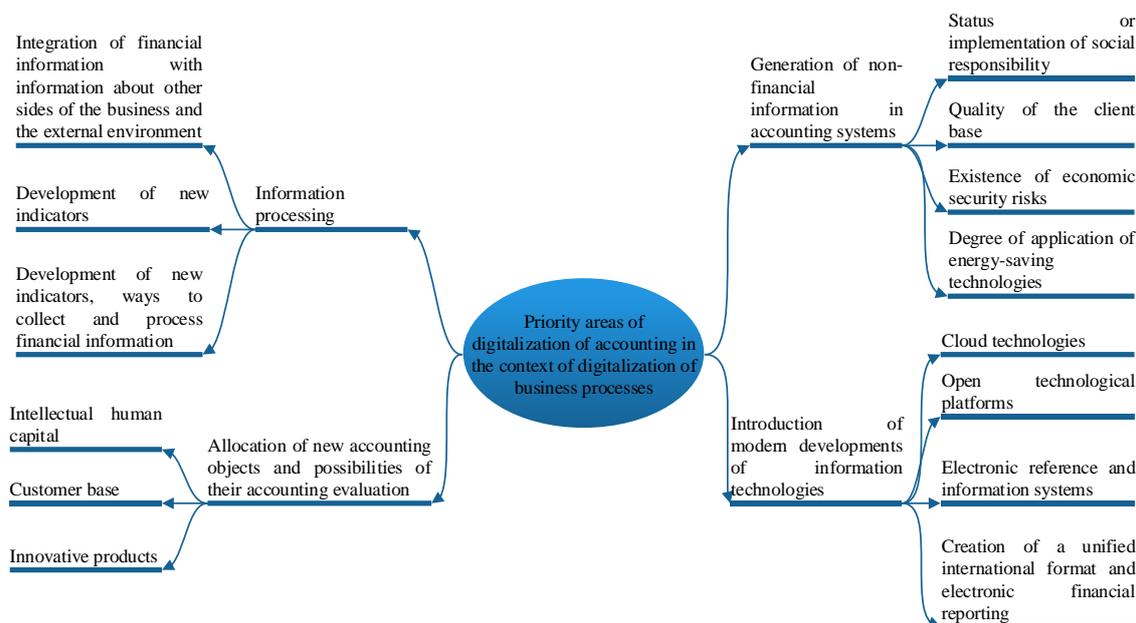


Fig. 4. Intellectual map of priority areas of digitalization of accounting in the context of the digitalization of business processes (compiled by the author for (Kulynych, 2019; Rozhnova, 2018))

As can be seen in Figure 4, the priorities of digitalization of accounting in the context of the digitalization of business processes are defined as new ways of processing information, the allocation of new accounting objects and means of their evaluation in the accounting system, the inclusion of non-financial information in the accounting system, and the introduction of modern information technology in business processes through programs, platforms, standards, etc.

The problems of improving the accounting system based on digitalization are concentrated around providing the organization with personnel of appropriate qualifications with the necessary competencies, skills, and experience, the preciousness of acquiring, implementing, and using innovative technologies, the time, money, and labor costs of conducting a full business transformation and transferring it to digital standards, as well as conducting appropriate preliminary analysis, analysis of the process of implementing digitalization measures,

Such problems are solved through competent strategic management, engagement of highly qualified employees, calculation of business needs for digitalization tools, and appropriate determination of real possibilities of their implementation.

Discussion

The study concludes that digitalization is necessary for any enterprise. The digitalization process should be deliberate and gradual, taking into account all the needs and opportunities of the business. This involves coordinating the stages of the digitalization process, constant analysis, evaluation of results and prospects, determining the priorities of digitalization, focus on the consumer, as well as a thorough assessment of the threats and risks of the process. Ukrainian and foreign researchers pay much attention to the process and consequences of digital transformation. The works of foreign researchers point out that the extended possibilities of digitalization can provide room for new functions, increased reliability, efficiency, and optimization opportunities, exponentially increasing the value that companies bring to customers (Annarelli et al., 2021). These and other benefits, also identified in the current study, allow us to confirm that the digitalization process can be characterized as non-alternative and necessary for businesses. The advantages of such a process are quite obvious, so scientists often focus on the disadvantages of this process and ways to minimize them. Thus, Korobka (2021) identifies the following disadvantages of digitalization: difficulty in determining the exact result, benefits may be temporary, lack of specialists with appropriate qualifications. The researcher refers to the advantages of digitalization as: the location of users, a positive image, cost reduction, convenient processing of

large amounts of information, high competitiveness. The advantages highlighted by the scientist generally coincide with those identified in the study, but the disadvantages outlined are contradictory. These disadvantages, firstly, relate to the micro level, that is, the disadvantages at the level of functioning of an individual business entity. Secondly, such shortcomings with experienced management are not only easy to eliminate, but it is possible to prevent them at all. Regarding the shortage of specialists of appropriate qualifications, it can be noted that information technology is developing very rapidly, and in the near future, there will be more and more such specialists. In addition, large companies can introduce internships to train specialists in accordance with the requirements of a particular business. The disadvantage of the relatively temporary nature of the benefits can play a significant role if digitalization measures are introduced once and the business process is not actually changed in the future. However, digitalization is an ongoing, constantly evolving process, so the enterprise should also operate a permanent system of analysis of prospects and opportunities for the implementation of new digitalization measures. Thus, in the case of the implementation of digitalization permanently, we cannot talk about the temporary nature of the benefits. Regarding the severity in determining the exact result - this statement is also contradictory because if there are specialists with the appropriate qualifications it is quite possible to predict a fairly accurate result of the introduction of digitalization measures. Small and medium-sized businesses play an important role in the digitalization of businesses as the most adaptive, flexible, and innovative enterprises. Therefore, separate studies are devoted to identifying barriers to digitalization for small and medium-sized businesses. Transformation of the business model for such businesses is complex and requires investment and the necessary related skills. Even though business owners and managers recognize the value of strategy, the daily routine of business operations leads them to try to avoid strategic planning. Digitalization supports specific core competencies, which leads to greater financial efficiency. However, the challenge remains for small and medium-sized businesses to hire employees with the necessary skills; this will continue to be a significant obstacle to their successful digitalization (Eller et al., 2020). In some studies, the consequences of the digitalization of accounting are not primarily related to the convenience of accumulating, storing, and transmitting information, but to the quality and reliability of such information, in particular the reliability of those responsible for

storing and transmitting it. The risks associated with these factors are among the key threats posed by the digitalization of accounting (Agostino et al., 2021). Some researchers add the following items to the list of disadvantages: the need for a significant time to convert business documents, conservatism, rapid technological progress, insufficient legal regulation, a certain disregard for human capacity, duplication (Stefanovova et al., 2020). Most of the above disadvantages were considered in the article, but insufficient legal regulation remains an unexplored aspect. It should be agreed that the legal support for the digitalization of accounting is in its developmental stage and remains imperfect at the moment. Therefore, the prospects for further research should be a detailed study of the current legal support for the digitalization of accounting and the development of recommendations for its improvement.

Conclusions

The study identified the main trends in the digitalization of business processes, including the digitization of business information, doing business over the Internet, the use of electronic networks, the use of information devices in production, cashless payments, increased access and awareness of customers on business. The advantages and disadvantages of the digitalization of business processes are defined. The undoubted advantages are simplification and reduction of time for processing documents, the acceleration of all processes, particularly production, cost savings, creating a positive image, expanding the customer base, etc. The main disadvantages are the increased risks of cybersecurity breaches, the risk of defamation, the threat to the confidentiality of information. The article proposed a process for the digitalization of business processes, consisting of a preliminary analysis of needs and resources, strategy development, setting goals and objectives, direct implementation of digitalization, and evaluation of the results. The study details this process and reveals the content of each of its components. In addition, the main directions of digitalization of accounting are defined and systematized. The benefits that digitalization will provide are identified, and the main obstacles to successful digitalization are given, one of which is the problem of finding highly qualified personnel with the appropriate skills. Possible solutions to the problems are suggested.

Bibliographic references

- Agostino, D., Saliterer, I., & Steccolini, I. (2021). Digitalization, accounting and accountability: A literature review and reflections on future research in public services. *Financial Accountability & Management*, 38(2). Doi: 10.1111/faam.12301
- Annarelli, A., Battistella, C., Nonino, F., Parida, V., & Pessot, E. (2021). Literature review on digitalization capabilities: Co-citation analysis of antecedents, conceptualization and consequences. *Technological Forecasting and Social Change*, 166, 120635. <https://doi.org/10.1016/j.techfore.2021.120635>
- Bloomberg, J. (2018). Digitization, digitalization, and digital transformation: confuse them at your peril. *Forbes*. <https://www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confuse-them-at-your-peril/?sh=6ce0387c2f2c>
- Chyzhevska, L., Voloshchuk, L., Shatskova, L., & Sokolenko, L. (2021). Digitalization as a Vector of Information Systems Development and Accounting System Modernization. *Studia Universitatis Vasile Goldiș Arad, Economic Sciences Series [Studia Universitatis Vasile Goldiș Arad, Seria Științe Economice]*, 31(4), 18-39. Retrieved from <https://publicatii.uvvg.ro/index.php/studiaeconomia/article/view/687>
- Eller, R., Alford, P., Kallmünzer, A., & Peters, M. (2020). Antecedents, consequences, and challenges of small and medium-sized enterprise digitalization. *Journal of Business Research*, 112, 119–127. doi: 10.1016/j.jbusres.2020.03.004
- Gobble, M. M. (2018). Digitalization, digitization, and innovation. *Research-Technology Management*, 61(4), 56-59. <https://doi.org/10.1080/08956308.2018.1471280>
- Husieva, O. Yu., & Lehominova, S. V. (2018). Digitalization as a tool to improve business processes and optimize them. *Economics. Management. Business*, 1, 33–39. http://nbuv.gov.ua/UJRN/ecmebi_2018_1_7
- Iorgachova, M., Kovalova, O., & Plets, I. (2018). Financial engineering as a tool for the development of corporate bond market in Eastern Europe on the example of Ukraine. *Baltic Journal of Economic Studies*, 4(4), 120-125. <https://doi.org/10.30525/2256-0742/2018-4-4-120-125>
- Khandii, O. (2019). Social threats in the digitalization of economy and society. In *SHS web of conferences*, 67, p. 06023. EDP Sciences. <https://doi.org/10.1051/shsconf/20196706023>
- Knudsen, D.-R. (2020). Elusive boundaries, power relations, and knowledge production: A systematic review of the literature on digitalization in accounting. *International Journal of Accounting Information Systems*, 100441. Doi: 10.1016/j.accinf.2019.100441
- Korobka, S. (2021). The digitalization of entrepreneurial activity. *Bulletin of V. N. Karazin Kharkiv National University Economic Series*, 100. <https://doi.org/10.26565/2311-2379-2021-100-09>
- Kraus, N., Kraus, K., & Manzhura, O. (2021). Digitalization of business processes of enterprises of the ecosystem of Industry 4.0: virtual-real aspect of economic growth reserves. *WSEAS Transactions on Business and Economics*, 18, 569-580. Doi: 10.37394/23207.2021.18.57
- Kulynych, M. B. (2019). Digital transformation of Russian companies in modern conditions. *Economics, Management, and Administration*, 3(89), 8-15. [https://doi.org/10.26642/ema-2019-3\(89\)-8-15](https://doi.org/10.26642/ema-2019-3(89)-8-15)
- Lazebnyk, L. L. (2018). The digitalization of economic relations as a factor in the improvement of business processes of the enterprise. *Economic Journal. Series: Finance, Accounting, Taxation*, 2, 69-74. [In Ukrainian]
- Lozic, J. (2019). Core concept of business transformation: from business digitization to business digital transformation. *Economic and Social Development: Book of Proceedings*, 159-167. https://www.researchgate.net/profile/Elshan-Ahmadov/publication/343975892_Book_of_Proceedings_esdWarsaw2019_Online/links/5f4b5a7d299bf13c5057d1bf/Book-of-Proceedings-esdWarsaw2019-Online.pdf#page=166
- Pantelei, A., & Lazari, L. (2022). Accounting in digitalization conditions. In: *The challenges of accounting in the view of young researchers [Electronic resource]: Student conf., ISSC 2022 Collection of scientific articles*, 6th Ed., March 11-12, 2022. Chisinau: ASEM, 2022, pp. 374-378. <https://doi.org/10.5281/zenodo.6758153>

- Rooksby, J. H. (2018). Gain insight into preventing, addressing claims of defamation. *Campus Legal Advisor*, 18(6), 1–5. doi: <https://doi.org/10.1002/cala.30719>
- Rozhnova, O. V. (2018). Harmonization of accounting, auditing and analysis in the digital economy. *Accounting. Analysis. Audit*, 5(3), 16-23.
- Stefanovova, Z., Bartkova, H., & Peterkova, J. (2020). Evaluation of the Effects of Digitization in the Process of Accounting Operations in a Selected Manufacturing Company. *SHS Web of Conferences*, 74, 02016. <https://doi.org/10.1051/shsconf/20207402016>
- Szalavetz, A. (2019). Digitalisation, automation and upgrading in global value chains–factory economy actors versus lead companies. *Post-Communist Economies*, 31(5), 646-670. <https://doi.org/10.1080/14631377.2019.1578584>
- Tiberius, V., & Hirth, S. (2019). Impacts of Digitization on Auditing: A Delphi Study for Germany. *Journal of International Accounting, Auditing and Taxation*, 100288. Doi: 10.1016/j.intaccaudtax.2019.100288
- Vărzaru, A. A. (2022). Assessing Artificial Intelligence Technology Acceptance in Managerial Accounting. *Electronics*, 11(14), 2256. <https://doi.org/10.3390/electronics11142256>
- Yershova, N. (2020). The development of accounting in the transition to a digital economy. *Bulletin of the National Technical University “Kharkiv Polytechnic Institute” (Economic Sciences)*, 2, 75-80. [In Ukrainian]

DOI: <https://doi.org/10.34069/AI/2022.56.08.15>

How to Cite:

Vashchenko, O., Kopeliuk, O., Sediuk, I., Bondar, I., & Kornisheva, T. (2022). Analysis of musical art trends in Ukraine in the 21st century. *Amazonia Investiga*, 11(56), 142-149. <https://doi.org/10.34069/AI/2022.56.08.15>

Analysis of musical art trends in Ukraine in the 21st century

Análisis de las tendencias del arte musical en Ucrania en el siglo XXI

Received: September 10, 2022

Accepted: September 30, 2022

Written by:

Vashchenko Olena⁶⁵<https://orcid.org/0000-0003-0130-7568>**Kopeliuk Oleh**⁶⁶<https://orcid.org/0000-0002-0428-1538>**Sediuk Ihor**⁶⁷<https://orcid.org/0000-0002-4038-5211>**Bondar Ievgeniia**⁶⁸<https://orcid.org/0000-0002-7655-6684>**Kornisheva Tetiana**⁶⁹<https://orcid.org/0000-0002-1170-077X>

Abstract

Thus, the development of Ukrainian music underwent a gradual evolution until the Russian aggression began in 2022. After the fall of the Soviet Union, Ukrainian-language music was not in favor, but after 2014 and especially after February 24, 2022, it became mainstream. Among Chusach varieties of musical art in Ukraine, the most common are pop, rock, rap, jazz, etc. The new opportunities that the Network has opened up for performers also have many hidden dangers. This is primarily about piracy, which significantly reduces the profits from selling your own. At the same time, thanks to multimedia and high-speed Internet, the exchange of musical novelties became more efficient. In particular, for a long time, Ukrainian music was characterized by the same trends as in the West: song plots, rhythms, popular styles of music, etc. It should be noted that the demand for Ukrainian music increased after Russia's military aggression. The Russian product was banned. So, if similar trends unfold in the same way, Ukraine will continue to see the emergence of new talented collectives. It should be noted that pop and rock are promising directions of music development but rap also looks extremely promising.

Resumen

El desarrollo de la música ucraniana experimentó una evolución gradual hasta que comenzó la agresión rusa en 2022. Tras la caída de la Unión Soviética, la música en lengua ucraniana no gozaba de buena fama, pero después de 2014 y, sobre todo, después del 24 de febrero de 2022, se convirtió en la corriente principal. Entre las variedades de arte musical de Chusach en Ucrania, las más comunes son el pop, el rock, el rap, el jazz, etc. Las nuevas oportunidades que la Red ha abierto a los artistas también tienen muchos peligros ocultos. Se trata sobre todo de la piratería, que reduce considerablemente los beneficios de la venta de lo propio. Al mismo tiempo, gracias a los multimedios y a la alta velocidad de Internet, el intercambio de novedades musicales se hizo más eficiente. En particular, durante mucho tiempo la música ucraniana se caracterizó por las mismas tendencias que en Occidente: tramas de canciones, ritmos, estilos musicales populares, etc. Cabe señalar que, tras el inicio de la agresión militar de Rusia, la demanda de música ucraniana aumentó. El producto ruso fue prohibido. Por lo tanto, si las tendencias se desarrollan de la misma manera, Ucrania seguirá viendo la aparición de nuevos colectivos con talento. Cabe señalar que el pop y el rock son direcciones prometedoras del desarrollo

⁶⁵ PhD in Art Studies Senior Lecturer of Department of Ukrainian and Foreign Music History, Faculty of Performing and Musicology at Kharkiv I. P. Kotlyarevsky National University of Arts, Ukraine.

⁶⁶ Assistant Professor, PhD in Musicology Performance and Musicology Faculty Special Piano Department Kharkiv I.P. Kotlyarevsky National University of Arts Kharkiv, Ukraine.

⁶⁷ Assistant Professor PhD in Musicology Special Piano Department Arts Performance and Musicology Faculty Kharkiv I.P. Kotlyarevsky National University, Ukraine.

⁶⁸ Doctor of Science Professor A.V. Nezhdanova Odessa National Music Academy, Choral Conducting Department Odessa, Ukraine.

⁶⁹ Candidate of Study of Art, Associate Professor Department of Musical Arts, Kherson State University, Kherson, Ukraine.



Keywords: Ukraine, music, perspectives of development, trends.

musical, pero el rap también parece muy prometedor.

Palabras clave: Ucrania, música, perspectivas de desarrollo, tendencias.

Introduction

Nowadays various transformations are taking place not only in the music market of Ukraine but massive accents in the world music industry are changing. So now there is a change in the key foundations of musical institutions and trends, primarily due to the development of modern technology. This concerns both popular genres and academic ones. Note that the new musical product has become publicly available, which could not be imagined back at the end of the 20th century. Twentieth century. The enormous power and capacity of the Internet has deprived the creators of musical products of the opportunity to earn a lot of money by releasing new albums, as modern Internet piracy is poorly controlled. Today, popular music has influenced it to become an integral part of human life. As a result of using music from modern gadgets, new programs for music distribution have begun to be actively introduced, and new social networks have been created. Consequently, modern information channels, in particular YouTube and Tick-Tock, influence the improvement of the music industry rating. The study of trends in contemporary music in Ukraine is a relevant topic for research. First of all, given that as a result of Russia's military aggression against Ukraine, Ukrainian (Ukrainian-speaking) music art has now received a new impetus for development. Ukrainian musical products on the themes of freedom, human choice, war, and the victory of Ukraine appear en masse. Consequently, an important task for our article is to identify current trends in world music, to investigate the trends of contemporary musical art in Ukraine. In general, the work aims to analyze the main trends and tendencies of the musical art of the XXI century.

An important difficulty is the lack of scientific research on modern Ukrainian music. This further emphasizes the relevance of the article, which is also intended to be a certain outcome in the coverage of this issue.

Theoretical Framework or Literature Review

Analysis of trends in contemporary Ukrainian music has not yet become an object of special scientific investigation. At the same time, Ukrainian scientists are making many attempts to

classify, generalize and predict the further development of Ukrainian music art. Foreign researchers have much more experience in the study of this complex issue (modern musical trends). However, by applying the available theoretical basis to Ukrainian realities, we can generalize our own results and investigate possible future development of Ukrainian music. The literary basis of our article is quite thorough. In particular, Barret (2017) investigated modern trends in electro and acoustic music. The scientist paid special attention to the problems of the terminological plan and tried to define a composite term "electroacoustic music" Bank (2020) characterized the peculiarities of the development of European musical art. Garrison (2019) explored major motifs in Western musical art. Raposo et al. (2020) in a collective monograph analyzed key trends in music, design, and art. Interiano et al., (2018) also investigated current trends in music sphere. Ukrainian researchers have explored the peculiarities of the development of Ukrainian musical art. For example, Lastovetska-Solanska, (2019) analyzed the problem of the formation of modern musical infrastructure in Ukraine. The researcher believes that musical infrastructure as one of the main terms of the musical-historical process is a direct reflection of musical requirements, preferences, and tastes of society, its artistic and cultural aspects (Lastovetska-Solanska, 2019). Taking this into account, Lastovetska-Solanska (2019) offers her own author's explanation of musical infrastructure - a separate structure of musical life of society, determined by the type of organization of musical education and concert and theater life of society, determined by specific social goals of philosophical and aesthetic dimensions, influencing the development of the composer within a particular national style and genre (Lastovetska-Solanska, 2019). Note that among the factors influencing the development of the musical industry are historical, national, mental, climatic, geographical, political, economic political-economic, and others. Among recent major monographic studies, we note the work of Sonevytsky (2019). In this work, the researcher characterized the musical culture of Ukrainians, minorities living in Ukraine. Sonevytsky (2019) also characterized the peculiarities of Ukrainian music development

through the prism of contemporary trials: the Revolution of Dignity (2013-2014), the Russian-Ukrainian war (2014 - and now). This monograph investigates the peculiarities of the transformation of the Ukrainian musical space as a result of the influence of the above-mentioned events. In addition, the works of Ukrainian historians, who have highlighted the peculiarities of the development of the Russian-Ukrainian war and its impact on the branch of culture, are important for our study. In particular, Kuzio (2021) defined the main directions of the cultural clash between the Ukrainian and Russian sides.

So, the literary base of our study is quite extensive. However, there is still a lack of narrow specialized works devoted to our theme. This opens before us an opportunity to work on a topical topic and make original conclusions.

Methodology

The study is built on general scientific logical research methods. Such general scientific methods as analysis, synthesis, induction, and deduction were important for our work. Based on the method of comparison, we managed to trace the peculiarities of the development of trends in the world and Ukrainian music. Besides, the axiological method allowed to pass from general statements (axioms) to specific conclusions and suggestions about the future development of the music industry in Ukraine. Possible further trends in the development of Ukrainian music have been analyzed based on the prognostic method of research. The paper also uses the historical method of research, which reflects certain ideological aspects of post-Soviet Ukrainian society, which subconsciously tolerated Russian or Russian-language music and songs.

In addition, the work uses special empirical methods of research, among which is observation. The main data for the empirical research were media recordings, in particular the materials of the leading Ukrainian media “TSN”, “Unian”, etc. At the same time, a considerable part of these materials was information from social networks and YouTube. It should be noted that in the work based on the category “Trending” on the YouTube platform it was possible to investigate the tastes and preferences of the Ukrainian audience and trace the development of Ukrainian music trends.

Results and Discussion

At the heart of contemporary musical culture is a commercial component. At the present time, there is a clear market relationship in musical art, in which the creator of a new musical product should be guided by the demand of the appropriate target audience (Weekhout, 2019). Another significant feature of the contemporary world music product is its internationalism. It is about the fact that in the context of the systemic improvement of the media, mass music art is distributed everywhere (regardless of geographical factor) (Bank, 2020). Consequently, contemporary audiences can often become international and multicultural, so the values of the current music product should be varied and international.

Another weighty criterion of contemporary musical culture is its technological sophistication. In particular, it is based on new modern technological innovations and solutions. The basis of the technology is the media, which filters information for the consumer, forming an idea of “good” or “bad” taste. In today's music culture, cultural value broadcasting plays an important role (Barrett, 2017). It is based on the power of words, music, and a variety of expressive means reaching a spectrum of emotional coloration. In addition, the appeal to mass music culture affirms values in society (Bank, 2020). Thus, certain cultural references and criteria are formed, which can also be expressed with the use of musical culture. Despite this, we emphasize that the fundamental values in contemporary music remain universal ideas, built on the values of different cultures, philosophies, and religions. In particular, the themes of freedom, peace, love, social problems, loneliness, etc. are now becoming particularly relevant in the world.

One of the noticeable components of contemporary musical art is the hedonistic aspect. We are talking about the fact that hedonism itself is almost the main function of musical culture. The latter is primarily oriented to meet the needs and demands of the target audience (De Luca et al., 2019).

At the same time, the current diversity of musical styles has led to the prevalence of niche music products over mass ones. Radio and television cease to influence the tastes of listeners, so the Internet plays a key role in the distribution of modern music products. In particular, in the United States of America, the music show business actively cooperates with such popular

resources as YouTube, Billboard, iTunes to promote their own music (Garrison, 2019). These factors influence the formation of modern trends in the music industry.

In the late twentieth century, there was an active development of forms, types, and styles in both mass music culture and academic culture. These trends have not bypassed Ukraine. Broadcasting global thought and current popular values, musical culture synthesizes national and European culture, as well as the culture of the Americas, this desire is increasingly reflected in modern musical compositions (Bohayevskiy, 2020). Thus, Ukrainian listeners have been actively involved in the dissemination of European music in recent years. European music has become more popular among Ukrainian listeners than ever before.

At the same time, academic musical art has retained its basis, in which there are elements of postmodernism, eclecticism, polystylism, but as a result of the blurring of boundaries between different musical genres, a peculiar combination of classical music and modern digital technologies has taken place. This practice is global in the XXI century.

A separate trend of academic performance is the appeal to the holding of individual music festivals aimed at popularizing classical music in a new performance. For example, the International Music Festival "Music in Old Lviv" aims to present the works of Ukrainian composers through the prism of the urban, architectural landscape of Lviv. The main organizer of this event is the Myroslav Skoryk Lviv National Philharmonic. The symbolic combination of the past with the present demonstrates that during the most difficult times the appeal to the traditions of the past turns into a kind of "chronicle" for future generations.

It should be noted that the key modern trends in music art include genre differentiation of music. It means that the current musical art is characterized by the development of various styles and trends. Note that today researchers provide different information about the total number of styles of modern music. However, most agree that there are about a hundred of them. In addition, some researchers point out that modern musical art in its development tends to transform the style into a genre (Fraser, 2018). An example of this process can be such genres as ragtime, blues, rock, and roll, etc.

At the same time, music using ethnic and neo-ethnic instruments is gaining popularity (Barrett, 2017). The preservation and neo-folklore reproduction of music with the help of folk musical instruments is becoming an independent trend. A vivid confirmation of this is the fact that in Eurovision, one of the world's major music competitions, performances with the use of folk motifs and instruments can be seen more and more often. Quite often the participants dress in folk costumes, which testifies to the popularity of folk culture in contemporary art. The recent victory of the Ukrainian band Kalush Orchestra at Eurovision 2022 is a clear confirmation of this opinion.

It should be noted that the tendency of synthesis of cultural traditions is noticeable in modern music. Today's popular music combines motifs of South American cultures, modern Europe, the East, etc. At the same time, there is a pronounced demand for Celtic, Indian, African motifs in the world (Garrison, 2019).

In addition, the trend of "musical nostalgia" is widespread in the global music industry. This term was introduced into scientific circulation recently. Modern experts understand this phenomenon as an appeal to the music of past decades (Pelchat & Gelowitz, 2019). Based on this trend, we can observe how concerts on retro themes, memorable evenings, etc. are organized. At the same time, leading music television channels can broadcast "long-forgotten" concerts (Scripp & Gilbert, 2019).

In addition, the trend of music crowdfunding is now widespread in the world of music. This phenomenon is quite new for the domestic market and is a process of voluntary fundraising among those willing to support the implementation of a project. In the field of music culture, it may also include donations from fans to support their favorite artists. This trend stems from many factors, including the transition to digital media and uncontrolled piracy, which does not allow artists to earn much from official sales of new albums (Barrett, 2017).

Thus, analyzing the trends of mass music culture, we have characterized the features and trends of this segment of culture. We believe that modern information technologies and new models of communication have influenced the formation of closer contacts between authors and their listeners. Thus, having interactive media at their disposal, the listener begins to influence the participants of the music industry and culture, and the consumption of music products in

general (Ren, 2021). Thus, we can summarize that the modern listener shapes demand and influences supply in the art market of the music industry.

With this in mind, let's analyze what popular music Ukrainians listen to as of March 2022. 6 works by Ukrainian artists are currently in the top 20 YouTube music trends. The 6th position in YouTube trends is occupied by the composition of the artist Skofka "Oy na oy". This song tells about the terrible actions of Russian troops in Ukrainian cities, the experiences of the lyrical hero about the future of his native land (Boyko, 2022). The whole song is permeated with longing for the past peaceful time. The 7th place is taken by the video of the concert of Ukrainian singer Tina Karol and Amelia Anisovich at the Charity Concert in Poland. In 11th place is the song "Ukraine will live" by O. Vynnyk. The key motif of this composition is similar to the Anthem of Ukraine. This song talks about the riches of the Ukrainian land, the whole text is permeated with

faith in the future victory of Ukraine. At the same time, the song "Ukrainian Rage" by Ukrainian singer Khrystyna Solovii is on the 16th line of YouTube trends. This song is a kind of cover of the famous rebel song "Bella ciao". It should be noted that the composition is dedicated to the heroes, the Armed Forces of Ukraine, and all those who are now fighting for the Ukrainian land. The song of the Ukrainian band "SKY" called "Don't retreat and don't give up" is in 17th place on this resource. On the official video of this song, you can see photos of the current war and its terrible consequences for Ukrainian families. However, the calls that are constantly heard in the song "Do not retreat and do not give up" We have nothing to fear anymore!" are especially uplifting. The last 20th place is occupied by the song of the Ukrainian singer under the pseudonym NK – "I am Ukraine" (Boyko, 2022). Specific conclusions can be drawn from these data, which are summarized in Table 1.

Table 1.

Rating of Ukrainian songs that are in the trends of Ukrainian YouTube. As of March 2022.

Position in the rating	Song title	Singer
1	"Oy na oy"	Skofka
2	"Ukraine is you"	Tina Karol
3	"Ukraine will live"	Oleh Vynnyk
4	"Ukrainian rage"	Khrystyna Solovii
5	"Do not retreat and do not give up"	SKAI
6	"I am Ukraine"	NK

At the same time, after the victory of the Ukrainian band Kalush Orchestra and due to the emergence of new hits, the trend rating of Ukrainian YouTube has changed significantly. Thus, in the period from June 17 to July 1, the most popular songs among Ukrainians were the following: 1st place – "Stefania" by Kalush Orchestra. This composition is addressed to the mother of the lyrical hero. Therefore, it became a song of gratitude not only to his mother, to whom he dedicated it, but also dedicated to all mothers who worry about their children in difficult times

of war. In the 2nd place is the song "Home" by Kalush Orchestra, which tells about the longing for home. In the 3rd place is the composition recorded by the duet of Artem Pivovarov and Dorofeeva – "Dumi". The track is imbued with longing and pain, as well as faith in the successful future of Ukraine. In 4th place is a song called "Ukraine will win" by O. Ponomarev, M. Khoma, and other contemporary Ukrainian artists (Boyko, 2022). Having analyzed the media, other songs by Ukrainian singers are also popular, as shown in Table 2.

Table 2.

Rating of Ukrainian songs that are trending on Ukrainian YouTube. Analysis from June 17 to July 1

Position in the rating	Song title	Singer
1	"Stefania"	Kalush Orchestra
2	"Home"	Kalush Orchestra ra Skofka
3	"Dumi"	A. Pivovarov and Dorofeeva
4	"Ukraine will win"	O. Ponomarev and others.
5	"Moskal is ugly"	Jerry Heil

It should be noted that almost all their songs have a militarized context and are imbued with the motives of Ukraine's victory. This phenomenon, as it turned out, is now one of the main trends in the modern music industry of Ukraine. The number of Ukrainian-language songs has also increased significantly, which is obviously a reaction to political events (Roslon & Zavada, 2021). In addition, we would like to point out such a trend as the creation of cover versions of these works, which can be heard not only by bands but also in arrangements for orchestras and choirs. In particular, since the beginning of the war, this was clearly reflected in the creation of virtual projects with the participation of children's choirs "Ukraine is you", "I am Ukraine" and others. Thus, even at the level of academic music performance, there is an appeal to the cultural sources of Ukrainian music. With the help of arrangements of classical songs, they are re-actualized in the musical space of Ukraine.

Discussion

Therefore, the development of Ukrainian music has gone through a long evolution. It is worth noting that after the collapse of the Soviet Union, Ukraine inherited a rather chauvinistic model of social thinking. Everything that was Russian-language was declared superior and urban, while Ukrainian-language content was deliberately humiliated and declared "rural". Gradually, with the development of our country's independence, younger generations began to prefer Ukrainian-language songs. Although this process is not as fast as one might assume, a considerable percentage of show business used the popularity of the Ukrainian language in their projects. The post-communist past, therefore, has not been completely overcome, but the development of Ukrainian music culture is undeniable. The victories of Ukrainian artists at the Eurovision Song Contests in 2003, 2014, and 2022 accelerated this evolution.

Russia's military aggression against Ukraine has also affected the music market. First, at the legislative level, the use of compositions by Russian artists is prohibited, while Ukrainian singers are allowed to use Russian to produce a local product (Kuzio, 2021). This eliminated a powerful competitor in the "shadow", that is, in the deep "underground". Obviously, this development will continue, and the Ukrainian music product will gradually become the leader, while the previously privileged Russian one will disappear or be reduced to a minimum. The patriotic wave, caused by admiration for everything Ukrainian and rejection of the

aggressor's culture, will probably continue. This will lead to the emergence of new names and bands in the performing music culture of Ukraine. The experience of The Kalush Orchestra, the winners of Eurovision 2022, indicates the beginning of this trend. The war has led to the emergence of new songs from already well-known Ukrainian artists dedicated to the heroic resistance of the people (Sonevtsky, 2019). As a result, experts estimate that the top 20 videos of the Ukrainian segment of YouTube include at least 8 Ukrainian-language songs.

The popularity of Ukrainian song and music content is confirmed by the success of charity performances abroad. Such activities not only bring real and immediate help but also in the long run serve to popularize the Ukrainian song product among foreigners (Ostashewski, 2021).

The interest of Europeans, Aryans, and Americans in participating in charity concerts, we note, will lead to the development of a new direction of musical activity for Ukraine – crowdfunding. The search for benefactors interested in the work of a particular band will become a reliable source of income for the industry in the future. Perhaps, well-known digital platforms such as Patreon, ForFans, and others will also be used for this purpose. Remote support for Ukrainian music will also grow, if only for the reason that many Ukrainians are abroad, so they will not be able to return home in the near future.

A difficult question is to look at the most popular and mass genres. Undoubtedly, they will be rock and pop, which were the flagships of the Ukrainian media market before. At the same time, it should be noted that under the influence of Russia since the early 2010s rap music gradually began to gain popularity in Ukraine. First of all, it was about representatives of the Russian direction, but today other performers are gradually taking the lead. Obviously, the progress of this music will only continue to develop, and Ukrainians will listen to rap artists more and more, perhaps even Ukrainian-speaking ones. Academic art, in turn, demonstrates openness and tendencies of convergence and synthesis with popular and media trends, while preserving the traditions of the national performing school.

Conclusions

Thus, analyzing the trends of mass music culture, we characterized the features and trends of this segment of culture. It should be emphasized that

modern information technologies and new models of communication influence the formation of closer relations between authors and their listeners. Having interactive media at their disposal, the listener begins to influence the music industry. With the help of media directly the listener as a future consumer is involved in the creative process of forming future “stars” and hits. In particular, this can be done by voting online or by SMS. Quite a striking example of this is the Internet and SMS voting that takes place at the main international music contest “Eurovision”. Obviously, these things influence the development of modern music art. In addition, the main trends of contemporary music are genre differentiation of music, the use of ethnic and neo-ethnic instruments, the synthesis of cultural traditions, music crowdfunding, and “musical nostalgia”. However, changes are also noticeable in the field of academic music. In particular, the appeal to the traditions of Ukrainian classical music, new arrangements of Ukrainian folk songs, holding of characteristic music festivals popularizes Ukrainian song and culture in general. At the same time, Ukrainian academic art has become closer to the audience: with the help of modern projects, the public is getting acquainted with the classical achievements of choral and instrumental art.

To sum up, the development of Ukrainian music underwent a gradual evolution until Russian aggression began in 2022. After the fall of the Soviet Union, Ukrainian-language music was not in favor, but after 2014 and especially after February 24, 2022, it became a mainstream trend. Among the modern varieties of mass music in Ukraine, the most common are pop, rock, rap, etc. The new opportunities that the Internet has opened for performers also have many hidden dangers. First of all, it is about piracy, which significantly reduces profits from the sale of their own works. At the same time, thanks to multimedia and high-speed Internet, the exchange of musical novelties has become more operative, there has been certain globalization of the music market. In particular, Ukrainian music has long been characterized by the same trends as in the West: song plots, rhythms, popular styles of music, etc. It should be noted that after the beginning of Russia's military aggression, the demand for Ukrainian music has increased. On the one hand, Russian product was banned, but at the same time, Ukrainian music proved to be quite competitive against Western music. Therefore, if similar trends continue, Ukraine will continue to see the emergence of new talented bands.

Bibliographic references

- Bank, K. (2020). The music of sense perception. *Knowledge Building in Early Modern English Music*. Routledge, 89-136. <https://doi.org/10.4324/9781003055891-3>
- Barrett, N. (2017). Trends in electroacoustic music. *The Cambridge Companion to Electronic Music*. Cambridge University Press, 201-224. <https://doi.org/10.1017/9781316459874.013>
- Bohayevskiy, Y. (2020). He was anxious about Ukraine till his last breath. *Diplomatic Ukraine*, (XXI), 856-865. Doi: <https://doi.org/10.37837/2707-7683-2020-44>
- Boyko, I. (2022, April 18). What Ukrainians listen to during the war: the main YouTube trends are named. Unian. UNIAN.NET. <https://www.unian.ua/lite/music/nazvano-top-5-muzichnih-trendiv-ukrajini-pid-chas-viyni-11792067.html>
- De Luca, M., Campo, R., & Lee, R. (2019). Mozart or pop music? Effects of background music on wine consumers. *International Journal of Wine Business Research*, 31(3), 406-418. <https://doi.org/10.1108/ijwbr-01-2018-0001>
- Fraser, R. (2018). World music: Listening to Steve reich listening to Africa; Listening to György ligeti listening to reich. *Literature, Music and Cosmopolitanism*. Cham: Palgrave Macmillan, 185-194. https://doi.org/10.1007/978-3-319-68480-2_12
- Garrison, T. (2019). Western art music. *The SAGE International Encyclopedia of Music and Culture*. <https://doi.org/10.4135/9781483317731.n785>
- Interiano, M., Kazemi, K., Wang, L., Yang, J., Yu, Z., & Komarova, N. L. (2018). Musical trends and predictability of success in contemporary songs in and out of the top charts. *Royal Society Open Science*, 5(5), 171274. <https://doi.org/10.1098/rsos.171274>
- Kuzio, T. (2021). Russia and Ukraine in comparative perspective. *Russian Nationalism and the Russian-Ukrainian War*. Routledge, 65-95. <https://doi.org/10.4324/9781003191438-3>
- Lastovetska-Solanska, Z. (2019). Formation of modern musical infrastructure of Ukraine. *Ukrainian music*, 32(2), 5-10. <https://doi.org/10.33398/2224-0926-2019-32-2/5/10>



- Ostaszewski, M. (2021). Studying Byzantine Ukrainian congregational music in Canada. *Studying Congregational Music*, 193-208. Doi: <https://doi.org/10.4324/9780429492020>
- Pelchat, N., & Gelowitz, C. M. (2019). Neural network music genre classification. 2019 IEEE Canadian Conference of Electrical and Computer Engineering (CCECE), 43, 170-173. <https://doi.org/10.1109/ccece.2019.8861555>
- Raposo, D., Neves, J., Silva, J., Castilho, L. C., & Dias, R. (2020). Advances in design, music and arts: 7th meeting of research in music, arts and design. Springer Nature.
- Ren, J. (2021). Pop music trend and image analysis based on big data technology. *Computational Intelligence and Neuroscience*, 1-12. <https://doi.org/10.1155/2021/4700630>
- Roslon, D. T., & Zavada, Y. I. (2021). The EU-Ukraine relations in the XXI century. *Politicus*, 5, 102-106. doi: <https://doi.org/10.24195/2414-9616.2021-5>.
- Scripp, L., & Gilbert, J. (2019). Human development through music. *Music Learning as Youth Development*, 8-39. <https://doi.org/10.4324/9780429436956-2>
- Sonevytsky, M. (2019). *Wild music: Sound and sovereignty in Ukraine*. Wesleyan University Press.
- Weekhout, H. (2019). *Music production*. Routledge. <https://doi.org/10.4324/9780429459504>

DOI: <https://doi.org/10.34069/AI/2022.56.08.16>

How to Cite:

Popovych, I., Machynska, N., Yaremchuk, N., Korniat, V., & Kurinna, V. (2022). Psycho-emotional states of future specialists in a socio-economic area under lockdown and martial law: comparative analysis. *Amazonia Investiga*, 11(56), 150-158. <https://doi.org/10.34069/AI/2022.56.08.16>

Psycho-emotional states of future specialists in a socio-economic area under lockdown and martial law: comparative analysis

Психоемоційні стани майбутніх фахівців соціономічного профілю в умовах локдауну і воєнного стану: порівняльне аналізування

Received: September 3, 2022

Accepted: October 18, 2022

Written by:

Ihor Popovych⁷⁰<https://orcid.org/0000-0002-1663-111X>**Nataliia Machynska**⁷¹<https://orcid.org/0000-0003-0309-7074>**Nataliya Yaremchuk**⁷²<https://orcid.org/0000-0001-7218-6543>**Vira Korniat**⁷³<https://orcid.org/0000-0002-6455-8199>**Vladyslava Kurinna**⁷⁴<https://orcid.org/0000-0002-6257-6596>

Abstract

The aim of the study is to perform comparative analysis of dominating psycho-emotional states of future specialists in a socio-economic area under lockdown and martial law. A verification strategy is suggested for examining psycho-emotional states. The research used participant observation, valid and reliable psycho-diagnostic instruments, factor analysis, coefficients of empirical data reliability. It was established that in the comparison of the selected complex of psychological content parameters Group 1 (under lockdown) and Group 2 (under martial law) there are no significant differences. Two factor structures of the respondents' psycho-emotional states were created: one of them – during the ongoing COVID-19 pandemic (59.91%) and the other – during the martial law (69.89%). It was found out that the obtained data on psycho-emotional states during the lockdown and the martial law are essentially different that did not allow determining or disproving significant differences by means of statistical

Анотація

Метою статті є порівняльне аналізування домінуючих психоемоційних станів майбутніх фахівців соціономічного профілю в умовах локдауну і воєнного стану. Розроблено констатувальну стратегію дослідження психоемоційних станів. Застосовано включене спостереження, валідний і надійний психодіагностичний інструментарій, факторне аналізування, коефіцієнти достовірності емпіричних даних. Констатовано, що у порівнянні підбраного комплексу психологічних змістових параметрів Групи 1 (під час локдауну) і Групи 2 (під час воєнного стану), немає достовірних відмінностей. Побудовано дві факторні структури психоемоційних станів респондентів: одну – під час прогресування пандемії COVID-19 (59.91%) і другу – під час воєнного стану (69.89%). Констатовано, що отримані психоемоційні стани під час локдауну і воєнного стану є якісно відмінними, що не дозволило за допомогою статистичних

⁷⁰ Doctor of Psychological Sciences, Full Professor, Full Professor of the Department of Psychology, Kherson State University, Kherson, Ukraine.

⁷¹ Doctor of Pedagogical Sciences, Full Professor, Head of the Department of Primary and Preschool Education, Ivan Franko National University of Lviv, Lviv, Ukraine.

⁷² Candidate of Pedagogical Sciences, Associate Professor, Associate Professor of the Department of General Pedagogy and Pedagogy of Higher School, Ivan Franko National University of Lviv, Lviv, Ukraine.

⁷³ Candidate of Pedagogical Sciences, Associate Professor, Head of the Department of Social Pedagogy and Social Work, Ivan Franko National University of Lviv, Lviv, Ukraine.

⁷⁴ Research Assistant of Department of Education of Children with Visual Impairments, Mykola Yarmachenko Institute of Special Pedagogy and Psychology, National Academy of Pedagogical Sciences of Ukraine, Kyiv, Ukraine.



coefficients. The study substantiated that the established empirical facts are characterized by scientific novelty which should be taken into consideration by organizers of educational and professional training for specialists in a socio-economic area.

Key words: mental state, educational process, psychology of war, internally displaced people, depressiveness.

Introduction

Ukraine's population is experiencing extremely tough times. In the 21st century our reality has been radically changed by two disasters which came to Ukraine simultaneously – pandemic and war. The ongoing COVID-19 pandemic spread across the globe, caused many people's deaths, irreversible mental traumas and material losses. The second disaster is the war lasting in Ukraine since 2014 which reached its full-scale phase on the 24th of February, 2022. The main priorities of the present are to maintain the unity of Ukraine, preserve people's lives, protect the territorial integrity and democratic values. The outlined contours of social life have a considerable irreversible impact on children's and adults' mental states.

Professional training for specialists in a socio-economic area has undergone permanent changes, moved to a virtual space by means of distance and mixed formats of education. Obviously, such transformation affects qualitative and quantitative indexes and has an impact on research participants' mental states.

Hypothesis. 1) a lack of significant differences in the content parameters of psycho-emotional states of future specialists in a socio-economic area examined under lockdown and martial law; 2) availability of significant differences in psycho-emotional states of the research participants.

The aim of the study is to perform comparative analysis of dominating psycho-emotional states of future specialists in a socio-economic area observed under lockdown and martial law.

Literature Review

The psycho-emotional sphere of an individual has always been the focus of scientific interest of researchers representing human science. Research on psycho-emotional states of an individual is a special issue. The quality of educational and professional training and also the

коefficientів встановити чи спростувати достовірні відмінності. Обґрунтовано, що встановлені емпіричні факти мають наукову новизну, яку доцільно взяти до уваги організаторам навчально-професійної підготовки фахівців соціономічного профілю.

Ключові слова: психічний стан, освітній процес, психологія війни, внутрішньо переміщені особи, депресивність.

ability to develop general and special competences depend on dominating mental states. The research on cognitive mental states of students of higher education institutions allowed establishing a unique role of cognitive mental states in regulation of the act of thinking (Prokhorov et al., 2015). The researchers found out that the content features of cognitive mental states of the research participants are determined by maintenance of an individual's steady orientation towards solving a problem for a certain period of time. It was established that "attitude" is a system-creating factor of cognitive mental states which is within the framework of the integrative content orientation of an individual. The present studies on critical thinking (Arbeláez-Campillo et al., 2020; Popovych et al., 2021b) and artificial intelligence of machines (Nosov et al., 2020a; Zinchenko et al., 2019) focus on the importance of thinking processes and the role of an individual in the processes under study. Mental state of subjects of educational and professional training as any complex production activity is accompanied by anticipatory content (Plokhikh et al., 2021; Nosov et al., 2020b; 2020c), changeability of social expectations (Popovych et al., 2021d) and a branched typology of probable scenarios of the course of actions (Popovych et al., 2021c).

The main type of mental activity in young adults is educational and professional activity, i.e. professional development. It was established that the phenomena of all-or-nothing thinking, social attractiveness and conformism are characteristic of the representatives of this age group. Worldview foundations formed in this age are based on value orientations, ideals, desires and aspirations prevailing in a social environment (Kononenko et al., 2020; Popovych et al., 2020e). At the same time, future specialists are expected to work with people, educating, teaching and developing a younger generation, sometimes rescuing their minds and souls, demonstrating tolerance, moderation and social maturity (Halian et al., 2020). Such professions

include specialists in the fields of pedagogy, psychology, law, economics and other professions in a socio-economic area. The research on dynamic features of the formation of successful professional identity of philology students finds out that optimal development of specialists' professional identity involves permanent formation of its structural components. It is important that the formation of professional identity is inextricably intertwined with crisis stages of personal development caused by disappointment due to a career choice, life choices, a lack of correspondence between social expectations and students' demands (Zaverukha et al., 2022). Social expectations of the representatives of students are extremely changeable, they undergo dynamic fast-paced changes related to the processes of formation and development of their "Self-concept" (Popovych et al., 2020a; 2020b). Student age is accompanied by manifestations of "all-or-nothing" and aspirations to be a leader. It was established that mutual projects of successful students and lecturers of higher education institutions contribute to realization of leadership potential. It was also found out that mutual work of student leaders and students with poor academic performance does not facilitate leadership potential (Zorina et al., 2018).

Content features of the process of professional training which is permanently reformed require special attention in the context of our research. This process is characterized by revision of fundamental didactical concepts, reconsideration of new positions of the rich experimental material of the national scientific school and foreign scientists' experience. Interrelated processes occurring in our country simultaneously actualize the problems located on different planes. They include globalization, decentralization, humanization, differentiation, regionalization, informational support for education and others. The martial law imposed on the Ukrainian society since the beginning of a full-scale invasion caused permanent flows of internally displaced people within the country and migration processes beyond its boundaries. It had a considerable psychological impact on professional training of not only students, but also the entire population of the country. Migration flows determined complex processes in the structure of migrants' professional identification (Blynova et al., 2020a; 2020b; 2020c).

Distant and mixed formats of education actively implemented in educational process because of the lockdown have become more widespread and

improved under martial law. Educational process has been moved to a virtual space not only shifting the markers of psychological well-being and comfort (Bryant & Veroff, 1982; Warr, 1978), but also essentially transforming the value-based sphere of an individual (Hulias, 2020; Hulias & Hoian, 2022; Popovych et al., 2021e), increasing anxiety (Popovych et al., 2020c), prioritizing the ability to adapt and search for a way out under difficult conditions (Haffejee et al., 2022).

Psycho-emotional states of future specialists in a socio-economic area are considered to be an integral complex of dominating characteristics of the research participants affecting the process and results of educational and training activity.

Theoretical analysis of the relevant psychological literature allowed outlining topicality and appropriateness of comparative analysis.

Materials and methods

The definition of the scientists O. Prokhorov, M. Yusupov and V. Plokhikh (2015) about mental state as a higher level of organization of an individual's psycho-emotional activity is the foundation of our comparative analysis. We considered methodological principles developed by E. Deci and R. Ryan (2008) about combination of eudemonic and hedonistic concepts of an individual's psychological well-being. A number of studies about adaptation potential of an individual, the ability to deal with stress (Halian et al., 2021) and overcome difficulties were also taken into consideration (Lazarus & Folkman, 1984). In addition, we looked at the regularities of organization of educational process in training future specialists (Popovych et al., 2020d; 2021a; Shevchenko et al., 2020).

Participants. The sample included graduates and postgraduates of the final years taking courses in the following educational programs (EP): the EP "Psychology", the EP "Economic cybernetics", the EP "Legal science" and the EP "Sociology". The research was organized in the following higher education institutions: Kherson State University (Kherson, Ukraine) (n=42); Ivan Franko National University of Lviv (Lviv, Ukraine) (n=53) and Horlivka Institute for Foreign Languages of the State Higher Educational Institution "Donbas State Pedagogical University" (Bakhmut, Ukraine) (n=21). The principle of randomness was taken into consideration while selecting the sample. At

the same time, we represented those higher education institutions which moved because of occupation and the imposition of the martial law to the West of Ukraine (Ivano-Frankivsk) – Kherson State University and the East of Ukraine (Dnipro) – Horlivka Institute for Foreign Languages of the State Higher Educational Institution “Donbas State Pedagogical University”. The higher education institution Ivan Franko National University of Lviv is in the central part of Ukraine and operates at its location. The research participants’ age limits were from 20 to 50, the descriptive frequency characteristics made: $M=23.12$; $SD=2.45$. All the respondents represented a socioeconomic area. In total there were $n=116$ participants (females $n=78$; 67.24% and males $n=38$; 32.76%). The sample was organized in compliance with ethical requirements and the requirements concerning organization of empirical research.

Organization of research. A verification strategy for examining respondents’ psycho-emotional states was created in the form of comparison of the content parameters of psycho-emotional states under lockdown (Group 1) and martial law (Group 2). The empirical data were collected (Group 1) during the academic year 2020-2021, (Group 2) after the imposition of the martial law, i. e. after the 24th of February, 2022, using Google-form. Relevant psycho-diagnostic instruments were selected to reflect the phenomenon under study appropriately and determine significant differences. The test “Way of Coping Questionnaire” (“WCQ”) (Lazarus & Folkman, 1984) with standard forms was used to identify dominating coping-strategies. The test was adapted by the researchers T. Kriukova and Ye. Kuftiak (2007). Eight strategies were taken into consideration: Self-Control (SC); Confrontation (CF); Seeking Social Support (SSS); Distantiating (DT); Planning to Solve a Problem (PSP); Accepting Responsibility (AR); Avoidance (AD); Positive Reestimation (PR). Differentiation of points of the semantic unipolar scale had four-point grading: 0-1-2-3, i. e. from “never” – “0 points” to “often” – “3 points”. The coefficient of homogeneity α -Cronbach of the empirical data equaled $\alpha=.845$.

Examination of psycho-emotional states requires researchers’ special attention to the emotional-volitional sphere. The emotional sphere during the lockdown and the martial law has undergone

excessive pressure and permanent trials. Some respondents could not handle such psycho-emotional pressure. The following psycho-diagnostic instruments were used to measure depressiveness – the method “Zung Self-Rating Depression Scale” (“SDS”) (Zung, 1965) and to identify signs of neuro-psychic tension – the questionnaire “Neuro-psychic tension” (“NPT”) (Nemchin, 1983). The methods allowed determining the degree of manifestation of the above parameters. The coefficient of homogeneity α -Cronbach of the empirical data equaled $\alpha=.823$. The research on the psycho-emotional sphere would be incomplete if it did not involve measurement of anxiety. Anxiety was a dominating characteristic at the initial stages of the lockdown and the martial law, it was often accompanied by panic and despair turning into a mental block and desperation. The questionnaire “The Spielberger trait anxiety inventory” (“STAI”) (Spielberger, 1971) reflected parameters of situational reactive anxiety (SRA) and personal anxiety (PA). A parametric four-point scale was used. The coefficient of homogeneity α -Cronbach of the empirical data equaled $\alpha=.789$.

Application of the general scale “Psychological Well-Being” (PWB) with the questionnaire “The Scales of Psychological Well-being” (“SPW”) (Ryff, 1989) is considered to be appropriate in the diversity of the suggested measurements. The coefficient of homogeneity α -Cronbach of the empirical data equaled $\alpha=.809$.

Statistical Analysis. The obtained empirical data were processed and comparison was performed by means of the computer program “SPSS” v. 27.0. The key descriptive frequency characteristics were used in the comparison. The level not lower than $p \leq .05$ is considered to be a reliable level for scientific conclusions.

Results and discussion

The research results were interpreted through descriptive frequency characteristics of the average measurements (M and SD). The empirical data were presented as comparison of the content parameters of psycho-emotional states under lockdown (Group 1) and martial law (Group 2). Tabl. 1 presents comparison of all the parameters under study.

Table 1.

Comparison of the average data by psycho-diagnostic methods Group 1 ($n_1=58$) and Group 2 ($n_2=58$)

Scale	Group 1		Group 2		Student's t-test	Level of significance
	M_1	SD_1	M_2	SD_2		
SC	71.34	± 15.12	68.05	± 14.89	.3675	–
CF	47.45	± 13.21	49.09	± 14.33	.4091	–
SSS	41.03	± 12.34	42.22	± 12.49	.9045	–
DT	48.34	± 14.09	49.45	± 14.78	.8091	–
PSP	64.12	± 20.19	62.19	± 19.37	.7322	–
AR	52.87	± 17.34	51.45	± 16.89	.6561	–
AD	53.00	± 17.56	52.99	± 17.28	.7345	–
PR	47.07	± 16.68	45.23	± 15.58	.6081	–
SDS	44.78	± 7.12	49.23	± 7.99	.7334	–
NPT	43.24	± 7.22	48.78	± 7.49	.6012	–
SRA	35.12	± 8.76	38.43	± 8.91	.5609	–
PA	36.14	± 9.45	39.03	± 9.89	.6438	–
PWB	351.19	± 49.33	351.19	± 49.33	.7770	–

Source: Personal elaboration, 2021-2022.

Note: Group 1 – data on the group of the research participants under lockdown; Group 2 – data on the group of the research participants under martial law; M_1 – arithmetic mean Group 1; M_2 – arithmetic mean Group 2; SD_1 – mean square deviation Group 1; SD_2 – mean square deviation Group 2; SC – Self-Control; CF – Confrontation; SSS – Seeking Social Support; DT – Distantiating; PSP – Planning to Solve a Problem; AR – Accepting Responsibility; AD – Avoidance; PR – Positive Reestimation; SDS – self-rating depression scale; NPT – neuro-psyche tension; SRA – situational reactive anxiety; PA – personal anxiety; PWB – Psychological Well-Being.

Tabl. 1 shows a considerable advantage of the parameters determined during the lockdown that allows making a conclusion that the parameters registered during the martial law have an extremely negative tendency for mental health. At the same time, we can state that comparison of the key parameters of the research on psycho-emotional states of future specialists in a

socioeconomic area by the coefficient Student's t-test did not allow registering any significant differences. Therefore, a lack of significant differences of the content parameters examined under lockdown (Group 1) and martial law (Group 2) confirms the first hypothesis of our research that there are no differences.

Table 2.

Factor analysis of psycho-emotional states in Group 1 and Group 2

Group 1, (n=58)				Group 2, (n=58)			
Identification of factor loadings	V	d	$\sum d$	Identification of factor loadings	V	d	$\sum d$
1F1	5.437	23.89	23.89	2F1	5.834	25.12	25.12
1F2	3.567	15.88	39.77	2F2	4.003	17.45	42.57
1F3	2.322	9.12	48.89	2F3	2.950	10.47	53.04
1F4	1.834	6.34	55.23	2F4	2.001	8.03	61.07
1F5	1.256	4.68	59.91	2F5	1.758	5.78	66.85
				2F6	1.109	3.04	69.89

Source: Personal elaboration, 2021-2022.

Note: Group 1 – data on the research group under lockdown; Group 2 – data on the research group under martial law; V – value; d – dispersion; $\sum d$ – sum dispersion; 1F1 – isolated activeness; 1F2 – destructive isolation; 1F3 – a change in the values of the current situation; 1F4 – pragmatic avoidance; 1F5 – constructive interaction; 2F1 – uncontrolled passiveness; 2F2 – controlled passiveness; 2F3 – moderate helplessness; 2F4 – depressiveness; 2F5 – constructive interaction; 2F6 – a change in the values of the current situation.

In the sample of Group 1, undergoing measurements during the ongoing COVID-19 pandemic, there were five factors loaded with their own values more than unity making the total dispersion $\sum d=59.91\%$. In the sample of Group 2, undergoing measurements during the imposition of the martial law, there were six factors loaded with their own values more than unity making the total dispersion $\sum d=69.89\%$. The following factor loadings were identified in Group 1: 1F1 ($V=5.437$) – isolated activeness is the most loaded psycho-emotional state during the lockdown. It shows that the respondents in which this state dominates are inclined to be isolated, they do not take responsibility and have poor communication with other colleagues; 1F2 ($V=3.567$) – destructive isolation. Confrontation dominates in such respondents. They do not seek social support and do not accept others while solving their problems; 1F3 ($V=2.322$) – a change in the values of the current situation. The respondents evaluate the current situation critically, try to find a way out, make few decisions, mainly contemplate and evaluate; 1F4 ($V=1.834$) – pragmatic avoidance. The desire to avoid responsibility dominates, the respondents are characterized by an immature social position and indifference; 1F5 ($V=1.256$) – constructive interaction. This mental state is accompanied by the desire to solve a problem, readiness to act and take responsibility. The following factor loadings are identified in Group 2: 2F1 ($V=5.834$) – uncontrolled passiveness. Such respondents are inclined to fall into despair. They experience emotions caused by the loss of their homes for a long time. This psycho-emotional state is the most loaded during the war; 2F2 ($V=4.003$) – controlled passiveness. It is accompanied by making a plan of actions and control, but there are no motivation and potential to follow the outlined scenario of the course of actions. It is frequently accompanied by strong emotions and unrealized expectations; 2F3 ($V=2.950$) – moderate helplessness. This state resembles the previous one to a certain degree, but there is inclination to avoid solving a problem, to think over the ways to ignore a problem without solving it; 2F4 ($V=2.001$) – depressiveness. The respondents with the dominating psycho-emotional state of depressiveness are severely depressed and need psychological support; 2F5 ($V=1.758$) – constructive interaction. During the martial law few respondents are ready to handle the situation calmly, make appropriate decisions and control the course of actions; 2F6 ($V=1.109$) – a change in the values of the current situation. This state is characteristic of the respondents who start believing that their life goes on in spite of the losses: human, moral and material.

The rest of the factors in Group 1 and Group 2 were not reflected in Tabl. 2, since their loadings were less than unity. Therefore, we can state that five factors (59.91%) made the factor structure of psycho-emotional states of future specialists in a socioeconomic area during the lockdown, and six factors (69.89%) made the factor structure under martial law.

There can be found many studies outlining content parameters, their features, impact and respondents' mental states during the ongoing COVID-19 pandemic (Haffejee et al., 2022). There are articles describing research carried out under martial law (Joshi & O'Donnell, 2003; Murthy & Lakshminarayana, 2006). The above papers reveal the consequences of the impact of war and terrorism on a child's mind (Joshi & O'Donnell, 2003) and the consequences of war affecting mental health of people who became war victims (Murthy & Lakshminarayana, 2006). There is a study comparing psychological well-being of young students during the ongoing COVID-19 pandemic and martial law (Savelyuk, 2022). The researcher found out that in "COVID-epoch" and at the beginning of the war in Ukraine, in young students there are certain statistically significant differences, both positive and negative, in the context of psychological well-being. The author stated that positive transformations of the corresponding experiences of psychological well-being are mostly related to "Autonomy", and negative transformations – to "Space management". The data obtained by N. Savelyuk (2022) in the dimension "Autonomy" are confirmed by our data on psycho-emotional states under lockdown: isolated activeness (1F1); destructive isolation (1F2); pragmatic avoidance (1F4). All these states are characterized by autonomy which acquired a new content under lockdown, respectively, the respondents have less potential in "Space management".

The obtained identification of factor loadings (see Tabl. 2) showed significant differences in the form of the factors, in spite of the fact that there were no significant differences in the psychological content parameters. It proves that the factor analysis ANOVA was selected for examination of psycho-emotional states rather appropriately. But even under such conditions, it did not allow comparing the identified states. It confirms the fact that we observed essentially different psycho-emotional states of the respondents under war, which require further differentiation and substantiation of their psychological nature. We can state that the second hypothesis was not confirmed and was

not disproved since there are significant differences in the respondents' psycho-emotional states, but we cannot identify them by means of coefficients, and it is impossible to compare them. However, the established scientific facts are of value that should be taken into consideration by organizers of educational and professional training for specialists in a socio-economic area.

Conclusions

1. The research substantiates that quality of education for specialists and their ability to develop general and specific competencies in the area of educational and professional training depend on dominating psycho-emotional states.
2. It was established that psycho-emotional states of future specialists in a socio-economic area are an integral complex of the respondents' dominating characteristics which have an impact on the process and results of educational and training activity.
3. It was determined that in the comparison of the selected complex of psychological content parameters in Group 1 and Group 2 there were no significant differences that allowed confirming the first hypothesis.
4. The factor analysis ANOVA was used to make the factor structure of psycho-emotional states of future specialists in a socio-economic area under lockdown consisting of five factors (59.91%) and the factor structure under martial law consisting of six factors (69.89%).
5. The obtained data on psycho-emotional states under lockdown and martial law are essentially different that does not allow determining significant differences by means of statistical coefficients. Consequently, it allowed neither confirming or disproving the second hypothesis.
6. The research substantiates that the identified scientific facts are of value that should be taken into consideration by organizers of educational and professional training for specialists in a socio-economic area.

Bibliographic references

Arbeláez-Campillo, D., Tatsiy, V., Rojas-Bahamón, M., & Danilyan, O. (2020). Contributions of critical thinking as a form of participation and political deliberation. *Amazonia Investiga*, 9(27), 5-12. <https://doi.org/10.34069/AI/2020.27.03.1>

Blynova, O., Chervinska, I., Kazibekova, V., Bokshan, H., Yakovleva, S., Zaverukha, O.,

& Popovych, I. (2020a). Social and Psychological Manifestations of Professional Identity Crisis of Labor Migrants. *Revista Inclusiones*, 7(3), 93-105. <http://www.revistainclusiones.org/index.php/inclu/article/view/1318>

Blynova, O., Kasil, Z., Tkach, T., Semenova, N., Semenov, O., Kamisnka, S., & Popovych, I. (2020b). Psychological manifestations of professional marginality of future social welfare professionals. *Revista Inclusiones*, 7(SI), 218-233. <http://www.revistainclusiones.org/index.php/inclu/article/view/1229>

Blynova, O., Popovych, I., Semenova, N., Kashyryna, Ye., Ursulenko, O., & Kononenko, O. (2020c). Personality Factors of Choosing Adaptation Strategies in a Different Cultural Environment by Labor Migrants from Ukraine. *Amazonia Investiga*, 9(32), 45-54. Retrieved from <http://dx.doi.org/10.34069/AI/2020.32.08.5>

Bryant, F. B., & Veroff, J. (1982). The structure of psychological well-being: A sociohistorical analysis. *Journal of Personality and Social Psychology*, 43(4), 653-673. <https://doi.org/10.1037/0022-3514.43.4.653>

Deci, E. L., & Ryan, R. M. (2008). Hedonia, eudaimonia and well-being: An introduction. *Journal of Happiness Studies*, 9, 1-11. <https://doi.org/10.1007/s10902-006-9018-1>

Haffejee, S., Vostanis, P., O'Reilly, M., Law, E., Eruyar, S., Fleury, J., Hassan, S., & Getanda, E. (2022). Disruptions, adjustments and hopes: The impact of the COVID-19 pandemic on child well-being in five Majority World Countries. *Children & Society*, 00, e12563. <https://doi.org/10.1111/chso.12563>

Halian, A., Halian, I., Popovych, I., Zavatskyi, Y., Semenov, O., & Semenova, N. (2021). Stress Resistance in the Situation of Uncertainty as a Factor of Development of Adaptive Ability of Medical Personnel. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(1), 251-264. <https://doi.org/10.18662/brain/12.1/181>

Halian, I., Machynska, N., Lozynska, S., Nos, L., Derkach, Yu., Prots, M., & Popovych, I. (2020). Tolerance of uncertainty as a component of the process of life-creation of future educators. *Revista Inclusiones*, 7(SI), 512-528. <http://www.revistainclusiones.org/index.php/inclu/article/view/1307>

Hulias, I. (2020). Axiopsychological projection of life achievements of the personality. *Kyiv:*

- Lyudmila Publishing House.
<https://archer.chnu.edu.ua/xmlui/handle/123456789/1565>
- Hulias, I. A., & Hoian, I. M. (2022). Explication of factors of the axiopsychological design of life achievements of modern youth. *Insight: the psychological dimensions of society*, 7, 41-57. <https://doi.org/10.32999/2663-970X/2022-7-4>
- Joshi, P. T., & O'Donnell, D. A. (2003). Consequences of child exposure to war and terrorism. *Clinical Child and Family Psychology Review*, 6(4), 279-291. <https://doi.org/10.1023/b:ccfp.0000006294.88201.68>
- Kononenko, O., Kononenko, A., Stynska, V., Kachmar, O., Prokopiv, L., Katolyk, H., & Popovych, I. (2020). Research of the factor structure of the model of world view settings at a young age. *Revista Inclusiones*, 7(3), 98-116. <http://www.revistainclusiones.org/index.php/inclu/article/view/1618>
- Kriukova, T. L., & Kuftiak, Ye. V. (2007). The questionnaire of controlling (the adaptation of the methods WCQ). *Journal of an applied psychology specialist*, 3(93), 102-112. <https://www.twirpx.com/file/1656062/>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New-York: Springer Publishing Company. <https://www.worldcat.org/title/stress-appraisal-and-coping/oclc/609341596>
- Murthy, R. S., & Lakshminarayana, R. (2006). Mental health consequences of war: a brief review of research findings. *World Psychiatry*, 5(1), 25-30. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1472271/>
- Nemchin, T. A. (1983). *A state of mental stress*. Leningrad: Leningrad State University. http://medobook.ru/load/medicina/psikhiatrija_a_i_psikhologija/sostojanija_nervno_psikhicheskogo_naprazhenija_t_a_nemchin_1983_g/30-1-0-6270
- Nosov, P., Palamarchuk, I., Zinchenko, S., Popovych, I., Nahrybelnyi, Y., & Nosova, H. (2020a). Development of means for experimental identification of navigator attention in ergatic systems of maritime transport. *Bulletin of the University of Karaganda – Physics*, 1(97), 58-69. <https://doi.org/10.31489/2020Ph1/58-69>
- Nosov, P. S., Popovych, I. S., Cherniavskiy, V. V., Zinchenko, S. M., Prokopchuk, Y. A., & Makarchuk, D. V. (2020b). Automated identification of an operator anticipation on marine transport. *Radio Electronics, Computer Science, Control*, 3, 158-172. <https://doi.org/10.15588/1607-3274-2020-3-15>
- Nosov, P. S., Zinchenko, S. M., Popovych, I. S., Ben, A. P., Nahrybelnyi, Y. A., & Mateychuk V. M. (2020c). Diagnostic system of perception of navigation danger when implementation complicated maneuvers. *Electronics, Computer Science, Control*, 1, 146-161. <https://doi.org/10.15588/1607-3274-2020-1-15>
- Plokhikh, V., Popovych, I., Zavatska, N., Losiyevska, O., Zinchenko, S., Nosov, P., & Aleksieieva, M. (2021). Time Synthesis in Organization of Sensorimotor Action. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(4), 164-188. <https://doi.org/10.18662/brain/12.4/243>
- Popovych, I., Arbeláez-Campillo, D. F., Rojas-Bahamón, M. J., Burlakova, I., Kobets, V., & Bokshan, H. (2021a). Time perspective in the professional activity of specialists of economic sphere. *Cuestiones Políticas*, 39(69), 424-445. <https://doi.org/10.46398/cuestpol.3969.27>
- Popovych, I., Blynova, O., Zhuravlova, A., Toba, M., Tkach, T., & Zavatska, N. (2020a). Optimization of development and psycho-correction of social expectations of students of foreign philology. *Revista Inclusiones*, 7(SI), 82-94. <http://www.revistainclusiones.org/index.php/inclu/article/view/1657>
- Popovych, I., Blyskun, O., Hulias, I., Shcherbina, V., Batasheva, N., Aleksieieva, M., & Chala, T. (2021b). Psychological Semantic Parameters of Adolescents' Conformism in the Measurement of Value Orientations. *Romanian Magazine for Multidimensional Education [Revista Romaneasca pentru Educatie Multidimensionala]*, 13(2), 167-184. <https://doi.org/10.18662/rrem/13.2/416>
- Popovych, I., Borysiuk, A., Zahrai, L., Fedoruk, O., Nosov, P., Zinchenko, S., & Mateichuk, V. (2020b). Constructing a Structural-Functional Model of Social Expectations of the Personality. *Revista Inclusiones*, 7(SI), 154-167. <https://revistainclusiones.org/index.php/inclu/article/view/354>
- Popovych, I., Chervinskyi, A., Kazibekova, V., Chervinska, I., & Machynska, N. (2021c). Empirical research of the typology of social expectations of the personality. *Amazonia*

- Investiga, 10(43), 112-122. <https://doi.org/10.34069/AI/2021.43.07.11>
- Popovych, I., Kononenko, O., Kononenko, A., Stynska, V., Kravets, N., Piletska, L., & Blynova, O. (2020c). Research of the Relationship between Existential Anxiety and the Sense of Personality's Existence. *Revista Inclusiones*, 7(SI), 41-59. <http://www.revistainclusiones.org/index.php/inclu/article/view/300>
- Popovych, I., Lymarenko, L., Tereshenko, N., Kornisheva, T., Yevdokimova, O., Koverznieva, A., & Aleksieieva, M. (2020d). Research on the Effectiveness of Training Technologies' Implementation in Student Theater. *Revista Inclusiones*, 7(2), 104-121. <http://www.revistainclusiones.org/index.php/inclu/article/view/261>
- Popovych, I., Shcherbyna, V., Sultanova, L., Hulias, I., & Mamchur, I. (2021d). Research of social expectations' properties of future specialists of socioeconomic profile. *Amazonia Investiga*, 10(39), 40-49. <https://doi.org/10.34069/AI/2021.39.03.4>
- Popovych, I., Shevchenko, A., Galvez, L. M., & Klenina, K. (2021e). Research of the relationship between social desirability and value orientations of adolescents. *Revista Notas Históricas y Geográficas*, 26(1), 241-268. <https://www.revistanotashistoricasygeograficas.cl/index.php/nhyg/article/view/339>
- Popovych, I., Zhigarenko, I., Losiyevska, O., Dovbenko, S., Kashyrina, Ye., Shevchenko, R., & Piletska, L. (2020e). Research of Achievement Motivation's Impact on the Career Orientations of Future Managers of Organizations. *Revista Inclusiones*, 7(SI), 247-263. <http://www.revistainclusiones.org/index.php/inclu/article/view/1231>
- Prokhorov, A. O., Yusupov, M. G., & Plokhikh, V. V. (2015). Cognitive States in the Process of Students' Intellectual Activity. *The New Educational Review*, 41(3), 263-274. <https://doi.org/10.15804/tner.2015.41.3.21>
- Qadri, F. (2020). The Financial Statement Analysis of Commercial Banks in Bahrain: A case study of Ahli United Bank. *Revista Científica Del Amazonas*, 3(5), 18-31. <https://doi.org/10.34069/RC/2020.5.02>
- Ryff, C. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-1081. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Savelyuk, N. (2022). Psychological well-being of student youth: a comparative analysis in the covid and war contexts. *Psychological Prospects Journal*, 39, 322-340. <https://doi.org/10.29038/2227-1376-2022-39-sav>
- Shevchenko, R., Cherniavskiy, V., Zinchenko, S., Palchynska, M., Bondarevich, S., Nosov, P., & Popovych, I. (2020). Research of psychophysiological features of response to stress situations by future sailors. *Revista Inclusiones*, 7(SI), 566-579. <http://www.revistainclusiones.org/index.php/inclu/article/view/1780>
- Spielberger, C. D. (1971). Notes and Comments Trait-State Anxiety and Motor Behavior. *Journal of Motor Behavior*, 3, 263-279. <https://doi.org/10.1080/00222895.1971.10734907>
- Warr, P. (1978). A study of psychological well-being. *British Journal of Psychology*, 62(1), 111-121. <https://doi.org/10.1111/j.2044-8295.1978.tb01638.x>
- Zaverukha, O., Popovych, I., Karpenko, Y., Kozmenko, O., Stelmakh, O., Borysenko, O., Hulias, I., & Kovalchuk, Z. (2022). Dynamics of Successful Formation of Professional Identity of Future Psychologists in Higher Education Institutions. *Romanian Magazine for Multidimensional Education [Revista Romaneasca pentru Educatie Multidimensionala]*, 14(1), 139-157. <https://doi.org/10.18662/rrem/14.1/511>
- Zinchenko, S., Nosov, P., Mateichuk, V., Mamenko, P., Popovych, I., & Grosheva, O. (2019). Automatic collision avoidance system with many targets, including maneuvering ones. *Bulletin of university of Karaganda*, 96(4), 69-79. <https://physics-vestnik.ksu.kz/apart/2019-96-4/8.pdf>
- Zorina, A. V., Yarullina, A. S., Akhmetova, L. A., Shaimardanova, M. R., Nikishina, S. R., & Garipova, A. A. (2018). Leadership in the University Student Environment: How to Become a Person-Oriented Leader. *International Journal of Instruction*, 11(4), 271-286. <https://doi.org/10.12973/iji.2018.11418a>
- Zung, W. W. (1965). A self-rating depression scale. *Archives of General Psychiatry*, 12, 63-70. <https://doi.org/10.1001/archpsyc.1965.01720310065008>



DOI: <https://doi.org/10.34069/AI/2022.56.08.17>

How to Cite:

Chumachenko, O., Kustovska, O., Tymoshevskiy, V., Kolhanova, I., & Kaminetska, O. (2022). Reclamation of the war affected agricultural land in east of Ukraine. *Amazonia Investiga*, 11(56), 159-168. <https://doi.org/10.34069/AI/2022.56.08.17>

Reclamation of the war affected agricultural land in east of Ukraine

Recuperación de las tierras agrícolas afectadas por la guerra en el este de Ucrania

Received: July 26, 2022

Accepted: September 5, 2022

Written by:

Chumachenko Oleksandr⁷⁵<https://orcid.org/0000-0002-1560-5518>**Kustovska Oksana**⁷⁶<https://orcid.org/0000-0003-1469-9249>**Tymoshevskiy Vladyslav**⁷⁷<https://orcid.org/0000-0002-3606-7229>**Kolhanova Iryna**⁷⁸<https://orcid.org/0000-0001-7771-2696>**Kaminetska Oksana**⁷⁹<https://orcid.org/0000-0002-1576-6477>

Abstract

One of the most critical components of Ukrainian economic complex is its agriculture. The development within the industry is generally determined by the current economy's state which is also impacted by the agricultural indicator. The research aims to study the renewal and reclamation of agricultural lands, which has deteriorated during the military operations especially in the east of Ukraine. Satellite data set was used, which was obtained based on Moderate Resolution Imaging Spectroradiometer images and covers the whole Ukraine with a spatial resolution of 232 m. The annual information on inactive and active agricultural land was then used to calculate the frequency of fallow/active land at each pixel level and to translate the subject/action series on neglect trajectories. The factors determining reclamation are related to the suitability of the land for agriculture. Accessibility to major cities was also important because most of the renewal and reclamation occurred closer to population centers, but this influence varied East of Ukraine. These factors suggest that renewal and reclamation patterns were primarily driven by

Resumen

La agricultura es tradicionalmente un componente importante del complejo económico ucraniano. Las tendencias y perspectivas de desarrollo del sector vienen determinadas por el estado general de la economía nacional, que a su vez está muy influenciado por la dinámica de los principales indicadores agrarios. La investigación tiene como objetivo estudiar la renovación y recuperación de las tierras agrícolas, que se han deteriorado durante las operaciones militares, especialmente en el este de Ucrania. Se utilizó un conjunto de datos de satélite, obtenidos a partir de imágenes del espectrorradiómetro de imágenes de resolución moderada, que cubren toda Ucrania con una resolución espacial de 232 m. La información anual sobre las tierras agrícolas inactivas y activas se utilizó para calcular la frecuencia de las tierras en barbecho/activas en cada nivel de píxel y para trasladar las series de sujetos/acciones en trayectorias de abandono. Los factores que determinan el abandono están relacionados con la idoneidad del terreno para la agricultura. La accesibilidad a las grandes ciudades también fue importante, ya que la mayor parte de la renovación y recuperación se produjo cerca de los centros de

⁷⁵ Ph. D. in Economics, Associate Professor National University of life and environmental sciences of Ukraine Faculty of Land Management, Department Land Use Planning, Ukraine.

⁷⁶ Ph. D. in Economics, Associate Professor National University of life and environmental sciences of Ukraine, Faculty of Land Management, Department Land Use Planning, Ukraine.

⁷⁷ Ph. D. in Economics, Associate Professor Kharkiv National Automobile and Highway University, faculty Road-Building, Department of road design, geodesy and land management, Ukraine.

⁷⁸ Associate Ph. D. in Economics Department Land Use Planning, Faculty of Land Management, National University of life and environmental sciences of Ukraine, Ukraine.

⁷⁹ Ph. D. in Economics, Associate Professor Bila Tserkva National Agrarian University Faculty of Agro-Biotechnological, Department of Land Resources Management and Land Cadastre, Ukraine.

factors related to land productivity, with renewal and reclamation focused on the most promising sites.

Keywords: agriculture, renovation, reclamation, land improvement, farmland.

Introduction

Agricultural development determines a country's level of food security and helps identify reserves for future prosperity. Each country chooses its own style of farming and type for growing certain crops, livestock or fisheries. The question of the appropriate type of agricultural activity in rural settlements or even some areas of urban areas depends on the type of land, geographic and climatic zones, temperature regimes, and amount of rainfall. How citizens use a country's natural wealth determines the future stability of its development. Harmful ways of using land, forests, and water basins lead to catastrophic consequences.

Generating high incomes from harvesting, raising livestock or fishing is the basis of food security. Problems in the agricultural sector can lead to malnutrition, hunger, and disease among children and adults. Another aspect, the effectiveness of agricultural activities in the country indicates the level of food supply, access to foreign markets, and availability of raw materials, and resources for other industries (Czyżewski & Matuszczak, 2018; Maertens & Vande Velde, 2017). Trends and prospects for the development of the industry are determined by the general state of the national economy, which in turn is influenced by the dynamics of the main agricultural indicators. The agricultural sector of Ukraine affects the development of the world food market, especially certain sectors, in particular grain and oil, and fat (Khan & Ashfaq, 2018; Sinha, 2019). In this context, there is inevitably a contradiction between the resource potential of agricultural production in Ukraine, the needs of the domestic market, and the dynamics of world demand for food. This is especially relevant due to the fact that the current successful development of agriculture, especially in comparison with other sectors of the Ukrainian economy, has not eliminated a number of important systemic problems.

These are structural imbalances in the industry, low efficiency and provision of financial

población, pero esta influencia varió al este de Ucrania. Estos factores sugieren que los patrones de renovación y recuperación fueron impulsados principalmente por factores relacionados con la productividad de la tierra, y que la renovación y la recuperación se centraron en los lugares más prometedores.

Palabras clave: agricultura, renovación, recuperación, mejora de la tierra, tierras de cultivo.

resources (especially in comparison with developed countries), Miller et al., (2018) incomplete land reform, insufficient skills of workers, and the presence of significant environmental problems. Moreover, all this occurs against the background of a high degree of involvement of the domestic agricultural sector in the global agro-food system, the corresponding increase in their interaction in the framework of increasing global competition (Weiss, 2021). Delaying the process of solving these problems can lead to the gradual degradation of production, loss of export positions, and even a threat to national food security in the long term.

The military conflict in Donbas was a turning point for many Ukrainians, and many families who had lived and lived peacefully in the East of Ukraine were forced to migrate from their settled homes. It is painful to see the number of civilian casualties, 2,000 of which have been recorded throughout the hostilities. With the outbreak of hostilities, the recruitment of a large number of soldiers to the AFU (Armed Forces of Ukraine) began. This represents approximately 250,000 persons. Most of them have gone to defend Ukraine's territorial integrity in the East; the tragic fate has befallen many. Namely, some 24,000 people were wounded and about 10,000 people died.

During the fighting, a large number of protected areas were damaged or contaminated, which were affected by fires caused by obstetric and arson to create smoke screens.

Private-rental relations, that concerns a substantial part of land relations in the country, impose a number of special features on the system of land ownership and use, especially in Eastern Ukraine. Thus, the development of approaches for assessing the state of land and developing approaches for the effective use of land that has been damaged by the hostilities in

the region is a relevant scientific and practical task.

Theoretical Framework or Literature Review

The various approaches in agricultural development research can be divided into several groups:

1. Approach devoted to the efficiency of agricultural production in general. Mosavi et al. (2020), see the efficiency of agriculture as an increase in agricultural production or income at minimum material and financial costs, but with multiple use of land, labor, material, and technical resources (Mosavi et al., 2020). The authors study such indicators as the area of agricultural land and the productivity of various types of crops, and vegetables, the results of dairy and poultry farms, and the dynamics of their profitability.
2. A comparative analysis of the effectiveness of public administration of agriculture in Ukraine and the European Union (EU) (Miller et al., 2018). Miller et al. (2018) investigated trends in financial support, sources of transfers to Ukraine and the EU, the growth rate of public services, the structure of spending on public services, and trends in customer support. The authors point out the differences in agricultural support that exist between Ukraine and the EU.
3. Presentations of quantitative analysis. For example, some foreign researchers investigated how farmers' readiness, advantages, specifics of their activity, size of farmland, remoteness from urban settlements, and the number of family members of the farmer influence the efficiency of cooperation and income growth in agriculture (Weiss, 2021).
4. Econometric models. Mosavi et al. (2020) used econometric models to study the profitability of small and medium enterprises over a long period (Mosavi et al., 2020). They analyzed accounts receivable, accounts payable, inventories, cash conversion cycle, and firm profitability, and then constructed a multivariate regression model. They presented the results of a correlation analysis between working capital and profitability of countless Spanish manufacturing firms.

A similar approach is demonstrated by Van Es & Woodard (2017) who considered the problem of the lack of technology that could ensure both

environmental safety and agricultural growth at the same time (Van Es & Woodard, 2017).

Quinton et al. (2018) believe that depressions in agriculture lead to threats to a country's economic sustainability and food security (Quinton et al., 2018).

Thus, in various scientific conclusions, they pointed to the need to turn "traditional agriculture towards agroecology," which can prevent not only food shortages or economic crisis, but also ensure environmental sustainability (Menne, 2017). This approach changes the understanding of the goals of agriculture. The term agroecology means that agriculture should not only be for the consumption of financial transfers or the use of its products by other industries but also should not be harmful to the environment. This is the mainstream in recent research abroad.

The purpose of the study is to examine the renewal and reclamation of agricultural land, the condition of which has deteriorated during the hostilities in East Ukraine.

Methodology

Maps of recultivation

Satellite dataset 10, was obtained from MODIS. This satellite is used for covers and pictures that are obtained from Ukraine with a resolution of 230 m. The "MODIS Normalized Difference Vegetation Index (NDVI)" time series was classified into active agricultural lands (i.e., with active vegetation layer) for each year from 2010 to 2021 with a 90% accuracy, estimated from independent verification data. Annual inactive and active farmland information was then used to calculate the frequency of fallow/active land at each pixel level and to translate the subject/active series into neglect and reclamation trajectories (Abdulfatah et al., 2017). Data collected from the following mods: MCD12Q2 Version 6 (Gray et al., 2019). (From where you collected satellite data); MCD12Q2 Version 6.1 (Gray et al., 2020). Visual analysis of this dataset showed sites with no evidence of management over 12 years (consistently fallow (Abdulfatah et al., 2017). Some of this land was used during the Soviet era, such as for cattle grazing. However, the conversion of meadows along rivers to cropland is highly unlikely, and so we excluded these areas from our analysis. The final data set consisted of 462420 hectares of agricultural land.

The available land use/land cover dataset covers a period of 12 years. We took the period of 2017-

2021 for analysis, since at that time reclamation became the dominant process of land change in Ukraine. In order to clarify the effect of reclamation, an analysis of images over several previous years is necessary (Abdulfatah et al., 2017). Given that any of the crop rotation systems in Ukraine provide for a fallow period of more than 5 years, we defined these plots as “neglected” during 2010-2016. Three binary datasets were created, one for each reclamation definition, which were subsequently used as

dependent variables in our models.

Explanatory variables

The highly emphasized level shows that there is reliable arithmetical data in Ukraine, especially at the district level. There are 490 districts in Ukraine. In this paper, we analyzed the Eastern region of Ukraine, where the hostilities are taking place. Eastern Ukraine belongs to the steppe zone (Figure 1, III).

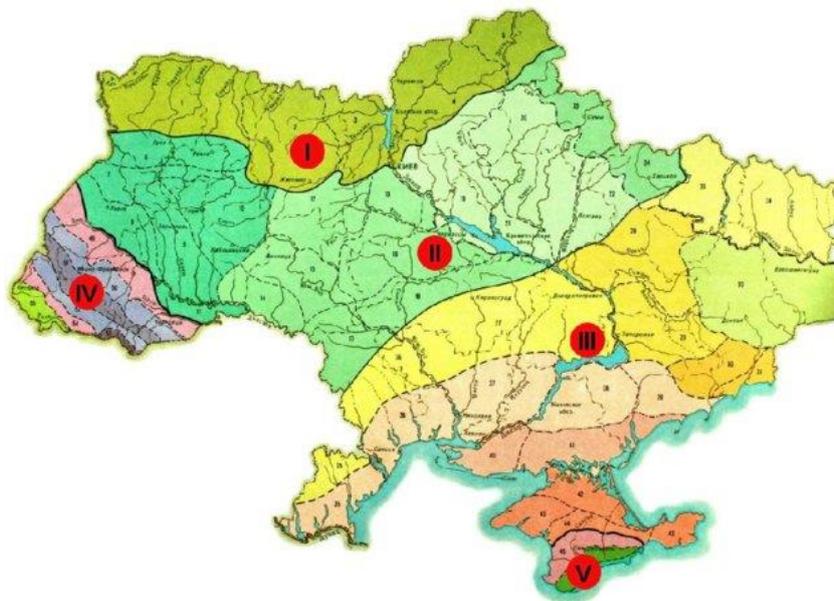


Figure 1. Ukraine Geographical Regions (The continuous line highlights the limitations in zone) (Obtained form: *National atlas of Ukraine*, by L. Rudenko, 2007). I—"Mixed Coniferous zone with forests with broad leaves", II—"the forest step zone", III—"steppe zone", IV—the "Ukrainian Carpathians", V—"Crimean Mountains"

To relate district-level statistics to other datasets, we used Euro-geographics (EuroGeographics, 2022a) district boundaries, which were manually verified and, if necessary, enhanced through the Ukrainian boundaries that are present and viewed from the Ukraine map (State Service of Ukraine for geodesy, cartography and cadastre (n.d.)).

The raster format's variables were highlighted with their separate resolution that is visible on the maps. The variables that were biophysically related to the terrain's slope and elevation were received from the 4th version of the SRTM or the Shuttle Radar Topography Mission (Maertens & Vande Velde, 2017). The model consisted of two variables that allowed for the reflection of patterns of climate which helped in the testing of average daily temperatures that were found to be above 5 degrees. These were obtained at a 1 km resection calculated from the global climate data. (Are et al., 2018). The ratio of annual

precipitation to evapotranspiration helped in identifying the global rigidity index through the process of soil data being obtained from 1 km resolution which represented the topsoil pH under 30cm of layer (Borelli et al., 2019, Carter et al., 2017).

Multiple variables for accessibility were used to assess and determine the regional and local markets along with expenses of facilities and costs of transportation. The lack of official information about networks of roads and boundaries of settlements lead the researchers to extract data from multiple web resources such as Euro geographics (EuroGeographics, 2022b). The Euclidean distance was then calculated between each avocation and its nearest settlement. The largest city had a population of over 50,000 and had paved roads. The distance calculated from the forest makes to the closes edge was attained through GlobCORINE

landscape map (Catacutan et al., 2018). Therefore, this value was then used as an indication of the marginality of ecology pertained to the locale of agriculture and its relative accessibility. Furthermore, the value is also a reflection of used land history as the forests were converted to agricultural areas recently which changed the landscape.

To be used as a reflection of demographical conditions, the rural population's average density was used as well as the changes in population between 2010 and 2016. This excluded larger cities with over 50,000 population. The ratio of dependency along with the portion of the employed and registered population where the individual was over 65 years of age or under 15 was then included in the assessment of the availability of labor (Smaliychuk et al., 2016). The effect of management of agriculture was assessed on district level data and states which were collected from 2001 to 2006 in yields of grain. Other indicators were the usage of fertilizers, and mechanization levels such as the number of harvesters and tractors (Smaliychuk et al., 2016).

The statistics about Ukrainian agriculture are rather lacking when it comes to farms and the only official data is held by registered agricultural entities which comprises societies, operations, joint stock companies, and farms. The number of farms and the area cultivated have seen no change as they only occupy 15% of the study area (Smaliychuk et al., 2016). Several covariates were inserted into the stream to reduce the model's complexity and enhance its readability. The act of determining the final variables requires multicollinearity and statistical analysis. The variables were estimated using a Pearson correlation value and if any greater than 0.5 were retained then the verifiable showed that there was a higher level of correlation with the dependent value. These descriptive statistics allow for influencing the variables and provide a wide array of information which can also be found in Table 2 as per the analysis.

Regression Setup and Design of Sampling

The process involved the evaluation of different models as per the reclamation definition (Table 1). Furthermore, the model estimation of Ukraine was kept separate from the models of Eastern Ukraine. Therefore, six models of regression were estimated along with a further 3 for separate ecological areas. Three models of Ukraine were also used and observations were made only regarding the agricultural land that was unused

between the time of 2010 and 2016 (Abdulfatah et al. (2017)). The reclamation that took place from 2017 to 2021 was considered regarding the observations that we used as code 1 and the farmland that was not used between 2017 and 2021 was code 0.

To lessen the impact of autocorrelation, the observations were made using 500m of spacing thus resulting in a 16% reduction in the accuracy of the dataset. These steps ultimately lessened the observation number to 169387. Then finally the sampled observations were put in the ecological areas and global models were selected in correlation to the reclamation of ecological areas.

Regression Trees Boost

BRTs or boosted regression trees are often made use of within a framework of regression allowing for a nonparametric method (Chausson et al., 2020). This method can view the relationships which are complex and not linear between predicting and relevant variables (Cohen-Shacham et al., 2019). The general thought behind the boosting processes is the combination of various weak models into an entity that will enhance performance (Are et al., 2018). BRTs involve decision trees that highlight the different variances of the values by dividing the space in a fashion reminiscent of binary numbers. The minimization of enhancement allows for the functional loss in the decision trees by adding new decision trees and the existing trees remain unmodified. This allows the values to be estimated. The loss observed is the highest in the first tree while the other trees that come next focus on the previous model to fit themselves thereby resulting in an enhancement of the prediction variables. (Are et al., 2018).

Boosted trees are not used to rebuild data rather they create links between the missing information and the predictors that are used in relationships and interactions (Corwin & Scudiero, 2019). Making sure the BRT works perfectly, requires various parameters that are used in calibration. They include tree complexity, package fraction, a large number of trees as well as the learning rate. The determination of the batch fraction comes from the samples that fit each model (Are et al., 2018). A fraction of 0.5 was made use of in the division to get observations for 10000 models as well as the test and training samples. The test also led to the testing of other parameters such as the cross-evaluation to assess the parameter settings as well as different measures. The interaction level, therefore, was chosen at a rate of 0.01 followed

by a level of 4. The Para terms are then used to evaluate the number of trees required for the best prediction in the dismo package (Diop et al., 2018).

Results and Discussion

The overall areas for the study are differentiated based on the concept of renovation provided in Table 1 as well as the 170,000 ha from the exclusive definition of cultivation that has been going on for the last 5 years. The 445100 ha for the last 6 years of cultivation is the intermediate definition while the comprehensive one is 987800 ha. The place of the farmland that was abandoned also majorly varies as they are between different ecological zones. The rates of reclamation were found to be the highest in the steep zone which was around 52%.

The linearity analysis of the variables that explain the phenomenon highlights that a major relation of 0.5 Pearson is present. The Drought Index along with the population, change, the yield of grain, and other variables acted as the final values that predict the results of the study. The reclamation methods and their drivers highlighted the variables of accessibility that allowed for the overall annual amount of above 5-degree temperatures which contributes to the performance of the model. The management of agriculture is another set of explanatory variables. The most explanatory power in the models goes towards availability and temperature. Other variables such as the mechanization level, employment, as well as slope have major impacts on the steppe only. Dependency ratios along with topsoil pH and organic and mineral fertilizer application did not see a major contribution to the overall variable and thus these variables had fewer significances and varied less than they were expected to. In the steppe model as well as the global model the overall distance contribution from the edge sees a decline from inclusive reclamation. The decline is from 23% to 16% however the temperature's influence and impact increased from 9.7% to 10.3%. Other variables that factor influence involve unemployment rate, slope, and the nearest town is all seen to be stable in all the different definitions of reclamation. The AUC and accuracy of prediction in the global models show an increase to 0.83 from 0.76 and 0.96 from 0.86 respectively for exceptional reclamation. The performance increase is observed in the steep model and they were far less emphasized than the global ones. But these models also showed the highest amount of positive prediction as visible in Table 4. All the models are similar such that

their distance to the edge effect lies on the reclamation of probability. The treatment probability saw a sharp rise as the distance from the edge function increased however it came to a halt at the 5km mark which is also the 10km mark in the steppe model. The distance to the edge effect was the most profound in the steep model and then the global model followed by forest-steppe and mixed forest respectively.

Other variables about accessibility had significantly less power of explanation such as distance to population centers. The nearest major towns and cities variables had little to no impact on the reclamation in the models. Furthermore, the high probability observed of reclamation within the distance to identified areas within Ukrainian agricultural land shows that the paved roads and settlements are crucially important in the steppe models. The daily temperature increases above 5 degrees also impacted reclamation in these models. The abandoned agricultural areas and their reclamation can serve as a viable opportunity to expand the farm area to enhance the ecosystem (Frątczak et al., 2019). The problem however remains that the determinants of relation such as spatial patterns are not understood by any. The overall evaluation showcases that reclamation and renewal is a major trend in Ukrainian rural areas due to the absurd prices of products and agricultural foods in the last decade. The high prices have led to a major investment in agriculture in Ukraine.

Eastern Ukraine had seen a large amount of reclamation of up to 50% of all agricultural land. The reclamation patterns in this study mainly showcase the factors and reasons that contribute to product-based agriculture. The reclamation probability highlights that the projections showcase the high potential for further expansion in Eastern Ukraine in agriculture. The red zone areas of reclamation are land that is free for use and due to the ideal conditions, it is becoming less and less available (Daryanto et al., 2018). The agricultural areas that are abandoned are being reclaimed at a high speed as it leads to a major increase in the production of agriculture. This research can act as a starting point to understanding their tradeoffs within the environment.

The unused agricultural land and its plots have led to the attraction of foreign and domestic interest in agriculture. The holdings of agriculture emerged in the early 2000s when there was a reform after the post-Soviet control of Ukraine. The agricultural lands and the sectors allowed for the possibility to distribute and

divide these plots of land to farm owners and leased them to generate profit from the production of agriculture due to the reduction in costs of raw materials. Other aspects included access to loans as well as tax and farming incentives that the government implemented to encourage the cultivation and reclamation of agricultural lands (Gunawardana et al., 2018). The assessment highlights that Ukraine's eastern regions do not have enough quality for abandoned agricultural and reclamation and land areas can be found elsewhere.

During the evaluation of the reclaimed, area it is vital to note that the reclamation hotspots and the spatial structure varied greatly. The analysis highlighted large urban centers in the steppe area where reclamation spots were found. These hotspots can be explained by four different factors. The first is the growing demand and need for agricultural products which require an urban population for storage and transportation (Dorondel & Serban, 2022). The second is the presence of necessary people and personnel for the maintenance of agricultural holdings along with land (Gatto et al., 2019).

The regression models showcase the patterns of spatial differentiation where reclamation is assessed by the agroecological conditions as well as their accessibility of them. The distance and temperature to the closest jungle places have a considerable impact on the reclamation probably as they happen more often in places where temperatures are high. The overall suitability of a given area is emphasized by the ground available for agriculture, as well as the forest distance to the nearest place of settlement which is also connected to higher reclamation possibility (Frątczak et al., 2019). The same can be said for cities that are near the steppe zone. The steppe has recorded high temperatures that are connected with the change in the climate. This leads to moisture in the soil and the requirement for more water for the crops (Alarcón & Arias, 2019). A suggestion can be made that the balance of water in the steppe is necessary for the reclamation of the area. The results showcase that remote areas are much more feasible for raw material purchase and selling agricultural products. There are far better opportunities and chances to make a profit and a return on investment for decision-makers. Therefore, it leads to reason that such policies about agriculture need to be targeted towards areas that have positive conditions for sustaining agriculture. These policies can thus promote the sustainability of the environment through afforestation and other farmland cultivation.

The results match up with the factors that were evaluated for the abandonment of agriculture in the Soviet Union and eastern Europe. These agroecological conditions, even though are marginal, yet they are very unfavorable for the key determinants that highlight similar neglect patterns (van Asseldonk et al., 2018). The results highlighted that the best lands out of the available ones were those that were reclaimed earlier. However, the level of neglect among the land divided by regions and countries was also a critical factor along with the agroecological conditions that are often overlooked by the more institutional and macroeconomic effects. These include land reforms, reorganization of lands as well as economic state and support. Other miscellaneous variables include farmer skills and farming structure (Blazquez et al., 2018).

By unitizing the global models that aim to highlight reclamation, the steppe zone has the vastest expansion of cropland along with better soils that take precedence over the neglected parts. Even though there are frequent droughts within the last few years, the models suggest that the infrastructure is improved and the steppe zone has vital constraints that are used to farming the region, therefore, enhancing the investment opportunities there. A large scale of forestation has already taken place in Northern Ukrainian areas thus it would be costly to reclaim those areas (Eriksen et al., 2021). Haymaking and cattle grazing are two ways in which reclaiming takes place while there are other viable options as well that surpass the effectiveness of traditional agriculture (Lin, 2022).

Finally, military conflict in eastern Ukraine has affected where reclamation (van Asseldonk et al., 2018) occurs and is likely to significantly reduce foreign investment in eastern Ukrainian agriculture (Cristan et al., 2019).

State financial support is an important element in the long term. It ensures intensive innovative development of the agricultural region (Denisova et al., 2021). One of the essential elements of financial support is the modernization and improvement of the state of the material and technical base (Smalychuk et al., 2016). The combination of these factors (i.e., financial support and modernization of the material and technical base) is a necessary condition for the reclamation of lands devastated as a result of military operations. The study of agricultural reclamation patterns and drivers is based on spatial and temporal factors and a nonparametric regression model, which is a powerful means of explaining the most influential factors and

predicting reclamation patterns. The study of the process of land reclamation in Ukraine was carried out in the past, during 2006-2016 (Smaliychuk et al., 2016). A key factor in reclamation is the suitability of land for planting crops. This is determined by abiotic indicators - soil types and temperature regime. In addition, the presence of a large settlement nearby agricultural land is of great importance, although this factor was not as important as the first one. Thus, the most effective reclamation takes place in promising areas with fertile soils, but near large urban agglomerations.

There are however uncertain sources that need to be highlighted. The first of which is the result of an error during the sensing of data. Climate fluctuations are a contributing factor that leads to the dry year pixelation that is prominent when the cropless has not seen a large-scale harvest. This can lead to unmanaged and barren land. Furthermore, the difficulty in separating the unmanaged lands from the managed ones lead to the exclusion of dependent lands from the study area because they had become permanent grasslands situated alongside rivers. However, their omission means that the rates of reclamation cannot be overestimated. Secondly, eastern Ukraine's agricultural system follows a specific time which leads to the misclassification of the dataset provided by the satellites due to the range of testing that took place over 6 years ago. These definitions showcase that field reclamation and reliability of the analysis lie within the space of agricultural holdings and large private farms. Lastly, various observations were made except for the steppe model. This leads to the conclusion that the data for the entirety of Ukraine is not available.

Conclusions

Land renewal and reclamation is a necessary measure, starting with the return of land to optimal qualities for further use in public production. Through the restoration of areas over a period of time it is possible to return the area to sustainable development and peaceful life for the population.

The key factors determining reclamation are related to the suitability of the land for agriculture (e.g., soil quality, temperature). Accessibility to major cities was also important because much of the renewal and reclamation occurred closer to population centers, but this influence varied east of Ukraine. Variables related to agricultural management (fertilizer application, mechanization) and demography

were insignificant in explaining renewal and reclamation in the study. These factors suggest that renewal and reclamation patterns were primarily driven by factors related to land productivity, with renewal and reclamation focused on the most promising sites.

Although the study did not assess the environmental costs of renovation and reclamation, it was shown that they have become the dominant land-use trend in the region since 2017 and that renovation and reclamation were primarily associated with agricultural entities targeting unused land with the greatest agricultural suitability and therefore potential profitability. These results provide a starting point for assessing where renewal and reclamation might occur and, therefore, what the production possibilities and socioeconomic and environmental consequences of renewal might be. Predicting where future renewal may occur in eastern Ukraine suggests that this area will be the focus because unused farmland there is still more prevalent than in the most fertile steppe zone. The resulting models also have implications for the release of unused productive capacity, highlighting major constraints on renewal and reclamation, mainly affordability that can be addressed through infrastructure investment. Given the significant area of currently unused agricultural land in Eastern Europe and the former Soviet Union, our results provide important information about the neglected process of land change and an assessment of the socioeconomic and environmental consequences of renovation.

Bibliographic references

- Abdulfatah, M. F., Najib, M., & Sanim, B. (2017). Tomato Fulfillment Supply Strategy (Based on Company's Internal-External Analysis). *International Journal of Science and Research*, 6(6), 639-643.
- Alarcón, S., & Arias, P. (2019). The public funding of innovation in agri-food businesses. *Revista de Investigacion Agraria (Spanish Journal of Agricultural Research)*, 16(4), e0111. <https://doi.org/10.5424/sjar/2018164-12657>
- Are, K.S., Oshunsanya, SO., & Oluwatosin, G.A. (2018). Changes in soil physical health indicators of an eroded land as influenced by integrated use of narrow grass strips and mulch. *Soil & Tillage Research*, 184, 269-280. <https://doi.org/10.1016/j.still.2018.08.009>
- Blazquez, D., Domenech, J., & Garcia-Alvarez-Coque, J.-M. (2018). Assessing technology

- platforms for sustainability with web data mining techniques. *Sustainability*, 10(12), 4497. <https://doi.org/10.3390/su10124497>
- Borelli, S., Simelton, E., Aggarwal, S., Olivier, A., Conigliaro, M., Hillbrand, A., Garant, D., & Desmytters, H. (2019). *Agroforestry and Tenure*. Rome, Italy: FAO and ICRAF. <https://www.fao.org/documents/card/en/c/A4662EN/>
- Carter, S., Manceur, A. M., Seppelt, R., Hermans-Neumann, K., Herold, M., & Verchot, L. (2017). Large scale land acquisitions and REDD+: a synthesis of conflicts and opportunities. *Environmental Research Letters*, 12(3), 035010. <https://doi.org/10.1088/1748-9326/aa6056>
- Catacutan, D., Finlayson, R., Gassner, A., Perdana, A., Lusiana, B., Leimona, B., ... & Yasmi, Y. (2018). *Asean guidelines for agroforestry development*. ASEAN Secretariat: Jakarta, Indonesia. <https://www.worldagroforestry.org/publication/asean-guidelines-agroforestry-development>
- Chausson, A., Turner, B., Seddon, D., Chabaneix, N., Girardin, C. A. J., Kapos, V., Key, I., Roe, D., Smith, A., Woroniecki, S., & Seddon, N. (2020). Mapping the effectiveness of nature-based solutions for climate change adaptation. *Global Change Biology*, 26(11), 6134–6155. <https://doi.org/10.1111/gcb.15310>
- Cohen-Shacham, E., Andrade, A., Dalton, J., Dudley, N., Jones, M., Kumar, C., Maginnis, S., Maynard, S., Nelson, C. R., Renaud, F. G., Welling, R., & Walters, G. (2019). Core principles for successfully implementing and upscaling Nature-based Solutions. *Environmental Science & Policy*, 98, 20–29. <https://doi.org/10.1016/j.envsci.2019.04.014>
- Corwin, D. L., & Scudiero, E. (2019). Review of soil salinity assessment for agriculture across multiple scales using proximal and/or remote sensors. In *Advances in Agronomy*, pp. 1–130. Elsevier.
- Cristan, R., Aust, W. M., Bolding, M. C., & Barrett, S. M. (2019). Estimated sediment protection efficiencies for increasing levels of best management practices on forest harvests in the Piedmont, USA. *Forests*, 10(11), 997. <https://doi.org/10.3390/f10110997>
- Czyżewski, B., & Matuszczak, A. (2018). Rent-seeking in agricultural policy revisited: a new look at the Common Agricultural Policy consensus. *Studies in Agricultural Economics*, 120(2), 69–79. <https://doi.org/10.7896/j.1801>
- Daryanto, S., Fu, B., Wang, L., Jacinthe, P.-A., & Zhao, W. (2018). Quantitative synthesis on the ecosystem services of cover crops. *Earth-Science Reviews*, 185, 357–373. <https://doi.org/10.1016/j.earscirev.2018.06.013>
- Denisova, D.A., Levanova, N.G., Dibrova, Z.N., Isakova, G.K., Hafizov, D., & Lizina, O.M. (2021). Indicators of state financial support for capital reproduction in the agricultural economic sector: The European union and Russia. *Universal Journal of Agricultural Research*, 9(5), 176–183. <https://doi.org/10.13189/ujar.2021.090504>
- Diop, B., Blanchard, F., & Sanz, N. (2018). Mangrove increases resiliency of the French Guiana shrimp fishery facing global warming. *Ecological Modelling*, 387, 27–37. <https://doi.org/10.1016/j.ecolmodel.2018.08.014>
- Dorondel, S., & Serban, S. (Eds.). (2022). *A New Ecological Order: Development and the Transformation of Nature in Eastern Europe*. University of Pittsburgh Press. <https://upittpress.org/books/9780822947172/>
- Eriksen, S., Schipper, E.L., Scoville-Simonds, M., Vincent, K., Adam, H. N., Brooks, N., Harding, B., Khatri, D., Lenaerts, L., Liverman, D., Mills-Novoa, M., Mosberg, M., Movik, S., Muok, B., Nightingale, A., Ojha, H., Sygna, L., Taylor, M., Vogel, C., & West, J. J. (2021). Adaptation interventions and their effect on vulnerability in developing countries: Help, hindrance or irrelevance? *World Development*, 141(105383), 105383. <https://doi.org/10.1016/j.worlddev.2020.105383>
- Frątczak, W., Michalska-Hejduk, D., Zalewski, M., & Izydorczyk, K. (2019). Effective phosphorous reduction by a riparian plant buffer zone enhanced with a limestone-based barrier. *Ecological Engineering*, 130, 94–100. <https://doi.org/10.1016/j.ecoleng.2019.01.015>
- EuroGeographics. (2022a, July 6). Official site. Retrieved from <https://www.eurogeographics.org>
- EuroGeographics (2022b, February). Open maps for Europe. Retrieved from <https://www.mapsforeurope.org/explore-map/euro-global-map>
- Gatto, P., Mozzato, D., & Defrancesco, E. (2019). Analysing the role of factors affecting farmers' decisions to continue with agri-environmental schemes from a temporal perspective. *Environmental Science &*

- Policy, 92, 237–244.
<https://doi.org/10.1016/j.envsci.2018.12.001>
- Gray, J., Sulla-Menashe, D., & Friedl, M. (2019). Lp daac - Mcd12q2v006. USGS. Retrieved from <https://lpdaac.usgs.gov/products/mcd12q2v006/>
- Gray, J., Sulla-Menashe, D., & Friedl, M. (2020). MCD12Q2 v061. USGS. Retrieved from <https://lpdaac.usgs.gov/products/mcd12q2v061/>
- Gunawardana, H., Tantrigoda, D. A., & Kumara, U. A. (2018). Integrating sustainable land management for post-conflict economic recovery. *Asian Development Policy Review*, 6(3), 129–141. <https://doi.org/10.18488/journal.107.2018.63.129.141>
- Khan, N. U., & Ashfaq, M. (2018). WTO's Implications on Agriculture Sector in Pakistan: Threats, Opportunities and Possible Strategies. *Advancements in Life Sciences*, 5(2), 30–36.
- Lin, E. (2022). How war changes land: Soil fertility, unexploded bombs, and the underdevelopment of Cambodia. *American Journal of Political Science*, 66(1), 222–237. <https://doi.org/10.1111/ajps.12577>
- Maertens, M., & Vande Velde, K. (2017). Contract-farming in staple food chains: The case of rice in Benin. *World Development*, 95, 73–87. <https://doi.org/10.1016/j.worlddev.2017.02.011>
- Menne, T. (2017). Digital farming set to revolutionize agriculture. *The Best Agrochemical News Platform*. <http://news.agropages.com/News/NewsDetail---22885.htm>
- Miller, R. S., Opp, S. M., & Webb, C. T. (2018). Determinants of invasive species policy: Print media and agriculture determine U.S. invasive wild pig policy. *Ecosphere*, 9(8), Article e02379. <https://doi.org/10.1002/ecs2.2379>
- Mosavi, S. H., Soltani, S., & Khalilian, S. (2020). Coping with climate change in agriculture: Evidence from Hamadan-Bahar plain in Iran. *Agricultural Water Management*, 241(106332), 106332. <https://doi.org/10.1016/j.agwat.2020.106332>
- Quinton, S., Canhoto, A., Molinillo, S., Pera, R., & Budhathoki, T. (2018). Conceptualising a digital orientation: antecedents of supporting SME performance in the digital economy. *Journal of Strategic Marketing*, 26(5), 427–439. <https://doi.org/10.1080/0965254x.2016.1258004>
- Rudenko, L. (2007). National atlas of Ukraine [Natsionalnyi Atlas Ukrainy]. Kyiv: Cartography.
- Sinha, J. K. (2019). Influence of technologies on the growth rate of GDP from agriculture: A case study of sustaining economic growth of the agriculture sector in Bihar. *Statistical Journal of the IAOS*, 35(2), 277–287.
- Smaliychuk, A., Müller, D., Prishchepov, A. V., Levers, C., Kruhlov, I., & Kuemmerle, T. (2016). Recultivation of abandoned agricultural lands in Ukraine: Patterns and drivers. *Global Environmental Change: Human and Policy Dimensions*, 38, 70–81. <https://doi.org/10.1016/j.gloenvcha.2016.02.009>
- State Service of Ukraine for geodesy, cartography and cadastre. (n.d.). A report on the performance of key tasks based on the results of the self-test. Retrieved from <https://land.gov.ua/>
- van Asseldonk, M., van der Meulen, H., van der Meer, R., Silvis, H., & Berkhout, P. (2018). Does subsidized MPCCI crowds out traditional market-based hail insurance in the Netherlands? *Agricultural Finance Review*, 78(2), 262–274. <https://doi.org/10.1108/af-06-2017-0052>
- Van Es, H., & Woodard, J. (2017). Innovation in agriculture and food systems in the digital age. *The global innovation index*, 97–104. https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2017-chapter4.pdf
- Weiss, A. S. (2021). New Tools, Old Tricks: Emerging Technologies and Russia's Global Tool Kit. Carnegie Endowment for International Peace. https://carnegieendowment.org/files/202104-Weiss_Russia_Global_Tool_kit.pdf

DOI: <https://doi.org/10.34069/AI/2022.56.08.18>

How to Cite:

Resatoglu, R., Özsvaş Akçay, A., & Ostovar Ravari, S. (2022). Structural analysis and comparative study of photovoltaic panel mounting systems in Northern Cyprus. *Amazonia Investiga*, 11(56), 169-182. <https://doi.org/10.34069/AI/2022.56.08.18>

Structural analysis and comparative study of photovoltaic panel mounting systems in Northern Cyprus

Kuzey Kıbrıs'ta güneş paneli taşıyıcı sistemlerinin yapısal analizi ve karşılaştırılması

Received: July 29, 2022

Accepted: September 7, 2022

Written by:

Rifat Resatoglu⁸⁰<https://orcid.org/0000-0002-7116-4497>**Ayten Özsvaş Akçay⁸¹**<https://orcid.org/0000-0003-3409-6621>**Shaghayegh Ostovar Ravari⁸²**<https://orcid.org/0000-0001-9056-3867>

Abstract

Northern Cyprus has made efforts to lessen its reliance on oil products and increase the usage of solar energy and installation of Photovoltaic (PV) panels. The design of lightweight structures, such as PV panel mounting systems, is significantly influenced by the characteristics of wind loads. Inaccurate calculations or a failure to take the wind load into account have recently resulted in substantial financial losses and damage to equipment and structures. In addition, the installation manner has remarkable effects on the output and efficiency of the PV panels. The wind loads on roof-mounted PV panels are examined in this study by considering two different heights for the building and different span lengths based on two loading standards; ASCE 7-16 and TS498, and the results and accuracy of each result are evaluated. Additionally, 64 rooftop PV panel mounting systems were developed to investigate the effects of factors including beam span length, load resisting system, column arrangement, available roof area, and required spacing between arrays. Deflection of the beams, cost of the mounting systems, weight of the mounting systems, and aesthetics of the building after installing PV panels are evaluated in this study.

Keywords: ASCE 7-16/TS498, Northern Cyprus, PV panel mounting system, PV solar panels, wind loads.

Özet

Kuzey Kıbrıs, petrol ürünlerine olan bağımlılığını azaltmak için güneş enerjisi kullanımını ve fotovoltaiik (PV) panel kurulumunu artırmak için gayret göstermektedir. PV panel taşıyıcı sistemleri gibi hafif yapıların tasarımı, rüzgar yükünden dolayı önemli ölçüde etkilenebilmektedir. Yanlış hesaplamalar veya rüzgar yükünün hesaba katılmaması, son zamanlarda önemli finansal veya ekipman kayıplarına ve yapılarda hasara neden olmuştur. PV panellerin kurulum şeklinin ilgili panellerin verimliliği üzerinde dikkate değer etkileri vardır. Bu çalışmada çatıya monte PV panellerdeki rüzgar yükleri, bina için iki farklı yükseklik ve farklı açıklık uzunlukları dikkate alınarak iki farklı standarta göre incelenmiştir; ASCE 7-16 ve TS498'e göre, yapı elemanlarının boyutlandırılmasında, alınacak yüklerin hesap değerleri dikkate alınarak sonuçlar karşılaştırılmış ve incelenmiştir. Ek olarak, panel kiriş açıklığı uzunluğu, yük taşıma sistemi, kolon düzeni, mevcut çatı alanı, dizilimler arasındaki gerekli boşluk gibi faktörlerin etkilerini araştırmak için 64 farklı çatı PV panel taşıyıcı sistemi geliştirilmiştir. Bu çalışmada PV panellerin montajından sonra kirişlerin sehimi, taşıyıcı sistemlerinin maliyeti, taşıyıcı sistemlerinin ağırlığı ve montaj sonrası bina estetiği değerlendirilmiştir.

Anahtar Kelimeler: ASCE 7-16/TS498, Kuzey Kıbrıs, panel taşıyıcı sistemi, PV güneş panelleri, rüzgar yükleri.

⁸⁰ Assoc. Prof. Dr., Near East University, Faculty of Civil and Environmental Engineering, Department of Civil Engineering, Northern Cyprus.

⁸¹ Asst. Prof. Dr., Near East University, Faculty of Architecture, Department of Architecture, Northern Cyprus.

⁸² MSc in Civil Engineering, Near East University, Faculty of Civil and Environmental Engineering, Department of Civil Engineering, Northern Cyprus.

Introduction

The total estimated annual solar radiation reaching the earth's surface is more than 7500 times the total annual energy consumption of the world (Okoye & Abbasoğlu, 2013, WEC resources solar (2013), Kassem et al, 2019a). Energy from the sun can be directly converted into electrical energy using photovoltaic (PV) panels (Kassem et al, 2019a). Loads on the mounting system of PV panels, especially wind loads, depending on various factors related to the geographical condition, surrounding condition, installation location, and mounting system characteristics. Various research has been carried out and multiple methods have been employed to study wind loads on PV panels in various settings in recent years (Saucu et al., 2019)

A climate change hotspot is a region where the climate is particularly sensitive to global warming (Giorgi, 2006) and faces more risks and challenges than other regions due to climate change (Fan et al., 2021). According to recent research, the Mediterranean region is a climate change hotspot (Hochman et al, 2022; Barcikowska et al., 2020) and is predicted to suffer the greatest negative effects of climate change and would experience considerable increases in temperature, decreases in rainfall, and modifications to average wind speeds (Zachariadis, 2012).

Cyprus is surrounded by the Mediterranean Sea and climate change has affected this island over the last decades with a wide range of consequences, such as changes in rainfall levels, changes in temperatures, droughts, and extreme weather events such as hurricanes and tornados, which have affected the average wind speed in

this island. Besides, tornadoes were rare occurrences in the Mediterranean region, however, their number and strength have increased (T-Vine, 2020, Agencies, 2020). On January 27, 2003, four tornadoes with wind speeds of up to 190 km/h impacted Cyprus. On January 22, 2004, this region was hit by a number of tornadoes with top speeds of roughly 140 km/h. (Sioutas et al, 2006). Additionally, a windstorm with an 80 km/h wind speed was recorded in North Cyprus on December 11, 2013 (Reşatoğlu et al., 2018). Overall, only 27.51% of the island is free from storm risk, while 51.19% of the island is at high risk of storms (Özşahin, 2012).

Extreme weather and climatic conditions have destructive socio-economic and ecological effects (Deryng et al., 2014; Ferrarezi et al., 2019) and change typical weather characteristics such as wind speed and wind load on buildings, structures, and equipment, which led to many injuries, fatalities, and great economic losses. (Kassem et al, 2019b, Online News for North Cyprus, 2020). As a result, severe adverse effects of climate change in a variety of industries and sectors should be anticipated in the future (Zachariadis, 2012), serious negative effects of climate change should be expected in the coming decades and therefore, the consideration of wind loads in the design of any type of structure has become more important (Reşatoğlu et al., 2018, Zachariadis, 2012).

According to data on human and financial losses, windstorms are among the disasters that cause the most financial harm, as the following figures illustrate (Reşatoğlu et al., 2018).

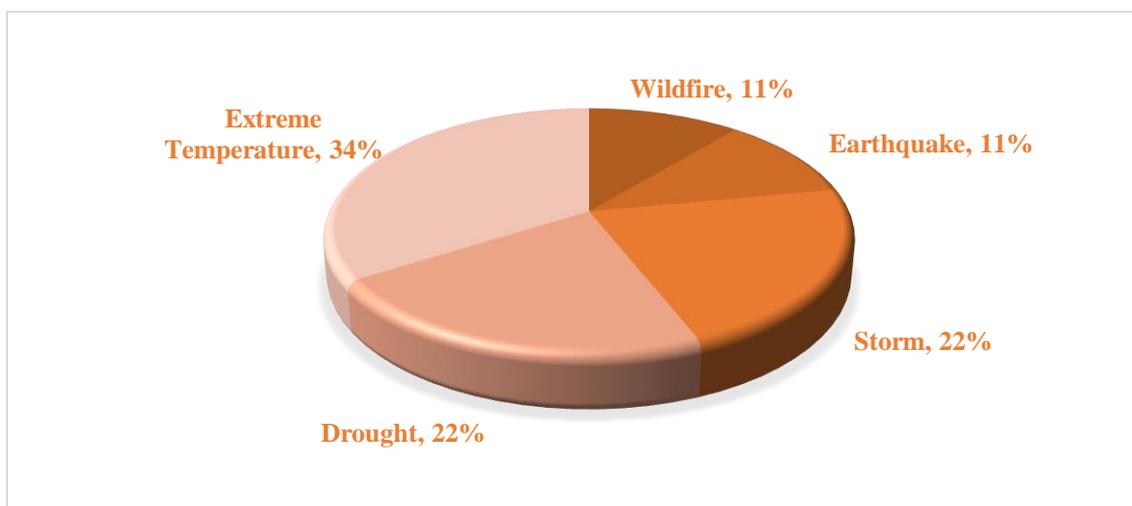


Figure 1. Disaster frequency due to disasters between 1990 and 2014 in Cyprus (Reşatoğlu et al., 2018).

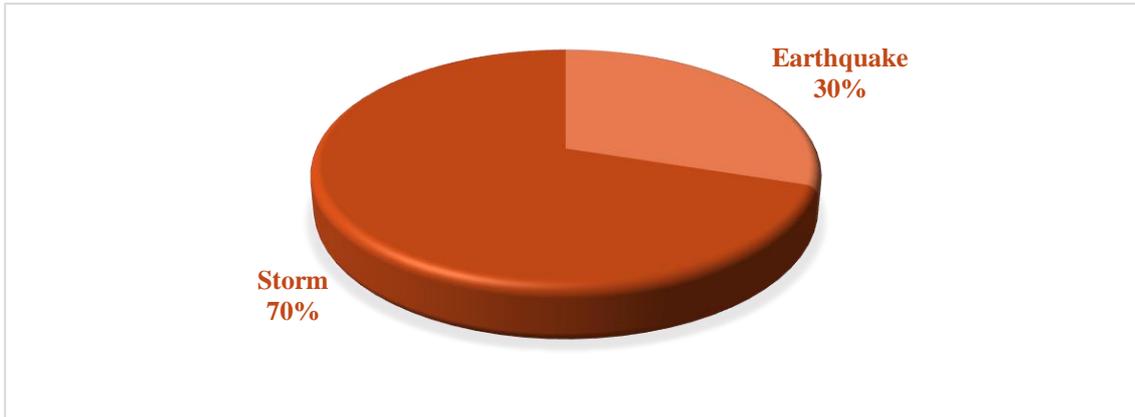


Figure 2. Economic damage frequency due to disasters between 1990 and 2014 in Cyprus (Reşatoğlu et al., 2018).

The objective of the work

PV panel mounting systems, especially those installed on roofs, are exposed to strong winds that can cause partial or total loss of the PV panel arrays, possible damage to adjacent facilities, human and financial losses, electricity shortages, power outages, and damage to other buildings (Naeji et al, 2017). Therefore, trustworthy data and proper wind load assessment on PV panel mounting systems are essential for the safe, efficient, and economical design of mounting systems (Moravej et al, 2015). Based on the recent works, the turbulence in the atmospheric boundary layer, surrounding conditions, and installation-related parameters, such as tilt angle, array spacing, panel size, and position all have an

impact on the wind acting on PV panels (Li et al, 2022)

According to KIB-TEK (Turkish Electricity Authority of Cyprus), the number of PV panels installed in Northern Cyprus climbed by 855% between 2014 and 2020, and the tendency to install PV panels is growing daily. But ensuring the safety of the panels and residents throughout different conditions is a crucial issue.

In this study, wind loads on flat roof-mounted PV panels are calculated using two different loading standards; ASCE 7-16 (American Society of Civil Engineers, 2017) and TS498 (Turkish standard,1997), while the effects of span length and building height on wind loads are evaluated. Considered variables are illustrated in Figure 3.

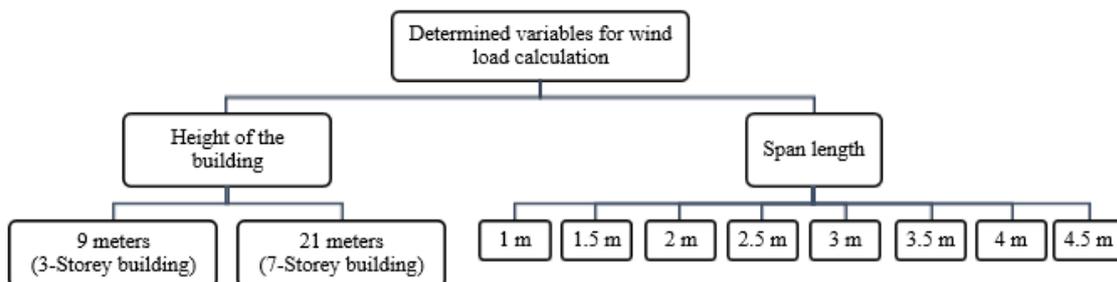


Figure 3. Determined variables for wind load calculation (Author)

On the other side, mounting systems of PV panels are designed and analyzed for installation on flat roofs in Nicosia, North Cyprus, while different parameters are taken into the account such as the height of the building, span length, column arrangement, load resisting system, and the number of panels. The load analysis and structural design are done according to the related structural standards, the appropriate tilt angle of panels, aesthetics, landscape, and weather condition of the study area. The

procedures given in ASCE 7-16 are used to calculate the loads, and AISC 360-16 (Specification for Structural Steel Buildings) is followed for designing the steel structure.

The findings of the study identify the optimum mounting systems of PV panels on flat roofs in the study area based on the number and size of PV panels, the best tilt angle for PV panels according to geographical conditions, aesthetics,

structural standards, the weight of the mounting systems, and cost analysis.

Methodology

Selected codes

In this study, the methods presented in two different standards are used to calculate wind loads in rooftop PV panel installation systems. TS498 is widely used in Northern Cyprus for load calculations on various structures, and

ASCE 7-16 provides load calculations and load combinations for the design of different types of structures, especially rooftop PV panels. Wind loads have been calculated using these two standards by considering two different wind directions, which are shown in figure 4. The wind blows in the + X direction, creating uplift loads on PV panels, hence it is known as uplift wind load and the wind blows in the -X direction, creating downward loads on PV panels, hence it is known as downward wind load.

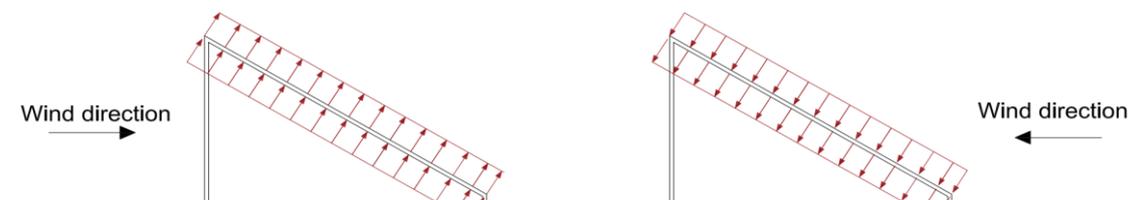


Figure 4. Uplift and downward wind load on PV panels (Author)

Wind load calculations based on TS498

According to TS498, the wind load on various structures depends on wind affected area, net wind pressure which relies on the height from the ground, and aerodynamic load factor which relies on geometrical properties and structural conditions. According to this standard, the magnitude of the wind load is calculated with the following equation.

$$W = C_f q A$$

Where W is Wind load resultant magnitude (kN), C_f is aerodynamic load factor, q is net wind pressure ($\frac{kN}{m^2}$) and A is the affected area (m²).

Net wind pressure (q) can be calculated with the following equation.

$$q = \frac{\rho v^2}{2g}$$

Where ρ is an air density (1.25 kg/m³), v is the wind velocity and given by the standard for different heights. In addition, the standard has provided a table and net wind pressure (q) can be obtained considering the height of the structure from the ground.

The aerodynamic load factor (C_f) depends on the geometrical properties and tilt angle of the desired surface and the condition of the area

where the building is located, which is obtained from tables provided in the standard.

Wind load calculations based on ASCE 7-16

According to ASCE 7-16, the wind load on the rooftop PV panels mounting system is calculated by considering the risk category for rooftop structures and rooftop equipment, determination of the basic wind speed for the applicable risk category, determination of wind load parameters, including wind directionality factor (K_d), exposure category (A, B, C, or D), topographic factor (K_{zt}), and ground elevation factor (K_e), velocity pressure exposure coefficient (K_z). Based on this standard, velocity pressure (q_z) is determined by the following formula.

$$q_z = 0.613 K_z K_{zt} K_d K_e V^2$$

The net pressure coefficient for rooftop PV panels ($G C_{rn}$) is determined using the parapet height factor (γ_p), panel chord factor (γ_c), array edge factor (γ_E), and nominal net pressure coefficient ($G C_{rn})_{nom}$ for rooftop PV panels which is determined using the normalized building length (L_b), Characteristics of the building include mean roof height of a building, width and length of a building, and normalized wind area for rooftop PV panels (A_n), and the effective wind area (A). The net pressure coefficient for rooftop PV panels ($G C_{rn}$) is calculated using the following formula:

$$(G C_{rn}) = \gamma_p \gamma_c \gamma_E (G C_{rn})_{nom}$$

The wind pressure for rooftop PV panels is calculated by using the following equation.

$$p = q_z(GC_{rn})$$

Modeling of PV panels and variables

Two different types of flat-roofed residential buildings with the same available roof area (10m × 20m) but two different orientations to the north have been considered and rooftop PV panel mounting systems are designed to be installed on the roof of these buildings (Figure 5).

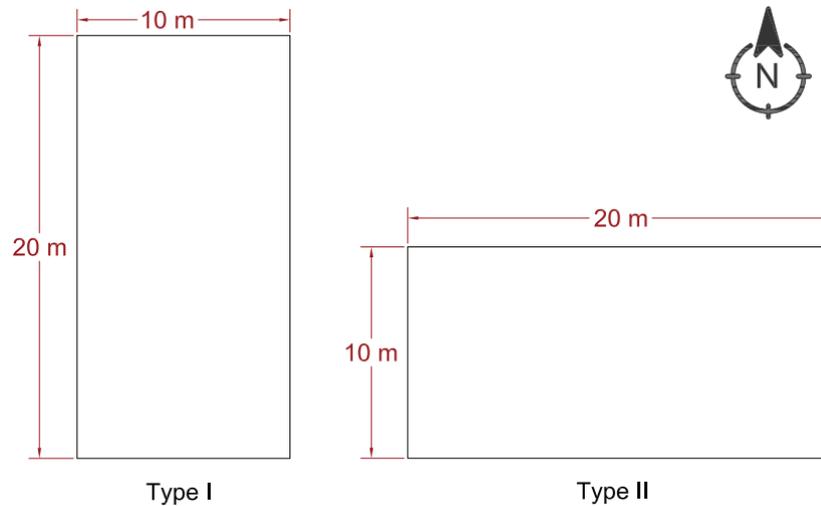


Figure 5. Plan view of the orientation of buildings to the north (Author)

PV panel arrays are installed at a distance of at least 1 meter from the edge of the roof for aesthetic reasons and to facilitate access. PV panels in the Northern hemisphere should face south, and the proper slope angle for PV panels in this area (Nicosia, Northern Cyprus) is 31-32

degrees based on the Nicosia standards for rooftop PV panels. In addition, an appropriate distance must be provided between the panel arrays to prevent the shadows of the panels on each other. The calculations for the distance between the arrays are as follows:

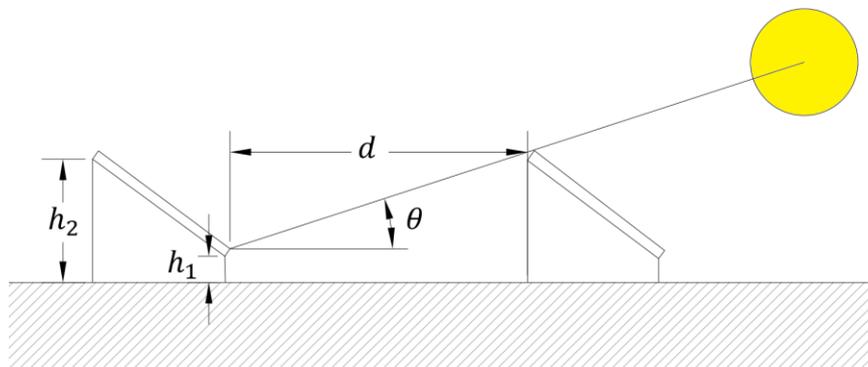


Figure 6. The distance between the arrays of PV panels (Author)

$$d = \frac{h_2 - h_1}{\tan\theta}$$

Where h_1 is the shortest side of the installation system, h_2 is the highest side of the installation system, θ is the solar elevation angle and d is the distance between two arrays.

Afterward, the optimal mounting system is determined based on the weight of the mounting system, the cost of the mounting system, and aesthetics.

✓ **Type I**

56 PV panels (7 rows of 8 panels) can be installed on the roof of residential building Type I (Figure 5). 32 mounting systems are designed to support

56 panels on the roof of this type of building by considering the following variables.

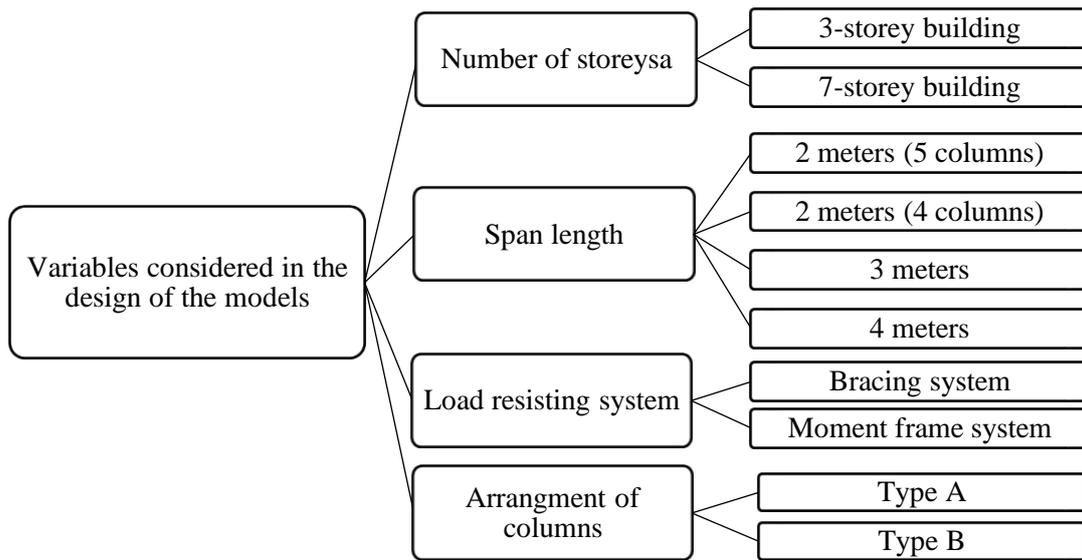


Figure 7. Variables considered in the design of mounting systems for (Type I) buildings (Author)

Type A and Type B of column arrangements are shown in figure 8.

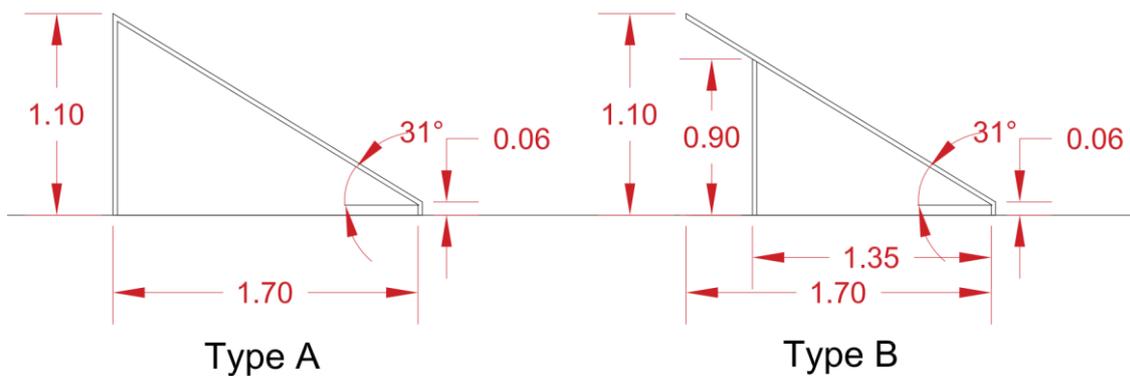


Figure 8. Section view of the arrangement of columns: Type A and Type B (Author)

The span lengths and column arrangements for these models are shown below:

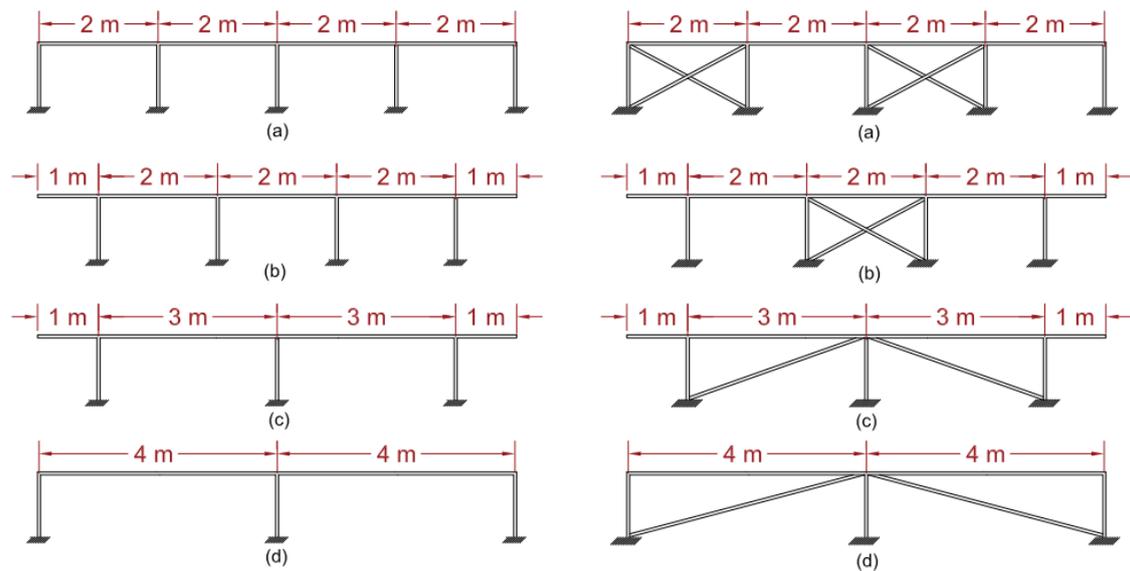


Figure 9. Span lengths and column arrangements for (Type I) building, (a) 2 meters (5 columns), (b) 2 meters (4 columns), (c) 3 meters, (d) 4 meters (Author)

✓ **Type II**

54 PV panels (3 rows of 18 panels) can be installed on the roof of structure Type II. 32

mounting systems are designed to support 54 panels on the roof of this type of building by considering the variables below.

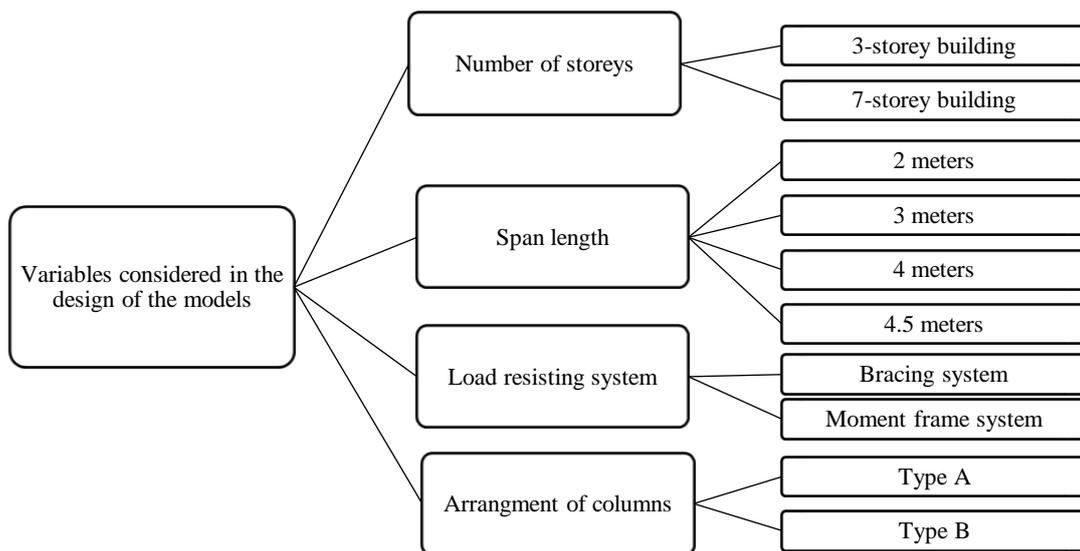


Figure 90. Variables considered for the design of mounting systems for Type II buildings (Author)

The span lengths and column arrangements for these models are shown below:

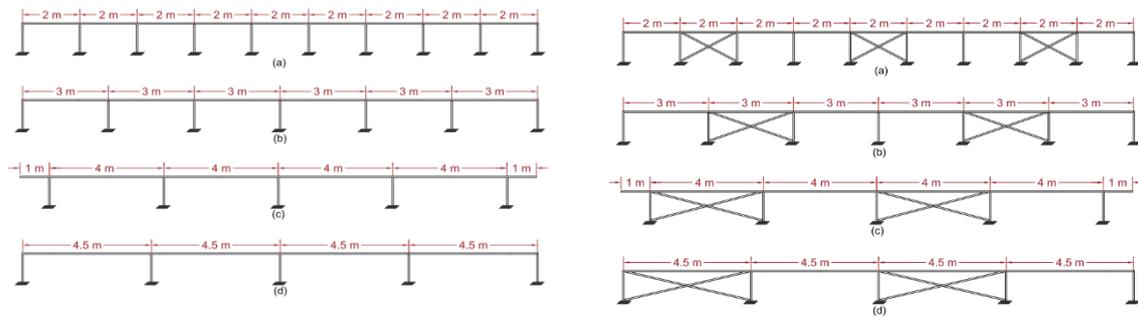


Figure 101. Span lengths and column arrangements for building (Type II), (a) 2 meters, (b) 3 meters, (c) 4 meters, (d) 4.5 meters (Author)

Material Properties

ST37-2 is selected for this study.

Load Combinations

37 load combinations are used in the design of the mounting systems of PV panels and developed in accordance with ASCE 7-16, including dead load, wind loads in two directions, seismic loads in two directions, 5%

Table 1.

Wind loads based on TS498 (Author)

Span length	Wind load direction	Number of storeys	
		3-storey building	7-storey building
For all span lengths	Uplift loads (N/m)	313	430
	Downward loads (N/m)	499	685

Table 2.

Wind loads based on ASCE 7-16 (Author)

Span length (m)	Wind load direction	Number of storeys	
		3-storey building	7-storey building
1	Uplift loads (N/m)	889	1463
	Downward loads (N/m)	592	975
1.5	Uplift loads (N/m)	741	1217
	Downward loads (N/m)	497	809
2	Uplift loads (N/m)	713	1153
	Downward loads (N/m)	478	769
2.5	Uplift loads (N/m)	691	1091
	Downward loads (N/m)	461	729
3	Uplift loads (N/m)	663	1061
	Downward loads (N/m)	442	706
3.5	Uplift loads (N/m)	641	985
	Downward loads (N/m)	428	657
4	Uplift loads (N/m)	591	935
	Downward loads (N/m)	392	625
4.5	Uplift loads (N/m)	542	901
	Downward loads (N/m)	361	602

eccentricity in two directions, and 30% orthogonal load (applied at zero eccentricity) in two directions.

Results and Discussion

Wind loads calculations

The calculated wind loads based on mentioned standards and variables are presented in the following tables.

According to ASCE 7-16, wind loads that rooftop PV panels can withstand depends on a number of factors that can be divided into four categories; geographical condition, surrounding condition, installation location, and mounting system characteristics (e.g. building risk category, basic wind speed in the area, type of structure, exposure category of the area, topographic condition of the area, ground elevation above sea level in desire area, the height of the building, height of the PV panel at the top and bottom edge of the arrays, height of parapet, panel size, length and width of the building, the title angle of PV panels, shape, dimensions and arrangement of PV panel arrays,

and distance between the mounting system and the edge of the roof). While according to TS498, the wind load on various structures depends on wind affected area, net wind pressure which relies on the height from the ground, and aerodynamic load factor which relies on geometrical properties and structural conditions.

Considering different parameters and effects of different geometrical characteristics provides large differences between the results obtained based on each of these standards. In the following figures, the uplift and downward wind loads for 7-storey buildings based on TS498 and ASCE7-16 have been shown.

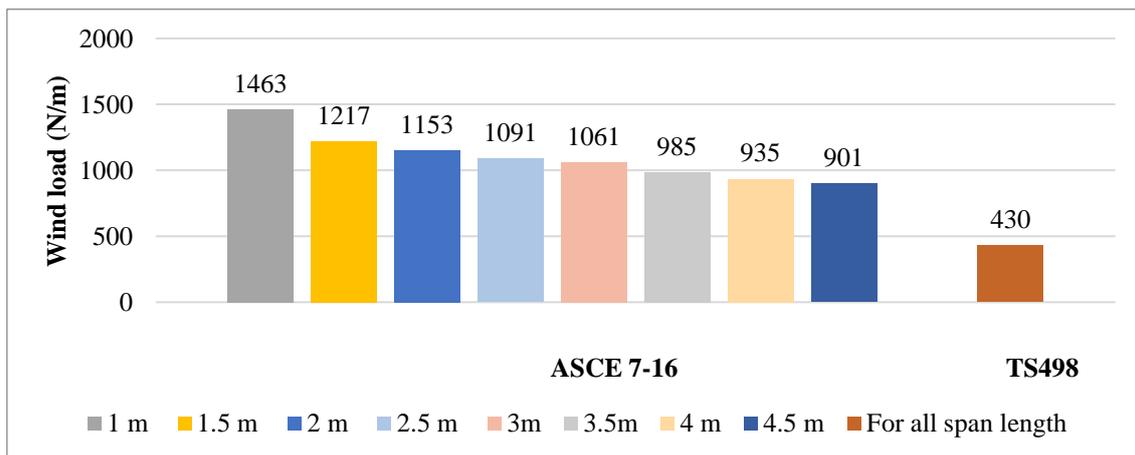


Figure 112. Uplift wind load (7-Storey buildings) (Author)

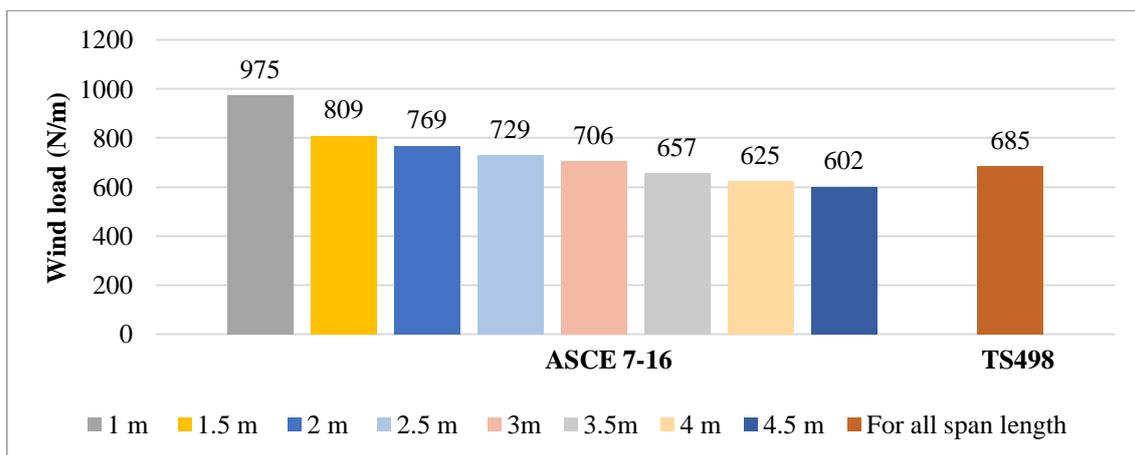


Figure 13. Downward wind load (7-Storey buildings) (Author)

- A comparison between the two standards shows that while TS498 provides equal wind loads for all span lengths of mounting systems, span length is an effective parameter in calculating wind load based on ASCE 7-16.
- The downward wind load on PV panels is significantly less than the uplift load for each building height in accordance with ASCE7-16. In addition, increasing the span length increases the effective wind area, and increasing the effective wind area reduces the nominal net pressure coefficient and thus reduces the wind load. Therefore, wind load decreases with increasing the span length of mounting systems based on ASCE 7-16.
- According to TS498, the downward wind load on PV panels is significantly greater

than the uplift load for any building height, but according to ASCE 7-16, the downward wind load on PV panels is significantly less than the uplift load for any building height and span length.

- Load calculations based on TS498 offer smaller uplift wind loads than ASCE 7-16, while downward wind loads calculated based on TS498 are in the range of ASCE 7-16.
- Mounting systems that support PV panels are often lightweight structures, therefore wind loads can greatly affect them. On the other hand, since PV panel mounting systems have no walls or barriers, winds can easily create uplift loads on the systems and have significant effects on them. TS498 does not provide specialized wind load calculations for rooftop PV panel mounting systems, and wind loads are calculated with the same variables and the same approach on different buildings, including residential, commercial, industrial, and other structures. Therefore, wind loads on rooftop PV panel mounting systems are calculated the same as wind loads for closed structures such as residential buildings, where the uplift wind load is low. As a result, the downward wind load is greater than the uplift wind load when wind loads on the PV panel mounting system are calculated according to this standard. But, ASCE 7-16 provides wind loads on various structures using a variety of approaches and parameters and specifically provides wind load calculation methods for rooftop PV panel mounting systems, therefore the effect of the uplift wind load is well considered in this standard.

Since Cyprus is in the climate change hotspot and the financial losses brought on by wind are significant, it is recommended that ASCE 7-16 be used to calculate the load on rooftop PV systems. This is because ASCE 7-16 appears to be more reliable with regard to the considered parameters and the proposed method for calculating wind load on rooftop PV panels. It is also feasible to develop a loading standard for the loads acting on solar panels in accordance with

the conditions in Cyprus, so that the relevant companies may use it to estimate the wind load on the PV panels and design safety mounting systems for PV panels.

Modeling of mounting systems

Deflection of the beams in mounting systems is highly important due to possible damage to PV panels and the destruction of PV cells. There is a strong relationship between wind load and building height. Increasing the number of storeys, increases both uplift wind loads and downward wind loads in accordance with ASCE 7-16. On the other hand, the Type B arrangement of columns decreases the required materials by 4% to 7%, but when all other parameters are fixed, models with Type A columns arrangement experience less beam deflection than Type B columns arrangement. In addition, increasing the span length increases the effects of column arrangement on the deflection.

It should be noted that increasing the span length affects the effective wind area and reduces the wind load based on ASCE 7-16. Thus, although wind loads decrease by increasing the span length, increasing the span length ultimately increases the deflection of the beams. While all parameters are the same, the mounting systems designed using the moment frame system experience less beam deflection than mounting systems designed using the bracing system, especially in larger span lengths.

Weight of the mounting system

The weight of the rooftop mounting systems of PV panels is of particular importance because these mounting systems are usually installed on the roofs of buildings that have already been constructed and the loads associated with these panels have not been included in the design of the building. As a result, designing a safe and lightweight mounting system is preferred. The weight of each mounting system with different span lengths, different building heights, and different load-resisting systems is shown in the following figures.

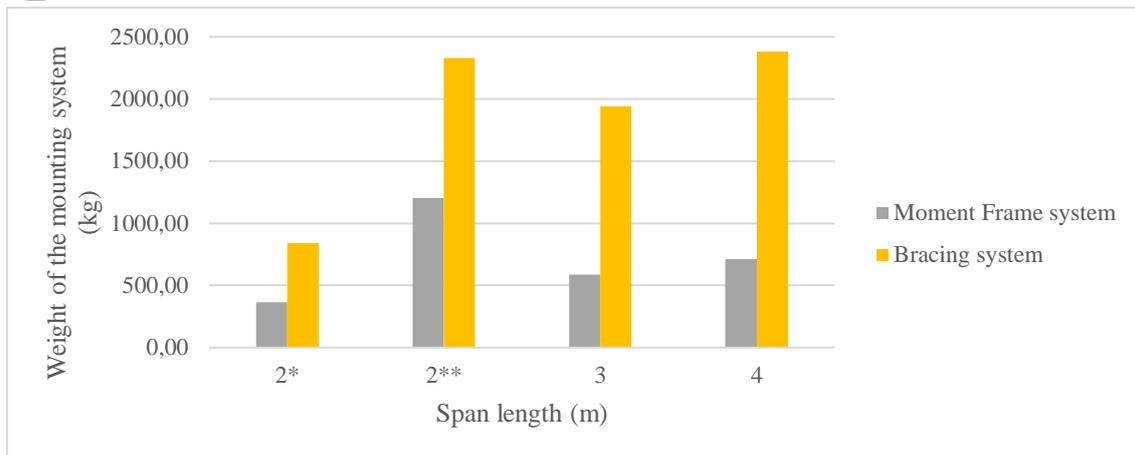


Figure 124. Weight of the mounting system vs. span length (7- storey building/ Type I) (Author)

2*: Mounting system with 2-meter span length and 5 columns

2**: Mounting system with 2-meter span length and 4 columns

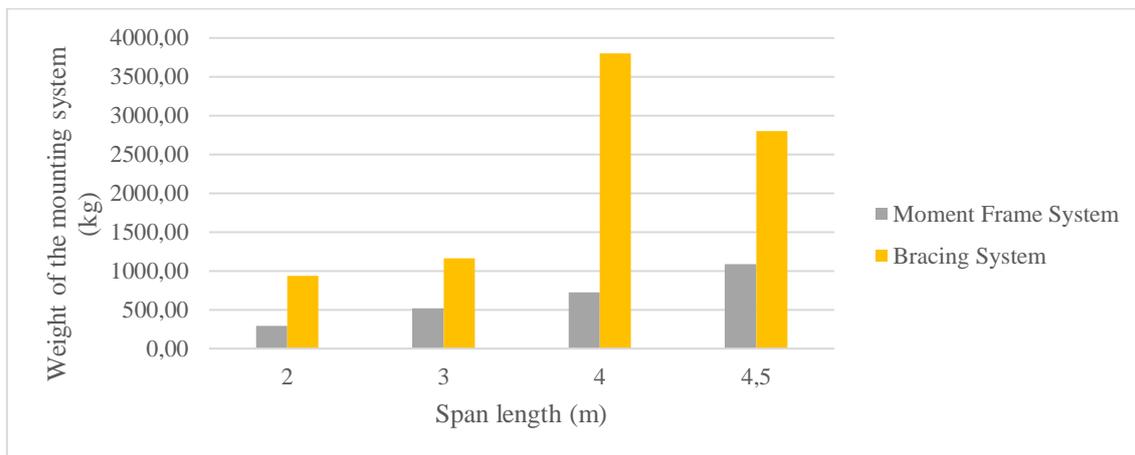


Figure 135. Weight of the mounting system vs. span length (7- storey building/ Type II) (Author)

According to the above figures, the following results can be found:

- Using the moment frame system reduces the weight of the entire mounting system compared to the bracing system.
- Increasing the span length reduces the number of columns, but larger steel frame sections are needed to control the deflection of the mounting system, resulting in an increase in the weight of the entire mounting system.
- Although the use of overhanging beams reduces the number of columns, the section

size increase, and the weight of the entire mounting system increases.

Cost analysis

The cost of various steel profiles was collected from the Northern Cyprus market for this study. Profiles with a length of 6 meters are sold and the costs are related to 6-meter profiles. Therefore, the number of profiles used for each type of mounting system is calculated, and then the cost of materials is calculated by considering the number of profiles.

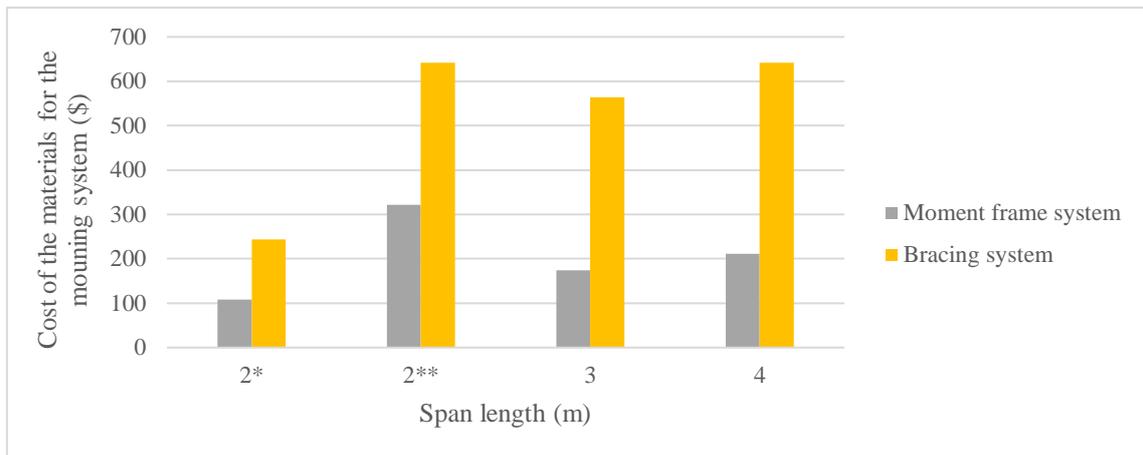


Figure 16. Cost vs. span length (7-storey building/ Type I) (Author)

2*: Mounting system with 2-meter span length and 5 columns

2**: Mounting system with 2-meter span length and 4 columns

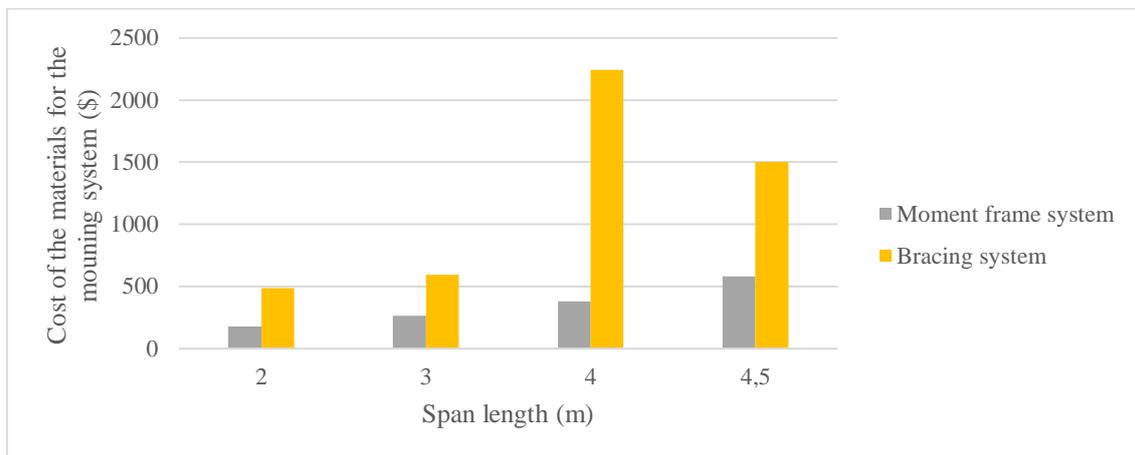


Figure 17. Cost vs. span length (7-storey building/ Type II) (Author)

According to the above figures, the following results can be found:

- When all the parameters are constant, designing the mounting system using the moment frame system is more cost-effective than using the bracing system.
- Increasing the span length reduces the number of columns and the entire length of the material, but due to controlling the deflection of the mounting system, the steel frame section size increases, which results in increasing the cost of the material.
- Although the use of overhanging beams reduces the number of columns, the size of the steel frame section increases, and with increasing steel frame section size, the cost of sections increases significantly.

Aesthetics

PV panel mounting systems are usually installed on the roofs of buildings that have already been constructed and therefore they are usually inconsistent with the architecture of the building, destroying the harmony of the façade, and affecting the aesthetics of the surrounding area. Thus, it is important to minimize the negative impact of rooftop PV panels on the aesthetics of the building and its surroundings.

First, minimize the visibility of the mounting system by placing at least 1 meter between the mounting system and the edge of the roof. Second, control the height of the mounting system and avoid using tall mounting systems. Third, minimize the number of columns and structural elements that result in reducing visual pollution.

In this study, a distance of 1 meter between the mounting system and the edge of the roof is considered. On the other hand, the height of mounting systems is 1.1 meters, which is the highest allowable height of rooftop mounting systems according to Nicosia standards for rooftop PV panels. In addition, it should be noted that mounting systems designed by using moment frame systems are preferred, because there is no bracing and the number of elements and visual pollution reduces, on the other hand, reducing the number of columns is desirable.

Conclusions

Solar panels, especially those installed on the roof, are subjected to a variety of loads throughout their service life, just like any other structure. Ignoring the loads on the mounting systems leads to improper design, which ultimately increases the risk of damage to the mounting systems and PV panels.

Wind loads on rooftop PV panels were calculated based on two different standards; TS498 and ASCE 7-16 in this study. The results show that since ASCE 7-16 specifically provides wind loads on PV panels, especially rooftop-mounted PV panels, the considered variables are accurate and the loads calculated according to this standard seem more reliable. Based on the results of ASCE 7-16 wind load calculations, uplift wind loads on PV panel mounting systems are 50% greater than downward wind loads, which have remarkable effects on the design of rooftop mounting systems.

The effects of all parameters on the deflection of the beams of the mounting system, the cost and weight of the mounting systems, and the aesthetics of the building have been studied, evaluated, and compared. According to the findings of this study:

- Mounting systems designed with a moment frame system outperform those developed with a brace system in terms of beam deflection, size of steel frame sections, weight and cost of the complete mounting system, and aesthetics,
- Placing columns in the corner of the mounting system (Type A of column arrangement) provides better support for the beams, which reduces the deflection of the beams.
- Avoiding overhanging beams leads to a reduction in deflection of the beams and the steel frame sections, cost, and structure weight of the mounting system.

- Beam span length should be proportional to the weight and cost of the structure. In fact, although the number of columns decreases with increasing beam span lengths, a larger steel frame section is required to control the deflection of the beams, which eventually leads to an increase in the cost and weight of the mounting system. In other words, increasing the span length of the beams and reducing the number of columns reduce the length of the desired material, but require larger steel frame sections, which results in heavier and costlier mounting systems.
- The appearance of mounting systems, particularly those installed in urban areas and on building roofs, is critical and special considerations must be made to maintain and ensure the aesthetics of buildings and their surroundings. Thus, it is preferable to use a moment frame system and reduce the number of columns from an aesthetic point of view, while a distance of 1 meter between the mounting system and the edge of the roof and the allowable height of the mounting system is considered.

In light of the findings, optimal installation structures can be developed to limit damage to PV panels, mounting systems, and roofs as a result of natural disasters. Furthermore, the findings of the study have beneficial effects on reducing the negative effects of mounting systems on buildings and urban environments, improving PV panel performance, and increasing the willingness of residents to use PV panels.

Although the generation of power by using PV panels minimizes the reliance on non-renewable resources, contributes to the production of clean energy, and has fewer negative environmental consequences, considerations must be made to ensure system efficiency and optimal performance, maintain the system and individual safety, prevent financial losses, and limit the side effects.

Bibliographic references

- Agencies, D. S. W. (2020, November 21). Tornadoes hit northern parts of Turkish Cyprus, Damage Power Grid. Daily Sabah. Retrieved May 10, 2022, from <https://www.dailysabah.com/turkey/tornadoes-hit-northern-parts-of-turkish-cyprus-damage-power-grid/news>
- American Society of Civil Engineers (2017) Minimum Design Loads for Building and Other Structures ASCE/SEI 7-16. Reston, VA, USA: American Society of Civil Engineers. ISBN 9780784479964

- Barcikowska, M. J., Kapnick, S. B., Krishnamurty, L., Russo, S., Cherchi, A., & Folland, C. K. (2020) Changes in the future summer Mediterranean climate: contribution of teleconnections and local factors. *Earth Syst. Dynam.*, 11, 161–181, <https://doi.org/10.5194/esd-11-161-2020>
- Deryng, D., Conway, D., Ramankutty, N., Price, J., & Warren, R. (2014) Global crop yield response to extreme heat stress under multiple climate change futures. *Environ. Res. Lett.*, 9, 034011, <https://doi.org/10.1088/1748-9326/9/3/034011>
- Fan, X., Miao, C., Duan, Q., Shen, C., & Wu, Y. (2021). Future climate change hotspots under different 21st century warming scenarios. *Earth's Future*, 9(6), e2021EF002027.
- Ferrarezi, R. S., Rodriguez, K., & Sharp, D. (2019) How historical trends in Florida all-citrus production correlate with devastating hurricane and freeze events, *Weather*, 75, 77–83, <https://doi.org/10.1002/wea.3512>
- Grechkina, O., Korniyushkina, A., Naruzhnaya, E., Tonkov, E., & Turanin, V. (2019). El lenguaje jurídico como medio de comunicación intelectual y jurídico. *Revista Científica Del Amazonas*, 2(3), 32-38. Recuperado a partir de <https://revistadelamazonas.info/index.php/azonas/article/view/15>
- Giorgi, F. (2006). Climate change hotspots. *Geophysical Research Letters*, 33(8), L08707. <https://doi.org/10.1029/2006gl025734>
- Hochman, A., Marra, F., Messori, G., Pinto, J. G., Raveh-Rubin, S., Yosef, Y., & Zittis, G. (2022). Extreme weather and societal impacts in the eastern Mediterranean. *Earth System Dynamics*, 13(2), 749-777.
- Kassem, Y., Al Zoubi, R., & Gökçekuş, H. (2019a). The possibility of generating electricity using small-scale wind turbines and solar photovoltaic systems for households in Northern Cyprus: a comparative study. *Environments*, 6(4), 47.
- Kassem, Y., Gökçekuş, H., & Güvensoy, A. (2019b). Solar Potential assessment in Near East University, Northern Cyprus. *Int. J. Eng. Res. Technol*, 12, 3061-3069.
- Li, S., Mao, D., Li, S., Wang, Q., Yang, Q., Chen, Y., & Zhou, S. (2022). Wind load characteristics of photovoltaic panel arrays mounted on flat roof. *Engineering Research Express*, 4(1), 015027.
- Moravej, M., Chowdhury, A. G., Irwin, P., Zisis, I., & Bitsuamlak, G. (2015). Dynamic effects of wind loading on photovoltaic systems. In 14th. International Conference on Wind Engineering (ICWE14), Porto Alegre, Brazil.
- Naeiji, A., Raji, F., & Zisis, I. (2017). Wind loads on residential scale rooftop photovoltaic panels. *Journal of Wind Engineering and Industrial Aerodynamics*, 168, 228-246.
- Online News for North Cyprus. (2020, November 22). Emergency meeting held to address storm damage. *North Cyprus News*. Retrieved May 10, 2022, from <https://www.lgcnews.com/emergency-meeting-held-to-address-storm-damage/>
- Okoye, C. O., & Abbasoğlu, S. (2013). Empirical investigation of fixed and dual axis Sun tracking photovoltaic system installations in Turkish Republic of Northern Cyprus. *Journal of Asian Scientific Research*, 3(5), 440-453.
- Özşahin, E. (2012) “Storm risk sensitivity analysis in cyprus using GIS,” *Journal of Turkish Studies*, Volume 7 Issue 4-II (7), pp. 2627–2642. Available at: <https://doi.org/10.7827/turkishstudies.3882>
- Reşatoğlu, R., Mirata, T., & Karaker, L. (2018). Earthquake and wind load effects on existing RC minarets in north Cyprus. *International Journal of Engineering & Technology*, 7(4), 3074-308523
- Sauca, A. C., Milchiş, T., & Gobesz, F. Z. (2019). Wind loading on solar panels. *Technical Scientific Publications [Műszaki Tudományos Közlemények]*, 10(1), 73-78.
- Sioutas, M., Doe, R., Michaelides, S., Christodoulou, M., & Robins, R (2006). “Meteorological Conditions Contributing to the Development of Severe Tornadoes in Southern Cyprus”. *Weather*, 61(1), pp 10-16,
- Turkish Standard (1997). *Turkish Standard Institute, The Calculation Values of Loads used in Designing Structural Elements*. Ankara, Turkey.
- T-Vine (2020, November 20). Freak weather, including a tornado, inflicts widespread damage across North Cyprus. Retrieved May 10, 2022, from <http://www.t-vine.com/freak-weather-including-a-tornado-inflicts-widespread-damage-across-north-cyprus/>
- WEC resources solar (2013), JJ1264 - world energy council. (n.d.). Retrieved May 10, 2022. https://www.worldenergy.org/assets/images/imported/2013/10/WER_2013_8_Solar_revised.pdf
- Zachariadis, T. (2012). Climate change in Cyprus: Impacts and adaptation policies. *Cyprus Economic Policy Review*, 6(1), pp. 21-37

DOI: <https://doi.org/10.34069/AI/2022.56.08.19>

How to Cite:

Andrushchenko, V., Yershova-Babenco, I., Kozobrodova, D., Seliverstova, A., & Lysakova, I. (2022). Digitalization of society: implications and perspectives in the context of the psycho-dimensionality of social reality / psychosynertics. *Amazonia Investiga*, 11(56), 183-195. <https://doi.org/10.34069/AI/2022.56.08.19>

Digitalization of society: implications and perspectives in the context of the psycho-dimensionality of social reality / psychosynertics

ЦИФРОВІЗАЦІЯ СУСПІЛЬСТВА: НАСЛІДКИ ТА ПЕРСПЕКТИВИ У КОНТЕКСТІ ПСИХОВІМІРНОСТІ СОЦІАЛЬНОЇ РЕАЛЬНОСТІ / ПСИХОСИНЕРТИКА

Received: June 9, 2022

Accepted: October 10, 2022

Written by:

Andrushchenko V.⁸³<https://orcid.org/0000-0002-7997-5913>**Yershova-Babenco I.**⁸⁴<https://orcid.org/0000-0002-2365-5080>**Kozobrodova D.**⁸⁵<https://orcid.org/0000-0001-8882-2364>**Seliverstova A.**⁸⁶<https://orcid.org/0000-0001-8927-6334>**Lysakova I.**⁸⁷<https://orcid.org/0000-0002-4531-6514>

Abstract

The purpose of this article is to analyze the process of «digitalization» of modern society from the point of view of psychosynergistic approach, psycho-dimensionality of social reality as subjective association of people. The concept of «digitalization» is used mainly in scientific and philosophical publications where it is presented as a modern «world trend». The concept of «digitization» is associated with profound changes in the social life of a modern person who in the near future will be in a fully digital world where every aspect of his life will be deeply influenced by digital data: how people will communicate and relate to each other; how they will work, learn, stay healthy and participate in politics and the economy. The introduction of digital technologies promises, on the one hand, enormous benefits for better health, more efficient social mobility, more efficient use of energy, more business and more prosperous companies, etc. But it is also obvious that such a fundamental social transformation will have certain complexities of an individual, intrapsychic nature, i.e. that unexpected challenges

Анотація

Метою статті є аналіз процесу «цифровізації» сучасного суспільства з точки зору психосинергетичного підходу, психовимірності соціальної реальності як суб'єктивного об'єднання людей. Поняття «цифровізація» вживається переважно в науково-філософських публікаціях, де воно подається як сучасний «світовий тренд». Поняття «цифровізація» пов'язане з глибокими змінами в соціальному житті сучасної людини, яка в недалекому майбутньому опиниться в повністю цифровому світі, де цифрові дані глибоко впливатимуть на кожен аспект її життя: як люди спілкуватимуться та їх стосунки один до одного; як вони будуть працювати, навчатися, залишатися здоровими та приймати участь у політиці та економіці. Запровадження цифрових технологій обіцяє, з одного боку, величезні переваги для покращення здоров'я, ефективнішої соціальної мобільності, ефективнішого використання енергії, збільшення бізнесу та процвітання компаній, тощо. Але також очевидно, що така фундаментальна соціальна трансформація

⁸³ Doctor of Philosophy, Academician of the Academy of Pedagogical Sciences of Ukraine, rector of the National Pedagogical University names M.P. Drahomanov, Ukraine.

⁸⁴ Doctor of Philosophy, professor, National Pedagogical University names M.P. Dragomanov, Ukraine.

⁸⁵ PhD in Philosophy, psychologist-consultant of CC «Alfalogia», Ukraine.

⁸⁶ PhD in Philosophy, Lecturer, International Humanitarian University, Ukraine.

⁸⁷ PhD in Philosophy, Assistant Professor, National Pedagogical University names M.P. Dragomanov, Ukraine.

and problems that did not exist before have already arisen and may arise further. The main theoretical base of the research are scientific and philosophical publications devoted to the problem of «digitization» and its influence on social life in English and Ukrainian languages. In the works of Ukrainian researchers, attention is mainly paid to economic and technological aspects of «digitalization», but we propose to solve this problem with transdisciplinary approach in which the efforts of scientists from different fields of knowledge (humanities, doctors, psychologists, representatives of computer sciences, etc.) will find general recommendations and regulations, which will help to adapt the person in new social conditions «digital society». One such transdisciplinary area could be psychosynergetics, as a post-non-classical area of knowledge that implements synergistic and other ideas.

Key words: digitalization, digital society, digital transformation, psychosynergetics, psycho-dimensionality.

Introduction

The main criterion of the social level of modern society, which is defined as a «digital society», is the level of development and introduction of digital technology. It continually and each time dramatically change the social reality. A qualitatively new stage of social development is at the same time global in nature and implies the complete transformation of society through digital technologies based on networks at different levels.

Such networks, in turn, collect, process, generate and distribute information through the following levels of global telecommunications networks. Therefore, in the context of psychosynergetics and psycho-dimensional social reality «digital society» can be characterized as a network «non-human society», rather than simply «information society», because in most cases, the decision is made by an algorithmized electronic digital device, not by the person himself. Such a decision is devoid of emotional, personal subjectivity and other peculiarities of the person and his communication («human factor»).

The construction of the «digital society» depends mainly on the «digital economy», which is today assessed as one of the emerging concepts of the

приведе до певних складностей індивідуального, внутрішньопсихічного характеру. Тобто, несподівані виклики і проблеми, яких раніше не було, вже виникли і можуть виникати і далі. Основною теоретичною базою дослідження є науково-філософські публікації, присвячені проблемі «цифровізації» та її впливу на суспільне життя на англійській та українській мовах. У працях українських дослідників, увага приділяється переважно економічним та технологічним аспектам «цифровізації», але ми пропонуємо вирішувати цю проблему трансдисциплінарним підходом, у якому зусиллями науковців з різних галузей знань (гуманітаріїв, лікарів, психологів, представників комп'ютерних наук, тощо), буде знайдено загальні рекомендації та норми, які допоможуть людині адаптуватись до нових соціальних умов «цифрового суспільства». Одним із таких трансдисциплінарних напрямків може бути психосинергетика, як постнекласична галузь знань, яка реалізує синергетичні та інші ідеї.

Ключові слова: цифровізація, цифрове суспільство, цифрова трансформація, психосинергетика, психовимірність.

economic development of any society, including Ukrainian. The concept of the «Digital Economy» first appeared in Japan in the 1990s., but in the West the term became known, thanks to Don Tapscott's book «The Digital Economy: Promise and Peril in the Age of Network Intelligence» (Tapscott, 1996). It addressed the question of how the Internet will change the conduct of business around the world, what a new «digital» civilization will be. The idea of the «digital economy» comes from a concept known since the 1960s: initially it was the theory of D. Bell about «information economy» (Bell, 1973), later transformed into the concept of «network society» or «network economy» M. Castells (Castells, 2000). In the years since the introduction of the concept of the «digital economy», many researchers have made adjustments to the definition of this category. The definition proposed in Savchuk's thesis can be taken as a basis: «The digital economy is a set of relationships that evolve in the process of production, distribution, exchange and consumption, and is based on online technologies and aims to meet the needs for life's benefits, which in turn, implies the formation of new ways and methods of business management and

requires efficient state regulation» (Savchuk, 2021, 53).

Today «digitalization» of the economy and society as a whole has become one of the priority tasks that are being solved at the state level as well. Since 2019, we have been implementing the project «Digital State», which aims not only to create the best conditions and opportunities for online access to all public services, but also to build a deeply integrated single digital system of government (Diya, 2019). Moreover, the need to modernize Ukraine's economy and the new strategic goals and ways of developing it were elaborated in two fundamental concepts: «Ukraine-2030». The strategy of change of the future » (National Institute of Strategic Studies, 2020), which is formulated in the National Institute of Strategic Research, and «Ukraine 2030E - a country with a developed digital economy» from Ukrainian Institute of the Future (Ukrainian Institute of the Future, 2021). The last document notes, that in Ukraine it is necessary for successful future development realization of «digital society», i.e. introduction of digital technologies in all spheres of life: from interaction between people to industrial production, from household goods to children's toys, clothing, etc. This is the transition of biological and physical systems to cyberbiological and cyberphysical (physical and computational) connections. Transition of activity from real world to virtual world (online)» (Ukrainian Institute of the Future, 2021).

This is a complete «digital transformation» of the entire Ukrainian society and its main spheres: digital transformation concerns economic and social consequences of digitalization. Data is at the heart of the digital transformation. Today, the capacity to receive and manage data is growing rapidly, thanks to the spread of devices, services and sensors throughout the economy of the State and society. This phenomenon has been described by such terms as Big Data and Internet of Things, IoT («Internet of things»), Blockchain Technology, etc. Thus, the problem of «digital society» for Ukraine is dealt with through the development of «digital economy», which is aimed ultimately at economic growth, improvement of the level of well-being of the society, as well as improvement of the living conditions and self realization of the person. In other words, today it is meaningful and its socio-philosophical understanding is relevant.

In the West the process of «digitalization», from the economic sphere to the sphere of personal life of a person, is subjected to thorough research and

comprehensive study by various scientists, both sociologists, psychologists and philosophers, as well as representatives of the business world and IT-technologies. The general trend of these studies is the definition of «digital» as a complex but irreversible process in which both positive and negative aspects of the large-scale introduction of «digital technologies» into the life of a person are highlighted.

The purpose of this article is to analyze the process of «digitalization» of modern society from the point of view of psychosynergistic approach, psycho-dimensionality of social reality as subjective association of people. In order to achieve this goal, it is necessary to solve the following tasks: 1) to identify the main meanings of the term «digital society» and its synonyms «didzhitalizatsiya», «didzhitizatsiya», «otsifrovka»; 2) to consider the main vector of development «digital» society and to define the essential approaches to its conception; 3) to identify positive and negative aspects of the influence of «digital» technologies on the mental health and psycho-social life of a person. Some negative aspects are already visible and may pose a threat to the life and health of society in the future, based on psycho-dimensionality as a determinant of the quality of the human being (personality), world view and methodology represented by the category of integrity, conception «brain-psyche(mind/consciousness ...)», conceptual model «whole-in-whole» (Yershova-Babenko, 2017; 2019a).

Theoretical basis

The main theoretical base of the research are scientific and philosophical publications devoted to the problem of «digitization» and its influence on social life in English and Ukrainian academic researches. The relevance of the topic of «digital» of modern society in the West today is not in doubt. Interest in this topic has grown gradually since the last decades of the last century, i.e. with the spread of new information technologies, the scope of which is growing steadily and this exponentially increasing development, has actually led to the creation of the term «digitalization». Meanwhile, as noted by the authors of the article «Digitization: Literature Review and Research Agenda» (Reis et al, 2020), the theoretical basis of «digitization» has not yet been sufficiently investigated (Reis et al., 2020, 452). There is not yet a «clear definition of the conceptual domain, nor a short bibliometric analysis of each term» that is used by different researchers when considering the «digital» process, because researchers from

different fields of knowledge are characterized differently (Reis et al., 2020, 447-448).

In Ukraine the concept of «digitalization» appeared relatively recently in scientific and philosophical publications, normative documents and mass media as a translation of the English term «digitalization», which, however, allows also a number of synonyms («didzhitalizatsiya», «otsifrovka», «didzhitizatsiya» etc.). Therefore, it is important for domestic philosophy to distinguish them in terms of terminology because, despite their common origin, there is a marked difference between them. Moreover, the authors of the above-mentioned article admit that they used only English-language sources, excluding all others (Reis et al, 2020, 452). Therefore, our research is aimed at filling a gap on this topic regarding Ukrainian-speaking publications.

Particular attention is paid in the Western scientific literature to the analysis of the consequences of «digitalization» on the social life of the person and society, which, as today most researchers believe, are diverse and versatile (Lanier, 2013; Mejias, and Couldry, 2019; Plesner, and Husted, 2020; Zuboff, 2019), ect. Moreover, some Western authors state that there are negative trends of «digitalization», some of which are of serious concern, as they are little visible to researchers (Tritin-Ulbrich, Scherer, Munro & Whelan, 2021, 9).

The Ukrainian-language philosophical and scientific literature also addresses issues related to positive and negative influences of «digitalization», with special attention paid to the latter (Danyl'yan, 2020). For example, some researchers believe that at present «digitalization» in Ukraine is carried out by the authorities inefficiently and inconsistently, which discredits her idea as a whole (Holionko & Ivanova, 2017). Criticism of the pace and directions of «digital» in Ukraine is also devoted to the publications of I.V. Dul's'ka, N.G. Holionko, T.A. Soboleva and others (Dul's'ka 2019; Holionko, Soboleva, 2021). The researchers also pay attention to the regulatory and legal nature of the introduction of «digital technologies» (Digital and Human Rights, 2021; Petryshyn & Gilyaka, 2021). The issues of «digital education» are dealt with in the works of Victor P. Andrushenko, who proposes the term «informatization of education», referring to the introduction of e-learning, cloud technologies, etc. in the education (Andrushchenko, 2021, 416-465).

On the other hand, the philosophical analysis of «digitization», which is represented in the works of T. Burlai, A. Hrytsenko, I. Yershova-Babenko, A. Litvinov, O. Pishchulina, A. Halaspis shows that the processes of introducing «digital» into all spheres of a person's life have a noticeable influence on his or her identity, mental health and development because «the person becomes a bio-techno-social being, substantially changing the parameters of life activity, creating not only previously unseen possibilities of progress, but also generating and increasing risks of instability» (Hrytsenko & Burlai, 2020, 28).

In the philosophical literature, the problems of «digital» are considered as problems of development of «digital»/ «information» culture which has qualitatively different from the previous type of culture and sets new requirements to the person (Lugovsky O, 2019; Litvinova, 2016). Also researchers turn to different aspects of understanding new characteristics and qualities necessary for a person to live in «digital culture». In this connection the concept of «digital person» appears (Goncharenko, 2019; Dz'oban', 2021). «In the Ukrainian language the word «digital person» is a neologism, synonyms, which are the concepts «information person» (homo informaticus) and «network person» (Dz'oban', 2021, 13). The main direction of these studies is related to the formation of personality in «information/virtual culture»: «digital person» - is a new stage of human development as the main object and subject of information relations in the information society in the last stages of its development» (Dz'oban', 2021, 13).

Thus, at the present time in Ukraine there is a lack of research works that address issues of social and philosophical understanding of the consequences of «digitization» for a person, his qualities and psycho-social aspects, which is undergoing significant changes in the new environment. The appeal to psycho-synergetics, in which a new theoretical model of the psyche is presented, is therefore justified and relevant. In general, the psycho-synergistic approach is aimed at solving the problems of the human ecology, its psyche and its adaptation to modern social changes and transformations. The author of the idea of synergy as a general scientific program and the founder of the Ukrainian Synergistic Society is I. S. Dobronravova (Dobronravova, 1990; 2004), the founder of psycho-synergetics and the founder of the Odessa branch of society, Scientific-philosophical and psychological synergistic

school is I.V. Yershova-Babenko (Yershova-Babenko, 2020). Within the framework of psycho-synergetics, as a post-non-classical field of research that develops at the intersection of psychology and synergetics, it is not only possible to undertake theoretical and methodological analysis related to the identification of a particular social-related phenomenon philosophical problem, but also practical recommendations to solve it.

Methodology

In the article the logical-historical approach was used to analyze the concept of «digital» and synonymous to it concepts. In addition, it presents the latest holistic approach to the analysis of human psyche as indivisible unity, natural integrity, expressed by the concept of «brain-psyche (mind/consciousness...) and the model «whole-in-whole». An integrated approach based on general scientific and philosophical methods of research (analysis, synthesis, generalization, synergis, etc.) was also used to identify the main ways of developing «digital society», its understanding and understanding from the standpoint of social-philosophical analysis. Systemic and synergistic approaches were used to analyze various aspects of the influence of «digital» on the person and his individual personal, intrapsychic and social life. A transdisciplinary approach based on the measurement of the object of the study has also been used, which has made it possible to present the phenomenon of «digital society» as a whole process in different dimensions (intrapsychic and extrapsychic) and taking place at different levels (social and personal).

Results and Discussion

The concept of «digitalization» is associated with profound changes in the social life of a modern person who in the near future will be in a completely digital world, or «digital-society» (Yershova-Babenko, 2020) where every aspect of his life will be profoundly affected by digital data: how people will communicate and relate to each other; how they will work, learn, stay healthy and participate in politics and the economy. The introduction of digital technologies promises, on the one hand, enormous benefits for better health, more efficient social mobility, more efficient use of energy, more business and more prosperous companies, etc. But it is also obvious that such a fundamental social transformation will have certain complexities of an individual, intramental nature, i.e. that unexpected challenges

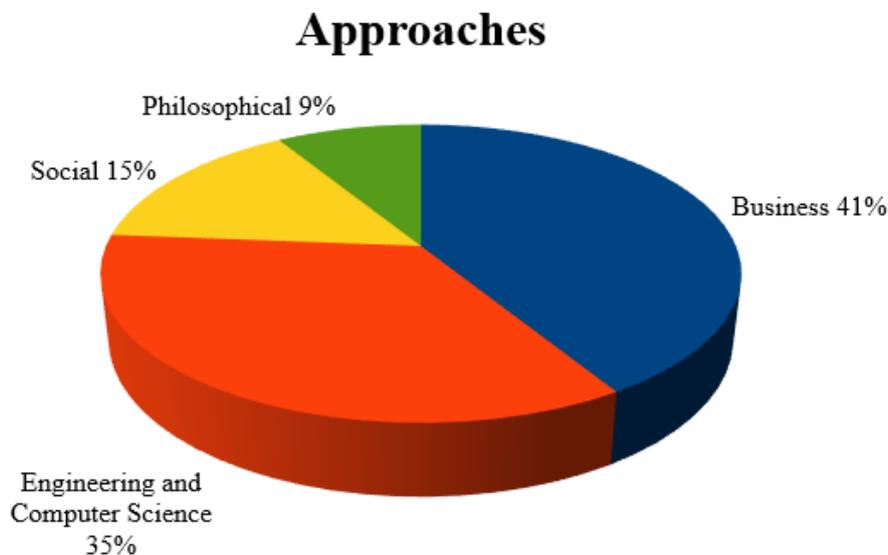
and problems that did not exist before have already arisen and may arise further. For example, differences between individual social groups and individuals in access to and control over digital data (the Internet) are already evident. Also, undoubtedly, that there are problems of a general philosophical nature that are related to a new understanding of nature and qualities of man, his place in the «digital» world: what it means to be human when we share the world with complex artificial intelligence; how the human psyche can cope with a huge amount of data, how to find among them reliable and reliable knowledge and many others.

According to R. Romansky, digitalization includes the following spheres of activity of the society and the person: e-access, e-society, e-policy, e-democracy, e-voting, e-inclusion (Romansky, 2021). Thus, the introduction of digital technologies may eventually lead to a high-tech and robotic society in which artificial intelligence plays a very high role and in which many of the basic characteristics of today's society are changed. As noted in article I.V. Yershova-Babenko: «at the turn of 2021 of the 21st century... It is clear that a completely different, new scientific picture of the world is emerging. It does not question the model of nature ... A fundamentally qualitatively different component - «digital», symbolizing non-living, non-biological» (Yershova-Babenko, 2020, 53) quickly entered it. As a result, a digital «civilization» emerges as qualitatively fundamentally new and substantially different from all previous types of civilizations (Yershova-Babenko, 2020, 57). This also means that at present the process of «digitalization» of the economy, society and culture, which is proposed to be carried out both on a global scale and at the level of individual position, is still at an early stage, and its development will take place in the coming decades.

Therefore, the use of the concept of «digital» needs to be clarified and conceptualized. Today in scientific and philosophical literature there is no common understanding of such phenomenon as «digitalization», «digital transformation», and even «digital economy», but there are many interpretations of them, represented by different approaches and fields of knowledge: technological (engineering), economical, social and philosophical approaches (Rudenko, 2021, 9). Each of them presents a different understanding of the «digitalization» process and highlights its significant sides and aspects, and analyses the characteristics of the «digital society». Our study compares the understanding

of the «digital» process and its consequences by analysing scientific publications on these key

approaches. We end up with the following pattern.



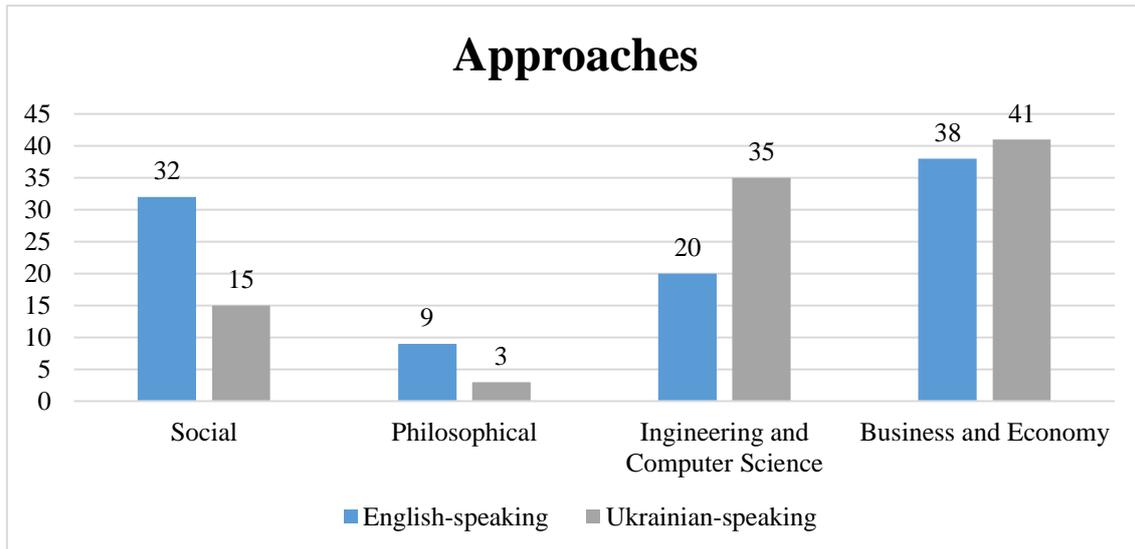
Dia. 1. Approaches to research of concept of «digitization» in scientific publications in Ukraine for 2019-2021

Highlighting these four approaches, in which today's issues of «digitalization» are actively discussed, shows that the largest number of scientific publications are in the «economic sciences and business», in which «digital economy» is used in addition to the concept of «digital economy» and «digital transformation» (33 out of 80). Next in «engineering and computer sciences» the issues of transition to digital technologies and the technologies themselves are actively discussed, which constantly increase and expand depending on the scope of application. These sciences contain descriptions of technologies and possible ways of developing them, with an emphasis on their effectiveness and positive effects (28 out of 80). A much smaller number of publications are in the social and legal sciences (15 out of 80).

The main topic of discussion in this sphere is the consequences of «digitalization» in the legal field, since this becomes a completely new and unexplored area when legal relations, actions and

subjects (including state authorities and administration) virtualization, i.e. from the realm of physical reality to the realm of virtual reality. Finally, the philosophical approach discusses anthropological consequences of «digitalization» affecting the identity, mental life and self-development of a person, which changes in the process of interaction with «non-human» devices. However, the small number of publications on this topic (7 out of 80) indicates that nowadays in Ukraine attention is focused on practical effects of «digital» rather than its influence on the psyche and health of the person.

The data in this diagram can be compared with the data given in the aforementioned survey «Digital: Literature Review and Research Agenda» (Reis et al, 2020) for English-language sources. As a result, we find that in general the distribution of the relationship between different sciences in the study is similar, except for some differences.



Graph 1. Comparison of research on the problem of «digital» in Ukrainian-language and English-language publications for 2019-2021.

Quoted from Reis, J., Amorim, M., Melão, N., Cohen, Yu., & Rodrigues, M. (2020). Digitalization: A Literature Review and Research Agenda, p. 449

The English-language publications present a more rigorous differentiation of the fields of knowledge that investigate «digital» problems, i.e. each area is divided into more specific and separate disciplines. However, the small number of publications on this topic (7 out of 80) indicates that nowadays in Ukraine attention is focused on practical effects of «digital» rather than its influence on the psyche and health of the person. But the sector of social knowledge in English-language publications (32%) far exceeds the number of Ukrainian-language publications (15%), which shows that in Ukraine social issues of influence of «digital technologies» are today paid little attention. With regard to the Philosophical approach, we see a difference in numbers in favor of Ukraine: English language (3%), Ukrainian language (7%), but there is an important qualitative difference in what is relevant to the field of philosophy in Ukraine and in the West. In addition, in Western sources there are disciplines which in Ukraine do not address the problems of «digital» - it is the sciences about ecology and environment. While in the West they actively investigate the problem of «digitization» (7%).

In general, in terms of the meaning of the term «digitalization», it is necessary to refer to the sections of the Gartner Glossary dictionary devoted to new technologies, it is possible to distinguish two basic terms related to «digital»: «digitalization» means the use of digital technologies to change the business model and provide new opportunities for income generation and creation of value; it is the process of

transition to digital business», as well as «digitization» - «otsifrovka», the transformation of different kinds of information into «digital» form (Gartner (n/d)).

Thus, it is possible to talk about two processes that express differently the process of using «digital technologies» in recent decades, and about the lack of attention to human processes in the course of digitalization. Thus, the first of the named - «otsifrovka»/ «digitization» is the beginning of the introduction of digital technologies in wide circulation and is connected only by processing of various information, which needs to be translated into a new format for its transfer and storage. In fact, it is only a narrow field of digital application, with which experts are mostly familiar, but which, one way or another, is still evolving. The second term of named - «digitalization»/ «tsifrovizatsiya» emerged much later and envisaged initially the transition to the introduction of «digital technologies» into business and entrepreneurship. But as technology developed, it became clear that a global penetration of «digital» in all spheres of society and human life became inevitable.

In this context, we can talk about two stages of «digital transformation» of modern society: 1) emergence and implementation of «digital technologies»; 2) global «digital transformation» of society. With regard to the latter process, the term «digitalization» arises, since at the previous level it was only information processing. So to this second stage is the concept of

«digitalization» and its synonym «tsifrovizatsiya». The first term occurs mainly in Ukraine in normative documents and in mass media publications, where it is mentioned about «digitalization» as a process of transition to «digital society», etc. (about «digital transformation» of economy, public service, education, medicine, law, cultural, etc.) (Prokhorov, 2019). Once again, we see that in this process there is a lack of attention to issues that are human, human-dimensional and psycho-dimensional - to the impact on mental health, personal and value transformations (the value of the human rather than information-digital-technological, business-economic-model).

The concept of «digitalization» is used mainly in scientific and philosophical publications where it is presented as a modern «world trend» - «digitization is the cause of global social transformation... is the logical stage of development of society, which in the field of economic relations is expressed in the concept of Industry 4.0. Increasingly, the strategic plans of the countries mention the need to build a digital society, development of the digital economy, which features virtualization of all social-economic, educational, social and political processes» (Sokolenko, 2019, 167). Thus, speaking of «digital» it is understood that its outcome will be the construction of a new type of society which is defined as «digital society», when the lack of emphasis on actual human values, human-society (Yershova-Babenko, 2020).

In Ukrainian philosophical literature there are different positions regarding the development of this new type of society. Thus, A.V. Halaspis notes that in the new society «otsifrovka of existence» is taking place, meaning «victory over space, since «digital» is indifferent to territory» (Halaspis, 2006). Some authors consider that the digital environment itself has no significant impact on human development and psyche, it is simply a tool that expands the human functionality and effect of using this «tool» depends on the person himself - whether it will be beneficial to him or not (Bochelyuk, 2020, 104). Other authors, on the contrary, see significant challenges and risks to the biological nature of man in case he is completely immersed in «digital-social». Thus, O. Litvinov warns that it is necessary to «abstain from magic «digital», power of algorithms and regulations and understand ethics «digital», to evaluate with all responsibility digitalization not as a chance of accelerated development through immersion in virtual reality, and specifically as a challenge to

the natural, biological habitat of man as the basis of possible destruction of biological and social civilization» (Litvinov, 2020, 170). His views are supported by A. Hrytsenko, T. Burlai, who note, that «the technique penetrates the human biological body not only as artificial organs, but also as a carrier of information and a key to information systems. In turn, biological processes become components of technical-technological processes of production» (Hrytsenko & Burlai, 2020, 28-29). Hence, in the end the question arises: «artificial intelligence will become a servant or master of man?».

Indeed, regardless of the research specifically devoted to the «digital society," different authors raise the question of the impact of technology on man and his ability: how should he change to adapt in a new society, is man ever ready to live in the «digital» world?

In this aspect there are several basic positions: first, part of the researchers believe that «digital society» creates much better conditions for self-development and self-fulfillment of a person than before. In other words, «digital person» (i.e. person immersed in the world of new technologies) is in a better position than today, because «digital technologies» open up new opportunities for him, develop new skills and abilities in him, require a new type of thinking and even a new type of identity. «The identification of the modern person takes place through its involvement in a sphere of information, virtual, social space. Even if talking about social networks, it is not necessary to consider them as something negative, as a place where a person is deprived of identity» (Goncharenko, 2019, 140).

Second, there are researchers who believe that the impact of technology on humans is manifold and multifaceted, with both positive and negative effects. Thus, D. Tapscott, creator of the theory of «digital economy», believes that due to the transition of information into digital form, a «computer consciousness» is formed in a person, in which his world outlook and world view are substantially changed (Tapscott, 1999). Information technologies are changing the outlook and moral and psychological characteristics of individuals, causing various transformations in the cognitive, motivational and emotional spheres. One of the reasons for these transformations may be a dramatic increase in the quantity of information and a change in its role and place in human life. In the «digital society», where the production of information prevails over all other social activities, networks

are emerging in which information can be exchanged and transmitted between countless interacting actors: information reality becomes more important than social reality (Danyl'yan, 2020, 48-49). Finally, there is an important point related to differentiation, conventionally speaking, apples and jokes: having an apple and giving it away, we are left without an apple, and

having an anecdote (information) and giving it, we save and double, and in the conditions of the Internet - reproduce many times (Yershova-Babenko, 2019b, 62).

The following risks and negative consequences for human social life in the «digital society» are distinguished:



Graph 2. Risks and negative consequences for human social life in the «digital society»

Thus, it is possible to speak of «computed sociality», which is based on «digital» technologies that allow to evaluate and manipulate how any social actor (social group, collective, etc.) represents itself to others in a completely «digital» society (Alaimo & Kallinikos, 2017, 177). In addition, digital technologies are increasingly being used to collect, analyze and process all kinds of data in real time. Data collection is no longer a stand-alone and costly process, as it used to be. But this is done as an automatic process that refers to almost any movement that a person makes, such as how and with whom they interact (e.g. communications, online contracts, credit card payments, physical transfers, etc.) (Tritin-Ulbrich, Scherer, Munro & Whelan, 2021, 13).

Moreover, «in today’s world, the most important objective circumstance is the discovery of information accessibility... all people are consumers of mass media ... The consumer of information becomes a voracious absorber of information» (Danyl'yan, 2020, 58). This results in the inability of a person to manage independently and by previous methods the quality and flow of information affecting his or her psyche and consciousness. «The modern man

receives and recycles information in a month as much as he received in the 17th century. Today, according to Mura’s law, the information is updated for 1.5 years, which is facilitated by convenient ways of its transfer and access» (Parhomenko, & Parhomenko, 2017, 6). The constant tendency of a person to consume information, especially in the sphere of material things, creates in him the desire to own material and social goods that shape the external environment of society, leads to the stagnation of the internal spiritual sphere, makes him aggressiveness of his own interests, he starts to immerse in consumption, orientation on things.

In fact, we’re talking about relying solely on the limbic system of the brain and reducing the use of the neocortex. There are many problems: a person with a material position cannot achieve internal harmony, appeasement and acceptance. Thus, «digital person» is formed as a carrier and interpreter of a huge amount of information, however, despite an increase in the level of perception and processing of information, increase of knowledge, etc., there is no related increase in level of intellectual ability. This phenomenon has received the name «digital autism» (the term A. Kurpatova): «...hyper-information environment influences the

formation of the human thinking system. The constant consumption of rapidly changing content makes critical awareness impossible. The inability to analyze information is the result of the fact that the image is not in the thoughts for a long time and quickly replaced by another (as in the case of switching channels or viewing news)... Mankind is biologically losing its skills, to learn and its learning. A common set of hedonism (enjoyment) and the inability to construct images of the future lead to people becoming intolerant to their failures, counting on easy success» (Pishchulina, 2020).

Significant changes are also taking place in other areas of human mental life: there is a certain degree of dependence on the technical means of communication (gadget, telephone, computer, etc.), even to the point where without them, the person loses stability and self-confidence; the virtualization of interpersonal communication takes place, resulting in the separation of the person and the loss of social contacts. In the cognitive sphere, human beings are set solely on the consumption of information, without critical analysis, content with a superficial level of knowledge. Finally, the identity of a person is transferred to a virtual space, which allows him to create many different self-representational representations and generally remain anonymous.

These and some other aspects of «digitalization» were covered in the article I.V. Yershova-Babenco «Problem of new scientific picture of the world. World of «digital» and «digital-subject» (2020), in which the term «digital-subject» is introduced: «subject is «digital», digital information embodied in some carrier (not necessarily biological) and at a certain moment becomes (became) self-contained, independent actor» (Yershova-Babenco, 2020, 43). The introduction of this term has some advantages over the term «digital person», as it allows a deeper understanding and insight into the modern process of «digital» society. The concept of «digital-subject» can refer not only to a person as a carrier and consumer of information, but to any other entity, for example, to a «carrier» having artificial intelligence. «Activity» of this «digital-subject» is an independent form of existence which will become possible in conditions of expanding and developing «digital society» (Yershova-Babenco, 2020, 44).

Looking at the peculiarities of this new form of subjectivity it can be noted that it antagonizes the human being as a biological being, with its mental characteristics, emotional component and

moral values, etc. «The digital is initially unemotional (indifferent) to both man and society and nature, i.e. in principle ... As the improvement progresses, the digital, does not assume the person in its focus, takes out the boundaries of its processes, although the digital is invented by the person, it is the product of his intellect Peculiarities of modern stage of existence of a digital - in fact, today a digital builds its independent from no one and from no one «digital world» (Yershova-Babenco, 2020, 44). Thus, there is a new picture of the world - «digital world», «digital information», which is built according to its own rules, and which includes neither nature, society, nor man. It is a world of machines, robots, technological devices, gadgets, etc., in which the main place is taken by artificial «intelligence», which does not lend itself to «human consistency», but, on the contrary, «inhuman» from the point of psychosynergetics (Goncharova, 2015).

The fundamental position in psychosynergetics is the new conceptual model of the psyche that justifies its non-equilibrium, dynamic, non-linearity and integrity (Yershova-Babenco, & Goncharova, 2015). In other words, it represents the psyche as a synergistic object of research, acting on the principles of chaotization, dissipativity and self-organization. On the basis of this, psychosynergetics introduces the concept «brain-psyche (mind/consciousness ...)», which explains the natural integrity and unity of the psyche on the basis of the newest holism, expressed by the conceptual model «whole-in-whole» (Yershova-Babenco, 2021). This concept captures the natural integrity of the human brain, consciousness and psyche, including its constituents, allowing them to be considered, on the one hand, as autonomous non-linear integrity, but, on the other hand, as inextricably linked by common unity and interacting as a separate nonlinear integrity.

These provisions of psychosynergetics show that in a «digital society» this natural integrity will be reduced to an emphasis on its individual parts, which leads to a distorted manifestation of the whole human personality. Therefore, the emergence of a whole series of existential-psychological problems, threats and challenges is unavoidable in the new type of society, since «digital»/ «digital-social» already in its bases disturbs the harmonious natural balance peculiar to man. «The peculiarity of this new «digital civilization» is its non-human/unpsycho-dimensional character, manifested in that, «digital-subject» does not need a biological carrier for its existence and development ...

Consequently, the «digital-subject» can become parallel to the person or completely replace it, by creating «post-human» and possibly «post-natural» - «digital» artificial world in which human continuity will have no place» (Yershova-Babenko, 2021, 406).

Conclusions

The problem of «digital» society is now one of the important political, economic and social problems for Ukraine, as a number of state normative documents state that «digital» is the main line of development of Ukrainian society in the coming decades. In this sense, it is studied from the perspective of information technology, economic, social and philosophical approaches. At the same time, this problem also has philosophical explanatory statements, since the understanding of social-philosophical perspectives and problems of the global «digital society» is now relevant for both western and domestic philosophers, psychologists and humanitarians in general. Therefore, in the philosophical thesaurus of the last decades such concepts as «digital»/ «information society», «digital culture», as well as «digital person» are actively used. In the works of Ukrainian researchers, attention is mainly paid to economic and technological aspects of «digitalization» (tab. 1). In this connection, in comparison with western researchers, there is an insufficient number of works devoted to anthropological, socio-philosophical, cultural and socio-psychological consequences of the process of «digitalization» and the construction of «digital society» on the life of an individual, its integrity and self-development.

Applying a psychosynergetics approach to the analysis of this problem showed that many of the above-mentioned characteristics of the «digital person» are rooted in the social «non-human continuity» of the «digital society». Therefore, the solution of each issue and problem separately will not bring fundamental changes in the existence and development of a person in a new society with the characteristic «human in person». In order to solve this problem the ratio of «human»/ «digital»/ «artificial», their compatibility and interaction requires a transdisciplinary approach in which the efforts of scientists from different fields of knowledge (humanities, doctors, psychologists, representatives of computer sciences, etc.) will find general recommendations and regulations, which will help to adapt the person in new social conditions «digital society». One such transdisciplinary area could be

psychosynergetics, as a post-non-classical area of knowledge that implements synergistic and other ideas.

Bibliographic references

- Alaimo, C., & Kallinikos, J. (2017) 'Computing the Everyday: social media as Data Platforms'. *Information Society*, 33(4), 175–91.
- Andrushchenko, V. P. (2021). Phenomenon of Education in 5 books: Ukrainian education: History of formation, development, modernization. Sums: University book, 560. <https://npu.edu.ua/#>
- Bell, D. (1973). *The Coming of Post-Industrial Society*. New York: Basic Books [Don Mills: General Publishing]
- Bochelyuk, V. (2020). Digitalization as a factor of formation of a cognitive sphere. *Vestnik KhNPU named after G.S. Skovoroda. Psychology*, 62, 81-107. <http://hnpu.edu.ua/uk>
- Castells, M. (2000). *The Rise of The Network Society: The Information Age: Economy, Society and Culture*. John Wiley & Sons.
- Danyl'yan, O. H. (2020) *Modern society, man, law in conditions of global transformations: monograph*. Kharkiv: Pravo, 344. http://ippi.org.ua/sites/default/files/enciklope_diya_tom_2.pdf
- Digital and Human Rights (2021): Collection of theses of the International Scientific and practical Internet Conference (Kyiv, Khmelnytsky, 30 March 2021). Khmelnytskyi, 395
- Diya (2019). Digital State. Retrieved at: <https://plan2.diia.gov.ua/>
- Dobronravova, I.S. (1990). *Synergetics: Developing non-linear thinking*. Kiev: Lybid', 147
- Dobronravova, I.S. (2004). *Synergetis as a general research programme. Synergetic paradigm. Cognitive-communicative strategies of modern scientific knowledge*, Otv. red. L.P. Kiyashchenko. M.: Progress-Traditsiya, 78-87 <http://www.philsci.univ.kiev.ua/biblio/Dodrphil-2017.pdf>
- Dul'ska, I.V. (2019). Priority directions of digitization of economy and society. *Modern problems of Economy and Entrepreneurship*, 24, 14-24 (In Ukrainian)
- Dz'oban', O.P. (2021). Digital person as a philosophical problem. *Information and Law*, 2 (37), 9-19.
- Gartner (n/d) *Gartner Glossary: over 2000 words*. Retrieved at:

- <https://www.gartner.com/en/information-technology/glossary/digitalization>
- Goncharenko, K.S. (2019). Digital person: Fantasy to lose identity. *Philosophical horizons*, 42, 137-140.
- Hrytsenko, A., & Burlai, T. (2020). The impact of digitalization on social development. *Economic theory*, 3, 24–51
- Holionko, N.H., & Ivanova, A.S. (2017). Digital innovations in modern society. Institutional repository of the State Higher Educational Institution "Vadim Hetman Kyiv National University of Economics". Retrieved at: <https://ir.kneu.edu.ua/handle/2010/21426>
- Holionko, N.H., & Soboleva, T.O. (2021). Current trends of digital transformations of economy. *Strategy of economic development of Ukraine*, 48, 13-23. [In Ukrainian]
- Halaspis, A. (2006). Contemporary civilization situation and metric-ontological parameters of historical being. *Scientific Bulletin of Chernivtsi University, Philosophy*, 301-302, 95-99. [In Ukrainian]
- Lanier, J. (2013). *Who Owns the Future?* New York: Simon and Schuster.
- Litvinov, O. (2020). Digitalization: On the rose of the digital roof. *State and Crime. New challenges in the post-modern era*. Kharkiv: KhNUVS, 170-172 <http://dspace.univd.edu.ua/xmlui/handle/123456789/9635>
- Litvinova, S. (2016). About the components of digital culture. *Digitle.wordpress*. Retrieved at: <https://digitle.wordpress.com/2016/10/04/12499875/>
- Lugovsky, O.V. (2019). Digital culture and its place in modern information society. *Philosophical horizons*, 42, 219-223. (In Ukrainian)
- Mejias, U. A., & Couldry, N. (2019). 'Datafication'. *Internet Policy Review*, 8(4), 1–10. <https://ulisesmejias.com/>
- National Institute of Strategic Studies (2020). *Ukraine – 2030. Strategy of future changes*. Retrieved at: <https://niss.gov.ua/doslidzhennya/ekonomika/ukraina-2030-strategiya-zmini-maybutnogo>
- Parhomenko, O.D., Parhomenko V.D. (2017). Person of the future in conditions of formation of information-known paradigm of civilization development. *Science, technologies, innovations*, 4, 3-9. (In Ukrainian)
- Petryshyn, O.V., & Gilyaka, O.S., (2021). Human Rights in the Digital Age: Threats and Perspectives. *Bulletin of the National Law Academy of Sciences*, 1, 15-24. (In Ukrainian)
- Pishchulina, O. (2020). *Digital Economy: Trends, risks and social determinants*. Razumkov Center Report, Kyiv, 274. Retrieved at: https://razumkov.org.ua/uploads/article/2020_digitalization.pdf
- Plesner, U., & Husted, E. (2020). *Digital Organizing: Revisiting Themes in Organization Studies*. London: Red Globe Press.
- Prokhorov, M. (2019) What is Digitalization?. *Ukrainian Radio is a radio platform of Ukrainian Public Broadcasting Company*. Retrieved at: <http://www.nrcu.gov.ua/news.html?newsID=91042>
- Reis, J., Amorim, M., Melro, N., Cohen, Yu., & Rodrigues, M. (2020). Digitalization: A Literature Review and Research Agenda. *Proceedings on 25th International Joint Conference on Industrial Engineering and Operations Management – IJCIEOM* (pp. 443-456). Retrieved at: https://www.researchgate.net/publication/340067801_Digitalization_A_Literature_Review_and_Research_Agenda
- Romansky, R. (2021). Informatization of the Society in the Digital Age. *Biomedical Journal of Scientific and Technical Research*, 3(33). Retrieved at: <https://biomedres.us/fulltexts/BJSTR.MS.ID.005418.php>
- Rudenko, M. (2021). Digital: Category and specificity of interpretation. *Economic Forum*, 4, 3-13 http://e-forum.lntu.edu.ua/index.php/ekonomichnyy_forum/article/view/243
- Savchuk, S. (2021). Improvement of the management system at energy enterprises in the digital economy. (The PhD thesis in economics). Ivano-Frankivsk, National Technical University of Oil and Gas, 242
- Sokolenko, L.F. (2019). The development of digitalization processes as a prerequisite for transformation organizational and methodological principles of accounting. *Economics, management and administration*, 4(90), 167-175
- Tapscott, D. (1996) *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*. New York, NY: McGraw-Hill.
- Tapscott, D. (1999). *Digital Society: The Pros and Cons of the Age of Network Intelligence*. Kiev-Moscow: Refl-buk, 403 (In Russian)
- Tritin-Ulbrich, H., Scherer, A.G., Munro, I., & Whelan, G. (2021). Exploring the dark and unexpected sides of digitalization: toward a critical agenda. *Organization*, 28(1), 8 –25

- Ukrainian Institute of the Future (2021). Ukraine 2030E - country with a developed digital economy: Ukrainian Institute of the future. Retrieved at: URL: <https://strategy.uifuture.org/kraina-z-rozvinutoyu-cifrovoyu-ekonomikoyu.html>
- Yershova-Babenko, I. (1992). *Psychic Research Methodology as a Synergistic Object*. Odessa: ODEKOM, 124 (In Russian)
- Yershova-Babenko, I., & Goncharova, O. (2015). Non-human components of human regularity fields. *Philosophy of knowledge*, 2(17), 243-259.
- Yershova-Babenko, I. (2017). *Psychosynergetics. Man in a difficult world*. Collection of scientific works. Sumy: University book [Universytet-s'ka knyha], 118–141. <https://npu.edu.ua/#>
- Yershova-Babenko, I. (2019a). Hypertheory «brain-psyche-mind/consiousness» is a post-non-classical general solution of the problem and a methodology of investigation of psycho-dimensionality. *Norwegian Journal of Development of the International Science*. 29, part 3, 45–50.
- Yershova-Babenko, I. (2019b). Integrity and initial «hybrid» of hypersystem «brain-psyche (mind/consciousness...)» Research methodology. *Norwegian Journal of development of the International Science*, 2(31), 58–64. https://nor-ijournal.com/wp-content/uploads/2020/09/NJD_31_2.pdf
- Yershova-Babenko, I. (2020). Problem of new scientific picture of the world. *World of «digital» and «digital-subject»*. *Norwegian Journal of development of the International Science*, 44(2), 53–60. https://nor-ijournal.com/wp-content/uploads/2020/09/NJD_44_2.pdf
- Yershova-Babenko, I. (2021). Concept «brain-psyche (mind/consciousness...)» and hypertheory of concept // *Journal of Perm University. Philosophy. Psychology. Sociology*, 3, 405-412.
- Yershova-Babenko, I. V. (2020). *Psychosynergy: methodological status, theory and practice: Anniversary collection of scientific works of Professor I. V. Ershova-Babenko, ed.-comp. V. B. Khanzhi, N. V. Krivtsova*. Odessa: Phoenix, 256 p.
- Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. Profile Books.

DOI: <https://doi.org/10.34069/AI/2022.56.08.20>

How to Cite:

Kara, S., & Yildiz, Y. (2022). From a commodity to addiction: Are mobile phones valuable commodities or sources of addiction for freshman students?. *Amazonia Investiga*, 11(56), 196-209. <https://doi.org/10.34069/AI/2022.56.08.20>

From a commodity to addiction: Are mobile phones valuable commodities or sources of addiction for freshman students?

Kullanışlı Bir Üründen Bağımlılığa: Cep Telefonları Üniversite Birinci Sınıf Öğrencileri İçin Değerli Bir Ürün mü Yoksa Bağımlılık Kaynağı mıdır?

Received: September 1, 2022

Accepted: October 30, 2022

Written by:

Saban Kara⁸⁸<https://orcid.org/0000-0002-7501-7961>**Yunus Yildiz⁸⁹**<https://orcid.org/0000-0002-4471-457X>

Abstract

Mobile phone use has increased exponentially on a global scale in all segments of society since the rise of the first mobile phones in 1970s. Although a wealth of research has been conducted to measure the effects of mobile phones on individuals, a few studies have been carried out to make a connection between similes and mobile phone use. In this respect, this study examined habits of students on mobile phone use through similes at a private university located in Erbil, Iraq. Students employed food, drink, household items and people to illustrate their mobile phone dependence rate. A questionnaire, a survey and an interview were adopted to gather data. The data which were collected by employing a mixed method design were analyzed through MAXODA software program and SPSS 25. The findings of the study uncover that mobile phone are indispensable in their lives with varying reasons to take advantage of them. Additionally, students have unsubstle plans to reduce their daily usage by channeling their energy to social activities. The findings of this study can have some implications to acknowledge negative points of mobile phone use and adopt realistic strategies to break mobile phone addiction on adults systematically.

Keywords: Mobile phone use, simile, addiction, mobile phone dependence.

Özet

1970'li yıllarda ilk cep telefonlarının ortaya çıkmasından itibaren cep telefonu kullanımı katlanarak küresel ölçekte tüm alanlarda arttı. Cep telefonlarının bireyler üzerindeki etkisiyle ilgili birçok araştırma olmasına rağmen, teşbih ve cep telefonu kullanımı arasında bağlantı kurulmasıyla ilgili sınırlı sayıda çalışma yapılmıştır. Bu bağlamda, bu çalışma Erbil Irak'ta bulunan bir özel üniversitedeki öğrencilerin cep telefonu kullanma alışkanlıklarını teşbih yoluyla incelemiştir. Öğrenciler cep telefonu bağımlılık oranını resmetmek için gıda, içecek, ev aletleri ve insanları kullandı. İki farklı anket ve bir görüşme ile veriler toplandı. Karma araştırma deseni ile toplanan veriler MAXODA ve SPSS 25 yazılım programları aracılığıyla analiz edildi. Araştırma sonuçları cep telefonlarının öğrenciler için vazgeçilmez olduğunu göstermiştir. Ayrıca, öğrenciler enerjilerini sosyal aktivitelere yönlendirerek cep telefonu kullanım oranını düşürme planlarının olduğunu belirtmişlerdir. Bu çalışmanın bulguları, öğrencilerin cep telefonu kullanımının olumsuz yönlerini kabul etmeleri ve yetişkinlerde cep telefonu bağımlılığını sistematik bir yaklaşımla aşma noktasında gerçekçi stratejiler benimsemeleri için bazı çıkarımları içermektedir.

Anahtar Kelimeler: Cep telefonu kullanımı, teşbih, bağımlılık, cep telefonu bağımlılığı.

⁸⁸ Ma, Instructor, English Language Teaching Department, Faculty of Education, Tishk International University, Erbil, Iraq.

⁸⁹ Ph.D., Assistant Professor, English Language Teaching Department, Faculty of Education, Tishk International University, Erbil, Iraq.

Introduction

Technological advancements have increased exponentially which have made mobile phone revolution possible. Since the advent of first mobile phone in 1973 by Martin Cooper, mobile phones have evolved significantly (Smith et al., 2011). First mobile phones' features were limited to calling or receiving a call, however, they played a key role in advancing the features of mobile phones. Nowadays, mobile phones are regarded as an inseparable part of our daily lives. Apart from using mobile phones to call or text, they serve human being in varied ways. For instance, mobile phones have been used to surf the internet, watch videos, do online shopping, draw pictures, compose novels, join lessons electronically, have instant online meetings, send emails and so on. Additionally, users have incessant interaction with their mobile phones, so they have embedded in their lives as an irreplaceable means of communication (Daskan & Yildiz, 2020; Yildiz, 2021). Considering this phenomenon, the number of mobile subscriptions increased to 8.6 billion worldwide and 1.43 billion mobile phones were sold only in 2021 (Statista, 2022). It seems that mobile phones have become an indispensable part of billions of people globally due to its convenience and relatively low price compared to the cost of pioneer mobile phone models.

Mobile phones are integral parts of many people's lives in many different fields. E-learning activities through mobile phones have been receiving much attention from the stakeholders of education ranging from teachers to students (Celik et al., 2022a). For instance, students can learn further thanks to educational websites if they have a mobile phone. Likewise, they can take Kahoot quizzes, do online experiments, take online lessons with their mobile phones. These activities can be useful to boost students' motivation and learning rate respectively. Apart from students, mobile phones are so essential for drivers to find the direction easily with GPS navigation apps. Additionally, mobile phones can be of greatest importance to people who want to cook at home through instructional videos about varied recipes. These people want to sharpen their skills about different cuisines with these videos. Furthermore, mobile phones have been used widely to do online shopping or use online banking. Users can save much time and money once they complete these tasks electronically. Subsequently, mobile phones can facilitate job seekers' lives through online employment websites. These websites can inspire people to secure a job in another country

and realize their dreams. Furthermore, mobile phones have many functions to relieve users' stress and spend quality time. Users who feel exhausted after a tiring day can take advantage of their mobile phones to have fun (Wei, 2008). It is crystal clear that mobile phones have many aspects to affect our lives directly.

Mobile phones have some drawbacks in people's lives as well if the amount of time to use the mobile phone is not balanced well. To illustrate it, students are likely to lose their concentration if mobile phones are not off or silent in the class. Additionally, drivers can crash if they are busy with their mobile phones while driving. Furthermore, office workers can miss the deadline if they cannot switch their attention from their mobile phones to their pre-defined duties. Subsequently, salesclerks cannot spare enough time for customers if they are not alerted to welcome them in a mobile phone free sales area. Apart from economic and academic loss, mobile phones can have adverse effects on people's social lives. For instance, parents may not nurture a good relationship with their kids if they are not away from their mobile phones. This troublesome relationship can have varied negative consequences in the future, so future generations can have countless issues related to it. Likewise, kids who spend much time with their mobile phones can be lost in virtual world which can take years to rehabilitate them. Apart from psychological effects, students' academic success can fall sharply if they cannot keep the balance between studying and being online with their mobile phones (Goswami & Singh, 2016; Celik et al., 2022b). It seems that there is a fragile line between using mobile phones in a beneficial way and destructive way.

Similes can be employed in literature as a figure of speech to compare two completely different entities with common qualities. Fishman (2021) postulates that simile is employed to make comparison between entities which bear no resemblance to each other directly. Similes are literary terms through which different entities are compared by using "like or as". There are two different similes which are closed and open simile. The former refers to revealing the shared quality explicitly, while the latter refers to not mentioning the common quality. To illustrate it, "You are walking as slow as a turtle." can be given as an example of closed simile because the shared quality is emphasized as slow while comparing a person with a turtle. On the other hand, "My grandmother walks like a turtle." is an

example of open simile because the shared quality is not emphasized explicitly.

Literature Review

Although there are numerous studies about mobile phone use, a gap has been noticed in literature regarding adopting similes to illustrate importance of mobile phones for individuals, so this study was initiated and finalized to fill this gap.

Technological developments have significant impacts in this century to transform people globally. One of the most groundbreaking technological developments in history can be seen in mobile phone industry. Mobile phone use has increased globally since first mobile phone called Motorola was produced in 1970s by Martin Cooper. Although there were several initiatives to produce mobile phones in 1900s, they were limited to using them in trains, ships or cars, so Martin Cooper's portable mobile phone has been considered as a pioneer in this respect. The first ever mobile phone weighed 2 kilograms and it needed to be charged for 10 hours in order to make a 30-minute call. Since that time and model, mobile phone industry has revolutionized in an ever-increasing rate. Accordingly, mobile phone sales have increased significantly, and their features have been multiplied to meet users' needs (Quimí & Alexandra, 2022). Nowadays mobile phones have numerous functions such as voice or video calling, texting, watching videos, surfing the websites, doing online shopping, taking online lessons, sending or receiving e-mails, taking notes, drawing, playing online games, studying cooperatively, watching videos and so on.

Voluminous studies have been carried out to measure the effects of mobile phones in people's lives with varying implications. Some scholars (Şenel, 2016; Kates et al., 2018) argue that mobile phones are invaluable commodities, while others (Park, 2005; Chóliz, 2010; Shoukat, 2019; Yildiz, 2019) claim that mobile phone addiction can have adverse effects in people's personal, social and academic lives. The same controversy can be easily noticed in published articles. To illustrate, Morgan (2012) postulates that cell phones are precious for college students because they have the chance to stay in touch with their families and friends to get their support. He also states that students can access to information in seconds, get online tutoring and crosscheck the information they have learned to be sure about the accuracy. Additionally, Kara (2020) conducted a study on freshman students

about their habits on mobile phone use. The results revealed that social media platforms can be used widely to enhance students' learning. The only point to be considered is that beneficial pages and groups should be pinpointed in advance to take advantage of social media platforms. Otherwise, students can lose the track and disadvantages of mobile phone use can be more than the advantages. He exemplifies that YouTube can be a great source of learning different languages, watching insightful conference and TV talks. Likewise, Facebook can be an essential platform to make friends from different countries, so they can be knowledgeable about different cultures. Twitter can be a miraculous tool to expand knowledge and be a more knowledgeable and creative person. On the other hand, the same platforms can be turned into time consuming activities to drain people's energy. Similarly, Tian et al. (2009) attribute three factors to mobile phone use which are sense of security, self-character extension and sense of dependence. They conclude that there is a fragile line between using the mobile phone for useful purposes and being addicted to it. If both points are considered and necessary measures are taken, mobile phone use can be so beneficial for users. Otherwise, having some negative consequences may be inevitable. Nowadays, a new term has been coined as mobile learning (M-learning) which refers to learning continuously through mobile phones. Sullivan et al. (2019) attest that m-learning offers flexible, continuous learning which has some connections with formal and informal learning versions. It seems that mobile phone use has some dimensions according to the preferences and priorities of the users.

Teachers' opinion on mobile phone use in class has received much attention in many studies recently. To name a few, Thomas et al. (2013) carried out a study in the USA to welcome teachers' opinion on mobile phone use in classrooms for educational purposes. The majority of the teachers (69 %) took side with using mobile phone in class, whereas a slight number of teachers uncovered their hesitation on using the mobile in class on grounds that mobile phones can disrupt the learning and teaching atmosphere. Likewise, Leem and Sung (2019) conducted a study in Korea to explore teachers' opinion on mobile phone use which revealed that being familiar, adaptable and passionate are key factors to use mobile phones in class. They contend that the success rate of integrating mobile into class activities depends on the will of the teacher to a large extent. Subsequently, O'Bannon et al. (2017) conducted a study to get teachers' (15) and students' (103) opinions on

mobile phone use in an Indian middle school. The study revealed that 88 % of the participants were in favor of using the mobile in class, whereas 12 % emphasized some negative points. Additionally, the study illustrated that mobile phones have been used for 23 different purposes ranging from taking a photo to scanning QR code to learn further.

Apart from positive influence of mobile phones, some negative points have been emphasized in recent studies. To illustrate a few, Tindell and Bohlander (2011) enumerate some of the negative points of mobile phone use which are being distracted, exposed to cyber bullying and radiation. Additionally, they contend that cognitive alertness reduces if users cannot take a break regularly. Wexler (2019) conducted a study in the USA on integration of mobile phone into class activities which culminated with negative consequences. Most of the students earned worse marks in their upcoming exams once they started using their mobile phones in class. They also stated that students did not want to switch to traditional course books which was another challenge for the teachers. They concluded that disadvantages of mobile phone use in a college setting outweigh the advantages. Additionally, Baker, Lusk and Neuhauser (2012) conducted a study on university students to get their opinions about mobile phone use. The students admitted that mobile phone use distracted their attention considerably and affected their learning rate adversely. Similarly, McCoy (2013) attests that the distraction rate of the students increases in line with the features of mobile phones. Mobile phones are versatile nowadays with numerous functions such as calling, watching, surfing and earning money. He also argues that cyberbullying and being addicted to online games are other negative implications of excessive and unplanned mobile phone use. Additionally, Park (2005) conducted a study in Korea on university students. 83 % of the students admitted that they were using their mobile phones excessively. They also admitted that they felt regretful after using it for long hours. Furthermore, Ismail et al. (2022) carried out a study in Iraq on 453 different professions and students which concluded that only 25 % of the participants were classified as mild users, whereas 75 % were classified as either moderate or severe user. They also uncovered that there was a direct correlation between their mobile phone use and anxiety level. The participants whose mobile phone use was excessive felt more anxious than others who were classified as mild users. Another notable point to be emphasized in their study was that social interaction was lower

among moderate and severe mobile phone users compared to mild ones. Considering these negative implications of mobile phone use, many countries including Israel, France, Australia have implemented new regulations to impose a ban on mobile phone use in classes (Beneito & Vicente-Chirivella, 2022). It seems that it is a controversial issue to include or exclude mobile phones in educational settings.

Purpose of the Study and Research Questions

The purpose of this study was to examine university students' habits on mobile phone use. To this aim, students' daily usage, different reasons to use the mobile phone, the frequency of grabbing the mobile phone and overall importance of mobile phone for them were measured through questionnaires, surveys and the interview. To illustrate the topic more clearly, students were asked to describe their mobile phone usage by adopting simile, so the researcher tried to pinpoint whether the students were taking advantage of their mobile phones or considering them as time consuming gadgets. Based on this framework, given research questions were explored in this study:

- Can students keep the balance between using their mobile phones and taking a break?
- What are the students' favorite activities with their mobile phones?
- Is there a considerable difference between the usage of mobile phones on weekdays and at the weekend?

Methodology

This study was conducted by employing a mixed method design which has been employed to analyze verbally and statistically (Byrne & Humble, 2007). A survey, a questionnaire and an interview were included to collect data. The survey included 5 items to get further details about students' mobile phone use. The questionnaire comprised 9 items related to their mobile phone use and possible strategies to reduce mobile phone use. Once participants responded, the data were processed in SPSS 25. through descriptive statistics, so mean score, the percentage and the number of respondents for each item ranging from strongly agree to strongly disagree were collected in one point. Additionally, the interview included one question to pinpoint the students' habits on their mobile phone use through similes. The interview was conducted as one on one to get students' genuine opinions in a stress-free environment because it was noticed in the preliminary trial

that students were hesitant to tell their ideas freely on this topic. The prompt in the interview included a fill in the blank activity which can be seen below:

- My mobile is like a(n) for me because

The responses of the interviewees were transcribed through MAXODA software program to classify and analyze accordingly.

Participants, Setting and Sampling Procedure

The population of this study accounted for all students who studied in language preparatory school (LPS hereafter) of a prestigious private university located in Erbil, Iraq during 2021-2022 Academic Year. 100 students received a high-quality education which included 100 % English as the medium of instruction. The

university had a diverse community to welcome around 10 different nationalities on the campus in a peaceful atmosphere, so it offered a welcoming atmosphere to get ideas from different nationalities. LPS students were admitted to university with a condition to improve their English during the year by receiving 24 hours of instruction and summarizing a short story in instructor's office as a presentation on a weekly basis. The Academic Year started in December and ended in October which was quite feasible to improve their 4 skills in a professional conduct. Apart from regular classroom activities, the students took some quizzes through Kahoot, Google Form or Padlet. They also had some debates to improve their critical thinking, problem solving and public speaking skills. In terms of classroom materials, the students completed three main course books, three vocabulary books, 2 grammar books and 1 listening and speaking book.

Table 1.

The number of male and female students as well as their ages Participants` Frequency in Terms of Gender and Age

Variable(s)	Option	F	%
Gender	Female	32	64
	Male	18	36
Age	18-20	43	86
	21+	7	14
Total		50	100

Once Table 1 was examined, it was seen that female students (64 %) were higher than male ones (36 %). In addition to the gender, the participants ages were illustrated in detail which displayed that 86 % of the students were between 18 and 20 years old, whereas only 14 % of the students were 21 years old or older.

When it was time to choose the sample from the population, the researcher adopted systematic sampling method for its convenience. The researcher listed all the students alphabetically. Later, he chose 2nd student randomly which was followed by each subsequent second student, so the researcher chose 50 students out of 100 who represented the population. Systematic sampling method has been preferred in social sciences to give equal chance to each participant by dividing them into intervals (Mostafa & Ahmed, 2018).

Instruments and Data Collection Procedure

The study lasted for 4 weeks which included to lay a background about simile and metaphor, taking a questionnaire and the interview.

In week 1, the researcher displayed some clear examples of simile and metaphor, so the participants did not feel confused while expressing their ideas on simile and their mobile phone use. Also, they read some articles on advantages and disadvantages of mobile phone use. They also read some tips to switch their concentration from their mobile phones to other activities to socialize. In the final step, the students brainstormed about finding a connection between simile and their mobile phones.

In week 2, the students answered the items in the questionnaire which was about the importance of mobile phone for them. The students had a briefing about 5-point Likert scale in advance. Once they answered the questions, they analyzed

different previous studies about using mobile phone globally.

In week 3, the students took the interview to pinpoint whether their mobile phone use bears a resemblance to some people, devices, items. In other words, they wanted to illustrate their mobile phone use with a familiar object or person, so the researcher figured out the importance of their mobile phones with the attributed person or object.

In week 4, the researcher analyzed the data to interpret scientifically. The first step was to extract data from the questionnaire and the survey respectively, so their daily routine on the internet through their mobile phones, genuine opinions on the effects of the internet and favorite activities were figured out accurately. In the next step, the researcher transcribed the data

in the interview, so different classifications could be made with ease. Finally, the items in the questionnaire were converted into SPSS to get the mean score, frequency and percentages for each item with certain numbers.

Once all data were uncovered, the committee came together to analyze the data and compile the valuable information for the research paper.

Findings

Findings of this study were classified under 3 headings which were the survey, the questionnaire and the interview, so each instrument was elaborated to get detailed analysis and make interpretations accordingly.

Figure 1 Illustrates the amount of time allocated for using the mobile phone on weekdays.

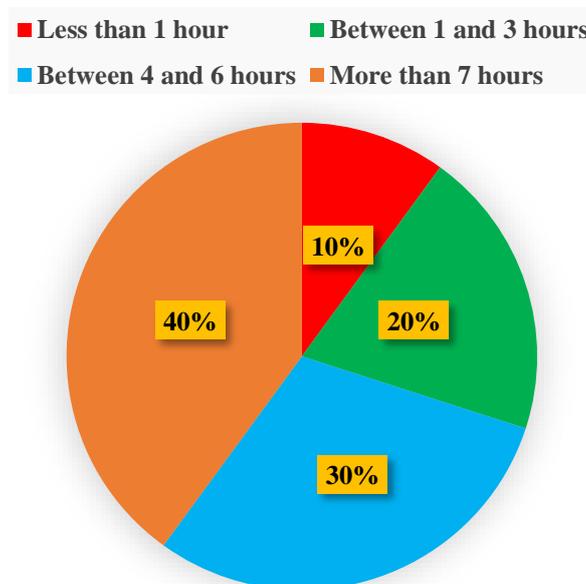


Fig 1. The amount of time spent with mobile phone on weekdays.

As can be seen in Figure 1, it was noticed that 40 % (20) of the students had a habit of using the mobile phone more than 7 hours. Additionally, 30 % (15) of the students set aside between 4 and 6 hours for mobile phone usage. Conversely, only 20 % (10) of the students spent between 1 and 3 hours using their mobile phones. Likewise, only 10 % (5) of the students allocated less than 1 hour for using their mobile phones. These

figures demonstrate that the highest percentage was recorded with using the mobile phone at least for 7 hours, whereas the lowest percentage was related to using the mobile phone for less than 1 hour.

Figure 2 illustrates the amount of time allocated for using the mobile phone at the weekend.

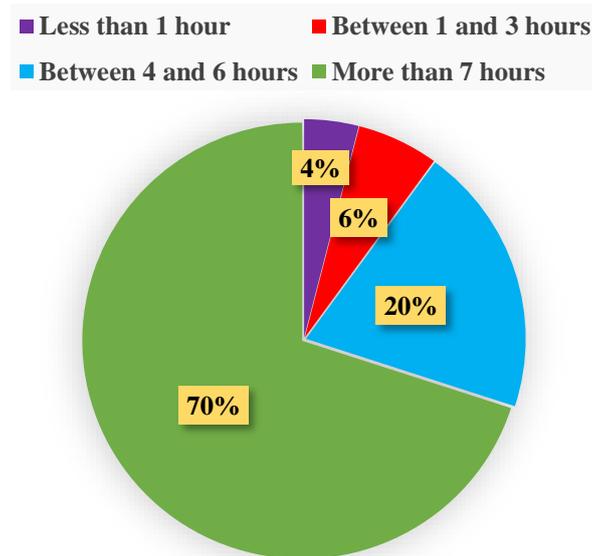


Fig 2. The amount of time spent with mobile phone at the weekend

Once Figure 2 was examined, it was noticed that 70 % (35) of the students had a habit of using the mobile phone more than 7 hours. Additionally, 20 % (10) of the students set aside between 4 and 6 hours for mobile phone usage. Conversely, only 6 % (3) of the students spent between 1 and 3 hours using their mobile phones. Likewise, only 4 % (2) of the students allocated less than 1 hour for using their mobile phones. These figures demonstrate that the highest percentage was recorded with using the mobile phone at least for

7 hours, whereas the lowest percentage was related to using the mobile phone for less than 1 hour.

When weekdays and weekend mobile phone usages were compared, it was observed that the amount of time to use mobile phone increased substantially.

Figure 3 displays the participants' favorite activity on their mobile phones

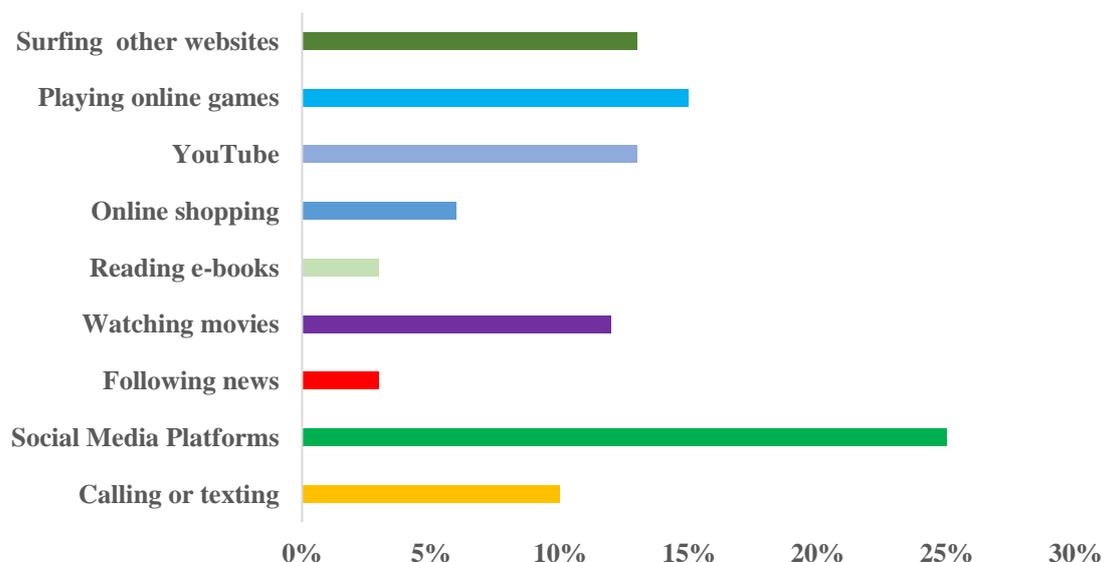


Fig 3. Users' favorite activity on mobile phone

Once Figure 3 was observed in detail, it was figured out that social media platforms received the highest share (25 %) which was not surprising considering their users globally. Additionally, playing online games followed social media platforms in terms of popularity among participants with a 15 % popularity rate. Spending time on YouTube and surfing other websites were placed as 3rd and 4th in terms of popularity. The former one's percentage was 13 %, while the latter one's percentage is 12 %. Watching movies was the 5th one with a 11 % rate. Final point to consider was that calling or texting through traditional telecommunication

service providers, online shopping, reading books online and following news did not appeal to many participants as their percentage was 10 or less as a single unit. It is important to note that YouTube was written as a single item in this study rather than merging it with other social media platforms.

The rationale to classify YouTube in this way was that YouTube has been the second most visited website in the world after Google, so the researcher wanted to measure its popularity as a single entity.

Table 2.
Students' opinion on their habits related to mobile phone use

ITEMS	Mean	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		%	f	%	f	%	f	%	f	%	f
1. Whenever I get up, I am inclined to grab my mobile phone.	4,48	68 %	34	20 %	10	6 %	3	4	2	2 %	1
2. I cannot imagine a day without using my mobile phone.	4,92	92 %	46	8 %	4	0 %	0	0	0	0 %	0
3. I can keep the balance between studying in my room and using the mobile. phone to surf.	1,86	10 %	5	8 %	4	0 %	0	22 %	11	60	30
4. If am close enough to my mobile phone, I cannot study for more than 30 minutes	3,06	34 %	17	18 %	9	0 %	0	16 %	8	32	16
5. My mobile phone helps me to expand my knowledge.	5	100 %	50	0 %	0	0 %	0	0	0	0 %	0
6. The disadvantages of my mobile phone outweigh the advantages.	4,24	52 %	26	32 %	16	8 %	4	4	2	2 %	2
7. My GPA can be higher if I limit my mobile phone use.	4,56	56 %	28	44 %	22	0 %	0	0	0	0 %	0
8. I have concrete plans to use the mobile phone less in the following days.	4,7	70 %	35	30 %	15	0 %	0	0	0	0 %	0
9. Joining some social activities can be helpful to reduce the adverse effects of this bad habit.	5	100 %	50	0 %	0	0 %	0	0 %	0	0 %	0

The participants responded to 9 questions to pinpoint their genuine opinions on mobile phone use.

Once item 1 was analyzed about grabbing the mobile phone as soon as waking up, the mean score was recorded as 4,48 which was quite significant. 34 (% 68) and 10 (% 20) students clicked on strongly agree and agree option

respectively. However, only 3 (6 %) students chose neutral. Likewise, only 2 (4 %) and 1 (2 %) students choose disagree respectively. Considering these figures, it can be suggested that the participants' inclination to hold their mobile phones after waking up is quite significant.

When item 2 which was related to spending a mobile phone-free day was analyzed, the mean score was recorded as 4,92 which was highly significant. 46 (92 %) students opt in strongly agree, while 4 (8 %) students chose agree option. On the other hand, no student chose neutral, disagree or strongly disagree option. It can be concluded that students had very strong bonds with their mobile phones.

When item 3 which was about balancing between self-study and surf the internet was analyzed in detail, it was observed that the mean score was 1,86. Only 5 (10 %) students chose strongly agree. Likewise, only 4 (8 %) students chose agree option. On the other hand, no student opted in neutral option. The most noticeable points in this item were related to disagree or strongly disagree which were chosen by 11 (30 %) and 22 (60 %) students respectively. These figures uncover that students were not satisfied with their will to make a distinction between studying and surfing the internet.

When item 4 which was related to the duration of studying was examined, the mean score was noted as 3,06. 17 (34 %) students chose strongly agree, while 9 (18 %) students chose agree option. Additionally, no student chose neutral. However, 8 (16 %) students chose disagree, while 16 (32 %) students chose strongly disagree option. Considering these figures, it displays that their motivation decreases when they are close enough to touch their mobile phones.

Once item 5 which was about expanding the knowledge was investigated in detail, the mean score was recorded as 5. All students opted in strongly agree option which meant that mobile phones helped them to enrich their knowledge in general.

Once item 6 which was related to choosing a side between disadvantages and advantages of mobile phones, the mean score was 4,24. More than half of the students (52 %) chose strongly agree, while more than a quarter of the students (32 %) chose agree option. However, only 4 (8 %) students chose neutral. Additionally, only 2 students (4 %) chose disagree or strongly disagree option respectively. These figures can

be contemplated as a sign of taking side with the disadvantages. A higher proportion of the students held the opinion that the disadvantages of the mobile phones are more than the advantages.

Once item 7 which was related to the estimation of GPA if mobile phone use is curbed was analyzed in detail, the mean score was recorded as 4,56. It was observed once more that more than half of the students (56 %) chose strongly agree option and more than 40 percent (44 %) of the students chose agree option. No student opted in neutral, disagree or strongly disagree option. These data show that students' opinion is to increase their GPA if they devise some novel strategies to reduce the amount of time with their mobile phones.

Once item 8 was analyzed in detail, it was noticed that students had concrete plans to reduce mobile phone use in the near future. All students opted in either strongly agree (70 %) or agree option (30 %). These figures illustrate that students are aware of the issue which poses may problems in their social and academic lives and they are planning to take action soon.

Once item 9 was analyzed in detail, all students had positive views on joining some social activities which can be doing sport, joining some clubs, hanging out with family members or friends. It shows that joining some activities can be of greatest importance to alleviate the effects of mobile phone use in students' lives.

Considering all items, it can be concluded that students cannot make a distinction between studying and spending time through their mobile phones. However, they are optimistic about coming to a resolution soon. They reiterated that they know how to kick this habit with some clear plans.

Interview

The participants were interviewed one on one to get their genuine opinions on their mobile phone use. Once the data were collected, they were classified in 3 groups which were food and drink, household items and people. Thus, the analysis could be completed as early as possible.

Table 3 illustrates the categories, examples of simile, frequency and percentage. Students bore some resemblance to these items or people while describing their relationship with their mobile phones.

Table 3.
Classification of Simile Examples

Categories		Frequency	%
1. Food & Drink	water, tea, coffee, alcohol, cigarette, coke, mineral water	16	32
2. Household Items	window cleaner, key, hanger, light bulb, ladder, fan, iron, bin, laundry basket, sink, lantern, bookcase, sofa, door	14	28
3. People	best friend, mother, father, grandparents, siblings, teacher, cousin	20	40

When the categories and frequency were analyzed in detail through Table 3, it was seen that students chose some people (40 %) to describe their relationship with their mobile phones. Later, food & drink (32) and household items (28) followed it. It can be suggested that students' bonds with their loved ones are unbreakable as their mobile phones. Some students' opinions can be seen below to get a clear image about this connection:

Food and Drink: My mobile phone is like water for me. Water is regarded as the source of life. Our body cannot function properly if the amount of water we drink is less than expected. Likewise, my mobile phone is the source of life for me. I quench the thirst for knowledge when I research on the internet with my mobile phone. (Student 7)

My mobile phone is like tea for me. I cannot imagine breakfast without drinking tea. Likewise, I cannot spend a day without my mobile phone. (Student 9)

My mobile phone is like coffee for me. I need coffee to start my day in an awaken way. Likewise, I need my mobile phone to feel awaken while scanning the latest news on well-known websites. I feel shocked, irritated, amazed or amused while checking the daily news, so this news helps me a lot in order not to be sleepy anymore. (Student 13)

My mobile phone is like drinking alcohol. I know that drinking alcohol can lead to chronic diseases such as liver disease, heart attack or digestive problems in the long run. Likewise, I know that I can be more sociable if I reduce the amount of time I spend through my mobile phone. (Student 16)

My mobile is like coke for me. Although I know that there are many negative impacts of drinking it, I cannot do nothing but to drink it regularly. Likewise, I am quite sure that there are adverse

effects of using the mobile phone. However, I can channel my attention to other activities. I spend at least 5 hours on the internet with my mobile phone. (Student 19)

My mobile phone is like mineral water for me. When I drink mineral water, it helps me to digest the food I eat easily. Likewise, my favorite activity is following the latest issue of Reader's Digest magazine with my mobile phone. This magazine helps me to absorb and digest large amounts of content. (Student 21)

My mobile phone is like smoking cigarette for me. Although I know that smoking kills people gradually, I cannot quit this bad habit. Likewise, I spend so much time on the internet instead of studying for my upcoming exams. (Student 24)

Household Items: My mobile phone is like a window cleaner. Window cleaners are so functional at houses or in offices. We use them to remove dirt from the window. Likewise, my mobile phone helps me to see a brighter image. Thus, I can go further to access to reliable information on the internet through my mobile phone. I can eliminate fake news from the real ones because I can access to different news channels by one click. (Student 26)

My mobile phone is like a key for me. I need the key to lock or unlock the doors. Likewise, I need my mobile phone to unlock my full potential. I will exploit all means to expand my knowledge on the internet through my mobile phone. (Student 29)

My mobile phone is like a hanger for me. I use my hanger to reserve my clothes in the closet once needed. Likewise, I take notes on my phone to read again as a reference in the future. I also save some websites to access to information later again if the needs arise. (Student 32)

My mobile phone is like a light bulb for me. A light bulb ensures that my room is bright enough

to study, chat or play some games. It facilitates our lives to complete our daily routine activities during daytime or at night. Likewise, my mobile phone illuminates my world. Once I learn novel information through my mobile phone, I assume that a brighter future is waiting for me. Additionally, it does not matter to be in the morning or evening. I can access to any websites for 24 hours through my mobile phone. (Student 33)

My mobile phone is like a ladder for me. I use the ladder to hang curtains, paint the wall or trim the peach trees in my garden. Likewise, my mobile phone helps me to access to trustable information step by step. In the past, people used to reach news through newspapers, but now I can check the accuracy through numerous websites which offer online news. Additionally, I can learn different languages in a graded way through my mobile phone. (Student 34)

My mobile phone is like a fan. I take advantage of a fan at home to cool, so I can feel more relaxed. Likewise, I use my mobile phone to read funny stories and relax after an exhausting day. My mobile phone helps me to break the monotony and feel relaxed. Additionally, I feel cool when I have an opportunity to go online. (Student 36)

My mobile phone is like an iron for me. I use my iron to make my clothes flat and smooth, so they will seem better. Likewise, I use my mobile phone to refine my knowledge. I research a lot before making a presentation in class in front of my friends and the instructor. This endeavor is so crucial, otherwise, I can address my presentation with full of deceptive information. (Student 37)

My mobile phone is like a bin. I use the dustbin to throw rubbish. Likewise, I use my mobile phone to delete unrelated or unnecessary items. Thus, I can reach the most updated information and concentrate on relevant information rather than focusing on out of date one. (Student 39)

My mobile phone is like a laundry basket for me. I use my laundry basket to keep dirty clothes before washing or take washed clothes to the clothesline. Likewise, I use my mobile phone to collect information in one point and transfer it to other fields once the need arises. (Student 40)

My mobile phone is like a sink. I use the sink to wash my hands and face or brush my teeth by running water which helps me to be more hygienic. Likewise, I use my mobile phone to

distinguish fake news from the real one, so I can reach the refined information. (Student 41)

My mobile phone is like a lantern for me. I use the lantern to light the room once power is off, so I will not be in a dark place. Likewise, I use my mobile phone to shed light on my way. I learn how to overcome my stress and be optimistic when I go online. In addition, I can increase my knowledge via my mobile phone. I see that a brilliant future lies for me if I have a chance to go online by my mobile phone. (Student 42)

My mobile phone is like a bookcase for me. I use the bookcase to read and be more knowledgeable. Likewise, I can download countless books and read on my phone. My phone is a real treasure for me to reach the latest books in an online format. (Student 43)

My mobile phone is like a sofa in the living room. The sofa has an irreplaceable place in the living room. Likewise, my mobile phone is indispensable for me. I cannot envision a life without my mobile phone as no one can imagine a living room without a sofa. (Student 45)

My mobile phone is like a door for me. The door's function is to protect the house against theft. It also welcomes people to show the interior design of the house. Likewise, my mobile phone helps me to take measures against theft and open new opportunities in my life. (Student 46)

People: My mobile phone is like one of my best friends. My best friend supports me whenever I need his assistance. We also travel, hang out and study together. Likewise, my mobile phone is more than a device for me. It helps me to relieve stress, boost my learning, revise my presentations and find the cheapest hotels before travelling. My mobile phone is a great companion like one of my best friends. (Student 10)

My mobile phone is like my mother. My mom is so precious for me because she does her best to secure my life and nurture my mental health. Likewise, my bonds with my mobile phone are so strong. My mobile phone helps me for the betterment of my lifestyle, so I will be capable of finding solutions and leading a happy lifestyle. (Student 11)

My mobile phone is like my father. My father has an irreplaceable place in my life. I need his support, affection and guidance as long as I live. Likewise, my mobile phone is indispensable in

my life. I can take advantage of my mobile phone in many ways according to my needs. (Student 12)

My mobile phone is like grandparents for me. My grandparents pass on their knowledge to me whenever they have a chance. Likewise, my mobile phone is a great source for me to learn valuable lessons, so I will not repeat the same mistakes. My life is trouble-free thanks to learning precious lessons with my mobile phone. (Student 47)

My mobile phone is like my siblings. My siblings encourage me to sharpen my skills. Likewise, my mobile phone helps me master many skills such as cooking, learning languages, installing programs, learning how to play instruments. (Student 48)

My mobile phone is like my teacher. My teacher is so knowledgeable to inspire us. Likewise, my mobile phone has millions of websites to learn and get inspired. (Student 49)

My mobile phone is like my cousin. I get on well with my cousin because we have so many common points. Likewise, my mobile phone is a great means to play online games, order food and drinks or book a hotel. It facilitates my life to be more sociable. (Student 50)

Conclusions

In this study, LPS students' attitudes towards their mobile phone use were explored in detail through a questionnaire, a survey and an interview. Considering the collected and synthesized data, some interpretations can be made.

The first noticeable point was that excessive mobile phone use was quite noticeable which was 70 % at the weekend. It was in line with previous studies (Liu et al., 2020; Shoukat, 2019) which argue that mobile phone consumption of adults increases when they do not have responsibilities to join lessons or work. Another significant point was that social media platforms received much more attention than any other online activities thanks to their popular features such as watching videos, doing online shopping, sharing photos or earning money as stated by Sun and Zhang (2021) in previous studies. In other words, social media platforms were ahead of playing online games, reading e-books, watching movies or spending time on YouTube (Yildiz, 2020). Additionally, many students were aware of the problem posed by the internet, so they had

set a clear guideline to reduce the amount of time by channeling their energy on different activities such as joining a club, doing sport, hanging out with family members and friends. They stated that their well-being and academic success will be far better if they eliminate internet addiction from their lives. Moreover, they referred to the food and drink, loved ones and household items to describe their relationship with their mobile phones. It can be suggested that the students have strong bonds with their loved ones. Furthermore, their will to change this negative cycle was promising although they had set aside more than enough time for mobile phone use recently. In other words, they were hopeful to reduce daily usage by taking part in different activities to socialize.

Some recommendations can be made for further studies. This study included students' mobile phone usage with similes. Other forms of figurative language can be integrated to illustrate the points more clearly. Additionally, students' exam scores and their mobile phone use can be compared to pinpoint whether there is a correlation between their mobile phone use and academic success in general. Finally, only food and drink, household items and people were categorized as a form of simile. Electronic devices, means of transportation, sources of energy can be included in further studies. Finally, only 50 students who have been studying in LPS of the students were included in this study. More students who have been studying at different stages of the university can be considered as participants in further studies to welcome larger segments from different stages of the university

Bibliographic references

- Baker, W. M., Lusk, E. J., & Neuhauser, K. L. (2012). On the use of cell phones and other devices in the classroom: Evidence from a survey of faculty and students. *Journal of Education for Business*, 87(5), 275–289. doi: 10.1080/08832323.2011.622814
- Beneito, P., & Vicente-Chirivella, Ó. (2022). Banning mobile phones in schools: evidence from regional-level policies in Spain. *Applied Economic Analysis*, 30(9).
- Byrne, J., & Humble, Á. M. (2007). An introduction to mixed method research. Atlantic research centre for family-work issues, 1, 1-4.
- Celik, B., Bilgin, R., & Yildiz, Y. (2022a). An evaluation of positive and negative aspects of educational games: a case study in Erbil Brayaty Primary School. *International*

- Journal of Social Sciences & Educational Studies, 9(1), 227-243.
- Celik, B., Darici, N., Yildiz, Y., & Yucedal, H. M. (2022b). Psychological Effects of Online Education during Covid 19 Process on Students: Tishk International University Case. *Canadian Journal of Educational and Social Studies*, 2(2), 55-69. <https://doi.org/10.53103/cjess.v2i2.31>
- Chóliz, M. (2010). Mobile phone addiction: a point of issue. *Addiction*, 105(2), 373-374.
- Daskan, A., & Yildiz, Y. (2020). Blended Learning: A Potential Approach to Promote Learning Outcomes. *International Journal of Social Sciences & Educational Studies*, 7(4), 103-108.
- Fishman, E. (2021). Teaching Students to Translate Poetry. *The Reading Teacher*, 75(1), 119-123. doi: 10.1002/trtr.1997
- Goswami, V., & Singh, D. R. (2016). Impact of mobile phone addiction on adolescent's life: A literature review. *International journal of home science*, 2(1), 69-74.
- Hussain, A., Hashim, N. L., Nordin, N., & Tahir, H. M. (2013). A metric-based evaluation model for applications on mobile phones. *Journal of Information and Communication Technology*, 12, 55-71.
- Ismail, M., Fadhil, I. A., Hanoon, J. A., & Murhesh, J. K. (2022). Does Smartphone Addiction Affect Social Interaction among Families in Baghdad City? *Global Journal of Public Health Medicine*, 4(2), 690-697.
- Kara, S. (2020). Letting Smartphones at Class Times: Does It Matter in Learning Process? *International Journal of Social Sciences & Educational Studies*, 7(1), 78-87.
- Kates, A. W., Wu, H., & Coryn, C. L. (2018). The effects of mobile phone use on academic performance: A meta-analysis. *Computers & Education*, 127, 107-112.
- Leem, J., & Sung, E. (2019). Teachers' beliefs and technology acceptance concerning smart mobile devices for SMART education in South Korea. *British Journal of Educational Technology*, 50(2), 601-613.
- Liu, X., Luo, Y., Liu, Z. Z., Yang, Y., Liu, J., & Jia, C. X. (2020). Prolonged mobile phone use is associated with poor academic performance in adolescents. *Cyberpsychology, Behavior, and Social Networking*, 23(5), 303-311.
- McCoy, B. (2013). Digital distractions in the classroom: Student classroom use of digital devices for non-class related purposes. *Journal of Media Education*, 4(4), 5-14. Retrieved from <http://digitalcommons.unl.edu/journalismfacpub/71>
- Morgan, K. (2012). The Pros & Cons of Cell Phone Usage in College. Seattle. Retrieved from: <http://education.seattlepi.com/pros-cons-cell-phone-usage-college-1578.html>
- Mostafa, S. A., & Ahmad, I. A. (2018). Recent developments in systematic sampling: a review. *Journal of Statistical Theory and Practice*, 12(2), 290-310.
- O'Bannon, B. W., Waters, S., Lubke, J., Cady, J., & Rearden, K. (2017) Teachers and Students Poised to Use Mobile Phones in the Classroom, *Computers in the Schools*, 34(3), 125-141, DOI: 10.1080/07380569.2017.1347454
- Park, W. K. (2005). Mobile phone addiction. In *Mobile communications* (pp. 253-272). London: Springer.
- Quimí, J., & Alexandra, J. (2022). Face-to-face vs online learning advantages and disadvantages (Master's thesis), La Libertad: Universidad Estatal Península de Santa Elena.
- Şenel, M. (2016). Exploring ELT Students' Perception of Mobile Phone through Figurative Language. *Sakarya University Journal of Education*, 6(2), 9-25.
- Shoukat, S. (2019). Cell phone addiction and psychological and physiological health in adolescents. *EXCLI Journal*, 18, 47.
- Statista. (2022, March 2). Smartphone sales worldwide. <https://www.statista.com/statistics/263437/global-smartphone-sales-to-end-users-since-2007/>
- Smith, M. L., Spence, R., & Rashid, A. T. (2011). Mobile phones and expanding human capabilities. *Information Technologies & International Development*, 7(3), pp-77.
- Sullivan, T., Slater, B., Phan, J., Tan, A., & Davis, J. (2019). M-learning: Exploring mobile technologies for secondary and primary school science inquiry. *Teaching Science*, 65(1), 13-16.
- Sun, Y., & Zhang, Y. (2021). A review of theories and models applied in studies of social media addiction and implications for future research. *Addictive Behaviors*, 114, 106699.
- Thomas, K., O'Bannon, B., & Bolton, N. (2013). Cell phones in the classroom: Teachers' perspectives of inclusion, benefits, and barriers. *Computers in the Schools*, 30(4), 295-308. <https://doi.org/10.1080/07380569.2013.844637>
- Tian, L., Shi, J., & Yang, Z. (2009). Why does half the world's population have a mobile phone? An examination of consumers' attitudes toward mobile phones.



- CyberPsychology & Behavior, 12(5), 513-516.
- Tindell, D. & Bohlander, R. (2011). The use and abuse of cell phones and text messaging in the classroom: A survey of college students. *College Teaching*, (60), 1-9.
- Wei, R. (2008). Motivations for using the mobile phone for mass communications and entertainment. *Telematics and Informatics*, 25(1), 36-46.
- Wexler, N. (2019). How classroom technology is holding students back. *MIT Technology Review*. Retrieved January 23, 2020 from <https://www.technologyreview.com/s/614893/classroom-technology-holding-students-back-edtech-kids-education>
- Yildiz, Y. (2019). EFL learners' needs in preparatory schools and supplementary techniques to improve their language proficiency. *International Journal of Academic Research in Business and Social Sciences*, 9(1), 586-596.
- Yildiz, Y. (2020). Reading habit and its role on students' academic success at language preparatory school: A research on Tishk International University preparatory school students. *Amazonia Investiga*, 9(27), 189-194.
<https://doi.org/10.34069/AI/2020.27.03.20>
- Yildiz, Y. (2021). Teaching English as a foreign language to 4th grade students by using technology. *Canadian Journal of Language and Literature Studies*, 1(2), 38-54.

DOI: <https://doi.org/10.34069/AI/2022.56.08.21>

How to Cite:

Alnabulsi, M.M. (2022). Al-Jouf educational supervisors perceptions about handheld devices' importance in health education concepts' acquisition to students. *Amazonia Investiga*, 11(56), 210-223. <https://doi.org/10.34069/AI/2022.56.08.21>

Al-Jouf educational supervisors perceptions about handheld devices' importance in health education concepts' acquisition to students

تصورات المشرفين التربويين بمنطقة الجوف حول أهمية الأجهزة الكفية في اكتساب الطلاب مفاهيم الثقافة الصحية

Received: August 23, 2022

Accepted: October 27, 2022

Written by:

Mishal Mohammed Alnabulsi⁹⁰<https://orcid.org/0000-0001-6413-3476>

Abstract

The study aimed to find out the educational supervisors' perceptions about the importance of handheld devices in acquiring health education concepts by school students in Al-Jouf region, KSA. A descriptive approach and a questionnaire were applied on random educational supervisors' sample. The study's results concluded that the school students' most important health concepts are "health" and "diet", that the handheld devices are of great importance in acquiring health education concepts, the students' great challenges and absence of statistically significant differences in the questionnaire both dimensions at ($\alpha \leq 0.05$) attributed to the study variables (gender, educational administration, experiences).

Keywords: Handheld devices, Health concepts, Educational supervisors.

Introduction

KSA 2030 Vision's technology leap increased students' use of handheld devices in education. KSA rushed to transform to digital remote education during COVID-19 pandemic period, to protect students from contracting diseases and maintain their health. Ottawa Declaration stressed that health is a daily resource that meets individual's needs, helps them realizing their ambitions, and is a positive concept emphasizing social and personal resources and physical capacities (WHO, 2012, p. 6). Health is indispensable human right, hence the states are responsible for caring for health education of all society's classes, spreading health awareness, and making use of handheld devices in that

الملخص

هدفت الدراسة معرفة تصورات المشرفين التربويين حول أهمية الأجهزة الكفية في إكتساب طلاب المدارس لمفاهيم الثقافة الصحية في منطقة الجوف بالمملكة العربية السعودية. تم استخدام المنهج الوصفي، وطبقت الاستبانة على عينة عشوائية من المشرفين التربويين بمنطقة الجوف. توصلت نتائج الدراسة إلى أن أهم المفاهيم الصحية لطلاب التعليم العام هي "الصحة"، و"النظام الغذائي"، وأن للأجهزة الكفية أهمية كبيرة في اكتساب الطلاب مفاهيم الثقافة الصحية، ووجود تحديات بدرجة كبيرة تواجه الطلاب. وعدم وجود فروق ذات دلالة إحصائية في بعدي الاستبانة عند مستوى ($0.05 \geq \alpha$) ترجع إلى متغيرات الدراسة (الجنس، نوع الإدارة التعليمية، سنوات الخبرة).

الكلمات المفتاحية: الأجهزة الكفية، المشرفين التربويين، المفاهيم الصحية.

(Al-Kinani & Al-Dujaili, 2018, p. 13). Technology and digital skills intervened in all life's activities, through developing many suitable digital applications. The importance of learning health education concepts is attributed to its being as important means for improving human life and health, changing individuals' unhealthy trends and behaviors, improving health level, increasing health awareness's and improving life' quality (Al-Kinani & Al-Dujaili, 2018).

The scientific problem is to study the importance of handheld devices in acquiring school students with health education concepts, and the most

⁹⁰ Dr. Assistant Professor of Education Techniques, Department of Curriculum and Teaching Techniques Faculty of Education and Literature, Northern Border University, Saudi Arabia.

important health concepts for students, and the challenges facing students' use of hand devices in acquiring health concepts. The research highlights about handheld devices' importance in health education concepts' acquisition to students from educational supervisors' point of view, and statistically differences of sample responses about each reality challenges according to gender, educational administration, and experience. Therefore, the priority tasks of schools in the present time is to develop student's ability to use handheld devices in acquiring health education concepts according to their needs.

Statistics of "Communication and Information Technology Commission 2020" indicate that the average data consumption per capita in KSA is 920 megabytes, equivalent approximately to triple global average. Some studies indicate to shortcomings in health concepts in KSA different educational stages curricula, Abu-Hula & Al-Balawi, (2006). Ben-Amrouche & Saker, (2020) recommends the necessity of developing health awareness methods through applying and spreading of new media and handheld devices. Al-Qaisi et al., (2021) points to the internet cultural content diversity. (Ben-Amrouche & Saker (2020) said that 50% of internet users believe in the internet significant impact on their health problems' understanding and 44% have improved their relationship with doctors thanks to internet. Bin-Safi (2019) showed that handheld devices-internet changed individuals' tastes of home-cooked meals, and opinions on fast-food-obesity relationship. Educating students about health concepts makes them aware of their health and healthy behaviors, which enhance their school excellence, Al-Zakari, (2007), and urge them to adhere to sound health practices to reduce diseases' spread. The WHO strives to raise health education level worldwide, Badah, et al., (2014).

School students' engagement with handheld devices, passion for digital world, long hours spent on internet are obvious. Students' acquired distance learning experience during Covid-19 pandemic contributed in that. The author noted through his observations at schools' student's strong attachment with handheld devices, integration with virtual world, reluctance to engage in collective dynamic activities, and scarcity of direct discussions. Hence the importance of health education concepts for students, and their role in reaching health and physical fitness indicators, Al-Ameen, (2020), motivated the author to benefit from this phenomenon for defining its important role in

providing students with health education' concepts.

The main question of study problem is: What are the educational supervisors' perceptions in Al-Jouf region in KSA about handheld devices importance in acquiring school students with health education concepts?

Accordingly, four subquestions emerged from it:

1. What are the public education student's most important health concepts acquirable through handheld devices from educational supervisors' opinions?
2. What are the educational supervisors' real perceptions about handheld devices' importance in school students' real acquiring health education concepts?
3. What are school students' challenges in using handheld devices in acquiring health education' concepts from educational supervisors' opinions?
4. What are the statistically differences of sample responses about each reality challenges in respect to study variables (gender, educational administration, experience)?

The study aimed to know the educational supervisors' perceptions about handheld devices' importance in acquiring health education concepts by school students.

It stems from the school student's dependence on handheld devices to get desired information.

The study theoretical importance comes from its handling this present and future important topic. While its practical importance comes from its contribution in enriching knowledge relevant to the curricula, and becoming more compatible with digital age to realize KSA 2030 vision.

Objective limitations are defined by handheld devices importance in school students' acquisition of health education concepts. Human limits are education departments' educational supervisors. Spatial limits are Al-Jouf region, KSA, (Sakakah, Dumat Al-Jandal, Tabarjal and Sweir).

Research Terminology

Handheld devices: "Portable electronic devices usable in education (mobiles, internet-accessed iPads, using an accredited operating system" (Al-Omari & Al-Momni, 2010, p. 2).

Health Concepts: “information set, facts and ideas relevant to positive state of physical, psychological, mental, social, personal, environmental, and preventive safety and adequacy included in the curriculum, and suitable for students’ age and contemporary developments” (Saleh et al., 2016, p. 1215).

The author defines procedurally health culture concepts as information and facts that deal with healthy learning experiences significant to students and aim to prevent them from contracting diseases and enhance their voluntary commitment to healthy behavior that limits the infection’s spread.

Theoretical framework and previous studies

The research triggered off the “social responsibility” theory, which focused on media social responsibility, entrusted roles and ability to influence the public (Murad, 2014). The theory’ intellectual principles are based on their meeting the public rapid needs and self-adherence to the society moral codes. It emerged in the American society through the Hutchins Committee, 1947” report titled “Free and Responsible Press”, which referred to media trespasses’ damages to society. The author chose this theory to support his research, due to its relation to his topic; since awareness and education of the society’s rights is a social media responsibility, as traditional and modern media became effective tools in influencing societies and individuals’ life.

All governments including KSA’s, paid great attention to health. KSA 2030 vision focused on strengthening health education of society members, upgrading health services, and using all modern means to spread health awareness. The modern media impact on individuals’ behavior is known (Najmi, 2020), as modern technology plays important role in societies and individuals’ life, which increased in parallel to sophisticated handheld electronic devices spread among students, after transition to e-learning during COVID-19 pandemic. This spread increased students’ internet spent time making handheld devices an essential element in educational process and an integral part of the societies and individuals’ life (Al-Zayoud, 2020). Electronic content has helped increase student achievement joyfully and making learning more interactive (Kapilas & Sreedevi, 2022).

Some studies pointed to social media networks’ role in exchanging instant conversations, videos and audios (Al-Hawari & Maarouf, 2021),

interaction using handheld devices, such as Facebook, Twitter and YouTube (Al-Awfi, 2012) limitless geographically, and to develop students’ healthy medical education (Jadoun & Ghadban, 2022). Modern health awareness policies rely on integrating social media networks electronic platforms, to facilitate health organizations to digitally manage educational materials, interact their with users and keep them attached to their handhelds devices due to increasing attraction and importance to health sectors in educational programs (Al-Faram, 2016).

Handheld devices have some advantages, such as instant interaction, discussion and exchanging views on health issues, displaying images and video clips, strengthening individual’s particularity, high storage and archiving capacity, rapid information retrieval, mass influence (Jadoun & Ghadban, 2022), meeting educational and cultural students’ needs and increasing their knowledge (How & Hung, 2019).

Al-Zayoud (2020) mentioned some disadvantages of using handheld devices such social isolation, weak personal skills and learning undesirable things. Al-Nabulsi (2021) mentioned internet addiction, electronic bullying, and intellectual property violation, lack of physical activity and sleep disturbances.

WHO used “Health Awareness” as a synonymous for “health education” which defines as “educational processes, through which health concepts, trends and behavior of individuals are changed to prevent diseases, preserve and improve health” (Al-Hefnawy, 2014, p. 134). “Health culturing” is used as synonym for “health education”, for communicating information and skills process necessary for individuals to practice their life, and enhance some of their behaviors, which are reflected on society’s and own health (Ben-Amrouche & Saker, 2020), by using medical posters, video clips, awareness lectures, and electronic health information exchange through internet-accessable and navigable handheld devices, playing an important role in creating and changing behaviors and values (Zawi, 2020).

Health education is reflected on individual’s health awareness level, as a behavior’s drive through intended practicing healthy behaviors, then practicing is transformed into unconscious habits (Najmi, 2020). Health culturing occurs slowly and gradually (Qaim, 2016). Current health care industry age has

witnessed great progress in line with artificial intelligence and robotics, helping hospitals to gain competitive advantages, in remotely following up patients, answering their inquiries, and satisfying their medical needs by automating medical processes, and transforming to intelligent robotic hospital, preserving punctuality and speed (Pavithra & Afza, 2022).

Literatures studies can be divided in two domains:

First: Studies dealt with health concepts. (Al-Sulaimani, 2008) aimed to identify health concepts to be incorporated in KSA elementary schools' curricula while (Eslim, 2010) identified health concepts in secondary schools and (Al-Shehri, 2018) exposed health education standards in first intermediate grade. (Al-Tweissi & Al-Shawish, 2013) reveal the health concepts in Jordan sixth and seventh grades while (Al-Fakir et al., 2014) dealt with health culture concepts in geography curricula and (Saleh et al., 2016) uncover health concepts in vocational education and (Al-Khazaali, 2018) tackled health concepts lower basic stage curriculum. (Taabali et al., 2017) revealed health concepts in primary school curricula in Algeria.

Second: Studies dealt with electronic devices and health education: (Al-Sulaiman, 2016) identified the effectiveness of a suggested computer program in providing fourth-grade students with health education concepts. (Bin-Safi, 2019) culture comparative study discussed health anthropology and its impact on disease and health care. (Zawi, 2020) examined the relationship between modern media and creating

individuals' cultural and social awareness. (Bin Amrouch & Saker, 2020) identified the media role in spreading health. (Al-Suhail, 2021) tackled sports media role in raising individuals healthy culture level during COVID-19 pandemic in Kuwait. (Al-Qaisi et al, 2021) examined media role in spreading health education among students and how to deal with epidemiological crises. (Jadoun & Ghadban, 2022) handled Facebook's contribution to awareness health during COVID-19 pandemic through analyzing Algerian Health Ministry webpage. (Ghaffary et al., 2022) inspected the viewpoint of a doctor using wireless devices in intensive care units IP, Phone, Pager and wireless monitoring, and the possibility of assessing an intensive care unit patient's condition without visiting him, and accessing to patient's file via internet.

Current study tackled the importance of handheld devices in acquiring school students 'health education concepts while none of the reviewed studies did that, giving the current study a distinctive scientific importance, and distinguishes itself from them. It differentiated from previous studies in subject, study sample, and tool in order to bridge this research gap, and to stress the importance of its execution.

Methodology and Procedures

The study used the descriptive approach to deal with a study population consisted of all educational supervisors in Al-Jouf region (Sakakah, Dumat Al-Jandal, Tabarjal, Sweir administrations), table (1).

Table 1.
Study population

Phras /Administration	Population			
	Male	Female	Total	%
Sakakah	43	63	106	41.57
Dumat Al-Jandal	27	35	62	24.31
Tabarjal	29	24	53	20.79
Sweir	18	16	34	13.33
Total	117	138	255	100.00

Source: Al-Jouf region education department's statistics, 2022.

To calculate the sample size, (Thompson, 2012) equation was used, where the sample was (153) individuals. The researcher obtained (157) responses, with a (61.57%) of the (255) population study chosen randomly, using an electronic link to perform the questionnaire in the period (4/9-30/9/2022)

Questionnaire

It based on five-point Likert scale, (5) fully agree, (4) agree, (3) to somewhat, (2) disagree, (1) absolutely disagree.

Questionnaire Validity

The questionnaire's structural validity was computed, by calculating the Internal

Consistency Coefficients between the score of each phrase in each dimension and the total score of the dimension measured, table (2).

Table 2.
Internal Correlation Coefficients (R)

Dimension (1)				Dimension (2)				Dimension (3)			
No.	R.	No.	R.	No.	R.	No.	R.	No.	R.	No.	R.
1	0.579**	10	0.615**	19	0.426**	28	0.478**	37	0.286**	46	0.576**
2	0.597**	11	0.527**	20	0.440**	29	0.485**	38	0.655**	47	0.388**
3	0.622**	12	0.604**	21	0.335**	30	0.452**	39	0.511**	48	0.541**
4	0.635**	13	0.542**	22	0.468**	31	0.464**	40	0.570**	49	0.483**
5	0.540**	14	0.609**	23	0.462**	32	0.467**	41	0.511**	50	0.572**
6	0.611**	15	0.525**	24	0.394**	33	0.388**	42	0.527**	51	0.435**
7	0.601**	16	0.471**	25	0.379**	34	0.434**	43	0.549**	52	0.435**
8	0.567**	17	0.418**	26	0.568**	35	0.469**	44	0.612**	53	0.345**
9	0.608**	18	0.464**	27	0.419**	36	0.339**	45	0.504**	-	-

(**significance at 0.01)

Table (3) shows the internal correlation coefficients of each dimension and the total score of the questionnaire.

Table 3.
Internal Correlation Coefficients (R)

Dimensions	R.
Most important health concepts of interest to school students	0.680**
Importance of handheld devices in school students' acquisition of health education concepts	0.722**
Challenges of school students' use of handheld devices in acquisition of health education concepts	0.709**

(**significance at 0.01)

Questionnaire Reliability

It was calculated using Cronbach's alpha coefficient, and the split-half equation of

Spearman-Brown. Table (4) shows stability parameter values.

Table 4.
Reliability Coefficients

Dimensions	Cronbach's alpha	Split-half reliability
Most important health concepts of interest to school students	0.87	0.77
Importance of handheld devices in school students' acquisition of health education concepts	0.75	0.85
Challenges of school students' use of handheld devices in acquisition of health education concepts	0.82	0.81
Total questionnaire	0.86	0.69

Results and Discussion

The researcher converted the responses obtained into numbers alternatives' limits according to the

questionnaire responses, table (5) limits of questionnaire alternatives:

Table 5.
Limits of questionnaire alternatives

Category	Score	Limits		Score
		from	To less than	
fully agree	5	4.20	5.00	very large
agree	4	3.40	4.20	large
to some extent	3	2.60	3.40	medium
don't agree	2	1.80	2.60	little
absolutely disagree	1	1.00	1.80	very little

Table (6) shows the distribution of the educational supervisor's sample according to the variables (Gender, Administration & Experiences).

Table 6.
Sample Variables & Categories

Variable	Category	Sample	%	Total
Gender	Male	79	50.32	157
	Female	78	49.68	
	Sakakah	43	27.39	
Administration	Dumat Al-Jandal	42	26.75	157
	Tabarjal	40	25.48	
	Sweir	32	20.38	
	5	31	19.75	
Experiences	5 >10	30	19.11	157
	10 >15	44	28.02	
	15 >	52	33.12	

Table (6) shows that the percentage of male is higher than that of females, respondents from Sakakah administration is the highest, and the respondents with more than 15 years' experience is the highest. Perhaps this is due to the influence of the experience factor on the response, and their desire to benefit from their expertise in scientific research.

The author answered the study four subquestions as follows:

First subquestion: What are the public education student's most important health concepts acquirable through handheld devices from educational supervisors' opinions? Table (7) shows the means and ranking of the of the most important health concepts of school students according to educational supervisors' perceptions:

Table 7.
Means and Ranking of Most Important Health Concepts

Health Concepts	Means	Ranking
Health Care	4.26	1
Psychological health	3.86	8
Disease protection	4.04	3
Medical Examination	3.98	5
Medical treatment	4.03	4
Healthy behavior	3.98	5
Healthy diet	4.08	2
Vaccination against diseases	3.92	7
Fitness	3.98	5
Immunity	3.75	10
Delusion of illness	3.70	12
Affliction	3.80	9
Infection	3.95	6
Obesity	3.73	11

COVID-19	3.65	13
Cholesterol	3.57	15
Diabetes	3.60	14
Pollution	3.33	16
All dimension	3.84	

Table (7) shows that the most important health concepts dimension of school students that can be acquired through handheld devices according to educational supervisors' perceptions is (3.84), corresponding to a significant degree of agreement. The most important health concepts are "health care", which came in the first place with a very large degree of agreement, then "healthy diet" with a large degree of agreement. The "pollution" concept came in the last place with a medium degree.

Second subquestion: What are the educational supervisors' real perceptions about handheld devices' importance in school students' real acquiring health education concepts? Table (8) shows means and ranking of the responses of educational supervisors about the importance of handheld devices in the acquisition of health education concepts by students.

Table 8.
Means and Ranking of Importance of Handheld Devices

N	Phrase	Means	Ranking
1	Students search internet for health care methods	4.22	1
2	Students learn the skills of health information and concepts in trusted medical websites	3.76	7
3	Students use handheld devices to recognize the concept of students' healthy behavior	3.77	6
4	Students use handheld devices in searching for methods of rationalizing medicines and medical treatment's expenditures	3.88	2
5	Students rely on handheld devices to obtain medical information instead of visiting and consulting doctors	3.75	8
6	Help students in researching the most appropriate healthy diet to reduce disease's spread	3.66	12
7	Using handheld devices to access sites specialized in calculating calories for students' appropriate healthy food	3.87	3
8	Help students in accessing up-to-date medical information	3.78	5
9	Quick access to information about instant health concepts	3.83	4
10	Students benefit from handheld devices in promoting healthy habits	3.71	10
11	Contribution of handheld devices in presenting an interesting explanation to students about health concepts implications	3.74	9
12	Students' publishing the meanings and implications of health concepts in internet	3.63	13
13	Students share health concepts' explanations with their colleagues on the electronic cloud and social media	3.75	8
14	Students watch clips those explain health concepts' meanings in easy way to apply	3.62	14
15	Students follow reliable Internet health channels	3.75	8
16	Easy access to extensive information on health concepts those support psychological stability of sick students	3.68	11
17	Students' use of handheld devices in educating society's members about health issues, especially in a period of crisis	3.63	13
18	Handheld devices presentation of correct methods for practicing sport and fitness exercises	3.63	13
	All dimension	3.76	

Table (8) shows that the average degree of the dimension "agreement of educational supervisors'

perceptions of the importance of handheld devices in school students' acquisition of health education

concepts” was high (3.76), and that the most important phrases "phrase 1" (very large degree), then "phrase 4" (large degree). “Phrase 14” came in the last place for the phrase of this dimension, (large degree). Each of the three penultimate phrases i.e. "Phrase 12", "phrase 17", and "phrase 18", (large degree).

Third subquestion: What are school students’ challenges in using handheld devices in acquiring health education’ concepts from educational supervisors’ opinions? Table (9) shows means and ranking of the educational supervisors’ responses to the challenges of school students’ use of handheld devices in acquiring the concepts of health education:

Table 9.
Means and Ranking of Challenges

N	Phrases	Means	Ranking
1	Distraction of students’ understanding of the meanings of health concepts due to sources’ abundance	4.17	1
2	Students’ delusion of contracting diseases because their reading about symptoms on internet	3.50	9
3	Weak abilities of school students to comprehend the meanings of health concepts	3.50	9
4	Students’ preoccupation in health-irrelevant contents in Internet	3.68	4
5	Students' addiction to browsing various websites in Internet	3.69	3
6	Students' use of health concepts in cyberbullying their peers	3.38	13
7	Lack of health concepts included in the public education stages’ curricula	3.58	8
8	Addressing the meanings of health concepts in the public education stages curricula insufficiently for students needs	3.66	5
9	Scarce use of handheld devices in communication between teachers and students to explain health concepts	3.66	5
10	Marginalizing the family role in clarifying the meanings of health concepts to their children	3.31	14
11	Weakness of parents’ conviction in the information those explain health concepts in internet	3.50	9
12	Outdating of health information available in internet	3.44	11
13	Exaggeration by some medical websites specialized in providing information explaining health concepts	3.61	7
14	Incredibility of information available in internet about health concepts of students’ interest	3.43	12
15	Students’ satisfaction with health information available in internet without referring to medical institutions	3.46	10
16	Handheld devices facilitate to students following websites that deal with health concepts inappropriate for their age	3.65	6
17	Handheld devices enhance spreading the culture of taking medicaments without consulting specialized doctors	3.72	2
All dimension		3.58	

Table (9) shows that the average degree of challenges is (3.58), corresponding to a large degree of challenges, and the most challenge facing students was "phrase 1" (large degree), then "phrase 17" (large degree), while "phrase 10" came in the last place (medium degree).

Forth subquestion: What are the statistically differences of sample responses about each reality challenges in respect to study variables (gender, educational administration, experience)? The answers according to the variables are as follows:

1- Gender variable: to verify statistically differences of sample responses, means and standard deviations of the reality and challenges of school students' use of

handheld devices in acquiring the concepts of health education, and (t-test), according to gender, are clarified in table (10).

Table 10.
Means and Standard Deviations (Gender)

Dimensions	Variable	N	Mean	Std.	(T) Value	Sig.
Real educational supervisors' perceptions	Male	79	67.15	7.60	0.83	0.69
	Female	78	68.15	7.48		
Challenges of school students in using handheld devices for acquiring health concepts	Male	79	59.79	10.37	1.49	0.19
	Female	78	62.05	8.58		

Table (10) shows that there are no statistically significant differences at ($\alpha \leq 0.05$) in both questionnaire dimensions, and in the total questionnaire, related to the gender variable (T=0.83). The results also indicate that male and female supervisors agree on the various challenges facing the school students' use of

handheld devices in acquiring health education concepts of (T=1.49).

2- The educational administration variable: to verify statistically differences of sample responses, means and standard deviations were calculated, and clarified in table (11).

Table 11.
Means and Standard Deviations (Administration)

Dimensions	Variable	N	Mean	Std.
Real educational supervisors' perceptions	Sakakah	43	68.54	5.89
	Dumat Al-Jandal	42	66.52	7.57
	Tabarjal	40	68.08	9.44
	Sweir	32	67.41	6.88
Challenges of school students in using handheld devices for acquiring health concepts	Sakakah	43	63.81	8.69
	Dumat Al-Jandal	42	60.45	7.81
	Tabarjal	40	59.75	11.82
	Sweir	32	59.06	9.16

Table (11) shows that Sakakah administration educational supervisors obtained the highest average in both questionnaire dimensions, and that Dumat al-Jandal administration supervisors obtained lowest average in reality dimension, and Sawyer administration supervisors obtained lowest average challenges dimension. Averages of reality dimension were (68.54), (68.08), (67.41), (66.52) were from Sakakah, Tabarjal,

Sweir and Dumat al-Jandal managements respectively. Averages of challenges dimension were (63.81), (60.45), (59.75), (59.06) from Sakakah, Dumat Al-Jandal, Tabarjal, and Sweir administration respectively.

One-way ANOVA was calculated for the educational administration variable for independent samples, and clarified in table (12).

Table 12.
One-Way ANOVA Test (Administration)

Dimensions	Source of variance	Sum of squares	DF	Average of squares	(F) Value	Sig.
Real educational supervisors' perceptions	Between groups	96.07	3	32.02	0.56	0.64
	Within groups	8745.67	153	57.16		
	Total	8841.73	156			
Challenges of school students in using handheld devices	Between groups	534.46	3	178.15	1.99	0.12
	Within groups	13722.29	153	89.69		
	Total	14256.75	156	-		

Table (12) shows no statistically significant differences at the statistical significance ($\alpha \leq 0.05$) of in both questionnaire dimensions according to educational administration variable (Sakakah, Dumat al-Jandal, Tabarjal, Sweir), in the reality dimension ($F=0.56$) and at a significance level of (0.64), and in the challenges dimension ($F=1.99$) and at the level of significance (0.12).

3- Years of experience variable: to verify statistically differences of sample responses, means and standard deviations of scores for the reality and challenges of school students' use of handheld devices in acquiring health education concepts, according to the years of experience variable were calculated, and clarified in table (13).

Table 13.
Means and Standard Deviations (experience)

Dimensions	Variable	Number	Mean	Std.
Real educational supervisors' perceptions	5 years>	31	69.97	7.65
	10 years>5	30	67.27	7.94
	15 years>10	44	67.11	8.04
	15 years<	52	66.94	6.68
Challenges of school students in using handheld devices for acquiring health education concepts	5 years>	31	63.13	8.34
	10 years>5	30	61.07	10.08
	15 years>10	44	61.52	9.43
	15 years<	52	58.98	9.94

Table (13) shows that educational supervisors with (less than 5 years) experiences obtained the highest average in both questionnaire dimensions, and supervisors with (more than 15 years) obtained the lowest average in both dimensions. The averages were (69.97), (67.27), (67.11), (66.94) for experienced supervisors (less than 5 years), (5 to less than 10 years), (10 to less than 15 years), (more than 15 years) respectively. In the challenges dimension, the averages were

(63.13), (61.52), (61.07), (58.98) for supervisors with experience (less than 5 years), (from 10 years to less than 15 years), (from 5 years to less than 10 years), (more than 15 years), respectively.

One-way ANOVA was calculated for the years of experience variable for independent samples, and clarified in table (14).

Table 14.
One-Way ANOVA Test (experience)

dimensions	Source of variance	Sum of squares	DF	Average of squares	(F) Value	Sig.
Real educational supervisors' perceptions	Between groups	209.64	3	69.88	1.24	0.30
	Within groups	8632.09	153	56.42		
	Total	8841.73	156	--		
Challenges of school students in using handheld devices	Between groups	363.44	3	121.15	1.33	0.27
	Within groups	13893.31	153	90.81		
	Total	14256.75	156	--		

Table (14) shows that there are no statistically significant differences at the level of statistical significance ($\alpha \leq 0.05$) in both questionnaire dimensions attributed to the years of experience variable, in the reality dimension ($F=1.24$), with significance (0.30), in the challenges dimension ($F=1.33$) with significance (0.27).

The results of table (7) show that the educational supervisors' opinion agrees to a large extent with the most important health concepts which can be acquired by students through handheld devices. This is explained by the fact that health concepts play a major role in supporting students' health culture, as it includes multiple knowledge and skills that contribute to changing attitudes and behaviors, and that the most important health concepts for students of public education are "health care", then "healthy diet". This corresponds to the human being basic needs, food and health, as the rest of needs depend on them according to Maslow's hierarchy. The concept of health care is one of the most needed concepts, especially in periods of diseases and epidemics spread, as happened during COVID-19 pandemic, and a healthy diet contributes to individual's health care condition and prevents diseases. While "pollution" concept came last, despite its importance locally and globally perhaps due to the lack of air and environmental pollutants in the fertile agricultural Al-Jouf region, that is famous for its olive trees.

Additionally, the "cholesterol" concept came Penultimately, perhaps due to that this term is mostly used among the elderly, and rarely used by educational students, and this is consistent with Taabali et al. (2017), and Al-Shehri (2018), which dealt with health concepts that should be included in curricula. It also explains the importance of health concepts for students as a result of COVID-19 pandemic impact and its infection and deaths cases globally, whereas the greatest interest was in health education to avoid contracting the disease.

Table (8) show the high agreement of the educational supervisors' point on the importance of handheld devices in students' acquisition of health education concepts which is explained by strong students' adherence to handheld devices which became vitals in their lives, as students depend on them in their scientific and cultural achievements, and searching the websites. This is in line with the current technological revolution and the rapid digital transformation that KSA is keen to keep pace with in accordance with 2030 Vision.

The most important phrases were "Students search internet for health care methods", then "Students use handheld devices in searching for methods of rationalizing medicines and medical treatment's expenditures", which indicates the students' association with internet, and their desire to increase health information from various reliable sources, due to the growth of their culture in maintaining their health condition, and reducing treatment expenses. This is consistent with Zawi (2020).

The phrase "Students watch clips those explain health concepts' meanings in easy way to apply" was less important among the phrases, which may be attributed to the large number of sites and accounts that broadcast clips of unreliable source on internet probably conflict each other and lose credibility in contrast with Ibrahim & Inan (2022). Penultimately, came the phrases "Students' publishing the meanings and implications of health concepts in internet", "Students' use of handheld devices in educating society's members about health issues, especially in a period of crisis", "Handheld devices presentation of correct methods for practicing sport and fitness exercises reflecting students' desire to educate themselves in a healthy way, and their unwillingness to publish and share information on internet for fear of responsibility due to lack of credibility in contrast with Al-Qaisi et al. (2021).

Generally, handheld devices are of great importance in students' acquisition of health education concepts, which expresses the study sample's conviction of handheld devices' importance for students, and their complementary role to school's role in education. This is explained by handheld devices spread among students, students' high searching skills using them which was greatly enhanced by adopting distance learning for during COVID-19 pandemic, and to the link between students learning and electronic platforms, in addition to health concepts' inefficiency in school curricula in concordance with Al-Shehri (2018).

Table (9) show that the challenges facing students are large, due to the abundance of cultural and informational diversity on internet, which affects students' behavior sometimes, and the contradictions of their contents occasionally. Continuous programs' updates and of technological devices' developments are another challenge facing students in adapting with them, which is consistent with Bin-Safi (2019) and Zawi (2020).

The greatest challenge for students was "Distraction of students' understanding of the meanings of health concepts due to sources' abundance", which may be attributed to the weak control over internet uploaded cultural contents, which makes students facing the challenge of choosing the most reliable and credible information. Then the phrase "Handheld devices enhance spreading the culture of taking medicaments without consulting specialized doctors". This is explained by the lack of health education information among students, and their lack of medical expertise, which makes them tolerate taking medicines without doctor's consulting, relying on information available on internet, in concordance with Al-Suhail (2021) and Al-Qaisi et al. (2021). The phrase "Marginalizing the family role in clarifying the meanings of health concepts to their children" came in the last place, which is explained by students' strong family bonding, and attributed to family's health directives and caring its children, in disconcordance with Jadoun & Ghadban (2022).

Penultimately, came "Students' use of health concepts in cyberbullying their peers" which was explained by students' possessing social awareness and appropriate amount of values that prevent them from bullying their colleagues of special needs, in concordance with Ben-Amrouche & Saker (2020). Generally, students face great challenges due to the fact that the era which we currently live is characterized by rapid and continuous technological development of handheld devices and software. The lack of educational curricula in addressing health concepts and the of content of health culture knowledge's diversity on the internet, increases the challenges that students face when use handheld devices, in accordance with Jadoun & Ghadban (2022).

Table (10) show no statistically significant differences in gender variable at ($\alpha \leq 0.05$) in both questionnaire dimensions, and in the total questionnaire, which indicates male and female supervisors' agreement about both questionnaire dimensions. This is explained by males and females supervisors' similar acquaintance with the challenges which students face, due to their same preparation programs, juxtaposition of their living places, similarity of male and female schools' facilities and curricula in concordance with Al-Khazaali (2018), Al-Sulaiman (2016).

It also explains the males and females supervisors' agreement about the challenges the students face in using handheld devices to

acquire health education concepts, which is explained by males and females supervisors' similar acquaintance with the challenges which students face, good contact with them, students' need for more health education, shortcomings of school curricula in handling health education concepts, and great diversity in presenting cultural health concepts on internet, in concordance with Saleh et al. (2016) and Al-shehri (2018).

One-way ANOVA (table 12) show no differences between means in the questionnaire both dimensions attributed to the educational administration variable. This is explained by the similarity of the educational administrations in Al-Jouf region in terms of facilities, preparations, training programs, and follow-up methods, high similarity of educational supervisors' experiences and skills, and sample small number (255) which helped in enhancing their intercommunication and conducting scientific meetings and discussions to exchange knowledge, experiences, skills and ideas.

One-way ANOVA (table 14) show no differences between means in the questionnaire both dimensions attributed to the variable number of years of experience. This is explained by the fact that all educational supervisors have minimum skills and technological proficiency necessary to perform their supervision tasks inasmuch as they attend specialized training programs held by educational administrations, and exchange experiences through WhatsApp groups, and scholarly discussions remotely and in person.

Conclusions

- The most important health concepts for school students are, "health care" and "healthy diet".
- The perceptions of educational supervisors about the importance of handheld devices in school students' acquisition of health culture concepts were very great.
- The most challenges facing school students are "Distraction of students' understanding of the meanings of health concepts due to sources' abundance" and "Handheld devices enhance spreading the culture of taking medicaments without consulting specialized doctors".
- There are no statistically differences at ($\alpha \leq 0.05$) in the questionnaire dimensions and in the questionnaire as a whole, level attributed to the study variables (gender,

educational administration, & years of experience).

Bibliographic references

- Abu-Hula, M., & Al-Balawi, K. (2006). Health concepts in science curricula for the intermediate stage in the Kingdom of Saudi Arabia. *Damascus University Journal*, 22(2), 197-240. <https://2u.pw/dCelp4> .(In Arabic).
- Al-Awfi, A. (2012). *Media Awareness Campaigns: Theoretical Foundations and Practical Procedures*. Riyadh: King Saud University. <https://2u.pw/obIsb5>. (In Arabic).
- Al-Fakir, S., Al-Subhien, E., & Al-Rasa'i, M. (2014). Health education concepts in geography books for the upper basic stage in Jordan. *Educational Journal*, 38, 128-152. <https://2u.pw/cPxOx1>. (In Arabic).
- Al-Faram, K. (2016). The use of social media in health awareness of Corona disease: An Applied Study on Medical Cities and Their Government Hospitals in Riyadh, Saudi Arabia. *The Arab Journal for Media and Communication Research*, 14, 164-175. (In Arabic). DOI: [10.21608/JKOM.2016.109340](https://doi.org/10.21608/JKOM.2016.109340)
- Al-Hawari, S., & Maarouf, A. (2021). *Media management for health crises*. Berlin: The Arab Democratic Center for Strategic Studies and Economic Policy. <https://2u.pw/WKg2js>. (In Arabic).
- Al-Hefnawy, M. (2014). *Press and health education*. Kafr Al-Sheikh, Egypt: House of Science and Faith for Publishing and Distribution. <https://2u.pw/SfoywE>. (In Arabic).
- Al-Khazaali, W. (2018). The degree of inclusion of health concepts in Islamic education books for the lower basic stage in Jordan. (Unpublished Master's Thesis), College of Educational Sciences, Al-Al-Bayt University, Jordan. <https://2u.pw/9D5spV>. (In Arabic).
- Al-Kinani, M., & Al-Dujaili, A. (2018). *Television and health awareness*. Amman: Dar Amjad for Publishing and Distribution. <https://2u.pw/FUjEoQ>. (In Arabic).
- Al-Ameen, H. (2020). Health culture and its relationship to some health and physical fitness indicators for preparatory stage students. *Scientific journal of physical education and sports sciences*, 88, 494-508. (In Arabic). DOI: [10.21608/JSBSH.2020.29384.1162](https://doi.org/10.21608/JSBSH.2020.29384.1162)
- Al-Nabulsi, M. (2021). Social media applications as one of the economic options for future education from the point of view of school principals. *Faculty of Education Journal*, 83(4), 579-638. (In Arabic). <https://doi.org/10.21608/MKMGT.2022.146937.1275>
- Al-Omari, M., & Al-Momani, M. (2010). *Innovations in the learning and teaching process and a step-by-step guide to their use*. Irbid: The world of books. <https://2u.pw/1o9DzS>. (In Arabic).
- Al-Qaisi, S., Abdul-Zobai, A., & Abdul-Razzaq, R. (2021). The degree of health media practice in dealing with epidemiological crises and its relationship to promoting health awareness for the Iraqi public. *Al-Arabi Journal for Media Studies*, 13, 68-95. <https://2u.pw/gqxr2C>. (In Arabic).
- Al-Shehri, S. (2018). The degree of observance of health education standards included in the science curriculum content for the first intermediate grade in the Kingdom of Saudi Arabia. *Journal of Educational and Psychological Sciences*, 2(1), 38-54. DOI: <https://doi.org/10.26389/AJSRP.H241017>. (In Arabic).
- Al-Suhail, M. (2021) The impact of sports electronic media in raising the level of health education in the Covid-19 pandemic. *Assiut Journal of Physical Education Sciences and Arts*, 57, 742-760. <https://2u.pw/Hg6VU5>. (In Arabic).
- Al-Sulaimani, N. (2008). The extent to which science books for the primary classes developed in the primary stage deal with the concepts of health education. (Unpublished Master's Thesis), College of Education, Umm Al-Qura University. <https://2u.pw/AC3Ey1>. (In Arabic).
- Al-Sulaiman, F. (2016). The effectiveness of an educational computer program to acquire health concepts in the science course for fourth grade students. (Unpublished Master's Thesis), Faculty of Education, Damascus University. <https://2u.pw/USHW5k>. (In Arabic).
- Al-Tweissi A., & Al-Shawish, I. (2013). Health concepts included in science books for the sixth and seventh grades in Jordan. *Educational Journal*, 27(108), 253-187. <https://2u.pw/3DHCey>. (In Arabic).
- Al-Zakari, M. (2007). Efforts of the press in spreading health knowledge. (Unpublished Master's Thesis), College of Da'wah and Media, Imam Muhammad bin Saud Islamic University. <https://2u.pw/aqgd3p>. (In Arabic).
- Al-Zayoud, S. (2020). The impact of modern technology and distance education on students. *The Scientific Journal of Technology and Disability Sciences*, 2(5), 21-46. (In Arabic). <https://doi.org/10.21608/SKJE.2020.156269>

- Badah, A., Badran, Z., & Mazahreh, A. (2014). Health Education. Amman: Dar Al-Masirah for Publishing and Distribution. <https://2u.pw/ZOEUEA>. (In Arabic).
- Ben-Amrouche, F., & Saker, S. (2020). The role of the media in spreading culture and health awareness. *Journal of Human and Society Sciences*, 9(4), 671-697. <https://2u.pw/EL2aXs>. (In Arabic).
- Bin-Safi, S. (2019). Health Anthropology. *Journal of Studies in the Humanities and Social Sciences*, 2(13), 89-107. <https://2u.pw/m82WwH>. (In Arabic).
- Communication and Information Technology Commission. (2020). Annual Report. Ministry of Communications and Information Technology. <https://www.mcit.gov.sa/documents>
- Eslim, N. (2010). Health concepts included in Islamic education books at the secondary stage in the Kingdom of Saudi Arabia. *Psychological Studies*, 3, 83-132. <https://2u.pw/5PkaNZ>. (In Arabic).
- Ghaffary, M., Nioumand, M., & Ghaffary, S. (2022). Telemedicine from the Perspective of a Medical Student Graduated Twenty Years Ago. *Journal of Positive School Psychology*, 6(7), 66-72. <https://2u.pw/AdWn3y>
- How, M., & Hung, W. (2019). Educational stakeholders' independent evaluation of an artificial intelligence-enabled network predictive simulations. *Educational sciences*, 9(10), 1-31.
- Ibrahim, H., & Inan, T. (2022). Using Cloud Computing Services in the Knowledge Sharing Process in Iraqi universities. *Journal of Positive School Psychology*, 6(6), 5423-5435. <https://2u.pw/dwu9S3>
- Jadoun, Z., & Ghadban, G. (2022). Facebook and health awareness in light of the COVID-19 pandemic - an analytical study. *Scientific Journal of Technology and Disability Sciences*, 4(2), 125-148. DOI: 10.21608/skje.2022.246437. (In Arabic).
- Kapilas, P., & Sreedevi, P. (2022). E-Content as An Innovative Teaching Tool for Improving Science Process Skills at Secondary Level. *Journal of Positive School Psychology*, 6(8), 3302-3306.
- Murad, K. (2014). Mass Communication and Media. Amman: Dar Al-Masirah. <https://2u.pw/FvDwtV>. (In Arabic).
- Najmi, A. (2020). Health education among Tabuk University students in the light of the National Vision 2030. *Journal of Education*, 4(188), 235-289. <https://2u.pw/5LV4cG>. (In Arabic).
- Pavithra, N., & Afza, N. (2022). Issues and Challenges in Adopting Robotics in Healthcare - A Conceptual Study. *Journal of Positive School Psychology*, 6(8), 4266-4270.
- Qaim, N. (2016). Arab satellite channels and the dissemination of health education: a descriptive and analytical study of the program (The Doctors) in its Western and Arabic versions on MBC4 and Dubai. International Conference: Media and the Development Bet. Faculty of Arts and Humanities, Fez, Morocco, 374-398. <https://2u.pw/Ub7Ac0>. (In Arabic).
- Saleh, R., Al-Rasa'i, M., & Al-Hilalat, K. (2016). The degree of inclusion of nutritional and health concepts in vocational education books for the first three grades in Jordan. *Studies for Educational Sciences*, 43(3), 1213-1229. <https://2u.pw/xGQarp>. (In Arabic).
- Taabali, M., Hami, S., & Farah, A. (2017). Health education in the Algerian school: books of the second generation of primary education as a model. *Journal of Studies in Health Psychology*, 2, 108-125. <https://2u.pw/BhezPM>. (In Arabic).
- Thompson, S. (2012). Sampling (3rd Ed). A John Wiley & Sons, INC., Publication.
- World Health Organization (WHO). (2012). Health education: Theoretical Concepts, Effective Strategies and Core Competencies: A Foundation Document to Guide Capacity Development of Health education. World Health Organization. Regional Office for the Eastern Mediterranean. <https://2u.pw/RU24Wl>
- Zawi, I. (2020). New media and the awareness industry in the era of globalization. *Think and Creativity*, 135, 403-436. <https://2u.pw/vIP4Qo>. (In Arabic).

DOI: <https://doi.org/10.34069/AI/2022.56.08.22>

How to Cite:

Romanova, I., Kudin, S., Rybak, O., Zavalevskiy, Y., & Pushkarova, T. (2022). Influence of digital technologies of distance education on the mental health of a child in the conditions of wartime realities. *Amazonia Investiga*, 11(56), 224-231. <https://doi.org/10.34069/AI/2022.56.08.22>

Influence of digital technologies of distance education on the mental health of a child in the conditions of wartime realities

Influencia de las tecnologías digitales de la educación a distancia en la salud mental de un niño en las condiciones de las realidades de la guerra

Received: March 18, 2022

Accepted: June 22, 2022

Written by:

Romanova Iryna⁹¹<https://orcid.org/0000-0003-0538-8799>**Kudin Serhiy⁹²**<https://orcid.org/0000-0002-9800-5525>

Researcher ID: AAD-7545-2020

Rybak Oksana⁹³<https://orcid.org/0000-0002-0596-7283>**Zavalevskiy Yuri⁹⁴**<https://orcid.org/0000-0003-1904-6642>**Pushkarova Tamara⁹⁵**<https://orcid.org/0000-0001-7611-9516>

Abstract

Russian aggression against Ukraine has caused considerable damage not only to the Ukrainian economy and infrastructure but also to the mental health of the nation. The highest risk group includes schoolchildren who have experienced traumatic experiences and, in some cases, physical injuries. The purpose of the article is to analyze the impact of digital technologies of distance education on the mental health of children in the conditions of military operations. Methods of analysis, synthesis, structural-functional, prognostic were used. In the results, the general problems of children's mental health formation in Ukraine were determined, peculiarities of the implementation of the recommendations of the World Health Organization regarding the observance of mental health were traced, and the effects of an aggressive digital environment, which were intensified by military actions, were determined. Special attention is paid to the recommendations

Resumen

La agresión rusa contra Ucrania ha causado un daño considerable no sólo a la economía e infraestructura ucranianas, sino también a la salud mental de la nación. El grupo de mayor riesgo incluye a los escolares que han sufrido experiencias traumáticas y, en algunos casos, lesiones físicas. El propósito del artículo es analizar el impacto de las tecnologías digitales de educación a distancia en la salud mental de los niños en las condiciones de las operaciones militares. Se utilizaron métodos de análisis, síntesis, estructural-funcional, pronóstico. En los resultados se determinaron los problemas generales de la formación de la salud mental de los niños en Ucrania, se trazaron las peculiaridades de la aplicación de las recomendaciones de la Organización Mundial de la Salud en relación con la observancia de la salud mental y se determinaron los efectos de un entorno digital agresivo, intensificados por las acciones militares. Se presta especial atención a las recomendaciones dirigidas

⁹¹ Docent Kharkiv Medical Academy of Postgraduate Education, Therapeutic Faculty, Department of Sexology, Psychotherapy And Medical Psychology, Kharkiv, Ukraine.

⁹² PhD in Pedagogy Associate Professor Chernihiv Collegium National University named after T.G. Shevchenko, Faculty of physical education. Department of biological bases of physical education, health and sports 14013, Ukraine.

⁹³ Associate Professor, Philosophy Doctor Ivan Franko National University of Lviv, Philosophy Faculty, Department of Psychology 1, Ukraine.

⁹⁴ Doctor of pedagogical sciences, professor First Deputy Director State Scientific Institution "Institute of Modernization of the Content of Education" 3035, Ukraine.

⁹⁵ Doctor of Pedagogical Sciences, Professor, Corresponding Member NAPS Institute for Modernization of Education Content, Head of the Project Activity Department 36 Vasylia Lypkivskoho Str., Ukraine.



to teachers regarding the continued use of digital technologies and distance education in wartime conditions. In the conclusions, it was noted that military challenges impose additional obligations on teachers and parents, because in the conditions of martial law, protecting children's psyche from additional stress is extremely important. For this, a system of methodological recommendations has been developed, which will be relevant for this process.

Keywords: psychological safety, Russian aggression, distance learning, Ukraine, digital aggression.

Introduction

The introduction of distance education and quarantine restrictions as a result of the COVID-19 pandemic has had its positive and negative sides. Among the latter, problems with the social adaptability of schoolchildren and psychological health stand out unambiguously. In Ukrainian realities, the negative consequences of distance learning using modern digital technologies have been combined with the destructive war started by the Kremlin's Russian regime in February 2022. The horrors of war, rocket and artillery fire, and destruction caused tangible damage to the psyche of all those affected, but especially children. The continuation of distance learning in Ukraine was primarily due to military motives, internal and external migration of the population. At the same time, experts are actively exploring the possibility of returning to traditional education, as the impact of digital technology on students under constant stress as a result of military action is increasing. Relevant such proposals will require more detailed consideration, the relevance of such research is not in doubt, although the final results may be adjusted according to the situation in the theater of war.

Therefore, the purpose of the article is to analyze the impact of digital distance education technologies on the psyche of schoolchildren during hostilities in Ukraine. As a result of the implementation of the goal other aspects were investigated: the peculiarities of the formation of mental health of schoolchildren in Ukraine, the recommendations of the World Health Organization (hereinafter - WHO), determined the impact of distance education and aggressive digital environment under martial law on the children's psyche.

a los profesores sobre el uso continuado de las tecnologías digitales y la educación a distancia en condiciones de guerra. En las conclusiones, se señaló que los desafíos militares imponen obligaciones adicionales a los profesores y a los padres, porque en las condiciones de la ley marcial, proteger la psique de los niños del estrés adicional es extremadamente importante. Para ello, se ha elaborado un sistema de recomendaciones metodológicas, que será relevante para este proceso.

Palabras clave: seguridad psicológica, agresión rusa, aprendizaje a distancia, Ucrania, agresión digital.

Literature Review

The article is based on a thorough review of current pedagogical literature. In particular, Demiray (2017) described the role of distance learning in the context of the global transformation of education. The scholar addresses the popular question, "Is the digital age really a 'tsunami' for the field of distance education and distance educators?" (Demiray, 2017, p. 179). Demiray (2017) notes that distance education with extensive use of modern digital technology is used at all levels of the educational and learning environment, forming a limitless platform of possibilities better than in-person instruction at any level of the learning environment (p. 179).

At the same time, Rajab (2018) characterized the key aspects of distance learning applications against the backdrop of warfare. His study is shaped by an analysis of learning platforms at Najran University. Note that this institution conducted distance learning through the military confrontation between Saudi Arabia, Yemeni rebel groups, and the Arab coalition. Ritter (2022) explored the problem of using individual Internet platforms and characterized the importance of digital games in improving the educational process in distance schools. Safonov et al. (2022) analyzed the main directions of digitalization policy in education and science in Ukraine and abroad. Prokopenko (2021) examined the key challenges of the digitalization of education of the future. At the same time, Ali (2022) identified the impact of immersive technologies on the transformation of the learning system as a whole.

The methodological basis of this article is also formed by the works of those authors who have studied certain aspects of the Russian-Ukrainian war. For example, Martz (2022) described the

main transformations in the phenomenon of the national identity of Ukrainians against the background of the Russian-Ukrainian confrontation. At the same time, Almäng (2019) outlined the main factors of the hybrid war, characterized its impact on economic, social, and political aspects. For our study, the work of Bînä & Dragomir (2020) is valuable, in which, the basic mechanisms of information warfare are analyzed. Based on their work, it is possible to identify the methods of information warfare, which are used in the digital education industry and affect the mental state of the child. Dijkstra et al. (2022) outlined the key political and socio-economic changes (local and global levels) against the background of a large-scale war in Ukraine.

Ukrainian researchers have developed basic principles for providing social and psychological assistance to different categories of people affected by war. In particular, Klochko (2020) characterized the peculiarities of social assistance to the population of Ukraine in the context of military realities.

However, the problem of definitive mechanisms of overcoming threats to the mental health of children in the context of military realities remains unexplored, as military operations in Ukraine are still ongoing. Separately important is the topic of the influence of digital technologies on children's mental health in the context of the Russian-Ukrainian war.

Methodology

The study is built on the use of systems analysis, based on which the fundamental subject of the study is divided into smaller elements. Based on synthesis these elements are combined and formed their judgments. The study also used the structural-functional method, which provides an explanation of the impact of individual technologies and tools of distance education on

the mental health of the child, while investigating the individual manifestations and dependencies between them within a single whole. With the help of the predictive method of research, recommendations that may be useful for educators were identified. Based on the axiological method of research it was possible to move from general statements to our own conclusions.

The work is also based on the use of some empirical materials, in particular, the official Ukrainian legislative acts.

Note that the study is formed on the principles of scholarship and objectivity.

Results and Discussion

Mental Health under Quarantine Restrictions and Military Operations: General and Ukrainian Contexts

In the current realities, researchers are drawing attention to the growth of various problems associated with an increase in physical and mental strain. As a result, frequent cases of insecurity, confusion, and frustration are revealed, intensified during the COVID-19 pandemic. The devastating effect of quarantine restrictions, as repeatedly noted by experts, has a negative impact on the physical and mental health of people in general, despite the disease transference and its consequences (Klochko, 2020).

WHO experts have defined mental health as a state of absolute well-being in physical, mental, and social terms, not just physical health. It is also characterized by the ability to discover personal potential, the ability to cope with life's turmoil, and the prospect of productive and fruitful work (Rajab, 2018). In particular, further characterizing the state of mental health, modern scientists turn to some parameters (See Table 1).

Table 1.

Basic parameters of mental health

Parameters of the state of certainty of the state of mental health

- 1) an understanding of the constancy, the identity of one's own physical and mental situation;
 - 2) constantly identical experiences, which are a reaction to the same type of situations;
 - 3) a real and critical assessment of one's own personality and one's own acts;
 - 4) mental equilibrium and adequate reaction to the influence of the environment;
 - 5) the ability to control one's own behavior, to conform to generally accepted norms and rules
 - 6) ability to plan one's life and to carry out one's plans
 - 7) ability to adjust one's own behavior according to the challenges of time
-

Created by authors

According to research by scholars, mental alertness has increased due to the introduction of distance education, the adoption of digital technology in everyday use, the growth of unfavorable environmental, economic conditions, asociality, etc. (Pereira & Pereira, 2013). All these challenges needed a response from the participants of the educational process. Distance learning in Ukraine was introduced on March 16, 2020 - for the period of quarantine, which since then has been interrupted several times for short periods, the use of distance learning methods was recommended. The most vulnerable and unprotected children, including temporarily displaced persons who were forced to leave their homes with their parents as a result of Russian aggression in Crimea and eastern Ukraine in 2014, were in a special risk group (Bînă & Dragomir, 2020).

After the deployment of large-scale military aggression by Russian forces against Ukraine on February 24, 2022, children's mental health problems became much more complicated and deepened (Martz, 2022).

Russian bombardment, ostensible violence, and aggression have caused profound trauma to children's psyches, the real extent of which still needs to be understood (as hostilities continue and many populated areas are occupied) (Dijkstra et al., 2022). At the same time, according to the proposed WHO criteria, aspects of mental health compliance, in general, are lost under martial law and actual hostilities (Klochko, 2020). In particular, the lack of uniform situations during firing provokes unbalanced reactions and completely different experiences, inability to control one's actions, extreme cases of hysteria or stupor, etc. The aggression of the Russian troops has also greatly reduced the ability to manage one's life, to plan, by making involuntary reactions dependent on external circumstances.

During martial law, there is a direct threat to children's physical health and lives. Accordingly, this situation itself is detrimental to their mental state, keeping them in constant tension. The introduction of distance education, on the one hand, was a response to the inability to provide the usual educational process and, on the other hand, compliance with quarantine measures against the background of the spread of new strains of COVID-19 (Demchenko et al., 2021). As of September 2022, all educational institutions in Ukraine in the regions not adjacent to the line of contact have switched to the normal mode of operation. Other reasons include, above

all, the possibility of better socialization for students as the war continues to unfold, in particular for internally displaced persons (hereinafter IDPs) who need additional attention amidst their deteriorating mental health (Almäng, 2019). Educators note wariness, fear of unusual sounds, depression, etc. among the category of such students. Communication with peers is designed to improve their overall condition.

Distance Education and the Digital Aggressive Environment under Martial Law

According to research by contemporary sociologists and psychologists, it is a proven fact that before school-age children can be quite satisfied with the information about the world and social life presented to them by parents, caregivers, teachers, or close adults. However, as children's social connections and contacts expand as they enter the outside world, it is a natural fact that there is an urgent need for a variety of information (Anggraini & Handayani, 2022). According to research by sociologists, books as a source of information are used by only 29% of schoolchildren, the vast majority obtain knowledge from digital sources of information (various Internet resources and digital platforms, television) (Demiray, 2017). The audiovisual size of digital sources of information corresponds well to the properties of children's vision and perception, and the availability of the Internet and its functions produces suitable conditions for excessive fascination.

Today's children, who spend a large amount of time near the computer, lose specific interest in other forms of perception of reality, including reading (Jena et al., 2021). Consequently, this is one of the important losses that due to excessive digital fascination, not only each individual child but all generations of children as they grow up in a digital society (Jena et al., 2021). This transformation of priorities cannot but affect the quality of children's intellectual and cognitive activities, their social communication, the quality of their leisure time, etc.

At the same time, the modern person, who is part of the so-called digital society, from childhood is under the influence of the digital environment and numerous Internet resources, which become her social everyday life (Lund & Aagaard, 2020). From them, she can get useful information, but irresponsible fascination can negatively affect the child's development, including her imagination (Demiray, 2017). Separately, some content seen in the digital space can create

anxiety fear in a child. In particular, currently in the context of the Russian-Ukrainian war, there are much violent footage of war realities freely available. Often children can accidentally come across them, some particularly violent materials can have a negative impact on the mental health of the child.

In military settings, teachers are engaging digital technology in the educational and learning process (Rajab, 2018). Note that the choice of digital tools, resources should be careful and very careful (Jena et al., 2021). Consequently, educators, educators who want to use a variety of digital resources in learning should be aware that individual platforms, resources, or Internet materials will negatively affect the development of young children (Lund & Aagaard, 2020).

Often it is up to the child to choose whether to watch a video or a movie, but it is not always easy for them to understand what they see on the

screen and draw the proper, correct conclusions. In military realities, this is especially true of various Telegram-channels, which often spread false (semi-true) information, which can have a negative impact on the child's psyche. Many of today's Telegram channels spread panic in society due to paid advertising opportunities. This has a negative effect on adults, not to mention children. There are also separate channels in Tik-Tok (the most popular network among teenagers, despite age restrictions, many children are registered on the platform), which spread information about the Russian-Ukrainian war, spread violent footage.

Modern scientists distinguish the concept of an "aggressive digital environment". It is what negatively affects the development of not only the child but also the adult (Jena et al., 2021). There are specific reasons to characterize a digital environment (or an individual resource) as aggressive (See Table 2).

Table 2.

The key foundations of the digital arena

Main bases of the aggressive digital environment	
1. Image of overtime aggression	Appears in various scenes of brutality and violence
2. High manipulative capacity	Is formed by different manipulative techniques and has a significant impact on the inner world of the person.
3. Unreliability of the resource or platform	It affects the formation of fear and frustration in a person

Created by authors

Note that the outlined bases may overlap, and then it is difficult to recognize them, to separate them, to remove one from the other. Nevertheless, it is negative that they (together or each separately) especially exert psychological pressure on those categories of society that are in it.

Measures to improve the use of digital distance education technology for the education of children

Problems, in particular, the growth of the load on the children's psyche with the use of digital learning technologies, became an object for analysis. In particular, to overcome the additional mental load it is necessary to take into account the manifestations of children's lack of autonomy. We are talking about the fact that students are often not guided in time, have some difficulty in using online tools, need help to prepare learning materials, help to overcome the

motivational and behavioral unpreparedness to learn at home (Prokopenko, 2021).

On the other hand, working with students during distance education requires an increased effort from parents. They should be ready to stimulate, improve the organization of students' activities, establish communicative, artistic, speech, physical work, and communication with teachers and other peers. In addition, parents must communicate without barriers with their children, remembering that they also provide a sense of protection, crucial to building confidence and psychological peace (Demiray, 2017). Teachers (especially when referring to the synchronous use of distance learning in wartime settings) must maintain established communication with both students and their parents.

European researchers have pointed out that digitalization has revealed a lack of competence in many teachers, who must also learn how to

communicate with students' parents in the new environment (Lund & Aagaard, 2020). For a large number of teachers, establishing collaboration with children and adults through the use of digital technology proved problematic (Safonov et al., 2022). In particular, when using asynchronous learning modes, teachers also have to learn how to succinctly and accessibly shape messages for parents, maximize positive learning outcomes, and motivate and encourage them to learn together with their own children.

In digital distance education, educators need to demonstrate professional skills for both student and parent audiences (Jena et al., 2021). Specifically, it is important to use accessible, expressive, emotional, logical, and appropriate language and to use appropriate language. Psychological and sociolinguistic skills are also relevant—primarily an understanding of the importance of both oral and written communication, as these important professional tools are essential in a wartime distance learning environment. In a distance learning environment, there is a growing danger of a situation where parents will do the task for the child. Such manifestations need to be replaced by another - to help students perform tasks independently, to bring education closer to their interests and interests, to consider the opportunity to choose, creatively experiment, etc. (Safonov et al., 2022). The use of digital technology and distance education should not relieve parents of their responsibility for their children's education.

Teachers must use digital technology appropriately to improve students' mental well-being and learning performance (Ali, 2022). In particular, the use must be complemented by the teachers' oratory skills, instant response to change. Among the important is to know the subtleties of psychology, that is, to be able to anticipate hidden thoughts in the speech of children or adult parents, to have a good culture of speech, to know the rules of etiquette. Multicultural competence is extremely important since the territory of Ukraine has long been home to representatives of different peoples, including Muslims, Jews, etc. (Parshyn & Mereniuk, 2022). Therefore, the requirements regarding the ability to establish intercultural, mixed-age, and gender cooperation, to unite the team, to create an atmosphere of mutual respect and mutual assistance are relevant.

Researchers have drawn attention to the importance of proper communication and intonation, but we should additionally emphasize the use of exaggerated verbal and non-verbal

means - emotional and expressive speech - in online communication. Speaking should be clear, taking into account different modulations (joy, surprise, intrigue, sadness, despair; special timbres of voice, rising and falling speed of speech, intervals, etc.), actively use “sound masks” of the main characters when reading literary works, lively facial expressions (Armour et al., 2020). Open-ended questions and active listening (exclamations, head shaking, etc.) were also insufficiently evaluated.

Under martial law, displays of humanism and tolerance towards children and parents, providing needed psychological support came to the forefront of teaching (Rajab, 2018). Teachers are recommended with the active use of digital technology to prevent by all means the possibility of task both children and adults new mental trauma, to control the manifestations of aggression or disrespect in the team, to respond to lock-in, to form a positive and comfortable atmosphere, to promote peaceful communication and soft assessment. Among the features of the 2022 work are teachers' willingness to discuss war, talk about safety or danger, emotions, and planning for the future. Also relevant during a state of war are skills in working with various digital platforms and the ability to post instructional content on social media, since not everyone can attend online classes, especially under occupation.

Working under occupation requires special care from teachers. There are frequent cases when they formally perform their duties in schools occupied by Russian troops, while after hours they conduct classes online according to the Ukrainian curriculum. Protecting the mental health of children in such circumstances becomes of paramount importance.

Undoubtedly, mastering all of these skills is presented as an ideal model. Obviously, in real life, when there are certain nuances of ordinariness, it will be impossible to achieve the ideal, but it is necessary to strive for it, especially considering that we are talking about the psyche of children and the peculiarities of handling it.

Conclusions

Consequently, against the background of quarantine restrictions and the COVID-19 pandemic, children are threatened by frequent instances of insecurity, confusion, and frustration, as well as serious mental trauma associated with socialization problems. At the same time, in Ukraine, the negative

manifestations of digital technologies in distance education are intensified by active military actions. Russian aggression has caused considerable damage to the psychology of children, although, above all, the threat to the life and health of children is much greater in times of military action. Such a state automatically depresses the mental state. In addition, the influence of a digitally aggressive environment is important, which is especially harmful to those who suffered mental trauma during the occupation, evacuation, or wounding. Perhaps the prevention of the subsequent deterioration of students' well-being as a result of the active use of digital technology during distance learning has led to the fact that from September 2022, education in Ukraine is transferred to normal mode. We are talking about those regions that are not close to the direct line of contact.

Teachers are advised to follow the new rules of conduct when continuing distance learning. In particular, military operations do not remove the obligation to have a good command of modern teaching methods, to be well-versed in the possibilities of distance delivery of information. Among the main requirements are also the ability to communicate both with children and parents, because in a state of war such psychological support is extremely important, to treat students with tolerance, softly assess, etc.

Bibliographic references

- Ali, S. (2022). The effectiveness of immersive technologies for future professional education. *Futurity Education*, 2(2). <https://doi.org/10.57125/FED/2022.10.11.8>
- Almäng, J. (2019). War, vagueness and hybrid war. *Defence Studies*, 19(2), 189–204. doi: 10.1080/14702436.2019.1597631.
- Anggraini, R., & Handayani, Y. (2022). Digitalization in education. *Journal of Digital Education, Communication, and Arts (Deca)*, 5(01), 1–12. doi: 10.30871/deca.v5i01.2942
- Armour, K. M., Goodyear, V. A., & Sandford, R. (2020). The digital age challenge. In *School Physical Education and Teacher Education* (pp. 92–102). Routledge. doi: 10.4324/9780429330186-9
- Bină, M.-V., & Dragomir, C. (2020). Informative combat of the russian hybrid war. *Scientific Bulletin*, 25(1), 9–17. doi: 10.2478/bsaft-2020-0002
- Demiray, U. (2017). Is the digital age “A tsunami” for distance education? *Advances in Educational Technologies and Instructional Design*, 179-194. doi: 10.4018/978-1-5225-1692-7.ch009
- Demchenko, O., Lazarenko, N., & Liubchak L. (2021). Information and communication technologies in preparing future teachers to work with gifted children [Informatsiino-komunikatsiini tekhnolohii u pidhotovtsi maibutnikh pedagogic do roboty z obdarovanymy ditmy]. *Information technologies and teaching aids [Informatsiini tekhnolohii i zasoby navchannia]*, 86(6), 123-143. doi: <https://doi.org/10.33407/itlt.v86i6.4570>
- Dijkstra, H., Caveltly, M. D., Jenne, N., & Reykers, Y. (2022). War in Ukraine. *Contemporary Security Policy*, 43(3), 464–465. doi: <https://doi.org/10.1080/13523260.2022.2099085>. URL:
- Jena, B. M., Gupta, S. L., & Mishra, N. (2021). Effectiveness of online learning and face-to-face teaching pedagogy. In *Transforming higher education through digitalization* (pp. 21–43). Boca Raton: CRC Press. doi: <https://doi.org/10.1201/9781003132097-2>
- Klochko, O. O. (2020). Social assistance in Ukraine: Realities, prospects. *Perspectives. Socio-political Journal*, (4), 155-162. doi: <https://doi.org/10.24195/spj1561-1264.2020.4.22>
- Lund, A., & Aagaard, T. (2020). Digitalization of teacher education. *Nordic Journal of Comparative and International Education (NJCIE)*, 4(3-4), 56–71. doi: <https://doi.org/10.7577/njcie.3751>
- Martz, C. (2022). Russian war crimes against Ukraine: The breach of international humanitarian law by the Russian federation. *SSRN Electronic Journal*. doi: <https://doi.org/10.2139/ssrn.4106901>. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4106901
- Parshyn, I., & Mereniuk, K. (2022). The Muslims in Medieval Lviv: linguistic, historical contexts. *Journal of Narrative and Language Studies*, 10(19), 138–149. URL: <https://nalans.com/index.php/nalans/article/view/498>
- Pereira, S., & Pereira, L. (2013). Digital Media in Primary Schools. *Educational Policy*, 29(2), 316–341. doi: <https://doi.org/10.1177/0895904813492378>
- Prokopenko, O. (2021). Technological challenges of our time in the digitalization of the education of the future. *Futurity Education*, 1(2). <https://doi.org/10.57125/FED/2022.10.11.3>



Rajab, K. D. (2018). The effectiveness and potential of E-learning in war zones: An empirical comparison of face-to-face and online education in Saudi Arabia. *IEEE Access*, 6, 6783-6794. doi: <https://doi.org/10.1109/access.2018.2800164>

Ritter, M. (2022). Digital Games in Primary School English Language Education. *English*

Studies [Anglistik], 33(1), 29–41. doi: <https://doi.org/10.33675/angl/2022/1/6>

Safonov, Y., Usyk, V., & Bazhenkov, I. (2022). Digital transformations of education policy. *Baltic Journal of Economic Studies*, 8(2), 127–136. doi: <https://doi.org/10.30525/2256-0742/2022-8-2-127-136>

DOI: <https://doi.org/10.34069/AI/2022.56.08.23>

How to Cite:

Koda, S., Turkpenova, D., Kyrylenko, S., Malyk, V., & Lukiianchuk, A. (2022). Innovative elements in distance learning in a multicultural environment. *Amazonia Investiga*, 11(56), 232-239. <https://doi.org/10.34069/AI/2022.56.08.23>

Innovative elements in distance learning in a multicultural environment

Innovaciones científicas y tecnologías avanzadas en un entorno multicultural durante la formación a distancia

Received: September 10, 2022

Accepted: October 8, 2022

Written by:

Svitlana Koda⁹⁶<https://orcid.org/0000-0003-1458-2120>**Dinara Turkpenova**⁹⁷<https://orcid.org/0000-0002-0588-4496>**Svitlana Kyrylenko**⁹⁸<https://orcid.org/0000-0002-2701-1303>**Valentyna Malyk**⁹⁹<https://orcid.org/0000-0002-3291-4347>**Alla Lukiianchuk**¹⁰⁰<https://orcid.org/0000-0002-1597-5367>

Abstract

Scientific and technological innovations in education actually complete the process of establishing distance learning as an independent educational format. Information and digital cluster forms specific educational components in different socio-cultural dimensions, one of which is multiculturalism. Scientific exploration aims to analyze the dynamics of the implementation of scientific and technological innovations in the multicultural educational environment through the actualization of distance learning. The objectives are to investigate the transformation of educational strategies of multicultural space, which are updated online thanks to the ICT-potential. The article uses general scientific, pedagogical, culturological, and philosophical methods of research. We see a characteristic feature of the study as methodological activity in the dynamics of the rapid socio-cultural development of modern education. Consequently, modern sociocultural space is characterized by diversity, which dictates education its development prospects, which are

Resumen

Las innovaciones científicas y tecnológicas en la educación completan realmente el proceso de establecimiento de la enseñanza a distancia como formato educativo independiente. La información y la agrupación digital forman componentes educativos específicos en diferentes dimensiones socioculturales, una de las cuales es el multiculturalismo. El objetivo de la exploración científica es analizar la dinámica de la implementación de las innovaciones científicas y tecnológicas en el entorno educativo multicultural a través de la actualización del aprendizaje a distancia. Los objetivos son investigar la transformación de las estrategias educativas del espacio multicultural, que se actualizan en línea gracias al potencial de las TIC. El artículo utiliza métodos generales de investigación científica, pedagógica, culturológica y filosófica. Vemos un rasgo característico del estudio como actividad metodológica en la dinámica del rápido desarrollo sociocultural de la educación moderna. En consecuencia, el espacio sociocultural moderno se caracteriza por la diversidad, que dicta a la

⁹⁶ Candidate of Pedagogical Sciences, Associate Professor of the Department of Theory and Methodology of the Content of Education Faculty of advanced training and retraining Sumy Regional Institute of Postgraduate Pedagogical Education, Ukraine.

⁹⁷ Graduate student, Master of humanities Orenburg state university, Russian.

⁹⁸ Candidate of Pedagogical Sciences, Head of the department of innovative activity and research and experimental work State Scientific Institution "Institute of Modernization of the Content of Education", Kyiv, Ukraine.

⁹⁹ Postgraduate student, Teacher of the English language Department of Ukrainian and foreign languages Vinnytsia National Agrarian University, Vinnytsia, Ukraine.

¹⁰⁰ Candidate of Psychological Sciences, Associate Professor Department of Pedagogy, Psychology and Management The Bila Tserkva Institute of Continuing Professional Education, Ukraine.



provided by scientific innovations and advanced technologies. Prospective areas of research are the direction of innovative dimensions to overcome the negative manifestations of distance learning and taking into account the multicultural nature of the educational environment.

Keywords: distance learning, ICT in education, innovative educational strategies, multicultural space, Moodle.

Introduction

Distance learning has gradually asserted itself in educational systems. With the development of information and digital technologies, the organizational and logistical opportunities for the distance learning format of the educational process have increased significantly. At the same time, the globalization processes at the turn of the XX-XXI centuries contributed to the emergence of the factor of demand for distance learning for the multicultural environment. Synergetic scientific and worldview paradigm focused on pragmatism, the main principle of which was the result. The need for rapid and productive learning emerged to achieve proper educational outcomes. Applicants for knowledge, skills, and abilities in recent years have not always been in the standard conditions of education applicants in traditional educational institutions. Often enough, learning content had to be distributed to a large and dispersed audience that was in different locations and in different sociocultural statuses. This state of affairs required distance learning, which is able to take into account the necessary parameters required to organize the educational process in a multicultural space.

The traditional model of education, based on conservative principles, is quite difficult to respond to the need to transform. However, the modern world is full of challenges that have a significant impact on the content and form of education. If the content of education can be relatively quietly changed to meet the demands of the time, the transformation of the format of education requires much more effort. Today we are witnessing the final stage of the formation of a new format in the educational system - the online electronic educational space.

The period of positioning the distance learning format as an alternative or innovative has already expired. Recent years, especially the times of pandemic restrictions, have formed the basis for reorienting the innovativeness of learning

educación sus perspectivas de desarrollo, que son proporcionadas por las innovaciones científicas y las tecnologías avanzadas. Las áreas prospectivas de investigación son la dirección de las dimensiones innovadoras para superar las manifestaciones negativas de la educación a distancia y teniendo en cuenta el carácter multicultural del entorno educativo.

Palabras clave: aprendizaje a distancia, TIC en la educación, estrategias educativas innovadoras, espacio multicultural, Moodle.

technologies to the basic use of them in the educational space. In contemporary pedagogical discourse, the problem of distance learning focuses on considering aspects of creating a sustainable online environment for educators and co-educators (Ovcharuk, 2020; Sherman, Puhovskiy, Kambalova, & Kdyrova, 2022). A sustainable educational environment implies a total perception of the format of learning activity by all subjects of education. This is how the conditions for a stable and balanced educational process are created. We must recognize that online learning differs from emergency distance learning because it is more sustainable and holistic (Adedoyin & Soykan, 2020).

In such an environment, it is possible to plan short- and long-term educational strategies. However, an important methodological prerequisite for such planning is an algorithm for harnessing scientific innovation and technological transformation in education. As Penprase (2018) notes, "societal change from 4IR will require higher education to develop a greater capacity for ethical and intercultural understanding, preferring a liberal arts education with modifications to adapt to the specific issues raising 4IR technologies."

The purpose of the scientific exploration is to analyze the implementation of scientific and technological innovations in the distance education environment in the context of the dynamic development of multicultural space. The objectives are to form the attitudes of adaptation of transformational educational systems (distance, electronic, digital), which in the multicultural dimension need improvement in online.

Theoretical Framework or Literature Review

Modern scientific and pedagogical literature has attempted to systematize e-learning trends over

the past decade (Valverde-Berrocoso et al., 2020). At the same time, it should be noted that the specificity of distance learning in the literature is positioned in two dimensions: pre-pandemic (before 2020) and pandemic (from 2020).

In the pre-pandemic period, the status of the distance learning format was alternative to the traditional educational dimensions. The main pedagogical research was directed to the general problems of multiculturalism of the educational environment (Parkhouse et al., 2019), an adaptation of educational process participants to globalization manifestations in education (Karacabey et al., 2019), formation of ICT competencies in the subjects of the educational system (Ovcharuk, 2020).

Consideration of distance learning as the main format of the educational process has been expressed in the scientific and pedagogical discourse in such aspects:

- the potential of online learning in multicultural environments (Adedoyin & Soykan, 2020);
- synergetic self-organizing distance learning models (Choi & Lee, 2020);
- practically oriented science and technology innovations in online learning (Korkmaz & Toraman, 2020);
- indicators of educational quality in a distance learning format (Lassoued et al., 2020);
- ICT competencies in e-learning (Sousa & Rocha, 2019);
- sociocultural characteristics of the global use of distance learning (Rodriguez & Morrison, 2019).

The impact of the COVID-19 pandemic on the educational system was considered in the context of the mainstreaming of ICT-based learning (Coman et al., 2020), taking into account the sociocultural status of participants in the educational process (Hebebcı et al., 2020).

Methodology

The methodological precepts of distance learning research in a multicultural world need a critical analysis of the planetary turn to digital distance and distance education (Williamson et al., 2020). Among the methodological approaches, we note the use of dichotomous studies of the impact of multiculturalism on the process of distance learning: analysis of the international (interstate) educational space vs. the features of the national

educational environment (Ferri et al., 2020). Certain aspects of distance learning features are analyzed using the technique of content analysis (Hebebcı et al., 2020).

The most common method of researching the problem of distance learning is an exploratory descriptive approach using a questionnaire with appropriate samples (Lassoued et al., 2020). In our research exploration, we offer an analysis of the activity of distance learning systems among applicants and educators. An interesting site for the study of distance learning innovations in the multicultural dimension in Ukraine are institutions with applicants from different nationalities. The activity of applicants of different nationalities has formed a number of statistical data, which became the basis for the study of the multicultural influence on the transformational processes of distance learning.

The information-digital dimension adds its share of methodological potential when studying the impact of innovativeness on the multicultural educational space and the distance mode of the educational process. In particular, let us note the possibility of conducting an online survey in the distance mode (Sousa & Rocha, 2019).

Results and Discussion

The peculiarity of the final approval of distance learning in the educational space was the lightning speed with which all educational institutions switched exclusively to this format of work organization. Pandemic constraints dictated the conditions for the further functioning of the educational system as a whole, so there was no special choice for the educational community. In a short period of time, there was actually a real-time adaptation exclusively to online learning (Coman et al., 2020). On the one hand, the lack of a planned transition to the distance format has led to a certain chaotic nature of the learning process. However, on the other hand, such a stress test of the education system has demonstrated its potential to respond even to global problems. The realization of its powerful fundamental potential contributed to the formation of a worldview educational paradigm focused on continuous progress and development.

When we consider the established educational worldview paradigm, it should be understood that such a system has answers to the vast majority of questions of the multicultural dimension of education. The scientific and technological component in the established

worldview paradigm works according to the principle: innovation for improvement (Tambovceva, 2021). That is, when an educational problem of any nature arises (including a multicultural one), the scientific and technological segment mobilizes its efforts to solve it quickly and efficiently. The formation of ICT competencies is a relevant educational niche for multicultural space (Qizi, 2021). The availability and transmission of necessary cultural information is a prerequisite for the development of any community. Therefore, the educational cluster activates all possible mechanisms to form a common worldview paradigm in which multiculturalism is taken for granted.

Teachers' participation in cultural exchange programs in courses can be useful to increase their awareness and competence in multicultural education (Karacabey et al., 2019). In such an environment, the electronic format allows for cultural learning without wasting resources. Intercultural communication is optimized by advances in science and technology.

In general, the fundamental condition for controlling the quality of higher education is information support, which includes the formation of educational information and its processing, characterizing the state of the educational system (Oseredchuk et al., 2022). The issue of education quality largely depends on the quantitative indicators of scientific and technological potential and its ability to implement in a multicultural environment.

One of the important trends in modern progressive education is the concept of active learning, which characterizes not only the didactic approach but also forms a holistic philosophical and attitudinal paradigm. The key message of this paradigm is the actualization of global educational transformation as a synergetic model of interaction between subjects of education, educational groups or institutions, and national education systems. The search for learning contexts is the main goal of educational innovation (Miseyanni et al., 2018). Active

learning, due to the synergistic effects of interdisciplinarity and self-organization, brings together the stakeholders of the educational space and brings the educational system's teaching and methodological and organizational, and logistical cluster to a common denominator.

Such theoretical and methodological precepts become a favorable environment for multicultural dimensions of the educational space. The presence of several cultural manifestations in the educational system needs a dynamic system of education. The system of online learning was able to promptly provide all the necessary conditions for the subjects of the educational system.

Given the role of distance learning in modern education, we can state the globality of this format of learning (Palvia et al., 2018). In such conditions, this system of educational process organization covers all socio-cultural communities. Not to mention, innovativeness and adoption of advanced technologies in distance learning system occurs unevenly. Progressive communities with a high level of logistical support have much more opportunities for scientific innovation in the information and digital cluster. Multicultural space implies a peculiar blurring of boundaries in two aspects:

- the ability of the applicant to choose a country or community where the information and digital innovation potential is at an adequate level;
- the opportunity to disseminate information and digital technologies among communities with different levels of development.

The affirmation of distance learning as a basic format of the educational process has led to the time to focus on the intricacies of e-learning (Liu et al., 2019). Among the most common issues in contemporary scientific and pedagogical discourse related to distance learning, we note the following aspects (see Fig. 1).

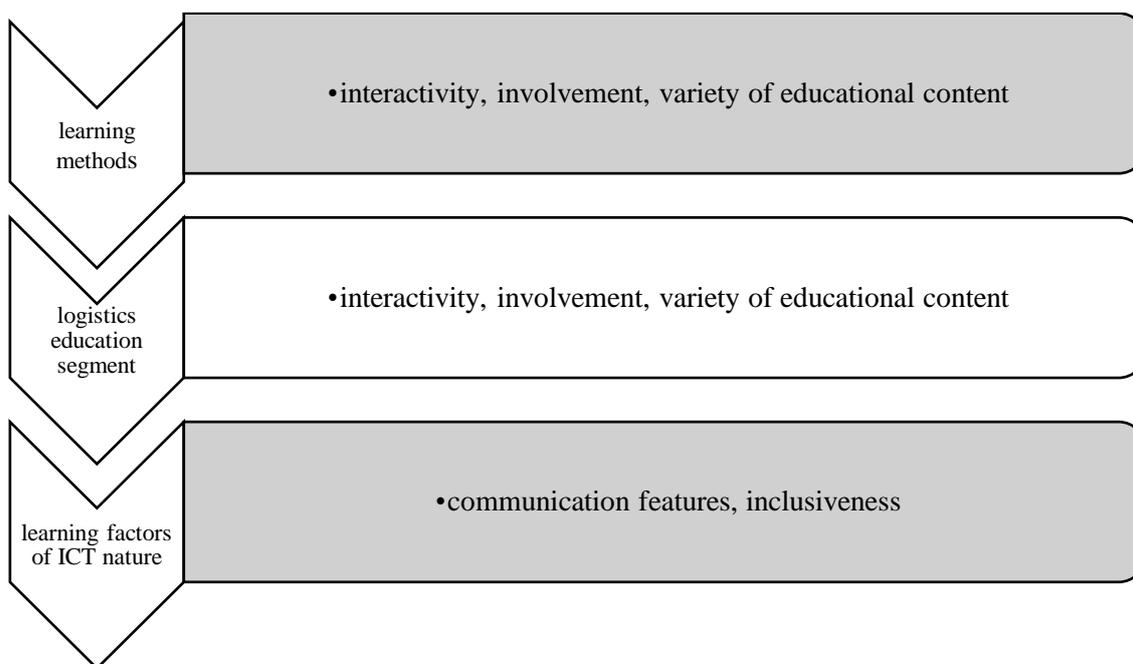


Fig. 1. Actual aspects of distance learning functioning in the multicultural space.

Source: authors' own development.

These elements of distance learning need constant updating and improvement since multiculturalism implies involvement in the educational process of the full power of scientific and technological potential.

Having succeeded in putting in order the organizational and logistical elements of online learning, the process of constant updating of this format of learning has begun. The analogy here analogy with the software of modern information and digital technologies Online learning also requires constant updating and improvement at all levels. Consequently, when we talk about advanced technologies in online learning, we are referring to the process of updating, not the introduction of a new format of distance learning.

When we consider distance learning, an important point is to investigate the type of presence of education applicants and educators (social or cognitive) (Rapanta et al., 2020).

Modern distance learning systems provide advanced statistics on user activity. Our study was guided by an analysis of a multicultural audience of education applicants consisting of students from different continents, different states, and different cultural communities. The different cultural paradigms of the applicants became one of the focuses of the study in the context of the perception of distance learning in general and the response to scientific and technological innovations of online learning.

As an example, let us cite the statistics on the use of resources of the Moodle environment (the largest distance learning platform in the world of education), indicating the steady dynamics of increasing requests from education applicants for access to learning content. When we talk about the dynamics of mastering the latest versions of the Moodle distance learning format, we get the following indicators (see Fig. 2).

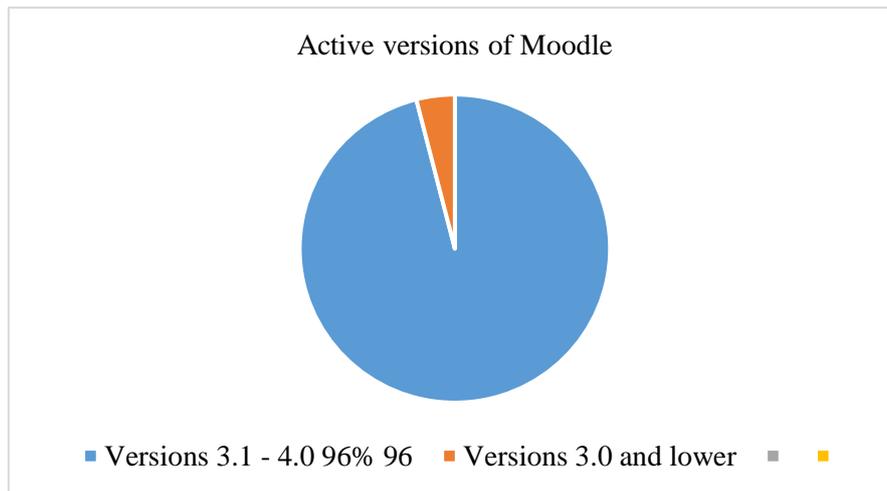


Fig. 2. Versions of the Moodle LMS used by the subjects of the educational process as of 2018
Source: (Moodle, n/d)

As we can see, new versions of Moodle distance learning system have a total superior demand among educational institutions. We can state that the attraction to scientific and technological innovations is total and does not depend on the characteristics of the socio-cultural community. Consequently, we can conclude that the multicultural environment adapts to distance learning at virtually the same pace. This indicates the priority of the educational component over the socio-cultural one. Educational needs dictate the conditions of sociocultural space, and not vice versa, as often happened in previous eras.

This sociocultural reality forms predisposing factors for the continuation and development of the processes of scientific and technological improvement of distance learning independent of multicultural environments.

One of the main priorities of educational development is to create a diverse environment for participants in the educational process (Tarbuton, 2018). The discussion of technology integration practices in the process of creating a positive learning space is becoming mainstream in contemporary scientific and pedagogical discourse. Multiculturalism is one of the key constants considered in twentieth-century educational distance learning practices. At the same time, the electronic online learning format is a flexible tool, thanks to which the obstacles of multicultural nature are overcome, namely:

- accessibility of education regardless of the socio-cultural status of the subject of the educational system;
- diversity of education, taking into account the socio-cultural characteristics of its participants;

- tolerance to the peculiarities of representatives of different socio-cultural communities.

A group of researchers (Morales-Chicas et al., 2019) attempted to identify culturally responsive educational strategies (CRE) within a K-12 computer-based education that addressed issues of multiculturalism (social and political consciousness, popular culture, cultural artifacts, intercultural connections, personalization issues, and experiences in education. Technological education that uses the information and digital component is able to effectively provide appropriate learning content (including socio-cultural direction) to all participants in the educational process.

Rodriguez & Morrison (2019) argue that science and technology innovation in education demonstrates the prioritization of the sociocultural triad (equity, diversity, inclusion) over traditional political-economic arguments. Distance learning is a mechanism for relieving tensions in individual multicultural dimensions regarding the translation of specific cultural knowledge about communities (Parkhouse et al., 2019). The need for self-organization of participants in the educational process during online learning encourages the formation of autonomous worldview beliefs about cultural issues. This approach completely removes the problem of any pressure or redundancy of ideological instruction from the tutor or dominant sociocultural group in the classroom learning format.

An important step for introducing innovative elements into the educational process is the development of educators' self-efficacy in the use

of multicultural classrooms (TSMC). This format forms the basis for the development of multicultural (PDME) (Choi & Lee, 2020). Such innovative approaches of a sociocultural nature are a promising direction of renewal of the educational system by achieving a synergetic effect in education and culture.

The obvious advantage of distance learning in the multicultural dimension is synergistic methodological attitudes. Different sociocultural dimensions need interdisciplinarity and self-organizing principles. Among co-educators of education, these aspects are expressed in the elements of self-regulation (Rasheed et al., 2020). They are realized in distance learning systems through an ongoing process of transformation based on the information-technological potential.

Conclusions

Thus, multiculturalism in distance learning is manifested in the aspect of analyzing the response of different communities (national, ethnic, cultural, religious, etc.) to innovative processes in education. The level of scientific and technological progress in the modern educational system allows to form educational strategies by the following components:

- Ensuring the dynamism of education and its readiness for global challenges;
- Taking into account the socio-cultural specificity of the subjects of the educational process;
- Adaptation of distance and digital learning to the parameters of educational quality.

Modern socio-cultural space is characterized by dynamic changes, pragmatic principles, and socio-cultural diversity and forms appropriate educational development strategies. To ensure the progress of education under such conditions is possible only through scientific innovations and advanced technologies, designed to correlate the format of distance learning with the peculiarities of the multicultural world for the subjects of the educational space.

Of course, distance learning, as, after all, any other problem of pedagogical discourse, produces a number of problematic aspects waiting to be solved. Today distance learning format is under the euphoria of its effectiveness in the critical period for the education pandemic. However, already the near future actualizes the need to solve the problems of e-learning or online learning. Consequently, the prospects of the

study lie in the direction of scientific innovation and advanced technology to overcome the potentially negative manifestations of distance learning in a multicultural environment.

Bibliographic references

- Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, DOI: 10.1080/10494820.2020.1813180
- Choi, S., & Lee, S. W. (2020). Enhancing Teacher Self-Efficacy in Multicultural Classrooms and School Climate: The Role of Professional Development in Multicultural Education in the United States and South Korea. *AERA Open*, 6(4). <https://doi.org/10.1177/2332858420973574>
- Coman, C., Țiru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*, 12(24), 10367. <https://doi.org/10.3390/su122410367>
- Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online Learning and Emergency Remote Teaching: Opportunities and Challenges in Emergency Situations. *Societies*, 10(4). <https://doi.org/10.3390/soc10040086>
- Hebebcı, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of Views of Students and Teachers on Distance Education Practices during the Coronavirus (COVID-19) Pandemic. *International Journal of Technology in Education and Science*, 4(4), 267-282. <https://doi.org/10.46328/ijtes.v4i4.113>
- Karacabey, M. F., Ozdere, M., & Bozkus, K. (2019). The Attitudes of Teachers towards Multicultural Education. *European Journal of Educational Research*, 8(1), 383-393. DOI: 10.12973/eu-jer.8.1.383
- Korkmaz, G., & Toraman, Ç. (2020). Are We Ready for the Post-COVID-19 Educational Practice? An Investigation into What Educators Think as to Online Learning. *International Journal of Technology in Education and Science*, 4(4), 293-309. <https://doi.org/10.46328/ijtes.v4i4.110>
- Lassoued, Z., Alhendawi, M., & Bashitialshaaer, R. (2020). An Exploratory Study of the Obstacles for Achieving Quality in Distance Learning during the COVID-19 Pandemic. *Education Sciences*, 10(9). <https://doi.org/10.3390/educsci10090232>
- Liu, S., Li, Z., Zhang, Y., & Cheng, X. (2019). Introduction of Key Problems in Long-Distance Learning and Training. *Mobile Networks and Applications*, 24, 1-4. <https://doi.org/10.1007/s11036-018-1136-6>
- Misseyanni, A., Lytras, M. D., Papadopoulou, P., & Marouli, C. (2018). Active Learning Strategies

- in Higher Education. Emerald Publishing Limited. Bingley. <https://doi.org/10.1108/978-1-78714-487-320181018>
- Moodle (n/d) Official site. <https://stats.moodle.org/>
- Morales-Chicas, J., Castillo, M., Bernal, I., Ramos, P., & Guzman, B. L. (2019). Computing with Relevance and Purpose: A Review of Culturally Relevant Education in Computing. *International Journal of Multicultural Education*, 21(1), 125-155. <https://files.eric.ed.gov/fulltext/EJ1208280.pdf>
- Oseredchuk, O., Drachuk, O., Demchenko, O., Voitsekhivska, N., Sbadosh Yu., & Sorochan, M. (2022). Application of Information Technologies is a Necessary Condition for Qualitative Monitoring of Higher Education and Modernization of Educational Process. *ICSNS International Journal of Computer Science and Network Security*, 22(3), 2022 501-509. <https://doi.org/10.22937/IJCSNS.2022.22.3.64>
- Ovcharuk, O. (2020). The use of digital learning tools in the teachers' professional activities to ensure sustainable development and democratization of education in European countries. *The International Conference on Sustainable Futures: Environmental, Technological, Social and Economic Matters (ICSF 2020)*. 166. 10019. DOI: 10.1051/e3sconf/202016610019
- Palvia, S., Aeron, P., Gupta, P., Mahapatra, D., Parida, R., Rosner, R., & Sindhi, S. (2018). Online Education: Worldwide Status, Challenges, Trends, and Implications. *Journal of Global Information Technology Management*, 21(4), 233-241. DOI: 10.1080/1097198X.2018.1542262
- Parkhouse, H., Lu, C. Y., & Massaro, V. R. (2019). Multicultural Education Professional Development: A Review of the Literature. *Review of Educational Research*, 89(3), 416-458. <https://doi.org/10.3102/0034654319840359>
- Penprase, B. E. (2018). The Fourth Industrial Revolution and Higher Education. In: Gleason, N. (eds). *Higher Education in the Era of the Fourth Industrial Revolution*. Palgrave Macmillan, Singapore. https://doi.org/10.1007/978-981-13-0194-0_9
- Qizi, U. S. B. (2021). Digitization Of Education At The Present Stage Of Modern Development Of Information Society. *The American Journal of Social Science and Education Innovations*, 3(05), 95-103. <https://doi.org/10.37547/2474-4690.20210503095103>
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, P., & Koole, M. (2020). Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity. *Postdigital Science and Education*, 2, 923-945. <https://doi.org/10.1007/s42438-020-00155-y>
- Rasheed, A. R., Kamsin, A., & Abdullah, N. A. (2020). Challenges in the online component of blended learning: A systematic review. *Computers & Education*, 144. <https://doi.org/10.1016/j.compedu.2019.103701>
- Rodriguez, A. J., & Morrison, D. (2019). Expanding and enacting transformative meanings of equity, diversity, and social justice in science education. *Cultural Studies of Science Education*, 14, 265-281. <https://doi.org/10.1007/s11422-019-09938-7>
- Sousa, M. J., & Rocha, A. (2019). Digital learning: Developing skills for digital transformation of organizations. *Future Generation Computer Systems*, 91, 327-334. <https://doi.org/10.1016/j.future.2018.08.048>
- Tarbutton, T. (2018). Leveraging 21st Century Learning & Technology to Create Caring Diverse Classroom Cultures. *Multicultural Education*, 25(2), 4-6. <https://files.eric.ed.gov/fulltext/EJ1181567.pdf>
- Tambovceva, T. (2021). Scientific innovations and advanced technologies in higher education. *Futurity Education*, 1(1). <https://doi.org/10.57125/FED/2022.10.11.2>
- Sherman, M., Puhovski, E., Kambalova, Y., & Kdyrova, I. (2022). The future of distance education in war or the education of the future (the ukrainian case study). *Futurity Education*, 2(3). <https://doi.org/10.57125/FED/2022.10.11.10>
- Valverde-Berrocoso, J., Garrido-Arroyo, M.C., Burgos-Videla, C., & Morales-Cevallos, M.B. (2020). Trends in Educational Research about e-Learning: A Systematic Literature Review (2009-2018). *Sustainability*, 12(12), 5153. <https://doi.org/10.3390/su12125153>
- Williamson, B., Eynon, R., & Potter, J. (2020). Pandemic politics, pedagogies, and practices: digital technologies and distance education during the coronavirus emergency. *Learning, Media and Technology*, 45(2), 107-114. DOI: 10.1080/17439884.2020.1761641

DOI: <https://doi.org/10.34069/AI/2022.56.08.24>

How to Cite:

Yakushko, K., Haidai, I., Hariunova, Y., Pryshchepa, O., & Marieiev, D. (2022). Theoretical and methodological principles of teaching linguists: the Ukrainian case. *Amazonia Investiga*, 11(56), 240-249. <https://doi.org/10.34069/AI/2022.56.08.24>

Theoretical and methodological principles of teaching linguists: the Ukrainian case

Principios teóricos y metodológicos de la enseñanza de los lingüistas: el caso ucraniano

Received: September 1, 2022

Accepted: October 2, 2022

Written by:

Kateryna Yakushko⁰¹<https://orcid.org/0000-0001-6977-8441>**Iryna Haidai**⁰²<https://orcid.org/0000-0003-3180-1479>**Yuliia Hariunova**⁰³<https://orcid.org/0000-0002-9201-691X>**Olena Pryshchepa**⁰⁴<https://orcid.org/0000-0002-0664-3301>**Dmytro Marieiev**⁰⁵<https://orcid.org/0000-0002-6282-8052>

Abstract

Technological progress has become a catalyst for the emergence of such interdisciplinary fields as linguistics and for the need for relevant specialists in the labor market. The purpose of this article is to analyze the theoretical and methodological aspects of linguists' training in Ukraine. The latest scientific researches and publications on the subject of training linguists in both domestic and foreign educational institutions were analyzed. The methods of system analysis, critical analysis of scientific and methodical sources, search, generalization, and structural-functional method were used for this study. The article highlights the structure, features, and principles of linguists' education on the basis of educational and professional programs of Ukrainian universities. The purpose of the training is to educate specialists which are able to navigate freely in various linguistic theories, carry out scientific analysis of language material, apply theoretical knowledge, strategies and methods (including innovative ones). The analysis of the education of linguistics students

Resumen

El progreso tecnológico se ha convertido en un catalizador para la aparición de campos interdisciplinarios como la lingüística y para la necesidad de especialistas relevantes en el mercado laboral. El objetivo de este artículo es analizar los aspectos teóricos y metodológicos de la formación de lingüistas en Ucrania. Se han analizado las últimas investigaciones y publicaciones científicas sobre el tema de la formación de lingüistas en instituciones educativas tanto nacionales como extranjeras. Para este estudio se utilizaron los métodos de análisis de sistemas, análisis crítico de fuentes científicas y metódicas, búsqueda, generalización y método estructural-funcional. El artículo destaca la estructura, las características y los principios de la formación de los lingüistas sobre la base de los programas educativos y profesionales de las universidades ucranianas. El objetivo de la formación es educar a especialistas que sean capaces de navegar libremente por diversas teorías lingüísticas, realizar análisis científicos del material lingüístico, aplicar conocimientos teóricos, estrategias y métodos

⁰¹ Candidate of Pedagogical, Associate Professor National University of Life and Environmental Sciences of Ukraine, Faculty of Humanities and Pedagogy, Department of English for Technical and Agrobiological Specialities, Ukraine.

⁰² Candidate of Pedagogical Sciences, Senior Lecturer Zhytomyr Polytechnic State University, Faculty of Public Administration and Law, Department of Foreign Languages, Ukraine.

⁰³ Candidate of Philological Sciences Teacher of Ukrainian language and literature at the Kharkiv Lyceum "Liberty School" of the Kharkiv region, Ukraine.

⁰⁴ PhD in Philological Sciences, Senior lecturer of the Department of Foreign Languages the Department of Foreign Languages Zhytomyr Polytechnic State University, Ukraine.

⁰⁵ PhD in Philology, Docent Associate Professor at the Department of Ukrainian Language, Literature and Methods of Teaching Oleksandr Dovzhenko Hlukhiv National Pedagogical University; Academic and Research Institute of Philology and History; Department of Ukrainian Language, Literature and Methods of Teaching, Hlukhiv, Ukraine.



proved that the structuring of the components of the theoretical part of the educational process is based on fundamentalization and the principles of subject specialization, while the selection of teaching methods focuses on the need to train competent specialists with practical skills. The basis of such training is based on student-centered, competence-based, systemic, integrative approaches using innovative, interactive technologies, which allows training specialists capable of effectively carrying out professional, scientific and innovative activity, integrating modern information and communication technologies.

Key words: linguistics, linguist, educational program, universities, Ukraine.

Introduction

The result of rapid technological progress and the need to improve the interaction between humans and technology is the integration of different fields of science. In the relatively short span of the twenty-first century, a number of new disciplines of an integrated type have been founded, creating a need for specialists in such disciplines.

As linguistics has undergone significant changes with the advent of technological advances, one of the most relevant is the symbiosis of the humanities and technical disciplines. This is a direct result of the fact that a process formerly led entirely by one person has now evolved into a complex set of new technologies and human labor. And so, this marketplace is uniquely positioned to help businesses benefit from multilingual services combined with innovative technology.

An example of such a field is linguistics, a subfield of philology. Linguists are language technologists - professionals who process, research language, use scientific methods, hypothesize and compare, experiment, and observe and invent innovative solutions in the field of linguistics. The activities of a linguist are quite varied and wide-ranging. It allows the specialist to realize his/her possibilities in many fields of activity, in particular, in the field of information technologies, mass media, commercial activity, and advertising. Therefore, there is obviously a rather high demand for this kind of specialist in the labor market.

(incluidos los innovadores). El análisis de la formación de los estudiantes de lingüística demostró que la estructuración de los componentes de la parte teórica del proceso educativo se basa en la fundamentalización y en los principios de la especialización temática, mientras que la selección de los métodos de enseñanza se centra en la necesidad de formar especialistas competentes con habilidades prácticas. La base de dicha formación se fundamenta en enfoques centrados en el alumno, basados en las competencias, sistémicos e integradores, que utilizan tecnologías innovadoras e interactivas, lo que permite formar especialistas capaces de desarrollar eficazmente la actividad profesional, científica e innovadora, integrando las modernas tecnologías de la información y la comunicación.

Palabras clave: lingüística, lingüista, programa educativo, universidades, Ucrania.

One of the most important indicators of each state is the quality of education, it also determines the technological and informational level of any society. That is why education plays a key role in the search for specialists in the field of linguistics.

Literature review

In the realities of the growing volume of scientific information, special attention is paid to the rational construction of the learning process in a higher educational institution. The growing requirements to the level of general cultural and special training of linguists lead to the need to improve the professional training of a linguist. So, the study of possibilities and ways to improve the education of linguists is conducted by a number of scientists (Bidyuk et al., 2018; Komochkova, Dorofeyeva, 2019; Svyshch, 2021). This study aims to analyze the educational professional training of linguists in the leading universities of Ukraine. The basic theoretical foundations of education of linguistic students were determined and the importance of educational disciplines for the formation of the level of knowledge of students was analyzed. The methods of training used by the universities and a number of skills that students can master with the help of such methods have been identified. And also, the article cites a number of innovations implemented by Ukrainian universities to meet the level of training international standards.

The analyzed recent studies and publications show that the topic of higher education research is the fundamental basis of the works of both domestic and foreign scholars (Relvas, 2020; Santos et al., 2019). Among them, the works that are based on the method of comparison of education in Ukraine and other countries (Levrints, 2020; Yuzyk, Mazaikina, Bilanych, & Yuzyk, 2019) should be highlighted.

The introduction of new technologies provides an opportunity to adapt them to improve the training of specialists in different industries (Dyka et al., 2019; Ikonnikova & Komochkova, 2019; Nikitova et al., 2020). An example of such technologies are information and communication technologies, which are a tool capable of contributing to the quality presentation of educational material, complementing and expressing educational content with illustrative and interactive elements. Ukrainian scientists are successfully studying such a tool and its use in the educational process of students (Koroliova et al., 2021; Kulichenko & Polyezhayev, 2020).

A number of scientific publications (Alexeyev, Alexeyeva, & Syniova, 2021; Onishchuk et al., 2020; Holikova, 2021; Bezliudna et al., 2020; Knyazyan & Mushynska, 2019) are dedicated to the educational process of linguists in Ukrainian and foreign universities.

In order to improve the skills of future linguists, scholars are constantly bringing in and analyzing the latest methods of the educational process (Shcherbak et al., 2022).

Methods

The following research methods were used to achieve the set objectives: system analysis, critical analysis of scientific and methodological sources, search, generalized, structural, and functional. Also, for a detailed analysis of the training of specialists from the field of linguistics in the course of the study, information on the linguistics curricula of a number of Ukrainian universities was used: Taras Shevchenko National University of Kyiv, Lesya Ukrainka Eastern European National University, Kyiv National Linguistic University, Lviv Polytechnic National University, etc.

Results and discussion

Higher education in Ukraine is constantly undergoing modernization and reform in accordance with the European educational standards defined by the Bologna Convention

(Baldyniuk et al., 2021). These changes have led to the introduction of credit-modular organization of the educational process and the harmonization of the combination of a number of academic disciplines to improve the educational process.

Linguistics includes the following key sciences: phonetics, phonology, morphology, syntax, semantics, pragmatics, and discourse (Lapshyna & Dorofeyeva, 2021). But since in practice the boundaries between these spheres are not clearly delineated, higher education institutions (“HEIs”) in Ukraine use and constantly update educational programs that are characterized by balancing between these spheres.

Professional training of linguists in Ukrainian universities is of a combined nature and is largely adapted to the needs of students as future specialists. It responds flexibly to socio-cultural changes and gives students a framework of knowledge, with the latter being able to adapt to the rapidly changing labor market.

The training of specialists in linguistics includes an extensive network of different types of institutions: universities and colleges of different forms of ownership. For example, linguists are educated at a number of universities in Ukraine: Taras Shevchenko National University of Kyiv, Lesya Ukrainka Eastern European National University, Kyiv National Linguistic University, Lviv Polytechnic National University, and others. The results of the study show that linguists, after completing the program of education and qualification level “Bachelor” and/or “Master”, can work in a wide range of areas: education (teaching and administrative activities, consulting), business and industry (translation, analysis, research activities), management, etc.

Besides the challenge of constantly renewing the educational program, in order to keep up with the technological development, vocational education must create competitive individuals capable of contributing to the development of science, solving complex problems in the field of philology, finding innovative solutions, providing intercultural communication and its translation support. In this case, the focus of the educational program is to train those professionals who can realize themselves in the labor market in the current conditions: scientific and technological progress; internationalization of education and the process of European integration; transformation of the labor market; comprehensive intellectual, professional,

creative and social development of the individual in the educational and scientific environment.

According to these requirements for educational and professional programs, Ukrainian educational institutions cite a number of competencies that students can master during the training, including: the ability to carry out scientific analysis and structuring of language and speech material; the ability to automatically work through natural language, its analysis, synthesis, recognition of the sound language code, morphological and syntactic analysis of texts; ability to master and apply innovative methods, forms and ways of organizing training.

In order to facilitate the development of professional abilities in language students that correspond to the above competencies, HEAs use a number of theoretical and methodological foundations of training analyzed in this study. The main foundations of such education are consistency, continuity, and alignment between the theoretical and practical components.

The educational program is based on specialized fundamental training of specialists in linguistics and has a combined orientation, containing academic, applied, and research. It is based on generally known provisions and results of modern scientific linguistic research.

The purpose of the educational and professional program is to provide a high level of scientific and practical competence, capable of effectively solving a number of topical problems in research, professional and practical, and organizational and managerial activities.

There are two forms of linguistics education in Ukraine: classroom and extracurricular. The classroom form includes lectures, workshops, seminars, and trainings. Out-of-classroom forms include consultations, self-study, individual studies, preparation of qualification papers, translation, and assistantships.

The curriculum is focused on special education, professional and scientific training in the fields focused on the formation of algorithms for coding, recognition, interpretation, generation/production, language and speech processing, translation, ensuring intercultural communication, formation and/or creation of linguistic support of various systems development of natural information and development of information work automation systems.

Theoretical training of linguists includes two conditionally separated theoretical parts: the study of general educational disciplines; mastering the disciplines of professional direction. Consequently, this differentiation aims to form and develop the foundation of students' knowledge regardless of the speciality.

Having analyzed a number of curricula of the above-mentioned Ukrainian HEIs, we can conclude that the content of linguistic training programs is tightly bound to the theoretical linguistic component, the framework of which is similar to the majority of Ukrainian HEIs. At the same time, the main component of such programs is a cycle of socio-humanitarian disciplines and professional disciplines, which, according to the Bologna system, are mandatory or selective.

The cycle of socio-humanitarian disciplines involves the development of general educational competence by mastering such areas of knowledge as philosophy, history, sociology, political science, art, literature, economics, and others.

The cycle of professional disciplines plays an important role in the formation of professional competence, based on such educational disciplines as country study, the practice of grammar, the practice of phonetics, interpersonal communication, writing practice, oral speech, history, and literature of the country whose language is studied. A significant part of the educational program is devoted to mastering modern information technologies, working with a variety of computer and Internet programs.

The required modules include the key subfields of linguistics. These include phonetics, phonology, semantics, syntax, pragmatics, morphology, and principles, and methods of linguistic research. Elective modules may include such subfields as sociolinguistics, psycholinguistics, neurolinguistics, cognitive linguistics, and stylistics. There are also a number of electives for students to choose from. For example, Ukrainian lexicography, gender studies elective, foreign language teaching methodology for professional direction. Depending on the educational program and the institution, required and elective courses may vary.

Most HEIs in Ukraine have elective disciplines, which take up to 35% of the total load. Although in practice it is typical to teach a stream of students on the general curriculum and a small

percentage of elective subjects. It should be noted that a recurring phenomenon is that the educational program is often concluded with a focus on the teacher, which leads to the completion of the content of training programs without taking into account the needs of the labor market.

The disadvantages of the theoretical part of the program should also include the lack of opportunity for students to choose their own teachers and the order of study of disciplines. This approach does not take into account the level of professionalism of individuals and does not stimulate healthy competition among the faculty.

To illustrate, let us analyze the educational and professional program of the Taras Shevchenko Kyiv National University for the Bachelor's degree in Applied Linguistics. The mandatory components of such a program are: general scientific disciplines in the social-humanitarian sphere; general philological and historical disciplines; English language disciplines; disciplines in theoretical and applied linguistics; mathematical disciplines; disciplines in information technologies.

In this program, the elective module is limited because the student has a choice between only two blocks of disciplines: "Computer Modeling of Verbal Communication and Second Foreign Language" and "Computer Construction of Lexicographic Systems and Second Foreign Language".

Consequently, we can conclude that although students do not have the opportunity to formulate a personal curriculum, the general concept of this training is determined by the orientation towards the interdisciplinary nature of the skills and knowledge that future specialists in applied linguistics must possess. Since the selected courses presuppose theoretical awareness of linguists along with the ability to use the knowledge in practice in the development of software for automatic linguistic analysis. At the same time, it should be noted that the axis of learning, which, by the way, is typical for different Ukrainian universities regarding the training of specialists in the considered specialization, is computer linguistics, and the problem of mastering linguistics comes to the background. Such practice requires a balanced revision of applied linguistics specialization in Ukraine as a whole, as it does not correspond to general world tendencies of philological education.

A compulsory part of the training process of linguists in higher education institutions is an internship conducted under the supervision of the leading scientific and pedagogical staff of the department. Students can carry out such practice on the basis of the university, linguistic laboratories, partner companies, government agencies, translation agencies, travel agencies, leading IT companies, etc. Based on the future specialist's specialty, the internship can be educational, computer and speech, computer and linguistic, translation, etc.

Educational practice is aimed at learning to use information technologies in professional activity. Educational practice aims to develop flexibility of students' thinking, phonemic hearing, and plasticity of the articulatory apparatus; mastering the culture of speech and etiquette norms; formation of necessary competences corresponding to the requirements of educational standard.

Computer-linguistic practice is aimed at forming the skills of working with computer programs for automatic text processing; the use of different machine translation systems; the ability to adapt the text to machine translation.

The main goal of computer-linguistic practice is for students to acquire the knowledge and skills of linguistic analysis of the use of computer technology, as well as the search for effective solutions for the preparation and presentation of research papers.

Translation type of practice is aimed at the formation and development of abilities and skills necessary for the organization of translation activity. The aim of such practice is: application of acquired knowledge and improvement of translation skills; development of creative initiative; mastering of modern technologies and forms of translation depending on the type of organization.

According to the educational programs of the above-mentioned universities, another mandatory component of professional training is coursework. The term paper is an independent scientific research conducted by the student and the purpose is to demonstrate in-depth knowledge of the chosen topic, which must be logically arranged and formulated. This type of work is aimed at independent analysis, elaboration of theoretical sources of the specified problems, and/or creative performance of a linguistic task of a practical nature. Regardless of specialization, this aspect of preparation should

prepare the linguistic student to conduct structured work on the chosen topic: selection of sources for processing, logical planning, use of mastered disciplines, and skills in writing.

Based on the studied educational programs of educational institutions in Ukraine, the main principle of the theoretical part of linguist training is systematic and professional orientation. In general, the matrices of training

courses focus on a deep scientific understanding of language as a means of communication, its origin and function, as well as the formation of linguistic, communicative, linguistic, and cultural competence. For an example of a training matrix, Table 1 presents a plan of the training process for higher education applicants in “Applied Linguistics (English Language)” specialty of Zhytomyr Ivan Franko State University.

Table 1.
Training matrix for linguists

1. General Training Cycle		
1.1 Compulsory academic disciplines A cycle of socio-humanitarian disciplines (Ukrainian Language, Practical English Grammar, Higher Mathematics, etc.)	1.2 Disciplines of the university's own choice A cycle of socio-humanitarian disciplines (Fundamentals of Medical Knowledge and Life Safety, Socioecology and Environmental Ethics, Physical Education, etc.)	1.3 Disciplines of the student's free choice Пять дисциплин свободного выбора студента из перечня предложенного университетом
2. General Training Cycle		
2.1 Compulsory academic disciplines A cycle of professional disciplines (Foundations of Structural Linguistics, Corpus Linguistics, and Lexicography, Probability Theory, etc.) Coursework in applied linguistics Coursework on programming Homework on the theory and practice of translation from English)	2.2 Disciplines of the university's own choice A cycle of professional disciplines (Introduction to Translation Studies. Theory and Practice of Translation from English) Qualification work	2.3 Disciplines of the student's free choice Five disciplines of the student's free choice from the list offered by the university
3. Practice Educational practice to develop phonological competence (English) Training practice to develop phonological competence (German) Educational practice of interpreting Educational practice in programming Industrial (interpreting) practice		

Source: authors' own development

It is necessary to take into account the fact that the volume of knowledge is growing exponentially. Therefore, for mastering the basic knowledge and forming the necessary skills the methodological foundations of training are as important as the theoretical ones.

Currently, teachers in Ukraine are actively using new approaches and innovations in the process of training specialists, as properly chosen methods of teaching have a positive impact on motivation and increase the level of cognitive activity of students.

In all of the analyzed linguist training courses, teaching methods are designed to achieve progress, consistency, and balance, and reflect the specific goals and emphases of the educational programs. The researched academic programs clearly demonstrate the links between the methodological foundations of specialist training and the specific goals of such a program.

Modern methodologies and technologies of educational and training programs are focused not only on the assimilation of ready knowledge but also on its development in the process of student and teacher co-operation, as well as the

formation of practical skills, necessary for a specialist.

Let us consider the methodological foundations of the training of specialists in linguistics, which formed the basis of most educational programs of Ukrainian educational institutions.

The explanatory-illustrative method is used to convey a considerable amount of information. It involves acquiring knowledge by listening to lectures, stories from academic and methodological literature, and perceiving information from a manual in electronic form. With this methodology students remain within the framework of reproductive thinking, comprehending and perceiving facts and conclusions.

To assimilate practical skills in linguistics training, a reproductive method is used. In doing so, students need to apply the studied material, the method of linguistic research, or reproduce a learned linguistic analysis based on a sample or rule. In this way, future specialists learn to act according to the developed algorithm - according to instructions, rules, or orders - in situations similar to the presented sample.

When using the method of problem statement, the teacher before presenting the material clearly formulates the problem, defines the cognitive task, then, explaining the system of evidence, comparing different approaches and views, shows the way to solve the problem. This method contributes to the education of specialists who are able to create a structural and semantic algorithm of scientific research and implementation of the tasks set.

The research method is used to involve students and manifest their initiative, creative search, and independence. In this case, after setting the task, analyzing the task, and brief oral and written instruction, students of linguistics should independently study the literature, sources, make an observation, etc.

The discussion method of training is focused on the development of students' creative thinking and promotes independent decision-making, self-reflection on own ideas and approaches, construction of consistent actions, the ability to think critically, to argue, and to interact with other participants in the discussion. In preparation, the following forms of discussions are used: "round table", "expert group meeting", "forum", "symposium", "debate", "court session", "aquarium".

Game technologies allow the most complete realization of the personal approach in various pedagogical situations, form the ability to apply the acquired knowledge to practical cases, and also contribute to the development of personal potential. Interactive methods of learning include, for example, such as working in pairs, the method of interviewing, sharing experiences, etc.

Exploratory learning strengthens the creative component of the educational process, contributes to the creation of educational products, assimilation of basic knowledge, and construction of one's own educational trajectory. This type of learning can include group, paired classes, self-education, mutual learning, tutoring, distance learning.

Project-based learning technology, as a rule, integrates information from different academic disciplines and promotes the emergence of individual projects of students and teaching them how to solve projects.

Trainings (case technology), the purpose of which is the formation of professional competencies, the involvement of communicative and creative abilities of students through the analysis of specific cases.

The methods and technologies used in lectures, practical classes, and self-study aimed at developing such abilities as the ability to see problems, analyze and transform information, put forward hypotheses, and carry out independent search and research activities were analyzed.

The improvement of scientific and methodological training of specialists in linguistics is also promoted by informatization and technicalization, because with the rapid development of technology increases and the radius of their application in the educational process. The organization of the educational process using innovative technologies is regulated by both educational programs of educational institutions and regulatory documents on the standards of training specialists in various fields. Thus, the Law of Ukraine "On Higher Education" states that the training of specialists should harmoniously combine educational, scientific, and innovative activities.

When forming competent specialists capable of creating electronic language resources, applying technology to process natural information,

developing language technologies and new methods for solving practical tasks in the field of language use; applying, editing, abstracting, and systematizing different types of texts (including professional, state and foreign languages) it is necessary to involve the wide range of available technologies.

Over the past few years, the material and technical base of Ukrainian universities has been significantly upgraded, creating all the conditions for comfortable and high-quality learning for students. Lecture classes are held in multimedia classrooms equipped with modern technical means of education: multimedia projectors and boards, specialized screens for displaying information, powerful sound systems.

Training laboratories provide scientific and methodological activities in accordance with the programs of training specialists, research within the approved scientific directions of the departments, and implementation of research results in practice, the work of creative teams created to solve a particular scientific problem.

In the preparation of specialists capable of scientific and innovative searches in the field of philology, their presentation to the professional and/or scientific community, and the protection of intellectual property on the results of research, the academic disciplines are provided with appropriate educational-methodical complexes. Students have access to university and other scientific and information databases, in particular Scopus and WoS. Considering that we can conclude that the training of specialists is conducted with the use of domestic and foreign experience.

Conclusions

The study analyzed the educational professional training of specialists in linguistics in Ukraine. This study was carried out using the method of system analysis, critical analysis of scientific and methodological sources, search engine, generalization, as well as structural and functional method. The results of the study showed that during the training of specialists capable of applying the acquired knowledge and methods of effective professional activity implementation, educational institutions of Ukraine apply a structured classification educational matrix, the components of which are the framework of scientific disciplines, teaching methods, and innovative technologies used during the training.

During the review of educational programs, it was found that although the theoretical aspect of linguistic training a priori consists of compulsory and elective modules, de facto there is a small degree of freedom of choice of disciplines. At the same time, it is determined that certain disciplines allow to create an appropriate scientific and theoretical basis, necessary for in-depth knowledge and understanding of linguistic theories, concepts, and directions of linguistic science in Ukraine and the world.

The principles of training of this kind of specialists is a complex of scientific theories, concepts, methodologies, and concepts of philology in relation to the theory and practice of translation, psychological and pedagogical model of knowledge, based on an interdisciplinary approach in accordance with the specifics of the future professional activity.

Considered a number of methods of professional training of specialists in linguistics, actively used by Ukrainian educational institutions and contribute to the assimilation and analysis of training materials, identification of problems, search for alternative solutions, providing high-quality professional training.

It has been substantiated that the Ukrainian model of education of students of linguists provides an active application of innovative technologies that ensure the ability of future specialists to effectively carry out professional and scientific-innovative activities, integrating modern information and communication technologies.

The study of educational programs of linguistics training in Ukrainian universities allows to assert that they are based on the provisions of information, competence, and functional approaches, as well as the principles of modularity, subject specialization, interdisciplinarity, fundamentalization taking into account the linguistic challenges of our time and the requirements of the standard for the specialty "Linguistics".

Bibliographic references

- Alexeyev, N. E., Alexeyeva, L. I., & Syniova, T. V. (2021). Training translators and interpreters in Ukraine: modern challenges. "Scientific notes of V. I. Vernadsky Taurida National University", Series: "Philology. Journalism", 2(2), 8–14. <https://doi.org/10.32838/2710-4656/2021.2-2/02>

- Baldyniuk, O., Kolomiets, N., Pochynkova, M., Kotlyarenko, S., Furdychko, A., & Hryhorchak, I. (2021). Challenges of modernity in the process of modernization of the structure of higher education in Ukraine. *Laplage em Revista*, 7(3A), 85–91. <https://doi.org/10.24115/s2446-6220202173a1371p.85-91>
- Bezliudna, V. V., Shcherban, I. Y., Bezliudnyi, R. O., & Makarchuk, V. V. (2020). European experience of training of future teachers of foreign languages: findings and prospects for Ukraine. *The bulletin*, 4(386), 225–234. <https://doi.org/10.32014/2020.2518-1467.123>
- Bidyuk, N., Ikonnikova, M., & Komochkova, O. (2018). Overview of professional education of linguistics students at universities of Great Britain. *Advanced Education*, 5, 5–10. <https://doi.org/10.20535/2410-8286.110921>
- Dyka, N., Mykytenko, V., & Shkirenko, O. (2019). Implementation of innovative technologies at the language learning at the new Ukrainian school. In *New stages of development of modern science in Ukraine and EU countries*. Publishing House “Baltija Publishing”. <https://doi.org/10.30525/978-9934-588-15-0-7>
- Holikova, N. S. (2021). Scientific and professional discourse in the vocational training of Ukrainian philologists. In *Communicative-pragmatic, normative and functional parameters of the professional discourse* (pp. 46–61). Liha-Pres. <https://doi.org/10.36059/978-966-397-232-9-4>
- Ikonnikova, M. V., & Komochkova, O. O. (2019). Modern online platforms and digital technologies in teaching linguistics in the us higher education practice. *Information Technologies and Learning Tools*, 73(5), 125–134. <https://doi.org/10.33407/itlt.v73i5.2548>
- Knyazyan, M., & Mushynska, N. (2019). The formation of translators’ research competence at the universities of Ukraine. *Journal of Teaching English for Specific and Academic Purposes*, 7(1), 085. <https://doi.org/10.22190/jtesap1901085k>
- Komochkova, O., & Dorofeyeva, O. (2019). Organizing educational activities of future linguists: the innovative experience of the UK. In *New stages of development of modern science in Ukraine and EU countries*. Publishing House “Baltija Publishing”. <https://doi.org/10.30525/978-9934-588-15-0-11>
- Koroliova, V., Grechenko, V., Kovalchuk, M., Samoilenko, V., Shevchenko, T., & Zaitseva, V. (2021). Information and communication activity of students when writing a course work on linguistics. *Linguistics and Culture Review*, 5(1), 115–128. <https://doi.org/10.21744/lingcure.v5n1.1062>
- Kulichenko, A., & Polyezshayev, Y. (2020). Innovative information and communication technologies for ergotherapists applied during English learning in Ukraine. *AD ALTA: Journal of Interdisciplinary Research*, 10(2), 228–233. <https://doi.org/10.33543/1002228233>
- Lapshyna, O., & Dorofeyeva, O. (2021). The content of professional training in linguistics at the UK universities. *Scientific Bulletin of Uzhhorod University. Series: «Pedagogy. Social Work»*, (2(49)), 75–78. <https://doi.org/10.24144/2524-0609.2021.49.75-78>
- Levrints, M. (2020). Comparative analysis of foreign language teacher education in Ukraine and the USA. *Academic Notes Series Pedagogical Science*, 1(188), 105–112. <https://doi.org/10.36550/2415-7988-2020-1-188-105-112>
- Nikitova, I., Kutova, S., Shvets, T., Pasichnyk, O., & Matsko, V. (2020). Flipped Learning Methodology in Professional Training of Future Language Teachers. (2020). *European Journal of Educational Research*, 9(1), 19–31. <https://doi.org/10.12973/eu-jer.9.1.19>
- Onishchuk, I., Ikonnikova, M., Antonenko, T., Kharchenko, I., Shestakova, S., Kuzmenko, N., & Maksymchuk, B. (2020). Characteristics of Foreign Language Education in Foreign Countries and Ways of Applying Foreign Experience in Pedagogical Universities of Ukraine. *Romanian Magazine for Multidimensional Education [Revista Romaneasca pentru Educatie Multidimensionala]*, 12(3), 44–65. <https://doi.org/10.18662/rrem/12.3/308>
- Relvas, S. R. (2020). JASM: Active Pedagogy for Foreign Language Learning in Higher Education. In *Conference Proceedings-13th International Conference Innovation in Language Learning*. Florence. (pp. 221- 225). Virtual Edition: Filodiritto Editore, Pixel.
- Santos, J., Figueiredo, A. S., & Vieira, M. (2019). Innovative pedagogical practices in higher education: An integrative literature

- review. *Nurse Education Today*, 72, 12–17. <https://doi.org/10.1016/j.nedt.2018.10.003>
- Shcherbak, O., Shamanova, N., Kaleniuk, S., Proskurin, A., & Yeganova, L. (2022). Improvement of automatic speech recognition skills of linguistics students through using ukrainian-english and ukrainian-german subtitles in publicistic movies. *Amazonia Investiga*, 11(53), 26–33. <https://doi.org/10.34069/ai/2022.53.05.3>
- Svyshch, L. (2021). Requirements for the value component in professional training of foreign language linguists in the age of changing axiological guidelines. *ScienceRise: Pedagogical Education*, 1(40), 20–24. <https://doi.org/10.15587/2519-4984.2021.224434>
- Yuzyk, O., Mazaikina, I., Bilanych, H., & Yuzyk, M. (2019). Quality of Higher Education in Ukraine and Poland: Comparative Aspects. *Comparative Professional Pedagogy*, 9(1), 66–74. <https://doi.org/10.2478/rpp-2019-0008>

DOI: <https://doi.org/10.34069/AI/2022.56.08.25>

How to Cite:

Abdullah, A.A., & Abdullah, W.S. (2022). Impact of contemporary rebuilding process on changing architectural genotype. *Amazonia Investiga*, 11(56), 250-263. <https://doi.org/10.34069/AI/2022.56.08.25>

Impact of contemporary rebuilding process on changing architectural genotype

أثر عملية إعادة البناء المعاصر في تغيير النمط الجيني المعماري

Received: July 3, 2022

Accepted: October 15, 2022

Written by:

Ameera Ahmed Abdullah¹⁰⁶<https://orcid.org/0000-0003-0610-5535>**Wrya Sabir Abdullah¹⁰⁷**<https://orcid.org/0000-0001-5254-8148>

Abstract

The rapid economical, socio-cultural changes in Sulaymaniyah city, Iraq in the last three decades promoted radical changes on both urban and architectural level. Several traditional houses in the historical center of the city have been demolished and replaced with rebuilt modern houses leaving negative impacts on the old fabric at both formal and spatial level. This paper aims to investigate the role of the contemporary rebuilding process achieved by landowners within the traditional neighborhoods of the city on changing the underlying genotype constants of housing spatial configuration through examining the morphological characteristics of the architectural layouts of both original and rebuilt type. To achieve this aim five traditional houses' plans built from (1900-1960) were selected to compare with five modern rebuilt houses (1990-2022) within the same neighborhoods, their spatial arrangements have been compared following analytical quantitative methodology using (A-graph software) as one of space syntax techniques also known as (Gamma analysis) to determine the characteristics of houses layouts in terms of (Symmetry/Assymetry) and (Distributness/Non Distributness) of the whole system. Results suggest existence of different structuring modes based on genotype distinction despite similarities in some organizational principles.

Keywords: Architectural Genotype, Justified graph map, Space syntax, Sulaymaniyah city, Traditional Houses Layouts.

المستخلص:

عززت التغيرات الاقتصادية والاجتماعية والثقافية السريعة في مدينة السليمانية، العراق في العقود الثلاثة الماضية تغييرات جذرية على المستويين الحضري والمعماري حيث تم هدم العديد من المنازل التراثية في المركز التاريخي للمدينة بالكامل واستبدالها ببيوت حديثة أعيد بناؤها من الصفر مما ترك آثاراً سلبية على النسيج التراثي المتوارث على المستويين الشكلي والتنظيم الفضائي. تهدف هذه الورقة إلى التحقق من دور عملية إعادة البناء المعاصر المنجزة من قبل مالكي الأراضي داخل الأحياء التراثية السبعة في المدينة في تغيير ثوابت النمط الجيني المتوارث و الاصل للتعويض الفضائي لهذه البيوت من خلال دراسة الخصائص المورفولوجية للمخططات المعمارية لكلا النوعين الأصل والمعاد بناؤه. ولتحقيق هذا الهدف تم اختيار خمس مخططات لمنزل تراثية و التي تم بناؤها بين الاعوام (1960-1990) لغرض المقارنة مع خمسة منازل حديثة أعيد بناؤها خلال (1990-2022) ضمن نفس السياق، وقد تمت مقارنة التنظيم الفضائي والبنية المجالية للنمطين باتباع منهجية تحليلية كمية باستخدام برنامج (A-Graph) كأحد تقنيات نظرية التركيب الفضائي والمعروف بأسم (تحليل جاما) لتحديد خصائص مخططات المنازل من حيث (التناظر / اللاتناظر) و (التوزيع / الانتشار) للنظام بالكامل. تشير النتائج إلى وجود أنماط تشكل مختلفة اعتماداً على مفهوم النمط الجيني في العمارة على الرغم من وجود بعض أوجه التشابه في بعض المبادئ التنظيمية.

الكلمات المفتاحية: النمط الجيني المعماري، خارطة الرسم البياني المبرر، قواعد تركيب الفضاء، مدينة السليمانية، مخططات البيوت التراثية.

¹⁰⁶ MSc. student Department of Architectural Engineering, university of Sulaimani, Iraq.

¹⁰⁷ PhD. In Architecture Engineering Sulaimani University, Iraq.

Introduction

“When a house is demolished, more than the home is lost” (Murphy, 2015). Every house has a story to tell, it is evidence of how earlier generations thought about and designed spaces to reflect their daily beliefs and needs. Architecture as a practice of the non-verbal system of symbols mirrors the cultural values, images, and beliefs that can be transmitted and shared through society, it can express and embody the collective cultural codes like no other artefact (Abdullah & Shari, 2019). Houses are believed to be the most complex buildings considering their functions and meanings, their spatial configurations describe the cultural ideological aspects of the inhabitants (Hanson, 2003).

According to the researchers the abstract rules behind houses organization in a specific culture are translations of socio-cultural codes of that society for this reason they show consistency in their spatial patterning, this consistency is called “Housing genotype”, a quality that can be conceived of as an archaeology of the space (Hillier & Hanson, 1989) (Hanson, 2003, p. 32). It is an intermediary of form and function in architecture, as well as an illustration of how that space received the information from society in its pristine form (Elizondo, 2021).

Traditional historical houses in Sulaymaniyah city compromise an important part of local architecture heritage, these houses were built by vernacular builders based on physical and non-physical needs of their inhabitants using construction methods inherited and passed from generation to the next. Despite showing several architectural typologies, their spatial arrangements shared common characteristics starting from the city’s establishment until 1960 when local socio-cultural impacts shaped houses layouts, however the contemporary rebuilding practices achieved by land owners generated drastic changes due to imitating modern westernized styles and produced distorted architectural styles (Abdullah & Shari, 2019).

As a result, the spatial arrangements of traditional houses layouts have been replaced with new setting that shows different morphological attributes. From this perspective this study investigates an issue related to the change and loss of inherited spatial patterns (genotypes) of these houses through answering the following questions:

1. What are the interior spatial genotypical constants behind housing arrangement in traditional districts of Sulaymaniyah city?
2. Do the spatial configurations of contemporary rebuilt houses within the historical districts differ from the spatial settings of traditional ones? if yes in which ways?
3. How the concept of genotype transition could be invested in future design and rebuilding processes within the historical context of the city for more sustainable rebuilding practices?

To achieve this aim, this study investigates the morphological attributes of traditional houses particularly in seven neighborhoods first, then explores the nature of change in these patterns throughout the time, therefore the architectural layouts of both traditional (courtyard) houses and modern rebuilt ones are compared in terms of syntactical characters using A-Graph software also known as (gamma analysis) to convert these plans into graphs and numerical data then to reveal their spatial genotypical constants.

The basic hypothesis in the present study is that given the importance of preserving the original architectural genotypes of traditional houses, modern rebuilding process doesn’t take in consideration the inherited spatial genotypes that may influence modern spatial arrangements and domestic setting, to answer the research questions the researcher suggests space syntax for being socio-spatial applicable methodology.

After comparing similarities and differences between the selected spatial patterns in terms of (Symmetry/Asymmetry) and (Distributness/non Distributness), the spatial system of each type could be determined and compared through obtaining the syntactical indicators of each house including mean depth (MD), integration (RRA), Base difference factor (H^*), space link ratio (SLR), types of spaces (spaceness).

The study doesn’t include the concept of phenotype or observable physical attributes of these houses (shape, length, envelope) or (social, behavioral, phycological) aspects of the inhabitants, it also excludes the period of (1960-1990) for being transitional period with transformational effects in housing industry in the city. Study results may influence future design and rebuilding processes in the way that original underlying codes behind spatial genotypes could be invested in various formal

styles (phenotypes) so that the original architectural genotypes could be retained with adaptation to today's demands as part of preserving local architecture identity.

Literature Review on Architectural Genotype

Genotype in biology when translated into architecture identifies the Architectural Genotype (Rahmane & Abbaoui, 2021). The term was first introduced into architecture in space syntax literature by Hillier and Leaman (Bill Hillier & Leaman, 1974) to differentiate between the actual built environment and the spatial logic that governs how the building must be built. (Hillier & Hanson, 1984) define the genotypes within the architectural context as abstract rules underlying spatial shapes which can be revealed using space syntax techniques, they are abstract spatial designs transmitted culturally, for a type of building or settlements (Steadman, 2008, p. 78).

Genotypes in architecture have been discussed on both urban and architectural level, housing genotypes have been investigated previously using space syntax techniques from several perspectives, including analyzing vernacular living spaces in Normandy to prove how cultural ideas are presented equally in both artifacts and builders' minds (Hillier et al., 1987), architects' design strategies, such as looking for a genotypical pattern in early residential plans in Germany designed by Mies Van Der Rohe (Bafna, 1999), suburban houses in London (Hanson, 2003), gender inequality in traditional courtyard house genotype in Baghdad City (Edwards et al., 2004), Evolution of apartment plans in Ankara city in terms of the relation between spatial genotypes and functionality (Guney, 2005), an investigation about the relationship between spatiality and functionality in both traditional and modern house layouts in Erbil City, Iraq (Mustafa et al., 2010), stability and change in apartments spatial genotypes in Brazil from 1930-2000 (Cunha, 2012) finding housing genotypes and transformation of housing codes in Korean apartments (Seo, 2017), an analysis of the consistency of the social and spatial structure in rural domestic type (Ostwald & Dawes, 2018), an analysis of continuity in spatial arrangement of Iranian traditional houses (Raith & Estaji, 2020) and more recently inhabitant modifications on standardized social housing genotypes based on social factors (Elizondo, 2021).

From the literature one can conclude that through identifying similarities and differences in the

internal configuration of several buildings it is possible to identify spatial architectural genotypes (Hanson, 1998, p. 215-241), thereby housing genotype is a stable pattern of spatial structure that underlies the phenotypical formal expressions (Cunha, 2012) or patterns replicated by people for their sense of owing specific characteristics from antiquity into the present-day, they can be transmitted only by means of cultural and socialization, these stable patterns are shaped by internal rules of spatial configuration and reflect the society's character, i.e., complex relational schemes, non-discursive aspects of design that architects cannot talk about because they are architects' unconscious social knowledge (Hillier, 2007), this recurrence of certain morphological features is considered as the genotype index (Bustard, 1999, pp. 219-240).

According to the researchers these patterns are exposed to transformation and change due to the change of socio-cultural codes of the builders over time. For the purpose of translation of these codes into mathematical graphical patterns the researchers suggest space syntax techniques as a reliable scientific technique for analyzing the nature of change in these patterns (Al-Sayed et al., 2014).

In conclusion the previous literature and all study cases are related to foreign or regional areas with different domestic specifications in different climates and cultural contexts, no specific study has discussed either the morphological characteristics of traditional houses' layouts in Sulaymaniyah city or patterns of change in their spatial configuration over time, thus a necessity to reveal the abstract rules behind traditional courtyard houses in the city with patterns of change in their spatial setting.

From these points this study finds out a knowledge gap which forms the study problem that is "Unawareness of the previous studies about types and levels of change in genotypical constants which form morphological attributes of spatial patterns of Sulaymaniyah traditional courtyard houses due to contemporary rebuilding practices" Rebuilding practices in the current study's scope is related to demolishing the original houses and rebuilding them from scratch.

Architectural Genotype Defined

According to Hillier the 'genotype' originated from the discovery of the same potentials in space to solve a certain kind of architectural problem for instance in religious buildings (how

to combine the need for the sacred to be separated from the everyday life) therefore the epicenter of these buildings is in the deepest space, with existence of a single direct line of sight linking the innermost sacred space to the most public space of the entrance (Bill Hillier, 2007, p. 174). The reason behind the repetition of these themes by people was their sense of functionality, therefore they have been transmitted by means of cultural and socialization (Roesler, 2012), they formed a framework of resilience, where changes can occur in function, technology and aesthetics (three Vitruvius principles) with preserving the same genotype, the repetition in these patterns supports finding an identity of that architecture, an identity data can be reused for another modern design in the future for sustainable development. (Sari et al., 2020). The identification of most common recurred elements, organizational qualities that persist across time will lead to discover the genotype of that architecture (Ledent, 2017). Likewise, the residential spatial genotype could be defined as a spatial pattern that commonly appears in some cases (Byun & Choi, 2016), According to specialists every house shows at least one spatial-functional genotype presented as relational and configurational consistency. In some architectural layouts the dominant genotype is easily identified when all the spatial-functional relations are observed, in other layouts they are less likely to be detected when some of the spatial themes are absent (Hillier et al., 1987). House's spatial arrangements can be divided into four sectors (zones) where the sector is defined as a set of spaces with common functional and social requirements, the sector acts as a mega-structure to determine the related spaces organization, boundaries, and their transformation (Amorim, 2001). This classification is essential in terms on comparison between two spatial settings. According to Amorim pre-modern houses sectors can be divided to four sectors as below:

- **The visitors sector:** mutual spaces between family and strangers such as vestibule, entrance hall, visitors room (reception), formal dining, library.
- **The family sector:** family private spaces such as living spaces, family dining room, bedrooms, bathroom.

- **The service sector:** such as kitchen, laundry, garage, front yard and backyard, servant room
- **The mediator sector** connects two different sectors with each other such as corridors and transitional spaces.

The above classification of housing spaces into groups is the most related classification within this study's scope and the first practical one which relied on space syntax techniques.

Traditional Houses in Sulaymaniyah city

The word traditional architecture refers to procedures, materials and elements that have been accepted gradually as a norm or tradition in a society, they transmitted orally, or less frequently by records that contain orally transmitted data, guidelines, and procedures, this does not imply that traditional processes and artifacts do not change with time, they do change, but their change is often slow, and their provenance is clearly seen (Noble, 2009, p. 9). Before 1960 the typical traditional house in Sulaymaniyah city despite showing different typologies (phenotypes) they were influenced by vernacular architecture of local architecture identity in response to climate, religion, socio-cultural factors (Qaradaghi, 2020) however they shared almost similar spatial distribution around the internal courtyard therefore the courtyard house genotype was the dominant type in the city.

Applying sectors classification mentioned above to traditional houses of Sulaymaniyah city one can conclude that each house is consisting of interior open courtyard worked as a mediator between other sectors and functioned as the main distribution core to all other spaces in the house (Fig. 1), In a typical Kurdish traditional house, the house consists of two parts the upper level called (Sar khan) and the lower level (Zher khan) usually occupied by several families particularly after the extension of family members. The (Iwan) was an important semi-open space for family gathering, the closed spaces (rooms) were multifunctional for eating, studying, sleeping. Service sectors like bath and toilets mostly were separated from the rooms and located near the main entrance of the house far away from house rooms (Fig. 2).

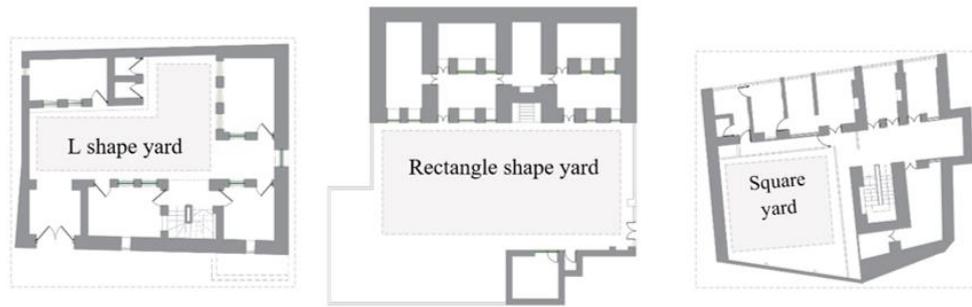


Fig. 1. the relationship between (open-closed) spaces in different spatial patterns of Sulaymaniyah Courtyard houses (Researcher)



Fig. 2. Service sectors (Kitchen, store, bath and toilets) were separated from houses rooms and linked with the inner courtyard (Researcher)

Contemporary Rebuilding practices within the traditional context

Traditional houses in the city have been deteriorated either by natural forces or demolished by landowners due to a lack of conservation policies, therefore this dominant traditional pattern with inner courtyard has been replaced with different spatial setting. The new

rebuilt houses are imitations of western style of housing organization with no connection with local architecture identity or socio-cultural values. The contemporary rebuilding tends to the demolition of the historic houses and replacing them with commercial buildings or modern houses with new spatial and formal setting (Fig. 3) and (Fig. 4).



Fig. 3. Typical traditional houses in Sulaymaniyah city, Iraq (Researcher)



Fig. 4. Contemporary Rebuilt houses on the remains of demolished traditional ones. (Researcher)

Method and Measures:

In this research a comparative analytical methodology will be followed to address the similarity and differences between the spatial genotypes of five traditional houses built from (1900-1960) and five contemporary houses built from (1990-2022) in the same traditional neighborhoods, to measure the nature and degree of change in their spatial settings. For this purpose space syntax was first proposed by Hillier and Hanson (Hillier & Hanson, 1984) as a set of techniques that aims for revealing the underlying spatial genotypes of specific layouts to uncover cultural codes behind spatial arrangement of any built environment, it is an applicable methodology on both urban and architectural level, where Alpha -analysis is utilized for analyzing urban settlements and

Gamma-analysis is designed for analyzing building spaces (Hillier et al., 1987) .The main purpose behind this methodology is quantifying the qualities of built environment to uncover the ambiguous relationship between the human factor and the built environment in the form of numerical data. These relations reveal the morphological characteristics of the plans after converting the plans into abstract graphs called “justified graph maps”(Hillier & Hanson, 1989). Fig. 5 shows that the graph consists of nodes represent houses’ functional spaces and lines represent the connection between these spaces, each space is given a depth value from a selected space called the carrier (usually the entrance of the house).

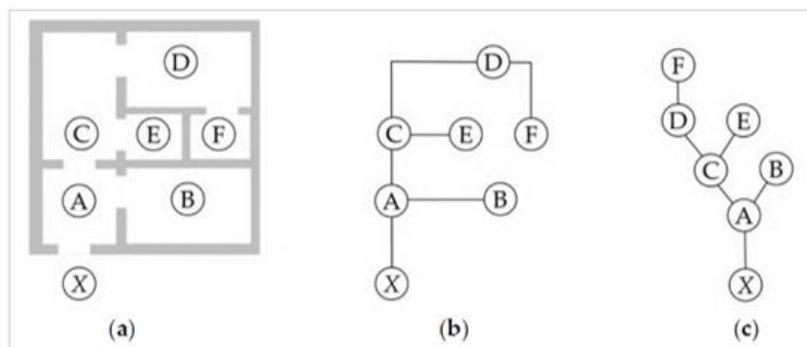


Fig. 5. Example of justified graph map: (a) Architectural layout with six rooms, annotated A–F, with the exterior (X) as carrier; (b) diagram shows the connections between the spaces; (c) justified graph of the plan. (Ostwald & Dawes, 2018, p. 55-56)

After the graphs are constructed, syntactical measurements of the plans with their calculations are obtained from mathematical formula explained bellow.

1. The mean Depth (MD)

This measure explains how integrated or separated the spaces are from each other or in other words the number of steps one should take to pass from the original space (the root) to

another space, it also reveals how deep or shallow the spatial system is .Fig.6 shows that we obtain the less depth when the spaces are connected directly to the root (symmetric system) and the most depth when all the spaces are organized in a liner sequence from the root (Asymmetric system). Mean depth is calculated according to:

$$MD = \frac{TD}{(K - 1)}$$

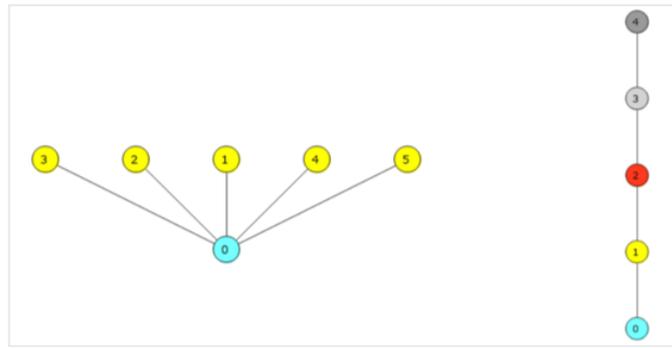


Fig. 6. Left: Symmetric system. Right: Asymmetric system (Researcher depending on Hillier and Hanson) (Hillier & Hanson, 1984, p. 94)

2. Relative Asymmetry (RA) and Integration (i)

This indicator refers to the relative isolation of a specific node, and its inverse is (i), which is the level of integration of a node. Simplistically more integrated spaces are more public and accessible, less integrated spaces are more private and less accessible. RA is utilized to compare measures derived from similar size graphs or plans with equal number of spaces by normalizing MD to a range between 0.0 and 1. These two values are calculated according to:

$$RA = \frac{2(MD - 1)}{(K - 2)}$$

$$i = \frac{1}{RA}$$

3. Real Relative Asymmetry (RRA) and Integration (i) of (RRA)

This indicator is used instead of RA because architectural plans differ in number of spaces. RRA normalizes the RA values in relative to an ideal diamond-graph D, for K number of spaces according to a specific table (Hillier & Hanson, 1984, p. 112)(Peponis, 1985).RRA also known as integration degree, it indicates how permeable a specific space is, low RRA values mean more integrated space, heigh RRA values mean less integrated space (high segregation) .Depth and integration are first key syntactic measurements when analyzing spatial patterns.

$$RRA = \frac{RA}{D_k}$$

$$i_{RRA} = \frac{1}{RRA}$$

4. Control value (CV)

This measure indicates the influence of one space on other spaces in the system in other words it determines to what degree one space controls the access to the neighbours (Klarqvist, 1993,p11). It

may refer to a space with more attraction than other spaces. High cv means more connections with other rooms.

$$CV_a = \sum_{D(a,b)=1} \frac{1}{Val(b)}$$

5. Base difference Factor (H) and Relativized Difference Factor (H*)

This indicator measures the degree of differentiation between the integration values of all the spaces in the house .BDF value ranges from 0-1 , the closer the value to zero the more integrated system (Symmetric system)and the closer value to 1 the more segregated system(Asymmetric) (Hanson, 2003, p. 84).If there was consistency in orders of these values this can refer to cultural pattern in the spatial system , therefore it is an important entropy-based measurement in determining the morphological characteristics of houses layouts because it reveals whether there is a consistency in spatial patterning ,a property which is called “inequality genotypes” (Hillier, 2007, p. 207)

$$H = - \sum \left[\frac{a}{t} \ln \left(\frac{a}{t} \right) \right] + \left[\frac{b}{t} \ln \left(\frac{b}{t} \right) \right] + \left[\frac{c}{t} \ln \left(\frac{c}{t} \right) \right]$$

$$H^* = \frac{(H - \ln 2)}{(\ln 3 - \ln 2)}$$

- **Space link Ratio (SLR):** indicates the degree of distributedness or non-distributedness of the layouts or the ringiness degree of the spatial system. If there is only one no-intersecting route from one space to another it is called non-distributed “a tree like structure” without any rings. If there is more than one non-intersecting route for any two spaces in the system, it is called a distributed system “Ringy structure” (Guney & Wineman, 2008).

- The degree of spaceness (space type):**
 According to Hillier there are four topological types of the spatial system (a-type, b-type, c-type and d-type) (Hillier, 2007). Where a-type space has one connection to other spaces, b-type space more than one connection and lies on a tree, c-type space has more than one connection and lies on a ring, d-type space has more than two connections and lies on at least two rings, in other words a and b type spaces belong to tree like graphs, c and d type spaces belong to ringy graphs (Hanson,

2003, p. 27)(Hillier, 2007, p. 250) (Guney, 2005)

For the purpose of analysis first, data were collected from researcher's field investigation, the selected houses are documented then converted into cad models using AutoCAD software, later architectural plans are converted into graph-based representations or justified plan graph (JPG) using A-graph software in which the exterior of the house, space number (00) is selected as the root, and the other spaces are aligned above (Table 1), (Table 2). The graph consists of nodes (functional spaces) and lines (connections between spaces).

Table 1.
Traditional houses (HT)with their graphic justification diagrams (Researcher)

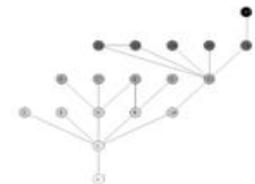
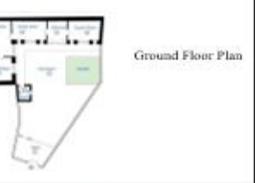
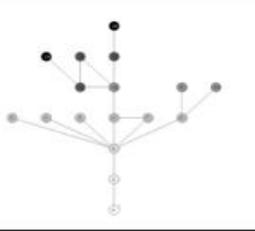
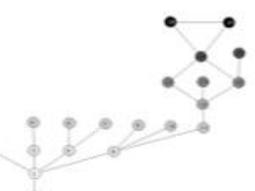
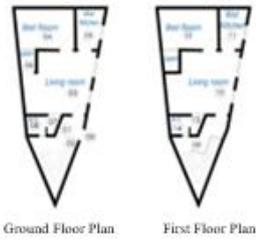
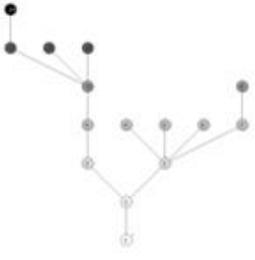
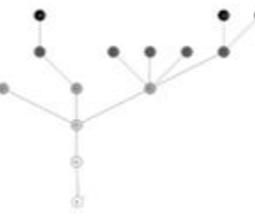
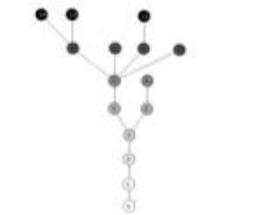
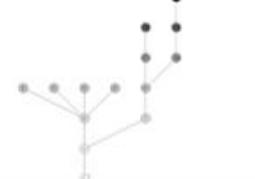
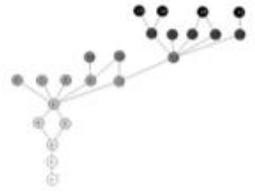
Traditional Houses samples (1900-1960)					
	House	Architectural style	Plans	Justified Graph	
1	HT01 Azad Nuri Beg House Sabunkaran				
2	HT02 Haji Zahir House Sarshaqam				
3	HT03 Ali Mam Sheikh House Sabunkaran				
4	HT04 Rauf Sarraf House Sabunkaran				
5	HT05 Saeed Mutabchy House Sabunkaran				
Legend		 Least Depth	 Highest Depth	 Depth lines	 spaces connection

Table 2.
Contemporary houses (HC) and graphic justification diagrams (Researcher)

Modern Houses samples (1990-2022)				
	House	Architectural style	Plans	Justified Graph
1	HC01 House Malkandi		 Ground Floor Plan First Floor Plan	
2	HC02 Salar Ali Hassan Julakan		 Ground Floor Plan First Floor Plan	
3	HC03 Banaz Muhammed Faraj House Julakan		 Ground Floor Plan First Floor Plan	
4	HC04 Aram Qasim House, Sabunkaran		 First Floor Plan First Floor Plan	
5	HC05 Kafya Abdullah House Sabnukaran		 Ground Floor Plan First Floor Plan	
Legend		○ Least Depth	● Highest Depth	Depth lines — spaces connection

Results and Discussion

This research followed a comparative methodology to investigate the nature of change in spatial genotypes of traditional houses plans in the historical center of Sulaimaneyah city after rebuilding them with new contemporary spatial

setting using one of space syntax measurements techniques to obtain numerical data from mathematical equations then interpreting the results based on space syntax methodology, results of the main benchmarks are presented in Table 3 and Table 4:

Table 3.
Mean syntactic values for Traditional Courtyard houses

House Number	MD	Integration (RRA)	SLR	BDF
HT01	3.11	1.09	1.10	0.78
HT02	2.72	1.54	1.00	0.76
HT03	3.08	1.12	1.10	0.76
HT04	3.81	1.37	1.10	0.85
HT05	3.06	1.03	1.15	0.76
Mean Value	3.15	1.23	1.09	0.78

Table 4.
Mean syntactic values for Contemporary Rebuilt Houses

House Number	MD	Integration (RRA)	SLR	BDF
HC01	3.60	1.53	1.00	0.84
HC02	2.93	1.19	1.00	0.72
HC03	3.40	1.41	1.00	0.72
HC04	3.45	1.51	1.00	0.81
HC05	3.55	1.14	1.10	0.70
Mean Value	3.38	1.36	1.02	0.76

1. Mean Depth MD

The mean depth for traditional (courtyard) house layouts, is (3.15); for modern houses layouts, it is (3.38). This indicates that the overall modern house layouts appear in asymmetric order (more linear organization), which refers to spaces organized away from the original space (root space) or the entrance of the house. In contrast, the overall traditional house layouts appear in symmetric order and spaces in these layouts are arranged near from and connected to the root, additionally in the traditional samples the inner courtyard and service sector (kitchen, store, bath, toilet) show the least depth and the bedrooms show the highest depth (private sector) while in the modern samples the hall (living area) and the stairs that connect the ground floor with the first floor have the least depth followed by the bedrooms being directly connected with the hall which means these closed spaces act like distributor spaces (public spaces) instead of the courtyard while the bathroom and toilet in the modern houses are the most remote spaces, this decreased the level of privacy and comfort of the bedrooms being connected to and opened to the hall.

2. Integration value RRA

Low RRA indicates more integrated system (accessible), the calculations show lower RRA value of the traditional samples with an average of 1.23 compared with the modern samples 1.36 which means the traditional spatial system was more accessible (permeable).

The syntactic values shows that the inner courtyard of the traditional house has the highest integration value (lower RRA) which means this space was essential and controlled the access to other spaces in the house where family's daily activities took place, while in contemporary houses the hall has the highest integration value and works as the distributor space to other rooms. This is a valuable indicator as it shows how the distributor space changed from being an external open space to internal closed space and the house layout from introverted to extroverted, in other words changing the ratio of open-closed spaces, this can be explained as imitating one of the western styles of rooms organization around closed circulation.

3. Space Link Ratio SLR

This property describes the (Distributeness-non Distributeness) of the spatial system. The contemporary samples show the recurrence of the value (1.00) with an average value (1.02) of all five houses which means number of connections between the rooms is equal to house spaces (less connectivity) and (non-distributed) or tree like spatial system with one linear path from the carrier (exterior) to other spaces in the house, while the traditional samples show recurrence of (1.10) with an average of (1.09) which means more alternative routes between house's rooms usually more than one access from a room to others this indicates more (Distributed) or ringy-like spatial arrangement with more than one route from the carrier (exterior) to other rooms, usually the rings are seen between the bedrooms as a reflection of socio-cultural values

and lifestyle of the inhabitants .The reoccurrence of SLR in each group is a sign of the existence of two differnt spatial underlying genotypes.

4. Base difference factor H^*

In terms of the difference factor both the traditional group and modern one shows convergent low average values with (0.78), (0.76) respectively, H^* values close to (0) indicates low differentiation between the spaces thus more functional efficiency and values close to (1) indicate strong differentiation between spaces thus low functional efficiency.

The result of this indicator show almost equal functional efficiency for both spatial setting. An important conclusion here is H^* value ranges from (0.76 – 0.85) for the five traditional samples while this value comprise from (0.70 to 0,84) in the modren samples. This consistency in spatial patterning of tradional samples is called “inequality genotypes” it is a sign of the strength of the cultural genotype.

5. Type of Spaces (Topological Types)

This indicator explains the connectivity bewteen spaces, the a-type spaces are the most parivate spaces they are suitable for bedrooms or spaces specified for women as they cannot be entered from other spaces while the d type is the space with highest connections with other spaces. From the graphs and (Table. 5), (Table. 6) in the traditional samples the courtyard and the vestibule (skifa) are b or c type spaces with two or more than two connetions with other spaces while in the modren samples the entrance and the hall have the most connections with other spaces with direct access to the bedrooms.

The a and b type spaces have higher rates in the modren houses than the traditional ones , a type spaces indicate no through circulation spaces such as the bedrooms and b type spaces mean transitional spaces with lower rates of c and d type of spaces in other words less rings in the spatial system and non distributed ssystem , while the traditional samples have more spaces from c and d type which indicated more rings in their spatial configuration to pass from one space to another through more than one path thus more distributed spatial arrangemnet.

Table 5.
Degree of space-ness (topological types) of Traditional samples

House Number	a-ness	b-ness	c-ness	d-ness
HT01	0.53	0.11	0.41	0.00
HT02	0.50	0.62	0.00	0.00
HT03	0.50	0.18	0.38	0.00
HT04	0.44	0.27	0.27	0.55
HT05	0.47	0.29	0.17	0.17
Mean	0.48	0.29	0.24	0.14

Table 6.
Degree of space-ness (topological types) of contemporary samples

House Number	a-ness	b-ness	c-ness	d-ness
HC01	0.57	0.50	0.00	0.00
HC02	0.61	0.46	0.00	0.00
HC03	0.50	0.57	0.00	0.00
HC04	0.53	0.53	0.00	0.00
HC05	0.53	0.20	0.66	0.06
Mean	0.54	0.45	0.13	0.01

Houses Genotypes

Genotypes exist when there is consistency in the rank order of ingeration values of houses spaces which means the presence of socio-cultural patterns in housing layout (Hillier & Hanson, 1984) .(Table.7) shows abbrivations of houses spaces to faciliate the processs of oredering integration values of all spaces so that spatial

genotypes could be determined, (Table. 8) and (Table. 9) respectively show relative assymetry values of both traditional and contemporary samples, from lowest RA value (most integrated) to heighest RA value (less integrated).

Table.8 shows recurrence of the ranking order of traditional samples that four of the five samples are structured around the courtyard except of

house HT02 which is structured around transitional space this repeated pattern in spatial organization is an evidence of underlying genotype in this group , while (Table 9) shows that contemporary samples HC01, HC03, HC04 are structured around the corridor which is closed

transitional space and HC02 and HC05 are structured around the guest room and staircase respectively ,this proves the absence of strong specific cultural genotype in the selected samples thus fundamental differences between first and second group in terms of spatial organization.

Table 7.
Abbreviations for houses spaces

space	code	space	code
1 Courtyard	crt	12 skifa	skif
2 Bedroom	br	13 House main entrance	Ext.
3 Exterior staircase	Str1	14 kitchen	kit
4 Interior staircase	Str2	15 Bath	bth
5 Guest room	gst	16 Toilet	wc
6 Living room	Liv	17 Store	sto
7 Iwan	Iw	18 corridor	corr
8 Balconey	Bl	19 Laundry	Lr
9 Roof	Rf	20 Entrance(foyer)	Ent.
10 Open	Op.	21 penthouse	ph
11 Garage	Gr	22 Hall	hall

Table 8.
Genotypes for Traditional samples

House Number	Mean RA	Order of Integration (Exterior Included)
HT01	0.26	Crt=0.13<str1=0.14<corr=0.17<hall1=0.20<hall2=0.22<ext, kit=wc=0.25<br1=0.27<gst1=br2=0.28<hall3=gst2=Iw=0.29<br3=gst=0.32<br4=0.33<Str2=0.39
HT02	0.49	Ent=0.25<Crt=0.28<Liv=0.35<skif=0.46<gst=0.50<kit=bth&wc=0.53<ext=0.71<br=0.78
HT03	0.27	Crt=0.13<Str1=0.15<Str2=0.19<gst1=0.20<corr1=0.22<skif=0.24<kit=bth=wc=0.25<corr2=0.29<gst2=Liv2=0.30<liv=br1=0.35<ext=0.36<br2=0.41<br3=0.42
HT04	0.31	Crt=0.18<Str2=0.19<Liv=0.20<corr=0.21<hall1=0.27<hall2=gst1=gst2=gst3=0.28<kit=0.29<ext=skif=0.30<br1=0.32<gst4=0.34<br2=0.38<bth=wc=0.39<Sto=0.40<gst5=Bl=0.44
HT05	0.24	Crt=0.10<Str1=0.13<Ent=Liv1=0.18<skif=Liv2=0.20<Sto=kit=bth=wc=0.21<Liv3=0.27<gst1=br1=0.28<gst2=br2=0.30<Ext=br3=0.31<br4=0.37

Table 9.
Genotypes for Contemporary samples

House Number	Mean RA	Order of Integration (Exterior Included)
HC01	0.40	Corr1=0.24<Str1=0.25<hall1=0.27<corr2=0.28<hall2=0.34<Ext=0.38<Lr1=0.39<br1=kit1=op=0.41<Lr2=0.46<br2=kit20.48<wc=0.53<Bth=0.60
HC02	0.32	Gst=hall=0.15<Str2=Lr=0.25<op1=0.28<kit=br1=br2=op=0.30<ph=0.38<bth=wc=0.41<Ext=0.43<Rf=0.53
HC03	0.37	Corr=0.19<kit=0.20<hall=0.24<pt=0.29<br=0.31<br2=Ent=Bth=0.34<kit=0.36<Rf=Sto=0.43<op1=op2=0.46<op3=0.50<Ext=0.60
HC04	0.40	Corr1=Str1=0.24<corr2=0.26<hall1=0.29<bth=wc=0.37<Ent=ext=0.39<br=hall2=bth=wc=0.44<Ph=0.50<kit=0.55<Rf=0.65
HC05	0.24	Str2=0.12<hall1=0.13<hall2=0.14<kit=gst=0.19<Lr1=bth1=0.20<Lr2=0.21<op1=op2=br1=br2=br3=Ph=0.22<br4=0.23<Ent=0.26<wc=0.29<wc2=bth2=Bl=0.30<Rf=0.31<Gr=0.34<EXT=0.43

Conclusions

The present research was conducted to compare between genotypes of the spatial configuration of a sample of traditional and modern houses in the historical center of Sulaymaniyah city, Iraq. Changes in the spatial genotypes due to demolition of original traditional houses and rebuilding new ones are revealed to show the impact of contemporary rebuilding practices achieved by landowners on generating different spatial configuration and morphological characteristics, the selected houses represent the dominant typology for the two models.

The study aimed to detect genotypical constants and organizational rules behind their architectural layouts. To fulfill this aim, the researcher followed a quantitative approach for data analysis included syntax techniques designed to uncover the relationship between houses spaces for both traditional and modern samples. For this purpose, syntactic indicators were calculated and compared in terms of (hierarchical structure, accessibility, structuring modes and spatial morphology). The study revealed to:

1. The importance of space syntax tools in revealing the impact of socio-cultural beliefs of the builders and inhabitants in depending on a specific spatial structure for house's architectural layout.
2. Genotype patterns of traditional houses layouts differ from modern rebuilt layouts in term of the relationship between open-closed spaces, hierarchy of the rooms, levels of privacy and social interactions. The open courtyard and semi-closed Iwan in the traditional setting constituted an important part of housing organization in the traditional setting while in rebuilt

houses these spaces transformed into the closed hall and small balcony respectively which both function as a transitional area.

3. In terms of the relationship with the street, the numerical syntactic values prove that traditional samples are introverted houses facing the inner courtyard separated with solid walls from outside and show weak relationship with the street while the modern rebuilt samples are extroverted with more spaces facing the street.
4. Traditional houses in the city although they were not built by architects with no formalistic standards, there is a unique common organizational system rooted in their spatial configurations, despite their different observable forms (phenotypes), this spatial genotype was influenced by local cultural values until the beginning of the 60s later these patterns evolved dramatically over the course of time in response to changes in people beliefs, values and behavioral patterns particularly under the absence of conservation polices and legislations.
5. In order to fulfill contemporary demands and preserving local architecture identity, designers need to derive modern models from the inherited spatial genotypes as these solutions proved to be more adapted with the local context and influenced by inhabitants' original cultural values and traditions.

Bibliographic references

- Abdullah, W. S., & Shari, A. N. M. (2019). Distortion of Local Architecture Identity A comparative study for the rebuilding process of the buildings on Sabunkaran street. *Sulaimania Journal for Engineering Sciences*, 6(3).

- Al-Sayed, K., Turner, A., Hillier, B., Iida, S., & Penn, A. (2014). *Space syntax methodology*. Bartlett School of Architecture, UCL: London, UK.
- Amorim, L. (2001). Houses of Recife: From diachrony to synchrony. *Proceeding of the 3rd International Space Syntax Symposium*, 1–7.
- Bafna, S. (1999). The morphology of early modernist residential plans: Geometry and genotypical trends in Mies van der Rohe's designs. *Proceedings of the Second International Symposium on Space Syntax*, 1, 1.
- Bustard, W. (1999). Space, evolution, and function in the houses of Chaco Canyon. *Environment and Planning B: Planning and Design*, 26(2), 219–240.
- Byun, N., & Choi, J. (2016). A Typology of Korean Housing Units: In Search of Spatial Configuration. *Journal of Asian Architecture and Building Engineering*, 15(1), 41–48.
- Cunha, V. (2012). Can genotype patterns change over time. In: *INTERNATIONAL SPACE SYNTAX SYMPOSIUM*, 8.
- Edwards, B., Sibley, M., Hakmi, M., & Land, P. (2004). The power of the veil: gender inequality in the domestic setting of traditional courtyard. In *Courtyard Housing* (pp. 109–123). Taylor & Francis.
- Elizondo, L. (2021). A Justified Plan Graph Analysis of Social Housing in Mexico (1974–2019): Spatial Transformations and Social Implications. *Nexus Network Journal*, 1–29.
- Guney, Y. I. (2005). *Appropriated 'a la Franga': An examination of Turkish modernization through the lens of domestic culture*. University of Michigan.
- Guney, Y. I., & Wineman, J. (2008). The evolving design of 20th-century apartments in Ankara. *Environment and Planning B: Planning and Design*, 35(4), 627–646.
- Hanson, J. (1998). Chapter Eight 'The anatomy of privacy in architects' London houses'. *Decoding Homes and Houses*, 215–241.
- Hanson, J. (2003). *Decoding homes and houses*. Cambridge university press.
- Hillier, B. (2007). *Space is the machine: a configurational theory of architecture*. Space Syntax.
- Hillier, B., & Hanson, J. (1984). *The Social Logic of Space*. Cambridge Univ. Pr.
- Hillier, B., & Hanson, J. (1989). *The social logic of space*. Cambridge university press.
- Hillier, B., Hanson, J., & Graham, H. (1987). Ideas are in things: an application of the space syntax method to discovering house genotypes. *Environment and Planning B: Planning and Design*, 14(4), 363–385.
- Hillier, B., & Leaman, A. (1974). How is design possible: A sketch for a theory. *DMG-DRS Journal: Design Research and Methods*, 8(1), 40–50.
- Klarqvist, B. (1993). A Space Syntax Glossary. *Nordisk Arkitektur for Skning*, (2), 11, 12.
- Ledent, G. (2017). Permanence to allow change. The archetypal room: The persistence of the 4x4 room. In *Architectural Research Addressing Societal Challenges* (pp. 339–344). CRC Press.
- Murphy, D.K. (2015). When a house is demolished, more than the home is lost. *The Conversation*. Obtenido de <https://theconversation.com/when-a-house-is-demolished-more-than-the-home-is-lost-42579>
- Mustafa, F. A., Hassan, A. S., & Baper, S. Y. (2010). Using space syntax analysis in detecting privacy: a comparative study of traditional and modern house layouts in Erbil city, Iraq. *Asian Social Science*, 6(8), 157.
- Noble, A. (2009). *Traditional buildings: a global survey of structural forms and cultural functions*. Bloomsbury Publishing.
- Ostwald, M. J., & Dawes, M. J. (2018). *The Mathematics of the Modernist Villa: Architectural Analysis Using Space Syntax and Isovists* (Vol. 3). Springer.
- Peponis, J. (1985). The spatial culture of factories. *Human Relations*, 38(4), 357–390.
- Qaradaghi, A. M. A. (2020). The effect of rural building types informing the type of traditional courtyard houses in Sulaimaneyah city. *Journal of the Planner and Development*, 42.
- Rahmane, A., & Abbaoui, M. (2021). The Architectural Genotype Approach in Contemporary Housing (1995 to 2010). *Engineering, Technology & Applied Science Research*, 11(1), 6810–6818.
- Raith, K., & Estaji, H. (2020). Traditional House Types Revived and Transformed: A Case Study in Sabzevar, Iran. In *Urban Heritage Along the Silk Roads* (pp. 157–173). Springer.
- Roesler, C. (2012). Are archetypes transmitted more by culture than biology? Questions arising from conceptualizations of the archetype. *Journal of Analytical Psychology*, 57(2), 223–246.
- Sari, I. K., Nuryanti, W., & Ikaputra, I. (2020). Phenotype, Genotype and Environment in Architecture Case Study: Traditional Malay House. West Borneo.
- Seo, K. W. (2017). Finding Housing Genotypes by Graph Theory: An Investigation into Malay Houses. In *Morphological Analysis of Cultural DNA* (pp. 37–47). Springer.
- Steadman, P. (2008). *The evolution of designs: biological analogy in architecture and the applied arts*. Routledge.

DOI: <https://doi.org/10.34069/AI/2022.56.08.26>

How to Cite:

Bilgin, R., Ekici, S., & Sezgin, F. (2022). Turkey's syrian policy under justice and development party rule after 2009. *Amazonia Investiga*, 11(56), 264-277. <https://doi.org/10.34069/AI/2022.56.08.26>

Turkey's syrian policy under justice and development party rule after 2009

2009 YILI SONRASI ADALET VE KALKINMA PARTİSİ İKTİDARINDA TÜRKİYE'NİN SURIYE POLİTİKASI

Received: September 2, 2022

Accepted: October 19, 2022

Written by:

Recep Bilgin¹⁰⁸<https://orcid.org/0000-0003-3760-218X>**Seydali Ekici**¹⁰⁹<https://orcid.org/0000-0001-8843-6092>**Fatih Sezgin**¹¹⁰<https://orcid.org/0000-0003-4022-5813>

Abstract

The Justice and Development Party's Syria policy has followed a volatile and pragmatic line. Prior to 2011, when the Arab Spring began in Syria, strategic cooperation was established within the framework of liberal and zero-problem policies with neighbors. When Turkey's democratic reform proposals against the opposition movements that emerged in 2011 did not realize, Turkey changed its position against the Assad regime and started to support the opposition. During this period, weapons aid was also given to the dissidents. Later, with the involvement of Russia and the USA, the balances in Syria changed and Turkey turned to defensive policies that would protect its internal and border security. In this context, military operations were carried out against Syria. However, these operations were carried out with the consensus of Russia and the USA. Although the JDP declared the Assad regime to be an enemy after 2011, it has come to the point where it is possible to negotiate with the Assad regime in the later period. This study makes a process analysis of Turkey's changing Syria policy.

Key words: Turkey's Syria Policy, Justice and Development Party, Neo-Ottomanism, Islamism, Security.

Özet

Adalet ve Kalkınma Partisi'nin Suriye politikası değişken ve pragmatik bir çizgi izlemiştir. Suriye'de Arap Baharı'nın başladığı 2011'den önce komşularla liberal ve sıfır sorun politikaları çerçevesinde stratejik iş birliği kuruldu. Türkiye'nin 2011 yılında ortaya çıkan muhalefet hareketlerine karşı yaptığı demokratik reform önerilerinin gerçekleştirilmesine üzerine Türkiye, Esad rejimine karşı tutumunu değiştirerek muhalefeti desteklemeye başladı. Bu dönemde muhaliflere silah yardımı da yapıldı. Daha sonra Rusya ve ABD'nin devreye girmesiyle Suriye'deki dengeler değişti ve Türkiye iç ve sınır güvenliğini koruyacak savunma politikalarına yöneldi. Bu kapsamda Suriye'ye yönelik askeri operasyonlar düzenlendi. Ancak bu operasyonlar Rusya ve ABD'nin mutabakatı ile gerçekleştirildi. AKP 2011 yılından sonra Esad rejimini düşman ilan etse de ilerleyen dönemde Esad rejimi ile pazarlık yapmanın mümkün olduğu noktaya gelmiştir. Bu çalışma, Türkiye'nin değişen Suriye politikasının süreci analizini yapmaktadır.

Anahtar kelimeler: Türkiye'nin Suriye Politikası, Adalet ve Kalkınma Partisi, Yeni Osmanlılık, İslamcılık, Güvenlik.

¹⁰⁸ PhD Candidate, International Relations and Diplomacy Department, Faculty of Administrative Sciences and Economics, Tishk International University, Erbil, Iraq.

¹⁰⁹ PhD Candidate, Department of International Relations and European Studies, Faculty of Economics and Social Sciences, International Burch University, Sarajevo, Bosnia Herzegovina.

¹¹⁰ PhD. Candidate, Campus Director, Glenbow College, Calgary, Canada.

Introduction

The foreign policy of Turkey in the first period of the Justice and Development Party's (JDP) rule developed as a reflection of the democratic liberal understanding in domestic politics. In this context, a zero-problem policy was developed, and close relations were established with neighboring countries. During this period, the JDP was concerned about providing legitimacy with liberal policies against the secular elite that maintained the tutelage of the political system. However, in the following period, the loss of power of the circles that would make effective opposition in the country brought the JDP back to its old Islamist codes. The JDP's post-Arab spring policy, which started in Syria in 2011, shows the reflections of this Islamist line.

This study firstly reveals the story of the Islamic thought that formed the origin of the JDP in the Republic of Turkey, because this story is a reflection of how they opposed the Kemalist state and how they were oppressed. Therefore, the JDP, which came to power under military pressure, first embraced people from all over the political spectrum and had a very democratic period. However, they later gathered all the power in their hands and adopted an authoritarian approach after 2010. Having followed a very liberal and democratic foreign policy before, the JDP completely changed its practices after this date. It was during this period that the Arab Spring started and the JDP returned to its Islamist codes and supported opposition religious organizations in the civil war in Syria. In fact, with Ahmet Davutoğlu's Ministry of Foreign Affairs in 2009, the idea of neo-Ottomanism led the government to proactive foreign policy. In this context, they wanted to help the establishment of regimes compatible with them by supporting the opposition both in Egypt and Syria. The change in the axis of the JDP's Syria policy is remarkable in terms of showing the Islamic expansionist policies in the period when it was strong, while emphasizing the democratic values when it was weak. As a matter of fact, this study aims to explain these changes in the foreign policy of the JDP through Syria.

Theoretical framework

Historical Background of Justice and Development Party

The Justice and Development Party (JDP) (Adalet ve Kalkınma Partisi-in Turkish), whose founders have an Islamic background, is a continuation of the "Nationalist View" that has

survived within Turkey's distinctive Islamist traditions (Sambur, 2009). However, due to the conjuncture that emerged at the time of its establishment, this party as a conservative and liberal democratic party with members from almost all parts of the political spectrum (Axiallis, 2014).

The historical past of political Islam in Turkey continued with a peculiar story in the Ottoman period, and in the Republican Period, it contained important signs pointing to the break from the previous period. Napoleon's invasion of Egypt in 1798 is shown as the period when Islamism first emerged (Cesari, 2017). Later, Islamist thought that spread from Egypt to the Islamic world, the non-religious superstitions that Islamic societies fell into and the false perception of religion, the despotic governments that prevailed in the Islamic world, and the Western colonialism, which was perceived as an external threat in the Islamic world, determined the three targets to be overcome by Islamist intellectuals (Mohammadi, 2015).

However, with the establishment of the Republic of Turkey, the western thought, determined by the state, rejected everything that had a religious reference and tried to establish a secular identity and lifestyle. In this context, Islamic thought also entered a very long period of slumber (White, 2013). With the military intervention in 1960, Adnan Menderes government was overthrown, and a new constitution was made in 1961 during this period. The most important feature of this new constitution was that it was a very liberal constitution (Isiksel, 2013). The reason why this constitution, which was made by the soldiers, who were the founders of the new regime, was so libertarian was thought to be because the previous 1924 Constitution was very restrictive, laying the groundwork for authoritarian understandings and preparing a despotic leader like Adnan Menderes (Dodd, 1992).

Towards the end of the 1960s, it is seen that especially socialist student movements started in the whole world as well as in Turkey (Bal & Laciner, 2001). Necmettin Erbakan, who was the leader of the national view movement of that period, who entered politics with his own identity at this time, had brought political Islam out of the slumber period it had been in for a long time (Gulalp, 1999).

By 1971, the State, which had western and secular codes, confronted with very different

ideas, which were hostile to the Western world and were heavily nationalistic. It should be stated that the socialist youth movements represent an extreme point in Turkey, while the national view movement represents another extreme point. However, the similarity between these two movements was that they both had a nationalist idea and were anti-Western. Although the Republic of Turkey had a codification that brought nationalism to the fore, its secular western aspect was equally dominant, and at this point it disagreed with the two extreme views mentioned above. With the memorandum given by the soldiers to the Süleyman Demirel government on March 12, 1971, the government resigned and Nihat Erim, who had a military background, became the Prime Minister instead. In the next period, an uncompromising struggle of the soldiers, who were the owner of the state and the most important political power at that time, triggered a long-lasting struggle against both the socialist thought and the Islamic national view tradition represented by Erbakan. This struggle continued in different ways with another military coup in 1980 (Esen, 2021).

After the mid-1980s, there emerged a period in which Islamist movements were on the rise in Turkey. During this period, different political murders were committed, and political Islam was shown to be responsible for this. However, despite all the propaganda activities, the rise of political Islam continued. In 1994, the mayors of Ankara and Istanbul passed into the hands of the Welfare Party, the party of the national view of that day. In the mayoral elections held that year, Recep Tayyip Erdogan won the Istanbul Municipality and made an important breakthrough in his political life. In the general elections held in December 1995, the Welfare Party emerged as the first party with 21.4% of the votes but could not form a coalition government. An important reason for this was that the soldiers, who were still the dominant figures of politics in that day's Turkey, did not want other parties to form a government with the Welfare Party. However, the events that developed later required Necmettin Erbakan to form a coalition government with Tansu Çiller, the leader of the True Path Party, in June 1996. After this point, the February 28 process, in which important ruptures would begin in Turkey, was entered (Onis, 1997).

At the National Security Council meeting held on February 28, 1997, crucially important decisions were taken regarding the future of all groups with Islamic tendencies and political Islam in Turkey. These decisions included extending primary

education to 8 years and making it compulsory. This resolution meant the closure of the middle sections of Imam Hatip high schools, which are institutions that political Islam attaches great importance to in Turkey. At that time, Necmettin Erbakan used the phrase "our backyard" for Imam Hatip High Schools. In addition, attention was drawn to the connections of political Islam with the Iranian regime, and it was requested to prevent such tendencies. These decisions, which included many other measures like these, were not initially approved by the then prime minister, Necmettin Erbakan. However, later on, these decisions were approved due to the pressure he felt on himself. Subsequent developments required Necmettin Erbakan to resign from being the prime minister in June 1997, and the governments established afterwards implemented the decisions of the National Security Council (Narli, 2000).

During this period, both the people with an Islamic tendency and the people with this identity in politics faced great pressure and forced change. These oppressive attitudes of the soldiers led to the establishment of very different coalitions within the political spectrum in the later period. So much so that Recep Tayyip Erdogan, who founded the Justice and Development Party in 2001, had friends from political Islam as well as people from different parts of the political spectrum. An important reason why people of this different view united under the roof of this party was that Recep Tayyip Erdogan and his friends, who were called innovators from the Islamic nationalistic view, had left the Nationalistic View. Abdullah Gül, who was the representative of the innovators in the congress held in the Fazilet Party, which was the Party of National View of that time, made an attempt to establish the Justice and Development Party because he lost against Recai Kutan by a very small margin (Eligür, 2010).

One of the biggest effects of February 28 on Islamists is that it forced them to transform their identity. In this respect, Tayyip Erdoğan and his friends separated from the Islamist national view and adopted the liberal conservative democrat understanding. In fact, they received a great support from the Western world with these identities in the future. However, until that time, the soldiers, who were constantly western and advocating westernization, were perceived as a natural ally by the westerners. Nevertheless, in the ongoing process, especially anti-democratic practices of the soldiers caused the westerners to move away from them and the thought they represented in Turkey. In the new conjuncture,

Tayyip Erdogan and his friends, who came to the fore with their conservative liberal democrat identity, were supported by the westerners represented by USA and EU (Yilmaz, 2013).

Establishment and Ideology of JDP

JDP was established on 14 August 2001 under the chairmanship of Tayyip Erdogan. These people, who represented the innovative understanding of the national view, did not win the congress in the Fazilet Party on 14 May, 2000, and they started new searches and established this party with their new identities. The striking aspect of this party is that it was founded at a time when the oppressive environment of the February 28 process was fading away. Likewise, the economic crisis that broke out in Turkey in February 2001 facilitated the performance of this party. As it can be understood from the words "justice" and "development", which are the words in the name of the party, they used these two concepts effectively, which were the two most basic needs of the society at that time. This party, which came to power about one year after its establishment, achieved a great development momentum during its first-period rule, approximately 2 years after the economic crisis in 2001 and after the devastating effects of the crisis began to improve. In this period, the most important source of the legitimacy of this party in the eyes of the society was the continuous development of the economy. It was an important step for Turkey's democratization that they included people from different spectrums in the same period (Özbudun, 2006).

In fact, the role that US President Bill Clinton had assigned to Turkey during his 1999 visit to Turkey was being implemented by this party (Wing & Varol, 2006). Accordingly, Turkey, with its secular democratic structure, had achieved a position that would set an example for all Muslim societies in the Middle East. In this respect, the JDP, which applied liberal democratic practices to both domestic and foreign policy, gathered a significant number of supporters both at home and abroad (Kesgin, 2020).

In this period, the soldiers who continued their existence with their secular, nationalist and western identity and the social layers they represented entered into a great identity conflict. On the one hand, these people, who represented the westernization moves inherited from the nineteenth century to the republic, on the other hand, lost the support from the west due to their

anti-democratic practices. The secular society and its representative soldiers, who could not produce the necessary arguments against the liberal-democratic and pro-Western domestic and foreign policy that JDP constantly emphasized, resorted to different propaganda activities (Esposito et al., 2017). For example, in the gatherings that started in 2007 and called the Republic rallies, the slogan of "Are you aware of the danger?" was set. In fact, at that time, it bore the signs that the secular segments were breaking away from the western understanding and evolving towards a pro-Russian and pro-Chinese Eurasian understanding. However, the western identity, which had been defended for a long time, hindered active opposition to the JDP. For this reason, the political Islamist past of these people was emphasized (Işik, 2012).

However, one of the most striking features of that period was frequently expressed by Tayyip Erdogan in the statement "I took off the national view shirt." The expression is a phrase that was used very effectively and turned into a slogan, both to escape from that past of Tayyip Erdogan, to emphasize his new identity and to block the propaganda activities directed at him and his party. He constantly felt the need to reject his past with this sentence (Yılmaz, 2016) so that he could move towards his political goals.

The peak point of all these struggles was the Presidential elections held in 2007. According to the 1982 constitution of the Republic of Turkey, the president was elected by the Turkish Grand National Assembly with a 2/3 majority vote. However, as a result of the implementation of this rule in the 1961 Constitution, the inability to elect the president in very long sessions became an important problem. Therefore, in the 1982 Constitution, the candidate who received the absolute majority votes (at least one more than the half) in the third round of the elections would be elected President. The 2/3 majority requirement was valid for the first two rounds only. The candidate who received the absolute majority in the third round would be elected President. There were 550 deputies in the total parliament of that day. A two-thirds majority of these MPs amounted to 367. However, the allegation of Sabih Kanadoğlu, who had previously served as the Chief Public Prosecutor, made Turkey very busy at that time. According to this claim, at least 367 deputies had to be present in the parliament for the election of the president (Turhan, 2007). However, until that day, the number of 367 was known as the number of deputies to elect the president in the first round. In this case, no one except the JDP

deputies participated in the voting and the number of participants remained at 361. In this case, the Republican People's Party, which applied to the Constitutional Court, canceled this vote, and as a result, the JDP had to hold new elections (Kahraman, 2007). In the general elections held on July 22, 2007, JDP received 46.58% of the total votes in Turkey. Having received only 34.4% of the total votes in the 2002 elections, the JDP increased its public support by more than 10% in this election. Abdullah Gül became President with the participation of the Nationalist Movement Party, which entered the parliament in subsequent Presidential elections. These developments also represented the starting point of major breaks in Turkey's political life (Yılmaz, 2021).

The turning point in which the JDP gained strength in such a way that no effective opposition could be made within the system was the referendum held in 2010. In this referendum, the structure of the Constitutional Court, which actively opposed the JDP, was changed, the structure of the high council of judges and prosecutors was changed, and military courts were abolished. Thus, as a result of the elections held in 2011 with the great success of the JDP, Tayyip Erdogan declared that he entered a period of mastery in politics.

JDP's Foreign Policy until 2009

One of the clearest reflections of JDP's liberal-democratic understanding emerged in its foreign policy practices. Evaluating Turkey's chronic problems up to that time with different foreign policy approaches, JDP also gained the support of some secular liberal sections in the country. For example, the Cyprus issue, which has been on Turkey's agenda since the 1950s, was handled with a very different approach and a very liberal and democratic line was followed. Accordingly, the unification of the two communities in Cyprus and their entry into the European Union with a common constitution had previously been revealed by the Annan Plan made by the United Nations. Fully supporting this plan, JDP showed that they were supporters of a liberal and democratic solution, and they also received the support of the Western world with these moves. Likewise, JDP improved its relations with the European Union at an advanced level and carried out the harmonization packages and democratization moves required for membership. In fact, Turkey had very close relations with Greece, which had previously been determined as an enemy in the public opinion (Oran & Ünsal, 2013).

One of the points where liberal policies are most clearly reflected in foreign policy is the "zero-problems-with-neighbors policy" formulated by the JDP itself. The slogans frequently voiced by the soldiers and the institutions supporting them, especially the secular elites in previous periods, were losing their validity in this period. A slogan inherited from the previous eras to the Turkey of that day clearly revealed Turkey's relationship with its neighbors: "A country surrounded by seas on three sides and enemies on four sides." According to this, Turkey was surrounded by enemies and Turkey's neighbors were Turkey's enemies. However, this concept changed to a large extent and, as a requirement of liberal policies, it reached the point of "zero problems with neighbors" (Askerov, 2017).

In addition, Turkey's constant facing to the West due to its secular identity had a significant impact on its relations with the Middle East countries. For this reason, there were very limited relations with the Middle East countries in the previous periods.

One of Turkey's most important foreign policy problems from previous periods was its relations with Syria. The Euphrates River, which originates from Turkey and passes through Syria, created important problems in foreign policy. The construction of dams on this river caused the problem of transboundary waters with Syria and this problem remained on the agenda for a long time. On the other hand, Syria's support of PKK terror, which is a Kurdish separatist movement in Turkey, exacerbated the problems (Sever, 2001). However, JDP had very close relations with Syria as a requirement of its "zero problems with neighbors" policy and changed the direction of the old policies of the state.

Methodology

This study was a qualitative survey and was a comparison of two different periods. The data required for the study were obtained by literature review and these data were evaluated comparatively. The conditions under which the JDP's Syrian policy, which is the subject of this article, changed and where it evolved as a result are discussed in the study. In addition, case studies were conducted to shed light on the emerging transformations.

The article was formed with the analysis of the policies of JDP in two different periods by comparing and contrasting them. Moreover, the reasons for the change in policies were analyzed, and how these changes were put into effect in

Syrian policy was demonstrated through practices. While the paper reveals the historical development of Islamist idea in Turkey, it gives an account of the reasons for the change resulting in the implementation of the ideology on Syria. In order to give a clear picture, the paper used a comparative method and indicated the policy changes of JDP in different periods.

Results and discussion

Ahmet davutoglu and neo ottomanism

The last point the JDP was on the defensive in Turkey's political structure was the closure case, which was opened in Constitutional Court, brought against it in March 2008. The positive outcome of this case for JDP, amid pressure from the environment towards secular elites, created a great opportunity. The unchanging public support to the JDP in all the developing processes and the attitudes developed by the EU and the USA towards the dissidents, who were believed to hamper the democratization processes, heralded positive developments for the JDP. Both the high level of public support and the support of the USA and the EU against the secular elites strengthened the JDP's position both at home and abroad. In fact, all these developments were clearly shown in the referendum in 2010, and 11 articles of the constitution, which can be considered as important steps towards democratization, were amended.

The fact that the JDP did not have a competitor to effectively oppose was an important reflection of that Ahmet Davutoglu was made Minister of Foreign Affairs in 2009, and JDP started to produce new policies. At this point, the appointment of Ahmet Davutoglu as Minister of Foreign Affairs and the adoption of the idea of neo-Ottomanism as a policy coincided with the same time (Akca, 2019).

In Ahmet Davutoglu's previous book, "Strategic Depth", we see that he evaluates the power of the state by taking into account different data. Accordingly, the history, geography, culture and population of a state are its fixed data. Likewise, its economic, technological and military capacity are also potential data. While these come together to show the power of the state, there are other factors that affect these data exponentially. First of all, the strategic mentality of that state and the existence of historical accumulation that includes cultural, psychological, religious and social values within this mentality can be used effectively in policy making. All this will take

place within a strategic planning. This strategic planning will be made by the political initiative who is willing in this regard (Davutoğlu, 2001).

In this study, Davutoğlu also mentions some elites who does not have a certain identity. He stated that these people, who think that they do not take initiative and take risks in making decisions on important issues, withdraw in occasions that require responsibility. Therefore, these elites stand back at the point where they need to take a step. They follow a passive policy. However, he implied that people with the understanding of strategic depth should take risks and be active in important decisions (Davutoğlu, 2001).

In fact, we can say that Davutoglu brought such a notion to power with the idea of neo-Ottomanism together with the Ministry of Foreign Affairs, which started in 2009. Although it is perceived in a very different way in the society, Davutoglu's understanding of neo-Ottomanism is to have very close relations with the modern states that became a part of the Ottoman Empire and to be a pioneer in many issues.

It was thought that adopting this idea and acting in this direction would bring Turkey to a central position as in the Ottoman Empire. Accordingly, Turkey would conduct active diplomacy in its environment and use its soft power effectively. In this way, it would strengthen the positive perception towards itself in other societies. In addition, in order for a country to internalize its strategic depth, it had to accept its historical past and plan accordingly. In this way, there was the thought that the past inherited from the Ottoman Empire would strengthen Turkey even more (Tüysüzoğlu, 2013).

In fact, we can say that with this thought, Ahmet Davutoğlu is trying to change the direction of Turkey's traditional foreign policy. The western and secular identity that Turkey had previously adopted had weakened its relations, especially with its southern and eastern neighbors. He remained far from active politics in his relations with the West. It was believed that Turkey's effectiveness would increase with the new concept determined (Tüysüzoğlu, 2013).

Turkey's traditional foreign policy was heavily oriented towards the West and was shaped to bring its western identity to the fore. Especially the abandonment of the idea of irredentism with the establishment of the republic caused Turkey to take a passive stance towards the former

Ottoman geographies, the Balkans and the Middle East. After 2009, the JDP's lack of rivals in domestic politics and elimination of secular elites signaled its transition to a new and proactive foreign policy. Although Davutoğlu stated that he did not use terms such as neo-Ottomanism, he criticized Turkey's passive foreign policy on many issues in various ways and signaled new directions (Cavlan, 2010). In this context, Davutoğlu criticized Turkey's failure to pursue active politics towards the states that were historically and geopolitically within the Ottoman Empire (Davutoğlu, 2001).

During this period, Prime Minister Tayyip Erdogan explained Turkey's new foreign policy as follows: He stated that Turkey is not a country in the periphery of international actors in any way, and that it is in a strategic position that will affect three continents. He also stated that Turkey's experience and historical mission compelled Turkey to assume a role in line with this rich background. Therefore, he stated that Turkey should move towards becoming a global power instead of being a regional power. Likewise, he stated that this situation is not a radical change from traditional politics, but a revision in line with world realities (Tüysüzoğlu, 2013).

In fact, although Ahmet Davutoğlu does not openly use the term Ottomanism, it is possible to understand from his discourses that a new Islamist identity is being formed and that Muslim states from the old Ottoman legacy are being called upon for cooperation under the leadership of Turkey. He included the Muslims in the Balkans, as well as the Middle East countries, which were former Ottoman lands, in the Muslim communities. The proactive foreign policy that started with Davutoglu was not limited to the modern states that were under the rule of the Ottoman Empire. Foreign policy towards the Muslim communities in Africa also started to work actively. After becoming the Minister of Foreign Affairs, Ahmet Davutoglu announced in his Sarajevo speech on 16 October 2009 that they would strengthen their ties with these Muslim countries and establish very close relations with them. He also expressed the need of Muslim communities for Turkey in different ways. He even stated that a significant part of Turkey's own population consisted of people whose origins belonged to these countries. All these were expressions that drew the profile of an idealist Islamist (Oran & Ünsal, 2013).

Reflections of paradigm shift on syrian policy

In fact, the zero-problems-with-neighbors policy that JDP had previously set had begun to bear fruit since 2007. The rapprochement between the two countries became more evident with the free trade agreement on 1 January 2007. In the following period, until 2010, the trade volume between the two countries increased from 796 million dollars to 2.5 billion dollars (Collinsworth, 2013).

Later, on September 16, 2009, with the visit of Bashar Assad to Turkey, a strategic cooperation council was established between the two countries. There would be ministers of the two countries in this council and it would consist of 16 people in total. In addition, other ministers who were not members of this council would also attend the meetings when necessary. It was envisaged that this council would meet at least twice a year. An important advantage of this council was that it would enable the bureaucratic problems to be overcome more quickly (Sinkaya, 2012). In addition, with the visa exemption agreement signed in 2009, the citizens of the two countries started to enter the other country without obtaining a visa (Imai, 2016).

This agreement was followed by the ministerial meetings of the two countries for high-level strategic cooperation. The meetings held in Aleppo and Gaziantep on 13 October 2009 with the participation of council member ministers were realized as a concrete step of cooperation (Kıbaroğlu, 2016). In addition, on 22 December 2009, the council attended by Prime Minister Tayyip Erdogan on behalf of the Republic of Turkey convened in Damascus and a total of 50 agreements, memorandums of understanding and cooperation protocols were signed in various fields (Scheumann et al., 2011).

Likewise, this council was held in Latakia, Syria on October 3, 2010. The meeting with the participation of the Prime Ministers was held on 21 December 2010 in Ankara. At this meeting, the status of the previous agreement was evaluated. In addition, 11 more agreements were made. In these agreements, it was decided to fight terrorism, to combine natural gas pipelines, to facilitate customs procedures and to clear mined lands and make them suitable for agriculture.

– Arab Spring and Turkey's Positioning

The Arab Spring, which started in Tunisia in 2010, spread to the countries in that region and

reached Syria. At first, Turkey was in favor of democratic solutions. For example, in the uprisings against the Gaddafi regime in Libya, Turkey sought a democratic solution that would continue the regime and prevent international intervention. However, these searches were unsuccessful. Then, when the events broke out in Syria, Turkey first thought of solving the problems with democratic initiatives that the Syrian regime would also consent to (Oran & Ünsal, 2013).

When demonstrations began in Syria in March 2011, regimes in other Arab countries had already been overthrown. However, there was the potential for a much longer war in Syria. The policy that Turkey had wanted to implement in Libya previously did not work. In this case, the need to follow different policies regarding Syria stood in front of Turkish policy makers. In Syria, the demonstrations first turned into a civil war, then into proxy wars and became a cause for conflict between sects. In addition, in the same period, organizations with religious references started to become more active in Syria, and minorities of different nationalities such as the Kurds began to seek new solutions of being independent.

The rapprochement with Syria until that day had caused Turkey to remain silent in response to the regime's reaction to the events taking place in Syria. After the protests started on March 18, 2011, Turkey was in favor of solving problems through dialogue. At first, Turkey saw this issue as Syria's own internal issue and was worried that the problems that would arise would affect it negatively (Altunışık, 2016). Later, Turkey wanted the Syrian regime to make some reforms. Among these demands of Turkey were general amnesty, change in the electoral system and the abolition of the state of emergency that had been going on since 1963. The Assad regime in Syria lifted the state of emergency on April 21. However, when other reforms and democratic initiatives were not realized, Turkey changed its policy towards Syria. At that time, Ahmet Davutoğlu's intense efforts were inconclusive (Mohammed, 2011). Later, Prime Minister Erdogan decided to impose economic sanctions against the Syrian regime after his visit to the USA.

– Pressure on Syria by the JDP

The JDP government's policy towards Syria, starting from March 2011, turned into forcing this country into democratic reforms. However, at the same time, these calls for reform did not

yield results and the refugee migration to Turkey started. While rumors were spreading that they would create a buffer zone in Syria to stop the refugees from crossing into Turkey, the Syrian army was sending soldiers to the Turkish border. During this process, allowing the Syrian opposition to gather in Turkey in May and July indicated that the crisis between Turkey and Syria would deepen. On July 9, 2011, Davutoğlu went for the last time and demanded that the war be stopped. When these demands were not accepted, Turkey started to follow a similar policy against Syria together with the western states. In September, Turkey allowed the dissidents to form the Syrian National Council in Istanbul. In this way, Turkish government thought that they could have more control over the political equilibrium that might emerge after Assad in Syria. Likewise, the Assad regime accused Turkey of inciting, arming and training the rebels (Oran & Ünsal, 2013).

– Support to Opposition

After September 2011, Turkey changed its policy towards Syria once again and started to support the opposition. In this new period, Davutoğlu first announced a package of sanctions against Syria on October 30, 2011. Accordingly, high-level strategic cooperation was suspended until the establishment of the legitimate government in Syria, senior officials who used violence against civilians within the country were banned from traveling to Turkey, and their assets in Turkey were frozen. Similarly, arms sales to Syria were stopped, and all arms shipments to this country were blocked. In addition, financial relations with the Central Bank of Syria were suspended (Ağır & Atılgan, 2017).

– JDP's Similar Policies Towards Other Arab Countries

In fact, during the period when Turkey changed its policy towards Syria, there were also power changes in countries that had previously experienced the Arab Spring and gained new administrations. For example, in the elections held on October 23, 2011, in Tunisia, where the Arab Spring began, the Ennahda party, which was described as a moderate Islamist, received 41% of the votes and won 89 seats in the 218-member constituent assembly. Likewise, it became the largest political party in the parliament (Saleh, 2015).

Likewise, in the election process that started on November 28, 2011, and ended on January 11, 2012, in Egypt, as an Islamist organization, the

Muslim brothers' party "Freedom and Justice Party", won 127 out of 332 seats and achieved great success in the election together with the other parties it formed a coalition with. Mohammed Morsi, the representative of the Muslim brothers, won the presidential elections held in May-June 2012 (Kazamias, 2015). Morsi pursued policies aimed at weakening the military tutelage, as the JDP had done in Turkey. During this period, Morsi dismissed some military commanders. However, he was removed from power with the military coup on 3 July 2013 (Kurun, 2015).

It should be stated that Morsi's domestic policy moves in this period were similar to the JDP's policies in Turkey. However, what the JDP did in Turkey, Morsi could not do in Egypt. Along with the military coup, the government and pro-government press in Turkey reacted very harshly to the military coup (Türkeş, 2016).

– **Islamist Ideals as Driving Force**

All these show that the changes made in the Syrian policy in this period and the policy towards other Arab countries show similarities. Although JDP's discourses focused on democracy at that time, it is possible to say that Islamist ideals came to the fore. Already in this period, we see that with the change made in Syrian policy, they started to support the opposition in this country. The opposition supported by the JDP emerged as belonging to the Islamist background (Başkan & Taşpınar, 2021).

Islamic organizations similar to the Muslim brothers in Egypt were also present in Syria. Behind the JDP's support to these Islamic groups was its enthusiasm to bring organizations that would have close relations with it to power. While doing this, the western states, especially the USA, reacted strongly to Bashar Assad's use of chemical weapons against his own people at that time (Scheller, 2014). In this case, the JDP calculated that the groups it supported would be accepted by the westerners and move to power. However, the fact that the US wanted Assad, who had secular tendencies, to stay in power rather than an Islamic government, had failed Turkey's calculations. Likewise, Turkey could not calculate the existence of forces such as Saudi Arabia, Jordan and the United Arab Emirates that would give serious reactions to any formation of the Muslim brothers (Erhan et al., 2015).

Although the JDP did not openly expressed its Islamic ideals on Syria and other Arab countries,

different reflections of this have emerged. In particular, a phrase that Tayyip Erdogan used in his speech on September 5, 2012, has been constantly reminded as a slogan that most clearly shows the Islamic ideals in Turkey after that day. His sentence is as follows: "God willing, we will recite Fatiha [First Quranic verse that is cited in prayers in Islam] at the tomb of Saladin, and we will also perform our prayers in the Umayyad Mosque... We will freely pray for our brotherhood (Hurriyet Newspaper, 2012)."

– **Developments at Home**

In the following period, Turkey's interest in the opposition in Syria continued to increase. In January 2014, 2 trucks claimed by government officials to belong to the National Intelligence Organization were stopped by the Gendarmerie on the order of the prosecutor (Armstrong, 2014). It was claimed that these trucks initially contained weapons that went to the Syrian opposition. When these allegations were repeated in the press for a long time, government officials began to repeat that there was humanitarian aid going to Syria in the trucks (Stanley-Adamson, 2016).

In the news published in May 2015, signed by journalist Can Dündar, the weapons hidden under the drugs in these trucks were shown. Thereupon, Turkey's agenda focused on this issue again (Dündar, 2015), and at this point Ahmet Davutoglu emphasized that state institutions should work in coordination and stated that it was wrong to reflect a decision of the political will as if it were a crime by another state institution. In addition, he said, unlike his previous statements, what happens inside the trucks is nobody's business (Cumhuriyet Newspaper, 2015).

– **Russian Intervention and Defensive Period**

During this period, clashes continued between the Syrian army and the opposition, and the progress of the opposition could not be stopped. At the beginning of 2014, the opposition in Syria lost foreign support to a large extent, and during this period, ISIS began to be effective in the north and east of Syria. By 2015, Russia was also included in the equation in Syria on September 30, 2015. Russia, which stated that it entered the region in order to stop the advance of the terrorist organization ISIS, organized an aerial bombardment against ISIS, thus weakening the strength of the organization. In addition, during this period, the Syrian government gained the support of Iran (Karnazov, 2015).

The downing of the Russian plane, which violated Turkish airspace on November 24, 2015, started a new era for Turkey. Turkey, which had been actively involved in the crisis in Syria until that day, then changed its priority and returned to its national security policies. In this period, the protection of the borders and the organization of the Kurdish minority in northern Syria were highlighted as the main problems. This period also led to a temporary Cold War between Turkey and Russia, and the Syrian airspace was closed to Turkish planes in the same period. After this, the Assad regime in Syria entered the recovery process (Kökçam, 2018).

– **Turkish Military Operations to Maintain its Security**

It is possible to say that Russia's intervention in the region changed the conditions dramatically. In fact, as a result of the influence of Russia, Astana talks were held, and a ceasefire was declared between the Assad regime and the opposition on 30 December 2016. Turkey and Iran were also included in these talks. In fact, these three countries became the guarantor states. As a result of the Astana agreement signed on May 4, 2017, it was decided to establish de-escalation zones. Later, with the 2 agreements dated 15 September 2017, the framework determining the duties and responsibilities of the soldiers of the guarantor countries was drawn. 12 observation points were established around Idlib, and the observation points where Turkish soldiers were placed were located in the areas under the control of the opposition. Russia and Iran had observation points in the areas under the control of the Assad regime. However, the advance of the regime soldiers towards Idlib continued and this situation led to an increase in the wave of migration towards Turkey. In this case, Turkey placed more soldiers at the observation posts, but could not prevent the attacks (Demir, 2021).

After the start of the period of Turkey's withdrawal to the defense in Syria, its policy focused on border security and internal security issues. In this context, there were different cross-border movements of the Turkish Armed Forces towards Syria. The first of these is the operation launched against the ISIS on August 24, 2016. As a result of this operation, ISIS withdrew inside Syria. The reason that compelled Turkey in this operation was the killing of soldiers and civilians on its own borders and within the country by this organization (Yeltin, 2018).

On January 30, 2018, there was a second operation launched by Turkey against the Kurds' attempts to establish a new state in Syria. There were important reasons for this operation from Turkey's point of view. First of all, this operation was launched with the aim of creating safe zones for the Syrian refugees, whose numbers are increasing day by day in Turkey. In addition, the activity of the separatist Kurdish movement PKK in Turkey, its attack on Turkey's military posts and attempts to establish a new state have made the operation necessary for Turkey. As a result of this operation, Afrin city center was taken under control on 18 March 2018. Thus, the Kurdish canton that was planned to be established in the region was prevented (Köylü, 2018).

On October 30, 2019, another Turkish operation against the Kurdish region in Syria began. The activities of the separatist Kurdish movement in this region were perceived as a threat by Turkey. Although military success was achieved as a result of this operation, some results changed with the intervention of the USA and Russia later on. In the Ankara agreement dated October 17, 2019, Turkey and the United States reached an agreement, and the Kurdish militias began to withdraw to the south. In addition, the Sochi agreement was signed with Russia on October 22, 2019, and as a result, it was decided that the separatist militias would withdraw 30 kilometers to the south. In addition, it was planned to conduct patrols of Turkish and Russian soldiers at a depth of 10 kilometers in this region. Thus, actors with diplomatic activity such as Russia and the USA came before Turkey and limited Turkey's range of action (Demir, 2021).

Then, on February 20, 2020, another operation against Syria was launched. Neighboring the Turkish city of Hatay, Idlib had become a gathering place for opponents of the regime. Therefore, the attacks of both the Assad regime and the Russian forces continued. This situation, which threatens Turkey's borders, could also lead to a refugee influx of three million people living in the region towards Turkey. Due to these security problems, Turkey launched a cross-border operation. As a result of this operation, which took place with an air attack, the Sochi agreement was signed between Russia and Turkey on March 5, 2020, and the operation was terminated. Thus, Turkey's control was established around Idlib. As a result of this operation, Turkey eliminated a security problem against itself (Demir, 2021).

– New Pursuits in Syrian Policy

At the last point, the realization by Turkey that the Bashar Assad regime could not be overthrown especially because of the support of Russia and the USA brought new pursuits. Tayyip Erdogan, who said that it was not possible to meet with Bashar Assad before (Cumhuriyet Newspaper, 2017), has recently changed his mind. Holding a press conference for the European political community while he was in Prague, Erdogan said on relations with Syria, "When the time comes, we can go to meet with the president of Syria. As of now, there are already low-level talks (Euronews, 2022)."

Discussion

After the military memorandum in 2007, JDP's ability to overcome the closure case in 2008 without any problems caused it to become almost the only actor in political life in the following period. The JDP, which largely eliminated the opposition forces within the state with the constitutional amendment referendum in 2010, gave the signal that it would embark on new initiatives when Ahmet Davutoglu was appointed to the Ministry of Foreign Affairs in 2009. After this period, the idea of following a proactive policy under the name of neo-Ottomanism was attempted and new initiatives were tried to be realized for all nations that were under the rule of the Ottoman Empire. Although an Islamic understanding was not expressed openly at the level of discourse, the actions of the later period showed that the government was chasing Islamic dreams. In particular, the collapse of the regimes after the Arab Spring and the coming to power of parties with Islamist ideas in countries such as Egypt and Tunisia gave hope that the dreams of the JDP would come true.

However, the intervention of other political forces in the following process brought about radical changes. The removal of the Muslim brothers from power in Egypt and the intervention of Russia in Syria to support the Assad regime also heralded that Islamist dreams would not come true. As a matter of fact, the USA's support of the Assad regime against radical Islamist opponents had results far beyond the expectations of the JDP.

With Russia's intervention in the region, it is possible to say that Turkey's Syria policy was drawn to a defensive line. After that period, some military operations were carried out to prevent formations that would threaten Turkey's security in the authority vacuum that emerged in Syria. As

a matter of fact, these operations were carried out under the control of Russia and the USA.

Tayyip Erdogan's Syria policy has significant changes in attitude. While he was close enough to say, "my brother Esad" before the Arab Spring, it came to the point of saying enemy "Eset" after the events started in Syria (Demirtaş, 2013). He stated that it was not possible to meet with Bashar Assad during this period. He even stated that Assad was a murderer who killed his own people. However, at the last point, he stated that he could negotiate with the regime in Syria.

Finally, after the Turkish Foreign Minister Mevlut Cavusoglu's statement, "We have to somehow agree with the opposition and the regime in Syria, we have to take it", anti-Turkey protests were held in many cities under the control of the Free Syrian Army supported by Turkey. Meanwhile, there were those who burned the Turkish flag among the protesters (Euronews, 2022).

Conclusion

After coming to power in Turkey, the JDP, which was quite weak against the secular soldiers, received great support both inside and outside of Turkey with its liberal and democratic line. Thanks to this support, he was able to stand against the soldiers, who were the most effective political power in Turkey at that time. Even liberal policies showed themselves in foreign relations and a policy of zero problems with all neighboring countries was adopted. In this context, very close strategic cooperation was entered into with Syria. However, the fact that the JDP became very powerful and remained unrivaled in the political arena caused it to return to its own Islamist identity. Supporting the opposition in Syria for these purposes and providing them with weapons, JDP was eager to bring Islamist groups to power. Other developments that fed these dreams also emerged in Egypt and Tunisia, which experienced the Arab Spring. While all these brought about foreign policy initiatives that fed Islamic idealism, with the intervention of Russia, Iran and the USA in Syria, all these idealist policies were replaced by realist and defensive policies. After a while, Turkey's own security was endangered, and foreign policy moves to protect this security were realized. Turkey's Syrian foreign policy evolved from democratic liberal policies to idealist Islamist policies, and then it has been drawn to a realistic line in the face of the emerging realities. In fact, at this point, a situation has emerged that even the opponents,

who were supported before by Turkey, are not satisfied.

Bibliographic references

- Ağır, O., & Atılgan, A. (2017). Evaluation of Turkey's Syria Policy with a Constructivist Approach [Türkiye'nin Suriye Politikasının Konstrüktivist Bir Yaklaşımla Değerlendirilmesi]. İnönü University International Journal of Social Sciences [İnönü Üniversitesi Uluslararası Sosyal Bilimler Dergisi], 6(1), 71-86.
- Akca, A. (2019). Neo-Ottomanism: Turkey's foreign policy approach to Africa. *New Perspectives in Foreign Policy*, 17, 03-08.
- Altunışık, M. B. (2016). The inflexibility of Turkey's policy in Syria. *IEMed Mediterranean Yearbook*, 57, 62.
- Armstrong, W. (2014). Hard times for good news. *Turkish Review*, 4(2), 202. <https://www.proquest.com/openview/1b2fae11b058b036ca70ef53fa3566cf/1?pq-origsite=gscholar&cbl=2031885>
- Askerov, A. (2017). Turkey's "Zero Problems with the Neighbors" Policy: Was It Realistic? *Contemporary Review of the Middle East*, 4(2), 149-167.
- Axiarlis, E. (2014). Political Islam and the secular state in Turkey: Democracy, reform and the Justice and Development Party. Bloomsbury Publishing.
- Bal, I., & Laciner, S. (2001). The challenge of revolutionary terrorism to Turkish democracy 1960-80. *Terrorism and Political Violence*, 13(4), 90-115.
- Başkan, B., & Taşpınar, Ö. (2021). The Nation or the Ummah: Islamism and Turkish Foreign Policy. SUNY Press.
- Cavlan, T. (2010). Neo-Ottomanism: A Break with the West? [Yeni Osmanlıcılık: Batıdan Kopuş mu?] *Journal of Social Sciences [Sosyal Bilimler Dergisi]*, 3(2), 126-156.
- Cesari, J. (2017). The Nationalist Origins of Political Islam. *Current History*, 116(786), 31-34.
- Collinsworth, D. (2013). Hatay: The Syrian crisis and a case of Turkish economic resilience. *Turkish Policy Quarterly*, 12(1), 119-124.
- Cumhuriyet Newspaper (2015, 31 May). The guns are real, the rest is a lie [Silahlar gerçek gerisi yalan]. <https://www.cumhuriyet.com.tr/haber/silahlar-gercek-gerisi-yalan-288881>
- Cumhuriyet Newspaper. (2017, 12 September). Assad is Assad again [Esed yine Esad oldu]. <https://www.cumhuriyet.com.tr/haber/esed-yine-esad-oldu-821743>
- Davutoğlu, A. (2001). Strategic depth [Stratejik derinlik]. Istanbul: Globe Publications. [Küre Yayınları].
- Demir, E. (2021). In the context of Turkey's Syria policy, the causes and consequences of the TAF's cross-border operations in Syria [Türkiye'nin Suriye politikası bağlamında TSK'nın Suriye'deki sınır ötesi harekâtlarının nedenleri ve sonuçları]. *Journal of Regional Studies [Bölgesel Araştırmalar Dergisi]*, 5(2), 541-580.
- Demirtaş, B. (2013). Turkish-Syrian Relations: From Friend 'Esad' to Enemy 'Esed'. *Middle East Policy*, 20(1), 111-120.
- Dodd, C. H. (1992). The development of Turkish democracy. *British Journal of Middle Eastern Studies*, 19(1), 16-30.
- Dündar, C. (2015, 31 May). Here are the weapons that Erdogan said she didn't have [İşte Erdoğan'ın yok dediği silahlar]. *Cumhuriyet Newspaper [Cumhuriyet Gazetesi]*.
- Eligür, B. (2010). The mobilization of political Islam in Turkey. Cambridge University Press.
- Euronews. (2022, 6 October). Erdogan's meeting with Assad [Erdoğan'dan Esad ile görüşme]. <https://tr.euronews.com/2022/10/06/erdogan-dan-esad-ile-gorusme-sinyali-suriyenin-baskani-ile-gorusme-yoluna-gidebiliriz>
- Erhan, Ç., Ocak, P., & Kuşoğlu, B. (2015). Turkey: Succeeded or Failed as a Role Model and Pillar of Stability in the Middle East? The Southern Mediterranean: Challenges to the European Foreign and Security Policy, 85, 199.
- Euronews. (2022, 12 August). 'Assad' became 'Assad' again: Syrian opposition protested by burning Turkish flag ['Esed' tekrar 'Esad' oldu: Suriyeli muhalifler Türk bayrağı yakarak protesto etti]. <https://tr.euronews.com/2022/08/12/esed-tekrar-esad-oldu-suriyeli-muhafifler-turk-bayragi-yakarak-protesto-etti>
- Esen, B. (2021). Praetorian army in action: a critical assessment of civil-military relations in Turkey. *Armed Forces & Society*, 47(1), 201-222.
- Esposito, J. L., Rahim, L. Z., & Ghobadzadeh, N. (Eds.). (2017). The politics of Islamism: Diverging visions and trajectories. Springer.
- Gulalp, H. (1999). Political Islam in Turkey: the rise and fall of the Refah Party. *The Muslim World*, 89(1), 22.
- Hurriyet Newspaper. (2012, September 5). Prime Minister Erdogan's speech [Başbakan Erdoğan'ın konuşması]. <https://www.hurriyet.com.tr/gundem/basbak>

- an-erdoganin-konusmasin-in-tam-metni-21388292
- Imai, K. (2016). Rethinking the insulator state: Turkey's border security and the Syrian civil war. *Eurasia Border Review*, 7(1), 19-29.
- Işik, C. (2012). Republican rallies in Turkey in the light of nationalism and national left debates [Milliyetçilik ve ulusal sol tartışmaları ışığında Türkiye'de Cumhuriyet mitingleri] (Doctoral dissertation), DEU Institute of Social Sciences [DEÜ Sosyal Bilimleri Enstitüsü]. <https://acikerisim.deu.edu.tr/xmlui/handle/20.500.12397/10465?show=full>
- Isiksel, T. (2013). Between text and context: Turkey's tradition of authoritarian constitutionalism. *International Journal of Constitutional Law*, 11(3), 702-726.
- Kahraman, M. (2007). Presidency and presidential election debates in Turkey in terms of their functions [Fonksiyonları itibarıyla Türkiye'de cumhurbaşkanlığı ve cumhurbaşkanlığı seçimi tartışmaları]. *Dumlupınar University Journal of Social Sciences [Dumlupınar Üniversitesi Sosyal Bilimler Dergisi]*, 19, 149-166.
- Karnazov, V. (2015). The Russian air campaign over Syria. *Asia-Pacific Defence Reporter* (2002), 41(10), 23-27.
- Kazamias, A. (2015). From popular revolution to semi-democracy: Egypt's first experiment with praetorian parliamentarism. In *Revolutionary Egypt* (pp. 134-156). Routledge.
- Kesgin, B. (2020). Turkey's Erdoğan: leadership style and foreign policy audiences. *Turkish Studies*, 21(1), 56-82.
- Kibaroglu, A. (2016). Turkey-Syria water relations: institutional development and political confrontations in the Euphrates and Tigris region. *Turkey-Syria Relations: Between Enmity and Amity*, 145-158.
- Kökçam, S. (2018). Turkey-Syria Relations in the Ak Party Era [Ak Parti Dönemi Türkiye-Suriye İlişkileri]. *Section Academy Journal [Kesit Akademi Dergisi]*, (15), 291-309.
- Köylü, M. (2018). Syria, PYD/YPG Structure and Operation Olive Branch [Suriye, PYD/YPG Yapılanması ve Zeytin Dalı Harekâtı]. *ASSAM International Refereed Journal [ASSAM Uluslararası Hakemli Dergi]*, 5(11), 70-86.
- Kurun, İ. (2015). Democratization in Egypt from A Historical Perspective: Problems, Pitfalls and Prospects. *Journal of Management and Economics [Yönetim ve Ekonomi Dergisi]*, 22(1), 183-199.
- Mohammadi, M. (2015). *Political Islam in Post-revolutionary Iran: Shi'i Ideologies in Islamist Discourse*. Bloomsbury Publishing.
- Mohammed, I. (2011). Turkey and Iran Rivalry on Syria. *Alternatives: Turkish Journal of International Relations*, 10(2&3), 65-77.
- Narli, N. (2000). Civil-military relations in Turkey. *Turkish Studies*, 1(1), 107-127.
- Onis, Z. (1997). The political economy of Islamic resurgence in Turkey: The rise of the Welfare Party in perspective. *Third World Quarterly*, 18(4), 743-766.
- Oran, B., & Ünsal, Ü. (2013). *Turkish Foreign Policy, Volume 3 (2001-2012) [Türk Dış Politikası, Cilt 3 (2001-2012)]*. Istanbul: Communication [İletişim].
- Özbudun, E. (2006). From political Islam to conservative democracy: the case of the Justice and Development Party in Turkey. *South European Society & Politics*, 11(3-4), 543-557.
- Saleh, M. (2015). *Constitution-making in transition: a comparative study of the 2012 Egyptian and 2014 Tunisian constitutions* (Master's Thesis), the American University in Cairo. AUC KnowledgeFountain. <https://fount.aucegypt.edu/etds/948>
- Sambur, B. (2009). The great transformation of political Islam in Turkey: The case of justice and development party and Erdogan. *European Journal of Economic and Political Studies*, 2(2).
- Scheller, B. (2014). *The wisdom of Syria's waiting game: Foreign policy under the Assads*. London: Hurst & Company.
- Scheumann, W., Sagsen, I., & Tereci, E. (2011). Orontes River Basin: Downstream challenges and prospects for cooperation. *Turkey's Water Policy*, 301-312.
- Sever, A. (2001). Turkey and the Syrian-Israeli peace talks in the 1990s. *Middle East Review of International Affairs*, 5(3), 87-99.
- Sinkaya, B. (2012). Rationalization of Turkey-Iran Relations: Prospects and Limits. *Insight Turkey*, 14(2), 137.
- Stanley-Adamson, C. (2016). The impact of global media perceptions of Turkey's intelligence and security approach towards the Syrian conflict. *Journal of Intelligence and Terrorism Studies*, 1.
- Turhan, M. (2007). Right-based interpretation and constitutional jurisdiction of the constitution [Anayasanın hak temelli yorumu ve anayasa yargısı]. *Ankara University Journal of SBF [Ankara Üniversitesi SBF Dergisi]*, 62(03), 379-404.

- Türkeş, M. (2016). Decomposing neo-Ottoman hegemony. *Journal of Balkan and Near Eastern Studies*, 18(3), 191-216.
- Tüysüzöğlü, G. (2013). Turkish foreign policy after the millennium: A pragmatism built around Neo-Ottomanism and Turkish Eurasianism [Milenyum sonrası Türk dış politikası: Yeni Osmanlılık ve Türk Avrasyacılığı ekseninde inşa edilen bir pragmatizm]. *Alternative Policy [Alternatif Politika]*, 5.
- White, J. B. (2013). 4 The end of Islamism? Turkey's Muslimhood model. In *Political Islam* (pp. 462-481). Routledge.
- Wing, A. K., & Varol, O. O. (2006). Is Secularism Possible in a Majority-Muslim Country: The Turkish Example. *Tex. Int'l LJ*, 42, 1.
- Yeltin, H. (2018). An Example of Turkey's Search for Security Against the Syria Crisis: Operation Euphrates Shield [Türkiye'nin Suriye Krizine Karşı Güvenlik Arayışlarına Bir Örnek: Fırat Kalkanı Harekâtı]. *Econder International Academic Journal*, 2(2), 200-214.
- Yılmaz, D. D. (2021). 11. Developments in President Abdullah Gül's Election Process [Cumhurbaşkanı Abdullah Gül'ün Seçim Sürecinde Yaşanan Gelişmeler]. *Journal of Economics, Business, Politics and International Relations [Ekonomi İşletme Siyaset ve Uluslararası İlişkiler Dergisi]*, 7(2), 244-259.
- Yılmaz, I. (2013). Beyond Post-Islamism: The Transformation of Turkish Islamism to Non-Islamism. *The Muslim World and Politics in Transition: Creative Contributions of the Gülen Movement*. London and New York: Bloomsbury, 67-81.
- Yılmaz, S. (2016). National Vision Movement: The Effect of Frame Change in Social Movements. *Itobiad [Milli Görüş Hareketi: Toplumsal Hareketlerde Çerçeve Değişimi Etkisi. Itobiad]: Journal of the Human & Social Science Research*, 5(4).

DOI: <https://doi.org/10.34069/AI/2022.56.08.27>

How to Cite:

Tymchyshyn, A., Semeniaka, A., Bondar, S., Akhtyrskaya, N., & Kostiuchenko, O. (2022). The use of big data and data mining in the investigation of criminal offences. *Amazonia Investiga*, 11(56), 278-290. <https://doi.org/10.34069/AI/2022.56.08.27>

The use of big data and data mining in the investigation of criminal offences

Застосування Big Data та Data Mining у розслідуванні кримінальних правопорушень

Received: September 10, 2022

Accepted: October 07, 2022

Written by:

Andriy Tymchyshyn¹¹¹<https://orcid.org/0000-0002-9591-8273>**Anna Semeniaka**¹¹²<https://orcid.org/0000-0001-9366-8234>**Serhii Bondar**¹¹³<https://orcid.org/0000-0002-0497-4457>**Nataliia Akhtyrskaya**¹¹⁴<https://orcid.org/0000-0003-3357-7722>**Olena Kostiuchenko**¹¹⁵<https://orcid.org/0000-0002-2243-1173>

Abstract

The aim of this study was to determine the features and prospects of using Big Data and Data Mining in criminal proceedings. The research involved the methods of a systematic approach, descriptive analysis, systematic sampling, formal legal approach and forecasting. The object of using Big Data and Data Mining are various crimes, the common features of which are the seriousness and complexity of the investigation. The common tools of Big Data and Data Mining in crime investigation and crime forecasting as interrelated tasks were identified. The creation of databases is the result of the processing of data sources by Data Mining methods, each being distinguished by the specifics of use. The main risks of implementing Big Data and Data Mining are violations of human rights and freedoms. Improving the use of Big Data and Data Mining requires standardization of procedures with strict adherence to the fundamental ethical, organizational and procedural rules. The use of Big Data and Data Mining is a forensic

Анотація

Метою даного дослідження стало визначення особливостей та перспектив застосування Big Data та Data Mining в кримінальних провадженнях. У дослідженні були застосовані методи системного підходу, описового аналізу, системного відбору, формально-юридичний та прогнозування. Об'єктом застосування Big Data і Data Mining є різноманітні злочини, спільними ознаками яких є серйозність та складність розслідування. Виявлена інструментальна спільність Big Data і Data Mining в розслідуванні злочинів та прогнозуванні злочинності як взаємопов'язаних завдань. Формування баз даних є результатом опрацювання джерел методами Data Mining, кожен з яких вирізняється специфікою використання. Основні ризики впровадження Big Data і Data Mining полягають у порушеннях прав і свобод людини. Удосконалення застосування Big Data і Data Mining потребує стандартизації процедур з чітким дотриманням засадничих правил етичного, організаційного та процесуального

¹¹¹ PhD in Law Sciences, Associate Professor, Department of Law, Separate Structural Subdivision of Higher Education Institution "Open International University of Human Development Ukraine" Ivano-Frankivsk Branch, Ivano-Frankivsk, Ukraine.

¹¹² Postgraduate student, Tavria National University named after V. I. Vernadskyi, Kyiv, Ukraine.

¹¹³ PhD in Law Sciences, Senior Research Fellow, Department for the organization of scientific activities and protection of intellectual property rights, National Academy of Internal Affairs, Kyiv, Ukraine.

¹¹⁴ PhD in Law Sciences, Associate Professor, Department of Criminal Process and Criminalistics, Educational and Scientific Institute of Law of Taras Shevchenko National University of Kyiv, Kyiv, Ukraine.

¹¹⁵ PhD in Law Sciences, Associate Professor, Department of Criminal Process and Criminalistics, Educational and Scientific Institute of Law of Taras Shevchenko National University of Kyiv, Kyiv, Ukraine.



innovation in the investigation of serious crimes and the creation of an evidence base for criminal justice. The prospects for widespread use of these methods involve the standardization of procedures based on ethical, organizational and procedural principles. It is appropriate to outline these procedures in framework practical recommendations, emphasizing the responsibility of officials in case of violation of the specified principles. The area of further research is the improvement of innovative technologies and legal regulation of their application.

Keywords: criminal analytics, criminal justice, criminal offenses, investigation, working with data.

Introduction

The law enforcement agencies are moving from rare partial cases of the use of modern technologies in criminal proceedings to their complex application, the development of new methods of detection and investigation of criminal offences. This is determined by a number of factors that are inherent in the vast majority of proceedings. These are the intellectualization of crimes and ways of countering their detection by criminals; significant data volumes that detectives need to process; lack of time and the dynamic investigation environment (Blahuta & Movchan, 2020). Information remains the central issue of the entire investigation process — its search, processing, consolidation and use as evidence.

Law enforcement systems generate huge volumes of information about crimes. These are demographic, socio-economic, time-space, geographic data (Butt et al., 2020). Detectives get a significant part of them from social networks, which occupy a special place among the sources of criminally significant data (Zhou et al., 2021). That is why a data management model or technique is so important for crime prevention decision-making (Hussain & Aljuboori, 2022). In this context, only the latest methods and technologies can give law enforcement agencies the opportunity to quickly and efficiently investigate and detect criminal offences.

Big Data and Data Mining occupy a special place among innovations, the use of which is determined by the specifics of the information society in which crimes are committed. In a generalized sense, Big Data is a concept that

характеру. Застосування Big Data і Data Mining є криміналістичною інновацією в розслідуванні серйозних злочинів та формування доказової бази для кримінального судочинства. Перспективи широкого застосування цих методів полягають у стандартизації процедур, що ґрунтуються на етичній, організаційній та процесуальній засадах. У рамочному виді дані процедури доцільно викласти в практичних рекомендаціях із наголошенням на відповідальності посадових осіб при порушенні зазначених засад. Орієнтири подальших розвідок лежать в сфері удосконалення інноваційних технологій та правової регламентації їх застосування.

Ключові слова: робота з даними, кримінальна аналітика, кримінальні правопорушення, розслідування, кримінальне правосуддя.

represents a huge amount of structured, unstructured and semi-structured data (Usha et al., 2020). In the era of Big Data, there is a transition to modern ways of collecting and integrating small-scale data contained in various sources (Zhao & Tang, 2017). Data Mining is a method of working with large arrays of data using computer technologies with subsequent identification of their significance, comprehensive analysis and generalization to the required informational result (Pokhriyal et al., 2020). In this context, Data Mining is a powerful tool with practical potential. Thanks to it, investigators can focus on the most important information about the crime (Hassani et al., 2016).

Aim

In view of the foregoing, the aim of this study is to consider the specifics of the use of Big Data and Data Mining in the investigation of criminal offences, as well as to determine problematic aspects in the field of human rights protection. The aim involves the following research objectives:

- identify the substance and tasks of Big Data and Data Mining as methods of investigating crimes and predicting criminal activity;
- identify criminal, procedural and human rights components of the application of these methods;
- determine prospects for the introduction of standards for the use of Big Data and Data Mining as forensic innovations in the investigation of crimes.

Literature review

The use of Big Data and Data Mining enables covering a number of well-known algorithms of intellectual analysis, which are involved in the detection and investigation of criminal offences. These include text analysis (Pramanik et al., 2017) (natural language processing (Chaudhary & Bansal, 2022), content processing through the development and application of a criminal thesaurus (Das et al., 2021), topic modelling (Zhao & Tang, 2017)); analysis of competing hypotheses during investigation (Oatley et al., 2020); studying the specifics of the connection between the crime and the territory in which it is committed (Hussain & Aljuboori, 2022), which is used to form geographic clusters (Usha et al., 2020); structural analysis of social networks (Pramanik et al., 2017), etc. Artificial intelligence is a promising Data Mining tool, which supplements the forensic capabilities of law enforcement agencies for processing information and its further analysis (Dupont et al., 2018). In particular, Data Mining by means of artificial intelligence includes Big Data processing for profiling and forecasting criminal behaviour; predicting crime rates (Oatley, 2022), etc.

The active use of Big Data and Data Mining has led to the creation of intelligent platforms for the coordination of law enforcement activities and information provision of current and planned policing (Norouzi & Ataei, 2021). One of them is the EU law enforcement agency's Secure Information Exchange Network Application (SIENA) platform. It ensures the exchange of operational and strategic information on crime between: Europol analysts and experts; EU member states; third countries with which Europol has cooperation agreements or working arrangements (Europol, 2022). Open Source Intelligence (OSINT), which is used to analyse publicly available sources of information, is one of the solutions to counter terrorist activities on the Internet (Chaudhary & Bansal, 2022).

The main focus is, however, on the technological aspects of Big Data and Data Mining. Although their application in criminal proceedings is covered, the criminal law, procedural and human rights aspects remain insufficiently studied.

In particular, it is necessary to pay attention to the types of crimes, to determine their most significant features in order to make innovations in the field of criminal justice more effective (Das et al., 2021). Specialists mainly focus on the advantages of using Big Data and Data Mining to

detect and investigate certain types of acts: fraud and other economic crimes in the business environment (Dehtiarovai & Yevdokimov, 2018), terrorist activity in social networks (Chaudhary & Bansal, 2022) etc. The results of technological counteraction to organized crime in Ukraine have been made public. It is about putting an end to the pirated online resources, exposing a fraudulent financial exchange, arresting criminals for the abuse of minors and distribution of relevant content on the closed Internet, suppression of the largest platform for the sale of personal data on the darknet, etc. (Blahuta & Movchan, 2020). There are, however, no classifications of crimes in the investigation of which it is appropriate to use Big Data and Data Mining. This entails a lack of general procedures for the use of information and telecommunication technologies and failure to use all opportunities for international law enforcement cooperation. The last aspect is extremely important, because modern organized crime is transnational. This determines the need for comprehensive support of investigations, in particular, joint investigative teams (European Parliament and the Council of the European Union, 2018).

The procedural aspect is the next problematic issue, that is enshrinement of the results of the use of Big Data and Data Mining in criminal proceedings. The matter is primarily about digital evidence, which is obtained on the basis of processing large information volumes. Conventional analytical methods are not appropriate for managing such data effectively (Usha et al., 2020). Such evidence includes electronic documents (text documents, graphic images, plans, photographs, video and sound recordings, etc.), websites, text, multimedia and voice messages, metadata, databases and other digital information (Blahuta & Movchan, 2020, p. 112).

Crime forecasting is closely related to the problems of criminal investigation. It is extremely difficult to detect crimes and investigate large-scale criminal activities of organized groups without proper organization of analytical work in this area. Forecasting crime is one of the most difficult tasks in law enforcement. In particular, the Big Data method has shown the potential of generalizing such indicators as geography, education, housing availability, urbanization, and population structure to predict the risk of crime in large cities (Wang et al., 2020). Trying to estimate hidden (latent) crime indicators is a separate problem (Jha et al., 2021). This is the reason for the

experts to emphasize the relevance of an intellectual expert system that involves methods of intellectual data analysis to predict the criminogenic situation (Norouzi & Ataei, 2021). In this regard, Data Mining enables combining formalized approach and informal analysis, as well as quantitative and qualitative data analysis (Dehtiarovai & Yevdokimov, 2018).

So, innovations in the investigation of criminal offences, including modern crime forecasting capabilities, allow for a better allocation of law enforcement resources (Hou et al., 2022). Therefore, it is emphasized that the correct use of Big Data and Data Mining can provide significant savings of public funds that are allocated to the field of security (Hassani et al., 2016).

The prospects for the widespread use of Big Data and Data Mining in the investigation of criminal offenses encounter difficulties that can be divided into several groups:

- lack of qualified personnel. The use of Data Mining is affected by the growth of Big Data volumes, but for people who do not have data analysis skills and do not have special knowledge (Hassani et al., 2016) the admissibility of such work for the investigation of criminal offenses is doubtful;
- a certain subjectivity in the selection and assessment of primary data. Detectives and experts still have certain prejudices about the collection and analysis of DNA, fingerprints, electronic messages, etc. (Oatley et al., 2020);
- the impact of the latency of crimes on the formation of databases, which leads to an inadequate analysis of the criminal situation (Guariglia, 2020);
- a time factor affecting the reliability of the results of using the latest methods. For example, the use of Data Mining is effective, but mostly in small time intervals (Dehtiarovai & Yevdokimov, 2018).

Along with this, there is a danger of violation of human rights and freedoms during the investigation of crimes using Big Data and Data Mining. For example, facial recognition systems can be used to covertly collect data not only on criminals, but also on citizens who have never been in trouble with the law. Besides, scanning the profiles of social media users gives law enforcement officers access to the private lives of millions of people (Blahuta & Movchan, 2020). This is why some states impose restrictions on

the use of the latest technologies in law enforcement activities. For example, starting in 2020, some cities in the US significantly limited the allocation of resources for policing in accordance with analytics that can predict future crime locations, potential victims, and criminals (Guariglia, 2020).

So, the use of Big Data and Data Mining in the investigation of criminal offences is an urgent problem that has both huge positive prospects and objective difficulties. The legal dimension of this problem draws attention to criminal law, procedural and human rights aspects. It is necessary to settle them for the widespread use of Big Data and Data Mining in the field of criminal justice.

Methodology and methods

The literature that covers the legal, procedural, and technological aspects of using Big Data and Data Mining in the investigation of criminal offences, as well as forecasting criminal activity was selected to achieve the aim set in the article and fulfil its objectives. Their analysis made it possible to identify the main components of the subject under research, which reflect the legal dimension of the problem.

The article also involved a generalization of the practice of international law enforcement organizations regarding the results of the use of Big Data and Data Mining in the field of criminal justice in terms of the requirements for building an evidence base in criminal proceedings. This gave grounds to determine the main prospects for making the application of these methods for the investigation of criminal offences and forecasting of criminal activity more effective.

The aim of the research was achieved through the following methods:

- systemic approach was used to study the tasks and technologies of Big Data and Data Mining in the field of criminal justice in terms of human rights protection;
- descriptive analysis was used to identify the specifics of Big Data and Data Mining as innovative forensic methods;
- systematic sampling and doctrinal approach enabled identifying and describing the features of criminal offences which can be investigated with the use of Big Data and Data Mining;
- forecasting was used to determine the prospects for making the use of Big Data and Data Mining as methods of investigating

crimes and predicting criminal activity more effective.

Results

Innovations in the methods of detection and investigation of criminal offences reflect the intensive use of technologies in criminal activities and the demand for digital evidence in criminal proceedings. The application of Big Data and Data Mining, which enable organizing and using significant arrays of structured and unstructured information, in combating crime is a many-sided problem. It includes:

- a) features of crimes that can be investigated using Big Data and Data Mining;
- b) crime combating objectives that can be fulfilled with the help of these methods;
- c) the specifics of using Big Data and Data Mining methods and technologies in criminal proceedings;
- d) requirements for the application results;
- e) compliance with basic human rights and freedoms.

Defining the range of crimes is complicated by the heterogeneity and number of their types that can be considered in this context. Big Data and Data Mining cover a wide range — from simple theft to international criminal activity. At the same time, information about suspects can be obtained and stored in different countries and cover significant periods of time (Hassani et al., 2016). It follows that the detection of such crimes usually requires cooperation with foreign states and coordination of international organizations, for example, Europol or Interpol. The conceptual documents contain only an approximate list of such crimes, for example, in Annex 1 to the Regulation (EU) 2018/1727 of The European Parliament and of The Council (2018). It is considered that the relevant criminal offences can be classified according to the following criteria: a) territorial affiliation; b) the nature of the act; c) subject composition. At the same time, classification groups do not exclude each other, but describe actions in different aspects. The following can be considered as the main common feature of all acts: a) the complexity of their investigation, which necessitates the use of the latest technologies; b) dangerousness, as a result of which they are classified as serious (serious) crimes punishable by imprisonment (see Figure 1).

As already mentioned, Big Data and Data Mining are methods that are used not only in the investigation of criminal offenses, but also in

predicting crime. These two tasks are closely related, because the element of delinquency is crime. In this context, crime forecasting should be considered as a logical operation with a purpose of identifying and, as a result, investigating particular criminal offences. The regularities that are revealed through the analysis of crime are also of significant importance at the level of a separate crime. The prediction of connections is a key area of research in complex social systems, which can be implemented by assessing the possibility of the non-obvious connections between pairs of objects. This can provide an effective means of detecting hidden connections in criminal networks and conspiratorial criminal groups (Assouli et al., 2021).

Figure 2 shows the relationship between crime investigation and crime forecasting in the context of Big.

Data and Data Mining

A large number of data sources with the entire set of structured and unstructured data contained cause the urgent need to use Big Data and Data Mining for crime forecasting and crime investigation. These can be open sources and those that require permission to work with them. They can belong to the state, law enforcement agencies, commercial entities, public organizations, individuals (Blahuta & Movchan, 2020). They are the source material to be processed by law enforcement agencies through Data Mining to create various data bases (banks) that are actively used in the crime investigation. This is especially important for international investigations. For example, the General Secretariat of Interpol has created and operates data banks that contain information:

- a) about persons wanted for crimes, missing persons, persons subject to identification, in particular, unidentified corpses, etc.;
- b) about vehicles stolen on the territory of Interpol member states;
- c) about stolen/lost identification documents, as well as stolen/lost forms of administrative documents;
- d) about works of art, antiques, other cultural values stolen on the territory of Interpol member states;
- e) about DNA recovered from crime scenes on the territory of Interpol member states and from criminals;
- f) fingerprints recovered from crime scenes on the territory of Interpol member states and from criminals;

- g) that enables identification of pornographic images;
- h) a bank of pornographic images created with the involvement of minors;
- i) a bank of images of counterfeit payment cards and their elements, as well as other relevant information regarding forgery of payment cards, etc. (Interpol, n.d.).

Figure 3 presents the general classification of the most popular data sources and their relationship with databases. At the same time, it does not contradict the appropriateness of analysing data from many sources (Multi-Source Analysis) (Blahuta & Movchan, 2020).

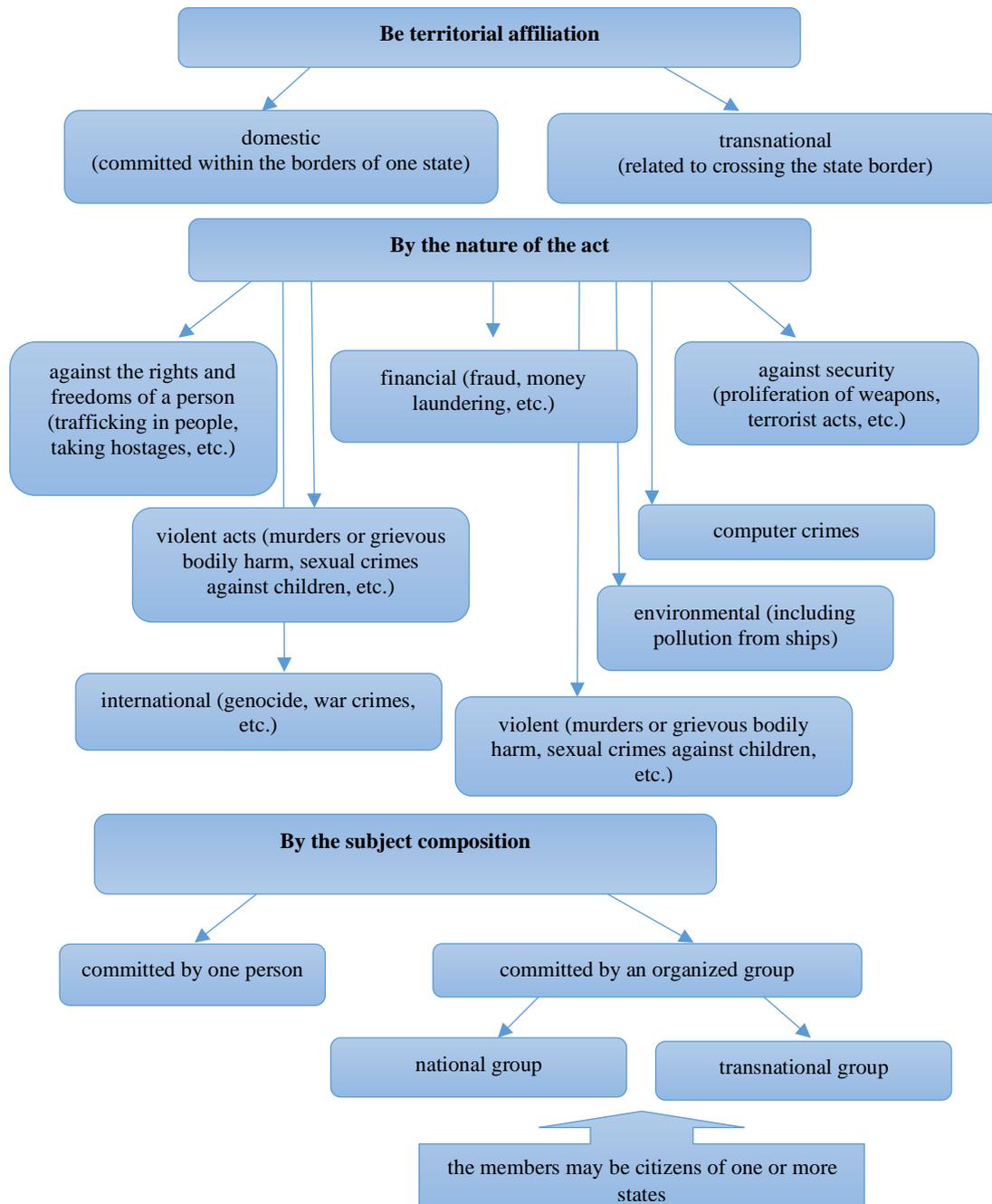


Figure 1. Classification of crimes which can be investigated using Big Data and Data Mining (built based on European Parliament and of The Council (2018))

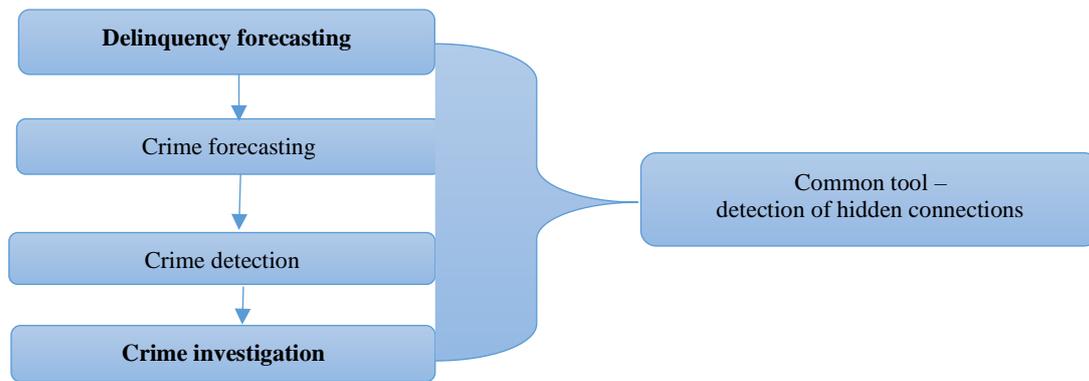


Figure 2. Crime forecasting and investigation as a Big Data and Data Mining task (developed by authors)

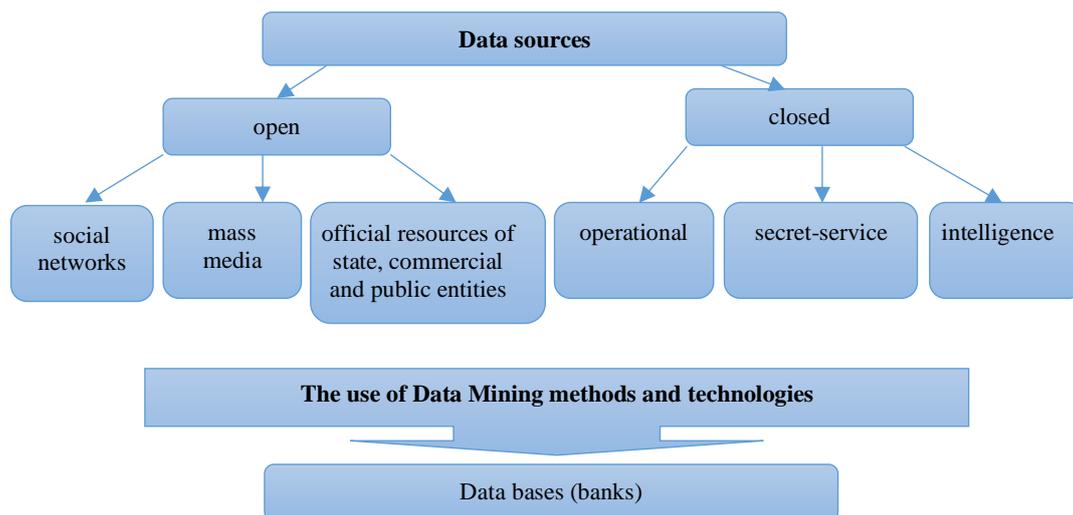


Figure 3. Classification of data sources and their relationship with data bases (banks) (based on Blahuta and Movchan (2020))

Technologically, Big Data are processed using Data Mining methods and technologies implemented through computer tools. A certain combination of methods is determined by the analyst taking into account the task and specifics of the criminal offense under investigation. While classification is the most popular method of Data Mining in analysing delinquency (Hassani et al., 2016), the most popular methods in criminal proceedings are: a) pattern identification; b) cluster analysis (clustering); c) association analysis; d) classification; e) social network analysis. In turn, visualization and machine learning are the main technologies with which Data Mining methods are implemented. Visualization is used to find exceptions, general trends and dependencies, helps in obtaining data at the initial stage of a particular project. Machine learning is further used to find dependencies in the project that has already been launched (Dehtiarovai & Yevdokimov, 2018). The specifics of the main Data Mining methods in

relation to criminal proceedings are presented in Figure 4.

The results of the application of Data Mining methods and technologies in criminal proceedings must be subject to certain requirements. They are determined by the tasks of certain components of the work of investigators and experts. Data Mining creates conditions for minimal user intervention in obtaining results. This is useful for analysts and practitioners to make important decisions (Norouzi & Ataei, 2021) regarding crime investigations. In particular, it is about the objectification of the process of advancing versions, the choice of tactical methods of investigative actions, etc. The exchange of information between law enforcement agencies is an important component of work with Big Data and Data Mining. The specifics of crimes for which Big Data and Data Mining are used for investigation sets a requirement that the results of

the application of these methods facilitate communication between law enforcement officers of different states (Europol, 2022). In general, evidence in criminal proceedings, which

will be recognized in court as admissible, reliable and sufficient for deciding a case on its merits should be the main result.

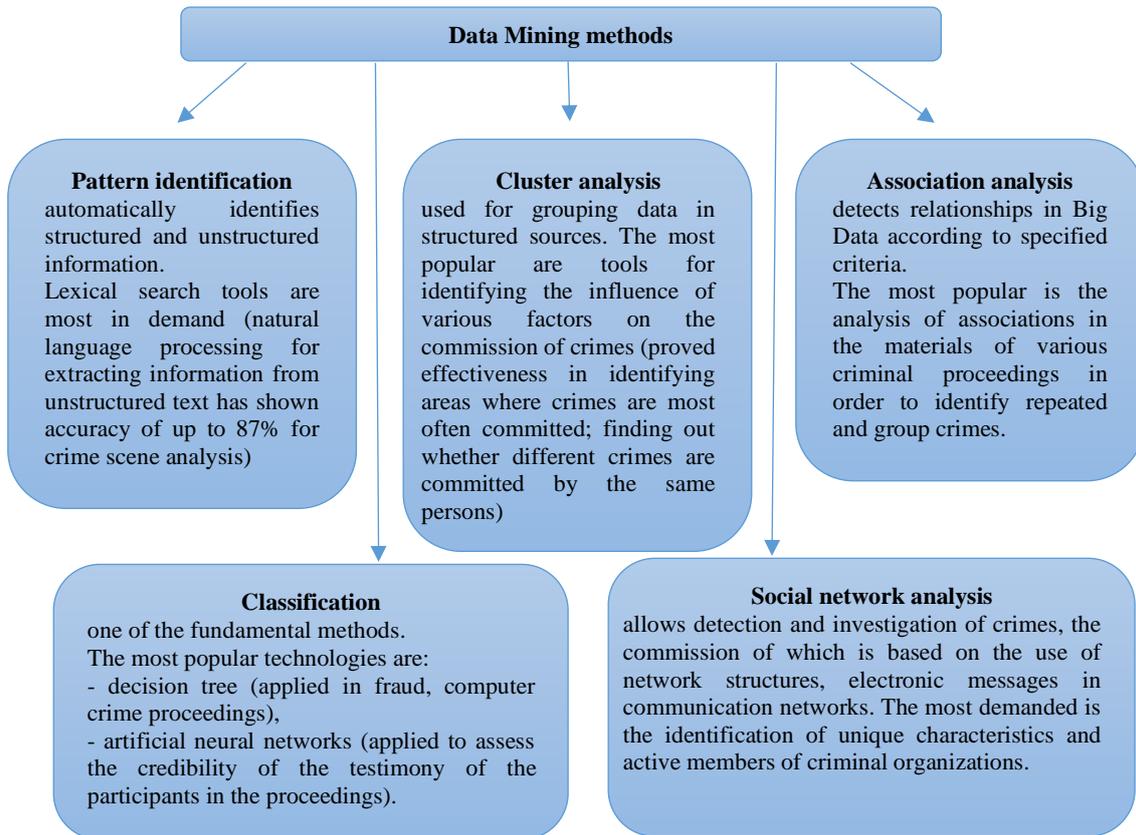


Figure 4. The main Data Mining methods in the context of the investigation of criminal offences (Hassani et al., 2016)

In this context, human rights issues are of particular importance. The use of forensic innovations in criminal proceedings determines the discourse on the provision of human rights and freedoms both in relation to participants in criminal proceedings and in relation to persons whose interests may be affected by the investigation.

The privacy and personal data protection are among the most vulnerable areas. Access to data plays an important role in the effectiveness of Data Mining as a forensic method. However, the need to keep the information confidential causes problems (Hassani et al., 2016). In particular, regulatory acts regulate this issue at the EU level. It is noted that personal data must be processed in a legal, fair and transparent manner in relation to the data subject; such data must be relevant and limited to the purposes for which they are

collected; they must be stored in such a way as to ensure the security of personal data, including their protection from unauthorized or illegal processing (European Union, 2018). Controversial issues of excessive interference in the private life of vulnerable categories of persons (children, the elderly, persons in need of international protection, etc.) may arise during the processing of personal data in criminal proceedings. Such issues must be resolved with full respect for human dignity and integrity (European Parliament and the Council of the European Union, 2019). The use of this method of Data Mining as analysis of social networks urges the issue of freedom of speech and expression on the Internet (Guariglia, 2020), etc. Figure 5 summarizes risks of violation of human rights and freedoms caused by the use of Big Data and Data Mining in the investigation of crimes.

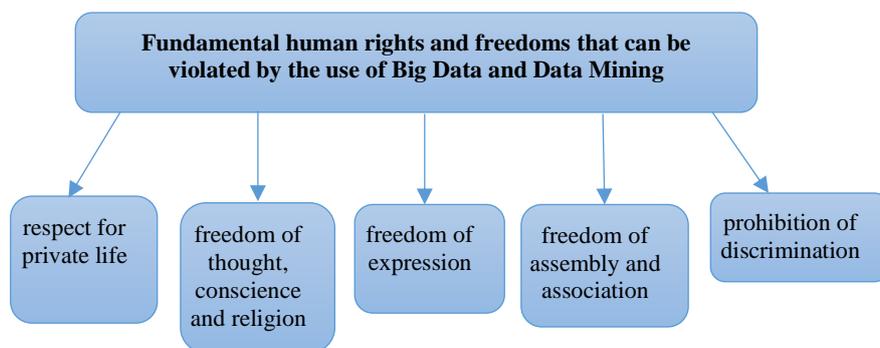


Figure 5. The main risks of using Big Data and Data Mining in criminal proceedings in the context of human rights protection (based on European Union (2018), European Parliament and the Council of the European Union (2019))

The mentioned aspects enabled determining the main prospects for improving the use of Big Data and Data Mining in the investigation of criminal offences, including in crime forecasting. They

are seen to be related to the standardization of procedures for their use. The following principles should be the basis of these standards: a) ethical; b) organizational; c) procedural (see Figure 6).

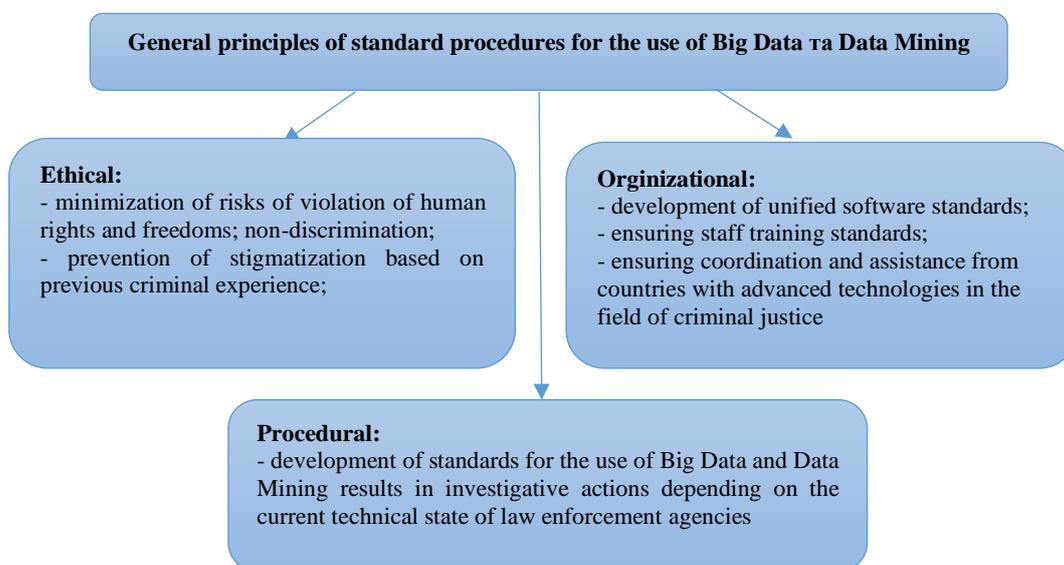


Figure 6. Prospects for improving the use of Big Data and Data Mining in the investigation of criminal offences (developed by authors)

In view of the above, it is considered appropriate to talk about the development of standard procedures for the use of Big Data and Data Mining in the investigation of criminal offences. These procedures should be based on ethical, organizational and procedural principles. It is appropriate to set out the relevant framework procedures in practical recommendations for authorized persons of law enforcement agencies, noting that violation of their principles will entail responsibility. This will enable to actively apply Big Data and Data Mining in criminal proceedings and use the results for the needs of national and international justice.

Discussion

Studies on the use of Big Data and Data Mining in the investigation of criminal offences is mainly focused on the software features, algorithms and their improvement. The legal aspects of the problem are much less studied. However, in general, the professional discussion is conducted in the context of the appropriateness and effectiveness of using the latest technologies in combating criminal activity. The focus is if the issue of crime forecasting, much less often — forecasting the commission of individual crimes. In general, the interrelationship of these aspects

for the fulfilment law enforcement objectives is not studied.

One should agree with the general initial thesis that the evolution of criminal behaviour led to the use of the latest technologies not only to commit crimes, but also to avoid punishment (Hassani et al., 2016). In this regard, Big Data and Data Mining, which are aimed at identifying accurate, simple, expedient and understandable patterns and models (Belesiotis et al., 2018), enable automating the detection of patterns and relationships in large data sets regarding crime. It is rightly noted that these methods play a significant role in informational support for the decision-making regarding crime control and crime prevention (Norouzi & Ataei, 2021).

In this study, the position regarding the prevalence of open data sources over closed ones was confirmed, because law enforcement agencies receive from 35% to 95% of data from open sources (Blahuta & Movchan, 2020). At the same time, it is debatable that the authors mainly focus on certain types of data. In particular, attention is paid to the prospect of reconnaissance into large groups of people using sensor devices, which provides information on the dynamics of social processes (Zhou et al., 2021); much attention is paid to geolocation in the context of proactive decision-making and prevention (Butt et al., 2020; Hussain & Aljuboori, 2022), etc. In this regard, one should agree with the opinion that forecasting crime requires significant improvement in the quality of Big Data, including the analysis of housing prices, population density, traffic conditions, and the unemployment rate (Hajela et al., 2021; Hou et al., 2022) etc. Crime-related events reveal spatio-temporal patterns that can also be used for prediction and subsequent decision-making (Kadar et al., 2019). However, other authors are sceptical about the accuracy of the prediction based on the inadequacy of the processed data (Wang et al., 2020).

But in relation to the investigation of criminal offences, the data obtained in the course of different criminal proceedings require a comprehensive analysis. First of all, the mutual connections of the participants in several investigations are revealed (Blahuta & Movchan, 2020). The analysis of such data as the time of day, season of the year, weather data, types of victims and features of places where crimes are committed is also promising. This helps to conclude when and where crimes are most likely to be committed (Guariglia, 2020). In view of the foregoing, the position should be shared that the

efficiency of Data Mining can be significantly increased only through the combination of data from several sources of information (Belesiotis et al., 2018). Accordingly, an approach that offers a combination of Data Mining methods (Dehtiarovai & Yevdokimov, 2018) focused on structured and unstructured data (Hassani et al., 2016) is promising.

This research confirmed that the use of Big Data and Data Mining encounters objective difficulties. However, one cannot agree on the predominant attention to technological aspects: the formation of clusters (regions) according to the criterion of the average score of the risk of becoming a victim of certain illegal actions (Soni et al., 2019); analysis of data sources on some types of criminal activity with unsatisfactory content quality (Hassani et al., 2016). For some types of crimes, the appropriateness of using the latest technologies is generally doubtful because of the uniqueness of criminal activity, as there is simply not enough data for analysis (Dupont et al., 2018). In such cases, the legal dimension of the problem cannot be covered.

Another problematic aspect is that insufficient attention is paid in the literature to the micro level — a specific criminal offense. In particular, the authors emphasize that although criminals constantly improve their criminal activities, they find new ways of committing crimes and evading social control (Dupont et al., 2018). Therefore, technology cannot predict crime. This only undermines trust between the police and society, discriminates against vulnerable populations and creates a greater risk of crime (Guariglia, 2020). Such views are a certain exaggeration and generally call into question the intellectual methods of investigating criminal offenses.

In contrast, the discourse on the human rights component of the use of Big Data and Data Mining in the investigation of criminal offenses is more realistic. Today, huge data sets can be collected and analysed secretly (Blahuta & Movchan, 2020). The non-transparent data processing tools, which lead to the creation of certain ratings regarding the risk of committing crimes by persons with criminal experience, are subject to sound criticism (Guariglia, 2020). One must, however, agree that these ethical and organizational issues must be addressed before new technologies become widely used and implemented in all criminal justice procedures (Dupont et al., 2018). This thesis was confirmed and developed in the results of our research.

In general, these considerations can be the basis of the legal, organizational and procedural aspects of the application of Big Data and Data Mining in the investigation of criminal offences.

Conclusions

The conducted research gave grounds for drawing a number of conclusions regarding the use of Big Data and Data Mining for the detection and investigation of criminal offences.

It was established that the mentioned criminal offences have different criminal law characteristics. They can be combined into a single group based on two factors — severity (their commission is punishable by imprisonment) and the complexity of the investigation. The features of Big Data and Data Mining make it possible to use them both for crime investigation and crime forecasting, which are interrelated tasks in the field of law enforcement. It is shown that the processing of heterogeneous open and closed data sources through Data Mining enables creating data bases (banks) used in law enforcement activities. The procedure for the use of Data Mining represents the use of methods and relevant procedures. The main Data Mining methods used in investigation of criminal offences, as well as aspects of their most frequent application are shown. It was established that the use of Big Data and Data Mining is associated with the risks of violation of basic human rights and freedoms. The most vulnerable objects of violations in this area were identified. The further implementation of Big Data and Data Mining in criminal proceedings is connected with the standardization of procedures for the use of particular methods or their set.

The standardization of procedures is proposed in order to unify the results of using Big Data and Data Mining in the context of preparing evidence for national and international courts. It is proposed to develop the ethical, organizational and procedural principles of each procedure and present them in practical recommendations for authorized persons of law enforcement agencies. Responsibility for violation of the specified principles shall be a separate aspect of those procedures.

Prospects for further research of forensic innovations in the investigation of criminal offences include standardization of their use to prepare an evidence base in the interests of criminal justice. A separate promising direction is the specialized training of specialists for the

development, implementation and use of the latest technologies in criminal proceedings.

Bibliographic References

- Assouli, N., Benahmed, Kh., & Gasbaoui, B. (2021). How to predict crime - informatics-inspired approach from link prediction. *Physica A: Statistical Mechanics and its Applications*, 570, 125795. <https://doi.org/10.1016/j.physa.2021.125795>
- Belesiotis, A., Papadakis, G., & Skoutas, D. (2018). Analyzing and predicting spatial crime distribution using crowdsourced and open data. *ACM Transactions on Spatial Algorithms and Systems*, 3(4), 1-31. <https://doi.org/10.1145/3190345>
- Blahuta, R., & Movchan, A. (2020). The latest technologies in the investigation of crimes: The current state and problems of use. Lviv: Lviv State University of Internal Affairs.
- Butt, U. M., Letchmunan, S., Hassan, F. H., Ali, M., Baqir, A., & Sherazi, H. H. R. (2020). Spatio-Temporal Crime HotSpot detection and prediction: A systematic literature review. *IEEE Access*, 8, 166553-166574.
- Chaudhary, M., & Bansal, D. (2022). Open source intelligence extraction for terrorism-related information: A review. *WIRES. Data Mining and Knowledge Discovery*, Online version, e1473. <https://doi.org/10.1002/widm.1473>
- Das, P., Das, A. K., Nayak, J., Pelusi, D., & Ding, W. (2021). Incremental classifier in crime prediction using bi-objective Particle Swarm Optimization. *Information Sciences*, 562, 279-303. <https://doi.org/10.1016/j.ins.2021.02.002>
- Dehtiarovai, Y. V., & Yevdokimov, Y. (2018). Data mining methods and models for social and economic processes forecasting. *Mechanism of Economic Regulation*, 2, 34-44. <https://doi.org/10.21272/mer.2018.80.03>
- Dupont, B., Stevens, Y., Westermann, H., & Joyce, M. (2018). Artificial intelligence in the context of crime and criminal justice. Montreal university [Université de Montréal]. <http://dx.doi.org/10.2139/ssrn.3857367>
- European Parliament and the Council of the European Union. (2018). Regulation (EU) 2018/1727 of the European parliament and of the council of 14 November 2018 on the European Union Agency for Criminal Justice Cooperation (Eurojust), and replacing and repealing Council Decision 2002/187/JHA. Retrieved from [www.amazoniainvestiga.info](https://eur-</p>
</div>
<div data-bbox=)



- lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R1727&from=IT
- European Parliament and the Council of the European Union. (2019). Regulation (EU) 2019/817 of the European parliament and of the council of 20 May 2019 on establishing a framework for interoperability between EU information systems in the field of borders and visa and amending Regulations (EC) No 767/2008, (EU) 2016/399, (EU) 2017/2226, (EU) 2018/1240, (EU) 2018/1726 and (EU) 2018/1861 of the European Parliament and of the Council and Council Decisions 2004/512/EC and 2008/633/JHA. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32019R0817>
- European Union. (2018). The General Data Protection Regulation: Regulation (EU) 2016/679. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679>
- Europol. (2022). Secure Information Exchange Network Application: Ensuring the secure exchange of sensitive and restricted information. Retrieved from <https://www.europol.europa.eu/operations-services-and-innovation/services-support/information-exchange/secure-information-exchange-network-application-siena>
- Grechkina, O., Korniyushkina, A., Naruzhnaya, E., Tonkov, E., & Turanin, V. (2019). El lenguaje jurídico como medio de comunicación intelectual y jurídico. *Revista Científica Del Amazonas*, 2(3), 32-38. Recuperado a partir de <https://revistadelamazonas.info/index.php/amazonas/article/view/15>
- Guariglia, M. (2020). Technology can't predict crime, it can only weaponized proximity to policing. Electronic Frontier Foundation. Retrieved from <https://www.eff.org/deeplinks/2020/09/technology-cant-predict-crime-it-can-only-weaponize-proximity-policing>
- Hajela, G., Chawla, M., & Rasool, A. (2021). A multi-dimensional crime spatial pattern analysis and prediction model based on classification. *ETRI Journal*, 43(2), 272-287. <https://doi.org/10.4218/etrij.2019-0306>
- Hassani, H., Huang, X., Silva, E. S., & Ghods, M. (2016). A review of data mining applications in crime. *Statistical Analysis and Data Mining*, 9(3), 139-154. <https://doi.org/10.1002/sam.11312>
- Hou, M., Hu, X., Cai, J., Han, X., & Yuan, S. (2022). An integrated graph model for spatial-temporal urban crime prediction based on attention mechanism. *ISPRS International Journal of Geo-Information*, 11(5), 294. <https://doi.org/10.3390/ijgi11050294>
- Hussain, F. S., & Aljuboori, A. F. (2022). A crime data analysis of prediction based on classification approaches. *Baghdad Science Journal*, 5, 1073-1077. <http://dx.doi.org/10.21123/bsj.2022.6310>
- Interpol. (n.d.) Our 19 databases. Recovered from <https://www.interpol.int/How-we-work/Databases>
- Jha, S., Yang, E., Almagrabi, A. O., Bashir, A. K., & Joshi, G. P. (2021). Comparative analysis of time series model and machine testing systems for crime forecasting. *Neural Computing and Applications*, 33, 10621-10636. <https://doi.org/10.1007/s00521-020-04998-1>
- Kadar, C., Maculan, R., & Feuerriegel, S. (2019). Public decision support for low population density areas: An imbalance-aware hyperensemble for spatio-temporal crime prediction. *Decision Support Systems*, 119, 107-117. <https://doi.org/10.1016/j.dss.2019.03.001>
- Norouzi, N., & Ataei, E. (2021). Application of data mining in identifying and discovering hidden patterns of theft. *International Journal of Innovative Research in the Humanities*, 1(1), 29-42.
- Oatley, G. C. (2022). Themes in data mining, big data, and crime analytics. *WIREs Data Mining and Knowledge Discovery*, 12(2), e1432. <https://doi.org/10.1002/widm.1432>
- Oatley, G., Chapman, B., & Speers, J. (2020). Forensic intelligence and the analytical process. *WIREs Data Mining and Knowledge Discovery*, 10(3), e1354. <https://doi.org/10.1002/widm.1354>
- Pokhriyal, N., Kumar, N., Verma, R., & Semwal, A. (2020). Survey on crime data analysis using a different approach of K-Means clustering. *International Journal of Advanced Science and Technology*, 29(5), 13839-13854.
- Pramanik, M. I., Lau, R. Y. K., Yue, Wei T., Ye, Y., & Li, C. (2017). Big data analytics for security and criminal investigations. *WIREs Data Mining and Knowledge Discovery*, 7(4), e1208. <https://doi.org/10.1002/widm.1208>
- Soni, S., Shankar, V. G., Chaurasia, C. (2019). Route-the safe: A robust model for safest route prediction using crime and accidental

- data. *International Journal of Advanced Science and Technology*, 28(16), 1415-1428.
- Usha, D., Niveditha, V. R., Kirubadevi, T., & Thamizhikkavi, P. (2020). Use of predictive analytical algorithm by crime investigation team – An Analysis. *International Journal of Advanced Science and Technology*, 29(9s), 2986-2992.
- Wang, J., Hu, J., Shen, S., Zhuang, J., & Ni, S. (2020). Crime risk analysis through big data algorithm with urban metrics. *Physica A: Statistical Mechanics and its Applications*, 545, 123627. <https://doi.org/10.1016/j.physa.2019.123627>
- Zhao, X., & Tang, J. (2017). Modeling temporal-spatial correlations for crime prediction. In: E.-P. Lim, & M. Winslett (Eds.), *Proceeding of the 2017 ACM on Conference on Information and Knowledge Management*, (pp. 497-506). New York, NY: Association for Computing Machinery. <https://doi.org/10.1145/3132847.3133024>
- Zhou, B., Chen, L., Zhao, S., Zhou, F., Li, S., & Pan, G. (2021). Spatio-temporal analysis of urban crime leveraging multisource crowd sensed data. *Personal and Ubiquitous Computing*. Retrieved from <https://doi.org/10.1007/s00779-020-01456-6>



DOI: <https://doi.org/10.34069/AI/2022.56.08.28>

How to Cite:

Tarasiuk, Y., Samsin, I., Bliakharskyi, Y., Epel, O., & Pokhylenko, I. (2022). Administrative law tools regulating high-rise construction in historic city districts: Ukraine and Germany. *Amazonia Investiga*, 11(56), 291-304. <https://doi.org/10.34069/AI/2022.56.08.28>

Administrative law tools regulating high-rise construction in historic city districts: Ukraine and Germany

Інструменти адміністративного права, що регулюють висотне будівництво в історичних районах міста: Україна та Німеччина

Received: September 1, 2022

Accepted: October 3, 2022

Written by:

Yurii Tarasiuk¹¹⁶<https://orcid.org/0000-0001-8616-7431>**Igor Samsin**¹¹⁷<https://orcid.org/0000-0003-4118-8452>**Yaroslav Bliakharskyi**¹¹⁸<https://orcid.org/0000-0003-3348-1683>**Oksana Epel**¹¹⁹<https://orcid.org/0000-0002-4400-7808>**Iryna Pokhylenko**¹²⁰<https://orcid.org/0000-0001-5409-7408>

Abstract

Historical quarters in cities are a living embodiment of people's culture and their collective memory, which preserve their heritage and past achievements. Urban identity depends on meeting the current needs while preserving the past. At the same time, urbanization exercise pressure on most countries, therefore they require updating administrative law regulation tools capable of protecting the identity of the rich national heritage. The aim of the article was a comparative legal analysis of the realities and prospects of preservation of historical districts of cities in the context of the practice of administrative law regulation of Ukraine and the Federal Republic of Germany. The methods of comparative legal analysis and observation were the leading methodological tools. The research revealed specific physical, socio-economic, and socio-cultural factors of urbanization, which caused noticeable and significant changes in the features of the administrative law tools that regulate urban planning. It was established that

Анотація

Історичні квартали в містах є живим втіленням культури народу та його колективної пам'яті, які зберігають його спадщину та минулі досягнення. Міська ідентичність залежить від задоволення поточних потреб при збереженні минулого. Водночас урбанізація тисне на більшість країн, тому вони вимагають оновлення інструментів адміністративно-правового регулювання, здатних захистити ідентичність багатой національної спадщини. Метою статті був порівняльно-правовий аналіз реалій та перспектив збереження історичних районів міст у контексті практики адміністративно-правового регулювання України та ФРН. Провідними методичними засобами були методи порівняльно-правового аналізу та спостереження. Дослідження виявило специфічні фізичні, соціально-економічні та соціокультурні чинники урбанізації, які спричинили помітні та суттєві зміни в особливостях інструментів адміністративного права, що регулюють

¹¹⁶ PhD of Law, Associate Professor of the Department of Law, Private Higher Educational Establishment University of Emerging Technologies, Kyiv, Ukraine.

¹¹⁷ Doctor of Law, in Philology, Professor of the Department of Constitutional, Administrative and Financial Law, Khmelnytsky University of Management and Law, Khmelnytsky, Ukraine.

¹¹⁸ PhD in Law, Senior Lecturer of Department of Labor, Land and Commercial Law, Faculty of Law, Leonid Yuzkov Khmelnytsky University of Management and Law, Khmelnytsky, Ukraine.

¹¹⁹ Doctor of Law, Judge of Sixth Administrative Court of Appeal, Kyiv, Ukraine.

¹²⁰ PhD in Law, Associate Professor of Department of Political Sciences and Law, Faculty of Urban Studies and Spatial Planning, Kyiv National University of Construction and Architecture, Kyiv, Ukraine.

the widespread German concept providing that every planning act of a lower-level body must take into account certain mandatory provisions established by the acts of higher-level bodies is gradually being tested in Ukraine. It is substantiated that the armed aggression of the Russian Federation forces Ukraine to take further actions to build new safe real estate objects and preserving historically significant buildings that were damaged by war. In this context, the national administrative law tools that regulate urban planning in Ukraine will also be transformed. The vector of further scientific research will be a comparison of the practice of implementing administrative law tools that regulate urban planning in terms of post-war reconstruction in the selected states.

Keywords: urban planning, historical heritage, urban areas, urbanization, high-rise construction.

Introduction

An appropriate participation, which determines the link between heritage and sustainability, is an integral part of international heritage regulation (Rosetti et al., 2022). Historic urban areas are part of the history and memory of the city, representatives of the style of the city and the main elements of the urban landscape, which gives them greater value. The types of urban interventions in historic districts vary depending on the situation in their urban structure, economic, social and environmental contexts. Urban regeneration is one of the important practices of urban intervention policy which deteriorates urban areas, with the aim of adapting their urban structure and bringing them into line with modern requirements (El-Basha, 2021). In this aspect, historical urban areas are key elements of protecting the genesis of the urban development and culture of the city. Preserving their safety involves not only planning, but also comprehensive efforts with the specific methods and policies for the safety of historic urban areas as their components (Bu et al., 2022).

In turn, rapid urbanization leads to shifting accents from the preservation of historical heritage in the city's buildings to the activation of developers and the construction of a large number of multi-story buildings to ensure the comfortable existence of citizens (Ignatenko, 2014, p. 116). High-rise buildings are an integral part of cities and will exist in the future despite

містобудування. Встановлено, що в Україні поступово апробується поширена німецька концепція, згідно з якою кожен акт планування органу нижчого рівня повинен враховувати певні обов'язкові положення, встановлені актами органів вищого рівня. Обґрунтовано, що збройна агресія Російської Федерації змушує Україну вживати подальших дій щодо будівництва нових безпечних об'єктів нерухомості та збереження пошкоджених війною історично значущих будівель. У цьому контексті трансформуються і національні адміністративно-правові інструменти, які регулюють містобудування в Україні. Вектором подальших наукових досліджень стане порівняння практики реалізації інструментів адміністративного права, що регулюють містобудування в умовах післявоєнної відбудови в обраних державах.

Ключові слова: містобудування, історична спадщина, міські території, урбанізація, висотне будівництво.

such reasons as changing social needs and rapid population growth.

The construction of new high-rise buildings in the historical district of cities significantly affects the traditional urban structure. Such buildings transform the existing infrastructure and transport systems, thus impacting their historical component, changing the city's horizon. From an aesthetic perspective, high-rise buildings mostly create contextual problems when located next to historical buildings. We can observe that local authorities are increasingly trying to find grounds for the demolition of old historical buildings in order to prepare land plots for the construction of modern buildings. In the 21st century, construction of an increasing number of innovative buildings can be expected in historic cities using advanced technologies (Makaklı & Özke 2017). Sustainable initiative methods should be used when designing the location of high-rise buildings, so that the construction is not considered as an undesirable manifestation of an extreme form of technological leap penetrating the existing historical environment (Baiz & Hoskara, 2022). Unique historical and cultural features of buildings are their heritage, which extends beyond the boundaries of the project itself to the surrounding area, and is mostly common property of the people (Foster, 2020). At the same time, high-rise buildings can be archaic and belong to cultural heritage. They can be former places of religious worship,

aristocratic residences, places of public gatherings, industrial facilities, early modern office buildings or military facilities.

In this context, the administrative law regulation itself is aimed at finding sustainable solutions for harmonizing the preservation of historical buildings and the construction of new ones. This regulation is designed at establishing relations between that public authorities, and determines the legal rights and obligations of the participants in the relevant regulated relations (Bortnyk & Zarosylo, 2022). The aim of public interest-oriented administrative management is supposed to mean as the requirement to take into account the relevant values and interests of all members of society and strive to respond to their needs and their views on policy goals in the best possible way (Coglianese, 2022). Legal regulation of administrative and legal relations is carried out by applying legal provisions. A set of tools developed for the implementation of the legal provisions regulating public law relations performs the role of a mechanism of administrative law regulation (Korostashova, 2019).

In this context, preservation of the historical and architectural state of cities, formation of a complex value perception of the authenticity of historical buildings, and the prevalence of territorial approaches to the preservation of urban monuments are of particular importance to executive authorities. The given vectors qualitatively transform both the approaches to the study of the historical background for appropriateness of construction of a certain type of buildings, as well as the content of the relevant administrative decisions.

In view of the foregoing, the aim of the article is a comparative legal analysis of the state and prospects of the administrative law regulation of high-rise construction in historical districts in Ukraine and Germany. The aim involved the following research objectives:

- 1) identify the major current problems of urban planning in the historical districts of cities in the territory of Ukraine and Germany;
- 2) analyse the impact of negative factors that can produce an impact on the destruction of historical buildings of cities;
- 3) propose reasonable administrative law solutions in order to find a balance of comfortable legal development in the states under research.

Literature Review

The choice of the research topic correlates with the modern vectors of the theoretical research in different states. The dissertation of Malokhlib (2020) entitled *Legal Bases of Use of the Ground Areas for Housing Construction* became the main tool and background for the article. In the course of research, the scholar summarized the grounds for defining the concepts of building density and height of the buildings in the context of preserving the historical and cultural area. The work of El-Basha (2021) *Urban Interventions in Historic Districts as an Approach to Upgrade the Local Communities* also had an influence on the author's opinion on the researched topic. The scholar prepared the background for outlining the research vector of administrative law tools of regulating high-rise construction in the historical districts of cities.

In turn, the articles of Bortnyk and Zarosylo (2022) and Coglianese (2022) revealed the essence of the subject of administrative law regulation, as well as economic and social management in the relevant context for the author of this article. The achievements of Bu et al. (2022) and Makaklı and Özke (2017) regarding the impact of newly built high-rise buildings on historical urban landscapes were taken into account in the course of the research.

Special attention should be paid to the works of Foster (2020) on strategies for the adaptive reuse of cultural heritage buildings and Yasinsky (2018) on the administrative law mechanisms of reproduction of residential quarters in the central parts of small historical cities.

The work of Rosetti et al. (2022), which is used in the article, emphasize the importance of participation in the regulation of the historical districts of cities, as well as the link between heritage and sustainability. This work helped to identify the priority areas of relevant measures and problematic components.

The author Al-Kodmany (2018) outlined such relevant vectors as innovativeness (novelty), objectivity, subjectivity, purposefulness, demand, implementation in practice, effectiveness of the potential of new digital technologies for the sustainability of the construction of high-rise buildings, which were taken into account in this research.

A number of theoretical and applied problems remain unsolved despite thorough theoretical studies on some aspects of the subject under

research. In particular, the essence and prospects of certain administrative law tools to regulate high-rise construction in historical areas of cities remain poorly studied. The vector of the research into the importance of preserving the historical and cultural heritage in the territory of the cities of Ukraine and Germany was chosen with due regard to the fundamental achievements of scholars.

Methods

There were 34 sources surveyed in the course of this research. Special attention was paid to the regulatory acts and documents that introduce innovations in administrative law tools regulating high-rise construction in general, and in historical districts in particular. The research design is described in Figure 1.

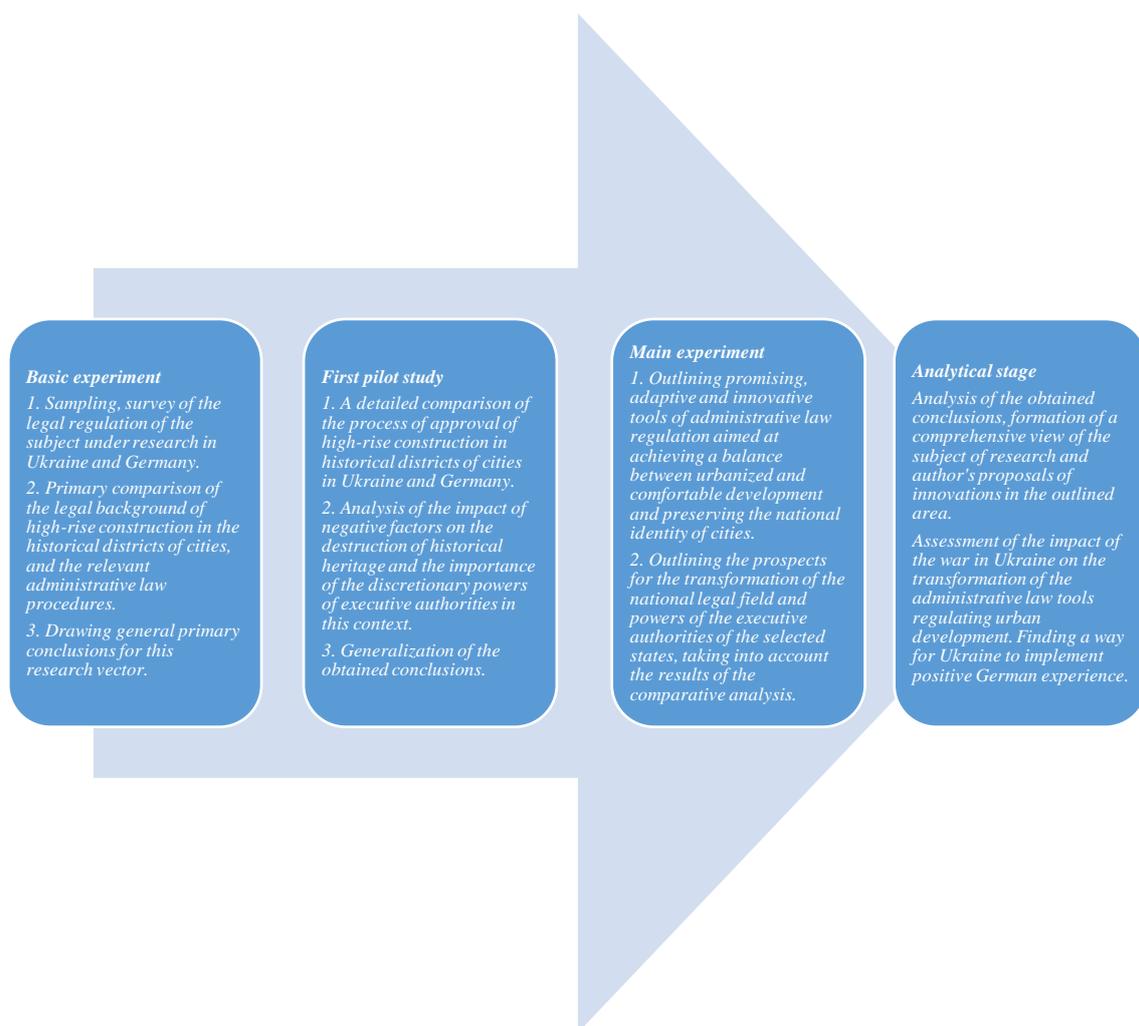


Figure 1. The research design.

The methodological background of the research was a set of methods and techniques of research, which allowed to achieve the aim and fulfil the objectives, as well as ensured the reliability of the obtained results. The dialectical method formed the methodological background of author's research and was used as a basis for the general description of the administrative law tools regulating high-rise construction in the historical districts of cities, and well as for outlining vectors for their further improvement.

The main research method was the method of comparative law analysis, which allowed comparing the realities of the implementation of declared regulatory measures in the studied area in Ukraine and Germany. This method also helped to determine the prospects of the post-war restoration of the historical districts of the cities of Ukraine in the context of the practice of Germany after World War II.

The observation method allowed identifying adaptive vectors of transformation of the set of competencies of executive authorities in order to

ensure effective preservation of the historical and cultural heritage of cities. This method was also useful during the review of negative factors influencing the preservation of historically significant buildings, finding effective ways to eliminate them.

The formal dogmatic approach was applied for consideration of the provisions of the legislation of Ukraine and Germany, which regulate the legal relations under research. This method helped to determine the regularities of the emergence and development of the appropriate tools of administrative law regulation, as well as to consider the evolution of doctrinal provisions on the subject under research. The research involved a system-structural approach, which allowed identifying problems in the specifics of the implementation of the declared administrative law tools of regulation, determining their constituent elements, developing a system of standard versions for drawing general author's conclusions and providing proposals on reforming the relevant legislation of Ukraine and Germany.

The described methodological background allowed covering the chosen subject of the research and establishing a well-founded author's opinion on further prospects of improving the tools of administrative law regulation in order to effectively preserve the historical districts of cities.

Results

According to the Washington Charter (ICOMOS, 1987), the protection of the historic urban centre of the city and other historic landscapes requires special attention to spatial planning and the relationship between the historic block and its surroundings. Protection of historical and urbanized areas of cities should be an integral component of the general understanding of the urban structure and the surrounding area. This requires a coordinated policy of economic, environmental, cultural and social development, with due regard for the historical districts of the city at all levels of planning, pays special attention to their social structure and cultural diversity (The Valletta Principles, 2011). In turn, historical and architectural areas are supposed to mean any group of buildings, structures and open spaces, including archaeological and paleontological sites, that represent human settlements in an urban or rural environment (UNESCO, 2011). Their integrity and value are confirmed from an archaeological, architectural, prehistoric, historical, aesthetic or socio-cultural

perspective. The local authorities should develop a specific plan with a detailed analysis of the relevant values for this purpose. It should be accompanied by constant monitoring.

It is appropriate to emphasize that both Ukraine and Germany have ratified the international agreements referred to above and have undertaken to ensure compliance with the declared provisions. Therefore, it is reasonable to compare the achievements of the states in the effective implementation of administrative law tools of regulation in the area under research.

In Ukraine, the planning and development of territories remain the main directions of urban planning (Law No. 2780-XII, 2020). Among other things, it is appropriate to include the protection of cultural heritage and the preservation of the traditional environment of settlements to the requirements related to such activities. This requires a coordinated mechanism of inter-agency cooperation. In particular, the activities of government bodies, institutions, ordinary citizens and economic entities aimed at ensuring an effective balance of preservation of architectural monuments and the introduction of innovative technologies into urban planning are becoming increasingly important (Law No. 2780-XII, 2020). The effective and legal development of territories necessitates a comprehensive planning of settlements, latest zoning with appropriate detailing. Planning restrictions regarding the preservation of legally protected historical areas and monuments of cultural heritage should not remain outside the attention of the authorities responsible for making reformation decisions on the development of these areas (Law No. 3038-VI, 2020).

In this context, it is appropriate to indicate the bodies authorized to regulate and ensure the urban planning. Article 5 of the Law of Ukraine (Law No. 1704-VI, 2022) regulates the range of subjects that have the relevant competence. The authorized bodies must also take into account the Building Code in their activities DBN B.2.2-12:2019 Planning and Development of Territories (Order No. v0104858-19, 2019). It should be emphasized that it is the Ministry of Culture and Information Policy of Ukraine and its authorized bodies that are responsible for determining the boundaries and appropriate regimes for the use of historical areas (Decree No. 318-2002-п, 2018). In turn, historical sites can be separated only in territories that are included in the List of Historical Settlements of Ukraine (Decree No. 878-2001-п, 2001).

The technical component of development transformation also requires attention. New buildings and reconstructed objects are subject to certain restrictions that coordinate their binding with historical structures. In particular, the height of high-rise buildings directly depends on the height of historical buildings within a particular historical area (Law No. 1805-III, 2022). The provisions of this Law detail the mentioned and other restrictions related to the preservation of cultural and historically significant heritage. It can be stated that the components of the new proposed high-rise building in the historical districts of the city should be of high architectural quality and ensure a sustainable approach to construction as a whole. The architectural quality of a building includes scale, shape, mass proportions and silhouette, facing materials, relationship with other structures, impact on the horizon line, impact on the urban landscape and surrounding views. This type of buildings should

be quite urban, but they should also respect the historic district of the city, as its impact on the public space and skyline is different in its scale and density. It is extremely important to responsibly manage urban development around objects of historical value to the city. In this regard, it is necessary to take into account the regulation of the buffer zone and maintenance, which are necessary for the protection of historical objects from negative effects.

At the same time, the powers of the executive bodies of Ukraine include the implementation of measures aimed at preserving high-rise historical monuments, which should be based on high-quality contractual legal relations. Such measures are legally divided into rehabilitation, restoration and reconstruction (Figure 2), which require appropriate administrative law tools of regulation.

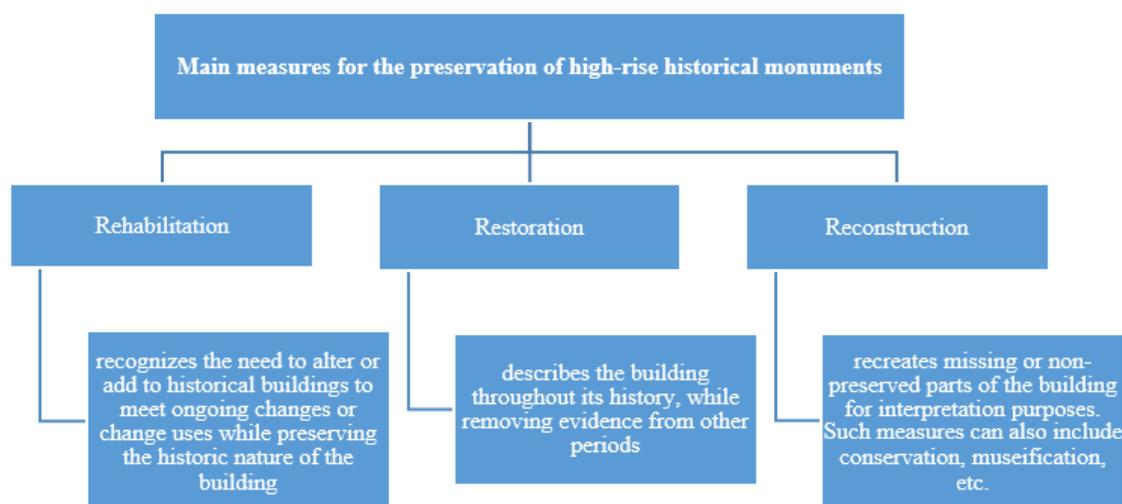


Figure 2. The main measures for the preservation of high-rise historical monuments in Ukraine (summarized by the authors based on the results of the analysis of legislative and doctrinal definitions)

Therefore, the above technical components produce their direct influence on decision-making by competent authorities in the field of proper regulation of high-rise construction in historical districts of cities. It is worth noting that in 2019, the Draft Concept of Public Administration in the Field of Urban Planning for 2019-2030 was prepared (Cabinet of Ministers of Ukraine, 2019). This Draft Concept established and recognized qualitative transformations in spatial development on the territory of Ukraine, which led to irreparable negative changes in the field of preservation of historical and natural environments. The developers of this document also noted a critical decrease in the public trust in government bodies in the field of urban planning.

This Draft Concept was never approved by the Cabinet of Ministers of Ukraine. Instead, a rather significant event was the adoption of the Procedure for Developing, Updating, Amending and Approving Urban Planning Documentation, approved by Resolution No. 926 of the Cabinet of Ministers of Ukraine of September 1, 2021 (Decree No. 926-2021-п, 2021). This document has become an effective regulator that currently ensures the implementation of administrative law tools regulating high-rise construction in Ukraine.

However, the events of February 24, 2022 will force to revise the entire global system of urban planning in qualitative terms, focusing on the

construction of new safe buildings and the preservation of historically significant buildings that were damaged by the war. Besides, according to the data of the Ministry of Culture and Information Policy, 367 episodes of war

crimes committed by the aggressor state against the cultural and historical heritage of Ukraine have already been recorded as of the end of May 2022 (Interfax Ukraine, 2022). The data are illustrated in Figure 3.

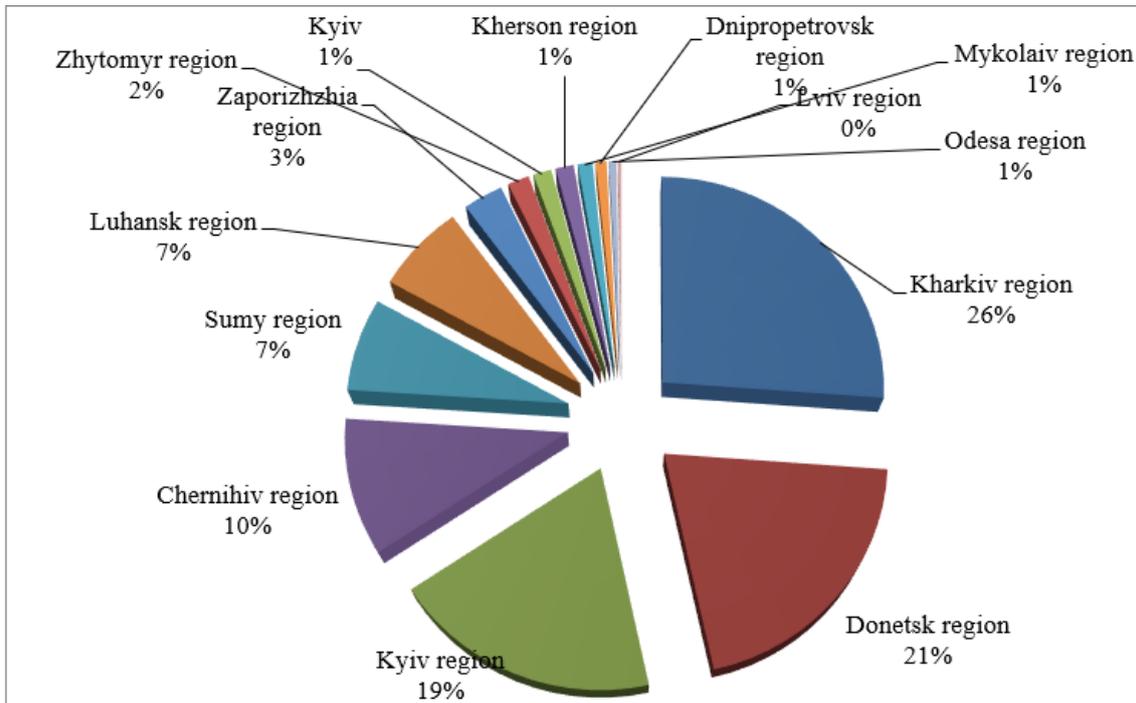


Figure 3. Regional distribution of the destruction of historical and cultural buildings in Ukraine as a result of the armed aggression of the Russian Federation as of the end of May 2022 (grouped by the authors on the basis of data published by the Ministry of Culture and Information Policy)

It is obvious that the post-war reconstruction of the state will only support this thesis and determine the processes to implement the measures to ensure the sustainable development of territories, the reproduction and further preservation of objects of historical and cultural purpose with the simultaneous expansion of the areas of high-rise buildings. Such ambitious goals will require legal support at the level of material and procedural legislative acts and by-laws. Besides, further deregulation of economic activity which significantly reduced the institutional capacity of the state in exercising control over the development of settlements and territories outside their borders should be considered conceptually correct in terms of revival of the investment attractiveness of the relevant construction.

The decentralization reform that expands the powers of local self-government bodies to

manage territories is being implemented slowly and improperly because of the lack of documentation on spatial planning (urban planning documentation), lack of experience, shortage of qualified personnel and difficult access to public cadastral information.

The rate of informal influence of business on making decisions by government bodies and officials still remains extremely high. This significantly complicates the implementation of the necessary legislative changes in the country. The lack of public access to the necessary information about urban planning, complex permitting procedures, lack of a competitive environment and numerous conflicts with the public lead to abuses and reduce the investment attractiveness of the urban planning industry. We can single out three leading factors that will shape post-war public administration in the field of urban development (Figure 4).

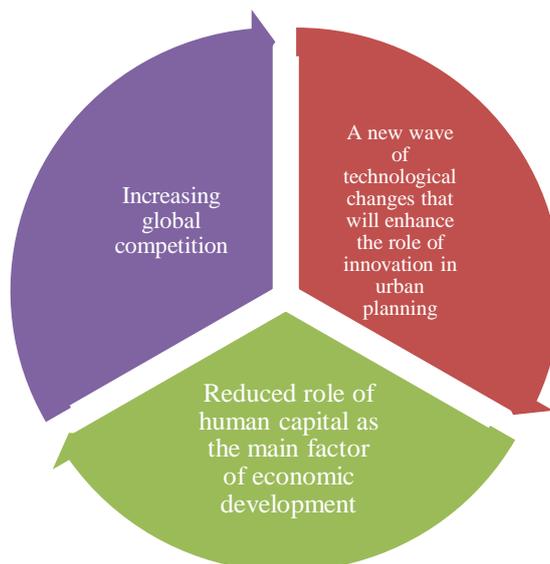


Figure 4. The main factors of post-war public administration in the field of urban development (proposed by the authors based on the results of the analysis)

The concept of public administration in the area under research should include, in particular, the need for transition from budgetary to pure investment financing. There is no doubt that persistent administrative barriers, corruption risks, low development of transport and inefficient engineering infrastructure, the lack of highly qualified research, engineering personnel and workers will significantly reduce the pace, in particular, of high-rise construction. However, one more important issue in this process — the coordination of regulations for the development of the territory with the simultaneous preservation of the historical and cultural area — requires attention. The concept of public management in the field of urban planning in this aspect provides that it is possible to enshrine a complete ban on new construction and reconstruction of buildings and structures within historical areas, and in the absence of their approved boundaries — on the entire territory of historical settlements, in cases where no clear boundaries of monument protection areas are established, in the absence of an approved historical and architectural reference plan. Besides, the legislation on the organization and holding of architectural and urban planning competitions should be harmonized with the current urban planning legislation and international standards, encouraging customers to practice competition in the central parts of cities and within the historical areas of historical settlements.

The main principle of high-rise construction should primarily be the publicity of procedures for consideration and approval of documentation

regarding land works, urban transformations in historical settlements. It is necessary to enshrine the procedure for conducting public examinations of draft legal acts on the preservation of cultural heritage, as well as the introduction of mandatory public hearings of construction projects in historical areas of settlements at the regulatory level.

Another legislative act that should regulate the issue of high-rise construction is the Urban Planning Code of Ukraine (Liga360, 2010). The Draft Urban Planning Code (Article 72) proposes the following types and composition of functional areas in settlements:

- 1) areas of public, business and commercial activity;
- 2) residential areas;
- 3) industrial areas;
- 4) non-industrial areas;
- 5) special purpose areas;
- 6) utility and storage areas;
- 7) recreation areas;
- 8) promising development areas.

Besides, this project provides that areas will be determined for historical settlements, for which a special regime of use is established in accordance with the legislation on the protection of cultural heritage:

- a) historical areas of historical settlements;
- b) lands of historical and cultural purpose;
- c) cultural heritage protection areas (Liga360, 2010).

That is, the mentioned zoning should exclude the possibility of high-rise construction on land plots of historical and cultural purpose and historical areas.

It is necessary to consider the foreign experience of such activities on the example of the Republic of Germany for a more thorough and comprehensive analysis of the problems of administrative law regulation of high-rise construction in the historical districts of cities. The system of land use planning on the territory of Germany was launched in 1935 with the creation of a special national body (Imperial Office for Spatial Planning). In 1936, this office determined the vectors of planning land use within the boundaries of both the entire state and individual territories.

Moreover, until 1960, governments and local self-government bodies on the territory of individual lands were delegated unlimited powers to develop the rules of local land use and their zoning.

The above had its negative consequences, manifested in the uneven development of territories and the loss of objects of historical and cultural heritage.

In Germany, there are currently almost a million archaeological sites, settlements, churches, workers' buildings, palaces, cultural areas, industrial and administrative buildings that belong to the cultural heritage. Along with international charters and conventions, Germany also adheres to international recommendations for the development and implementation of strategies related to the protection and preservation of monuments and cultural landscapes. Examples include the 1972 Recommendation concerning the Protection, at the National Level, of Cultural and National Heritage Paris; the 2011 Recommendation on the Historic Urban Landscape, Paris; the 2018 Warsaw Recommendation on Recovery and Reconstruction of Cultural Heritage.

In the Federal Republic of Germany, the protection of historical heritage is the responsibility of individual federal states. Each federal state issues its own regulatory act, which regulates issues of security, protection, conservation and study of historical heritage. Federal laws on the state protection of historical monuments describe the goals, principles, organizational structures, and duties of agencies that deal with the protection of monuments and other entities entrusted with protection. Besides,

general safety control tools and procedures are legally enshrined. The rights and obligations of the owners of monuments are also established, funds which can be directed to the financial support of measures for the preservation of historical monuments are determined.

The Federal Building Code (Federal Ministry of Justice, n.d.), the Federal Regional Planning Act (Federal Law Gazette, 1997) and the Federal Land Utilisation Ordinance (BauNVO, 1962) together form a comprehensive legal background for spatial and urban planning with regard to the protection of cultural values of the Federal Republic of Germany. These legislative acts contain provisions on urban development and construction projects, the parameters of urban land use planning, specify conservation and design laws, as well as the duties of the authorities that issue permits. At the local level, the authorities develop specific protection rules, which are coordinated with the protection authorities that deal with the monuments located at the federal land. In addition to the state, private organizations or individuals, such as the German Foundation for Monument Protection (Deutsche Stiftung Denkmalschutz) or volunteers for heritage protection, are involved in the protection of monuments.

Many German cities have historic districts that preserve cultural history, support the functioning of commercial districts, and attract tourists. Historic cities have assets of both cultural and economic value with high growth potential in a sustainable perspective. Historical buildings become protected by the state after their inclusion in the relevant list. The list is made by the state heritage protection authorities at the proposal of the owner or the municipality where the historic building is located.

The territorial planning of the German lands takes place at several levels because Germany is a federation and a member of the European Union: at the EU level, the federal level, the level of federal states, regions and communes (territorial communities). Besides, land use planning has been intensified as part of cross-border cooperation. It should be noted that other countries, in particular in Ukraine, also have a multi-level hierarchical system of territorial planning. Each of the federal self-governing entities of Germany, the federal state (Bundesland), adopts its own separate legislation on territorial planning and land zoning on the basis of national provisions. At the same time, the latter should be based on federal legislation

and only supplement it with due regard to local characteristics.

Urban and rural territorial planning is carried out directly at the level of local administrative units — municipalities (Gemeinden), and usually consists of two levels. The first level is Land Use Plans (Flachennutzungsplan or F-plan). They must take into account the guidelines approved by federal and local legislation and establish the specifics of the development of certain zones on the territory of the municipality. Designation of a certain area as a functional zone under the F-plan is not binding, but helps local municipalities in developing their detailed planning. Documents of the second level of planning in the municipality are binding and determine the detailed planning of the territories and zoning of the lands of the municipality. In Germany, they are called building plans (Bebauungsplan or B-plan). They have a graphic part that defines individual functional areas, it is regulatory in nature and is binding for all landowners and land users. Such plans are not developed for all territories, but only for those that are either planned to be actively developed, or, on the contrary, it is planned to limit commercial activity in a certain area.

The plans developed in Germany establish the requirements for the development of land plots which provide for a number of criteria, in particular, the type of building, the method of construction, the area of the land plot allocated for streets, schools, kindergartens, etc. In turn, if a local authority in Germany intends to carry out new construction or renovation, its representatives must discuss these intentions with those to be directly affected. Ways of implementing the planned measures and collecting the necessary municipal and private funds are discussed. If the implementation of the zoning plan (development plan) will adversely affect those who live or work in the area, the administration must prepare relevant materials and discuss them with the citizens concerned. The community should help those individuals who will be forced to change their place of residence or work, as well as companies and enterprises that will need to change their location. The results of discussions and sociological surveys, as well as proposals developed jointly with the public, shall be documented. Such documents are called social plans in Germany.

From the perspective of practice in Germany, owners need to take into account the cost of maintaining a historical building preserved.

However, buyers of such properties can receive support for their investment and further maintenance of the building through subsidies and tax incentives. In improved condition, such properties can generate high demand among tenants and corresponding income. In turn, the requirements for historic buildings are regulated by the law on the protection of monuments of the respective federal state where the building is located. The local or state administration for the protection of historical monuments carries out relevant administrative law regulation. In addition to the year of construction, information on historical buildings includes data on the rarity, quality of the structure and architecture of the object. The conditions that property owners must adhere to, for example, when it comes to extensions, modifications or renovations shall be the result of the categorization.

The purpose of preservation of historic buildings is to protect and permanently preserve cultural monuments and historically significant buildings without their alteration, damage or destruction. This means that a building included in the list of architectural monuments cannot be altered or transformed in any way, or can only be altered or transformed to a limited extent. Major renovations are only possible after consultation with the heritage authority and only if they do not change the appearance of the building. Preservation of the property is also the owners' responsibility, they are obliged to repair and modernize the building while preserving its historic appearance. Funds for the preservation of historical buildings are the contact persons on these issues.

Investors who want to renovate a property and then rent it out get some tax incentives. The Denkmal-AfA regulates the amount and time for claiming maintenance costs for tax purposes. Accordingly, the property owner is entitled to deduct nine percent of the cost of modernization and repair from taxes during the first eight years after the purchase of the property, and seven percent during the next four years. Besides, the depreciation for traditional capital investment is provided (AFA: Absetzung für Abnutzung). This includes the wear and tear of the Altbau buildings, so the acquisition costs are also deductible. In addition, there are other subsidy options, such as the KfW subsidy, which can be requested when architectural monuments are renovated to improve energy efficiency. Germany gives appointed urban planners great powers to accept or reject a building proposed by developers based on contextual suitability,

thereby preventing chaotic urban design in the city.

In view of the foregoing, it can be concluded that the so-called “counterflow principle” is used to regulate territorial planning in Germany. It provides that every planning act of a lower-level authority must necessarily take into account certain binding provisions established by acts of higher-level authorities.

The implementation of these practices in the national administrative legislation of Ukraine in the field of high-rise construction in the historical districts of the cities of Ukraine would be very useful, especially in the post-war period. This will contribute to the complex and sustainable development of territories in Ukraine and the development of uniform approaches to the control of land use and protection.

Discussion

In the current context, the issues of proper regulation of high-rise construction in the historical districts of cities are becoming urgent, requiring the executive authorities to ensure the balance of state and private interests. Malokhlib (2020, p. 39-40) expressed a rather essential opinion that the development of cities in Ukraine has been taking place without expanding their borders in the last two decades due to more rational use of urban territories and the completion of the development of each microdistrict and quarter. Besides, the vast majority of high-rise residential buildings are built with a high urban density, mostly in the immediate vicinity of existing buildings and structures. At the same time, the increased density and the height of the building are being revised against the background of the actual backwardness of the engineering infrastructure of settlements, the levelling of socio-cultural, health improvement services for residents by the development, including violations of the provisions on preservation of the historical and cultural area. In this context, the developer’s obligation to preserve the historical and cultural heritage of the relevant locality must be documented in the contracts concluded between the developer and the local self-government body. Moreover, the relevant local self-government body should be entrusted with monitoring compliance with the contractual obligations.

Therefore, balanced actions in the administrative law regulation require the regimes that signal when and where further approval is appropriate

or urgent (Kessler & Sabel, 2021). The result is the need to take additional measures to delay the adoption of a final decision or decisive action to preserve historically significant buildings.

In the context of increased urbanization, executive authorities need to identify and establish “complex protected areas” of fragments of traditional urban buildings that reflect important stages of the city’s history in order to reflect and preserve the continuity of the history of the city’s development. The transformation of the city into a territory solely for the satisfaction of its modern needs can affect the preservation of these fragments of urban development. The limited area of urban land available for new construction and the economic benefit from this construction are the reasons why historical heritage is mostly affected by developers. Moreover, the protection of historical heritage faces new challenges. Cultural heritage faces such problems as the threat of demolition, unqualified reconstruction with changing parameters, old age, desolation, and improper use because of the gaps in the legislative framework, incompletely coordinated institutional interaction, and the complex bureaucratic process of registration of historical and cultural areas (Ragheb et al., 2022).

Therefore, it is necessary to take into account both the preservation of cultural and historical heritage, and the satisfaction of the needs of a living and dynamic city. A delicate balance should be found between both phenomena, as high-rise buildings can create a powerful and positive image in the context of collective urban memory and can become elements that enrich the urban texture (Makaklı & Özke, 2017). Elegant and logical design combined with research and experiments with new forms is necessary in the construction and renovation of high-rise buildings in historic urban areas. In this case, it is very important to use modern technologies, local culture, historical context, natural environment and cost-effective solutions (Al-Kodmany, 2018).

It is very important to introduce patronage and public control over historical heritage objects in order to comply with the legislative requirements in the field of cultural heritage protection (Yasinsky, 2018). According to the researcher, it is also necessary to improve the system of preferential taxation of organizations and enterprises that can take responsibility for the preservation of relevant objects. The result can be an increase in their interest in the protection of cultural heritage and the attraction of additional

investments. It is appropriate to emphasize that administrative law tools of regulation are the balancing link between urban planning, architectural design and business.

The guiding principles and methods of sustainable development of the historical districts of cities can be implemented through preserving the spatial characteristics of the historical urban environment, its social content, as well through the qualitative transformation of the urban environment based on the constant development of local culture, traditions and the preservation of the memory of the area (Pietrostefani & Holman, 2021). The researchers have supported the author's position (Minghang & Guanghu, 2021) that modern strategies aimed at preserving urban heritage should be people-oriented and satisfy their needs, shall take into account cultural traditions, and even established social ties. Further effective activity at the level of local executive authorities will be the balance lever on the way to resolving the critical situation of destruction of historical heritage.

Conclusions

Preservation of the architectural, aesthetic, historical and cultural significance of historical buildings has become a cornerstone of urban planning for current and future generations. High-rise buildings, which are an integral part of modern cities, will exist in the future despite the evolution and change of social needs, rapid urbanization and population growth. Urban development is certainly not destructive, but disorderly development, unmanaged modernization, uncoordinated planning and lack of awareness of heritage values create significant problems. It can be stated that excessive population growth, economic development and the lack of an institutional or legal framework have currently prepared the background for the destruction of historical heritage — viable buildings and structures — in the world. In this context, the administrative law tools regulating the development require urgent reform. The realities require new guidelines for planning, development and implementation of reforms that will include such factors as cultural and architectural heritage.

The conducted research showed that Ukraine and Germany have a phased procedure for approval of high-rise construction in the historical urban areas. At the same time, the mechanisms of such approval remain insufficiently transparent, and regulatory legal acts have inaccuracies, which gives rise to misinterpretation. The introduction

of a completely transparent procedure for approval of the development of historical urban districts, with due regard to the latest achievements of the digitalization of the state and active involvement of the public in making relevant decisions, seems quite promising for Ukraine. At the same time, the high risk of corruption, which can lead to biased decision-making before the approval of the latest reforms, remains an extremely negative factor in the territory of this state. This problem exists in many areas and directly affects the gradual destruction of historical buildings in cities. Besides, the fate of historically significant buildings and structures destroyed on the territory of Ukraine as a result of the military operations of the Russian Federation remains uncertain. In the future, the public and leading specialists in the field of historical and urban planning should take a balanced approach to this issue, defending the possibility of preserving the national identity of Ukraine.

It is appropriate to emphasize that Germany quite effectively implements the declared decisions made in compliance with the administrative law in order to find a balance of comfortable legal construction and preservation of the state's heritage. Despite the strict prescriptions of the legislation, the approbation of certain tools of regulation is based on the value criteria of preserving the historical urban districts and the active participation of society in the formation of such criteria.

A comparison of the administrative law background of regulation in the studied area in the territory of Ukraine and Germany evidenced thorough groundwork in Ukraine and significant positive practical experience in Germany. At the same time, the vector of further research in the context of comparison with Ukraine will be the analysis of Germany's experience in the field of state and regional protection of war monuments in the context of urbanization.

Bibliographic references

- Al-Kodmany, K. (2018). The Sustainability of Tall Building Developments: A Conceptual Framework. *Buildings*, 8(1), 7-38. <https://doi.org/10.3390/buildings8010007>
- Baiz, W. H., & Hoskara, E. (2022). Developing a measurement scale for sustainable high-rise building in city of Erbil. *Journal of Asian Architecture and Building Engineering*, 21(3), 717-734. <https://doi.org/10.1080/13467581.2021.1900855>

- BauNVO. (1962). The Building Use Ordinance (BauNVO) dated 06/26/1962. Retrieved from <https://second.wiki/wiki/baunutzungsverordnung>
- Bortnyk, N., & Zarosylo, V. (2022). Subject of Administrative and Legal Regulation. *Global Prosperity*, 2(1), 18-24. <http://www.gprosperity.org/index.php/journal/article/view/56>
- Bu, X., Chen, X., Wang, S., Yuan, Y., & Han, C. (2022). The influence of newly built high-rise buildings on visual impact assessment of historic urban landscapes: a case study of Xi'an Bell Tower. *Journal of Asian Architecture and Building Engineering*, 21(4), 1304-1319. <https://doi.org/10.1080/13467581.2021.1930011>
- Cabinet of Ministers of Ukraine. (2019). The concept of public management in the field of urban planning for 2019 - 2030 [in Ukrainian]. Retrieved from <https://www.minregion.gov.ua/wp-content/uploads/2019/04/Kontseptsiya-nasayt.pdf>
- Coglianesi, C. (2022). Administrative Law: Governing Economic and Social Governance. *Economics and Finance*. Retrieved from <https://oxfordre.com/economics/view/10.1093/acrefore/9780190625979.001.0001/acrefore-9780190625979-e-771?rsk=RYB60>
- Decree No. 318-2002-п. On the approval of the Procedure for determining the boundaries and regimes of the use of historical areas of settlements, restrictions on economic activity on the territory of historical areas of settlements. The Verkhovna Rada of Ukraine, from 28.02.2018. Retrieved from <https://zakon.rada.gov.ua/laws/show/318-2002-%D0%BF#Text>
- Decree No. 878-2001-п. On the approval of the list of historical settlements of Ukraine. The Verkhovna Rada of Ukraine, from 26.06.2001. Retrieved from <https://zakon.rada.gov.ua/laws/show/878-2001-%D0%BF#Text>
- Decree No. 926-2021-п. On the approval of the Procedure for the development, updating, amendment and approval of urban planning documentation. The Verkhovna Rada of Ukraine, from 01.09.2021. Retrieved from <https://zakon.rada.gov.ua/laws/show/926-2021-%D0%BF#Text>
- I-Basha, M. S. (2021). Urban interventions in historic districts as an approach to upgrade the local communities, *HBRC Journal*, 17(1), 329-364. <https://doi.org/10.1080/16874048.2021.1938892>
- Federal Law Gazette. (1997). The Federal Regional Planning Act (Raumordnungsgesetz, ROG). Retrieved from <http://extwprlegs1.fao.org/docs/pdf/ger63579E.pdf>
- Federal Ministry of Justice. (n.d.). The Federal Building Code (BauGB) dated 06/23/1960 [in German]. Retrieved from <https://www.gesetze-im-internet.de/bbaug/>
- Foster, G. (2020). Circular economy strategies for adaptive reuse of cultural heritage buildings to reduce environmental impacts. *Resources, Conservation and Recycling*, 152, 104507. <https://doi.org/10.1016/j.resconrec.2019.104507>
- ICOMOS. (1987). Charter for the Conservation of Historic Towns and Urban Areas (Washington Charter 1987). Retrieved from https://www.icomos.org/images/DOCUMENTS/Charters/towns_e.pdf
- Ignatenko, I. V. (2014). Legal provision of land zoning within settlements: monograph [in Ukrainian]. Kharkiv: Vydavnytstvo «Finart». Retrieved from https://library.nlu.edu.ua/POLN_TEXT/MONOGRAFII_2017/Ignatenko_mon_2014.pdf
- Interfax Ukraine. (2022). The Ministry of Culture documented 367 episodes of Russian war crimes against the cultural heritage of Ukraine [in Ukrainian]. Retrieved from <https://ua.interfax.com.ua/news/general/835347.html>
- Kessler, J., & Sabel, C. (2021). The Uncertain Future of Administrative Law. *Daedalus*, 150(3), 188-207. https://doi.org/10.1162/daed_a_01867
- Korostashova, I. M. (2019). Mechanism of administrative and legal regulation as a legal category and a multidimensional phenomenon [in Ukrainian]. *Scientific notes of the Institute of Legislation of the Verkhovna Rada of Ukraine*, 1, 52-61. <https://doi.org/10.32886/instzak.2019.01.06>
- Law No. 1704-VI. On construction regulations. The Verkhovna Rada of Ukraine, from 09.06.2022. Retrieved from <https://zakon.rada.gov.ua/rada/show/1704-17#Text>
- Law No. 1805-III. On the protection of cultural heritage. The Verkhovna Rada of Ukraine, from 13.05.2022. Retrieved from <https://zakon.rada.gov.ua/laws/show/1805-14#Text>
- Law No. 2780-XII. On the basics of urban planning. The Verkhovna Rada of Ukraine,

- from 16.10.2020. Retrieved from <https://zakon.rada.gov.ua/laws/show/2780-12#Text>
- Law No. 3038-VI. On the regulation of urban planning activities. The Verkhovna Rada of Ukraine, from 10.10.2020. Retrieved from <https://zakon.rada.gov.ua/laws/show/3038-17#Text>
- Liga360. (2010). Draft Law of Ukraine dated May 18, 2010 No. 6400. Urban Planning Code of Ukraine [in Ukrainian]. Retrieved from <https://ips.ligazakon.net/document/JF4XS00A?an=3>
- Makaklı, E. S., & Özke, S. (2017). High rise buildings in historic cities. *The Online Journal of Science and Technology*, 7(2), 60-67. Retrieved from <https://tojsat.net/journals/tojsat/articles/v07i02/v07i02-09.pdf>
- Malokhlib, O. S. (2020). Legal bases of use of the ground areas for housing construction (PhD disirtation). Yaroslav Mudryi National Law University, Kharkiv. Retrieved from <https://acortar.link/OnbrjT>
- Minghang, D., & Guanghu, J. (2021). Analysis on the Protection and Reuse of Urban Industrial Architecture Heritage. *IOP Conference Series. Earth and Environmental Science*, 787. Retrieved from <https://iopscience.iop.org/article/10.1088/1755-1315/787/1/012175/pdf>
- Order No. v0104858-19. On the approval of DBN B.2.2-12:2019 "Planning and development of territories". The Verkhovna Rada of Ukraine, from 26.04.2019. Retrieved from <https://zakon.rada.gov.ua/rada/show/v0104858-19#Text>
- Pietrostefani, E., & Holman, N. (2021). The politics of conservation planning: A comparative study of urban heritage making in the Global North and the Global South. *Progress in Planning*, 152, 100505. <https://doi.org/10.1016/j.progress.2020.100505>
- Ragheb, A., Aly, R., & Ahmed, G. (2022). Toward sustainable urban development of historical cities: Case study of Fouh City, Egypt. *Ain Shams Engineering Journal*, 13(1), 101520. <https://doi.org/10.1016/j.asej.2021.06.006>
- Rosetti, I., Bertrand Cabral, C., Pereira Roders, A., Jacobs, M., & Albuquerque, R. (2022). Heritage and Sustainability: Regulating Participation. *Sustainability*, 14(3), 1674. <https://doi.org/10.3390/su14031674>
- The Valletta Principles. (2011). The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas. Adopted by the 17th ICOMOS General Assembly on 28 November 2011. Retrieved from https://mecc.gov.md/sites/default/files/2010-the_valletta_principles_for_the_safeguarding_and_management_of_historical_cities_towns_and_urban_areas.pdf
- UNESCO. (2011). Recommendation on the Historic Urban Landscape, including a glossary of definitions. Retrieved from http://portal.unesco.org/en/ev.php-URL_ID=48857&URL_DO=DO_TOPIC&URL_SECTION=201.html
- Yasinsky, M. R. (2018). Reproduction of residential quarters in the central parts of small historic towns (PhD dissertation) Lviv Polytechnic National University, Lviv. [in Ukrainian]. Retrieved from <https://lpnu.ua/sites/default/files/2020/dissertation/1585/dysertaciyayasinskyymr.pdf>

DOI: <https://doi.org/10.34069/AI/2022.56.08.29>

How to Cite:

Budnyk, O., Rembierz, M., Arbeláez-Encarnación, T.F., Rojas-Bahamón, M.J., Arbeláez-Campillo, D.F., Chinchoy, A., & Matveieva, N. (2022). Formation of tolerance in the inclusive environment of an educational institution. *Amazonia Investiga*, 11(56), 305-319. <https://doi.org/10.34069/AI/2022.56.08.29>

Formation of tolerance in the inclusive environment of an educational institution

Formación de Tolerancia en el Ambiente Inclusivo de una Institución Educativa

Received: September 5, 2022

Accepted: October 12, 2022

Written by:

Olena Budnyk¹²¹<https://orcid.org/0000-0002-5764-6748>**Marek Rembierz**¹²²<https://orcid.org/0000-0003-0295-0256>**Tanya Fernanda Arbeláez-Encarnación**¹²³<https://orcid.org/0000-0002-1635-4116>**Magda Julissa Rojas-Bahamón**¹²⁴<https://orcid.org/0000-0003-4882-1476>**Diego Felipe Arbeláez-Campillo**¹²⁵<https://orcid.org/0000-0002-9041-9563>**Alexander Chinchoy**¹²⁶<https://orcid.org/0000-0002-2572-1416>**Natalia Matveieva**¹²⁷<https://orcid.org/0000-0002-8495-7074>

Abstract

In the article the results of theoretical research of the problem of forming a tolerant attitude towards people with special educational needs (SEN) are substantiated, defining the essence of the basic concepts of the research, psychological approaches to understanding the content and levels of tolerance. The following research methods were used: study of psychological and pedagogical literature, media monitoring, questionnaires and mathematical statistics. The results of an empirical study involving 226 respondents representing general secondary and higher education institutions in different regions of Ukraine are presented. The cases of disability discrimination in inclusive education were identified and the most effective measures for the formation of tolerant social attitude towards them were outlined. Based on the analysis of media resources, examples of intolerance in inclusion in

Resumen

En el artículo se fundamentan los resultados de la investigación teórica del problema de formar una actitud tolerante hacia las personas con necesidades educativas especiales (NEE), definiendo la esencia de los conceptos básicos de la investigación, enfoques psicológicos para la comprensión del contenido y niveles de tolerancia. Se utilizaron los siguientes métodos de investigación: estudio de literatura psicológica y pedagógica, seguimiento de medios, cuestionarios y estadística matemática. Se presentan los resultados de un estudio empírico que involucró a 226 encuestados que representan a instituciones de educación secundaria general y superior en diferentes regiones de Ucrania. Se identificaron los casos de discriminación por discapacidad en la educación inclusiva y se describieron las medidas más efectivas para la formación de una actitud social tolerante hacia ellos. Con base en el análisis

¹²¹ Doctor of Pedagogical Sciences (PhD, EdD), Professor, Vasyl Stefanyk Precarpathian National University, Ukraine.

¹²² Doctor of Pedagogical Sciences (PhD, EdD), Professor, University of Silesia in Katowice, Poland.

¹²³ Estudiante Derecho, Universidad Libre de Colombia, Colombia.

¹²⁴ PhD. Educación y Cultura Ambiental. Docente titular Jorge Eliécer Gaitán. Grupo de Investigación Primate. Par evaluadora Colciencias, Colombia.

¹²⁵ Grupo de Investigación Lenguajes, Representaciones y Educación, Universidad de la Amazonia, Grupo de Investigación Primate, Colombia.

¹²⁶ PhD in Pedagogical Sciences, Associate Professor, Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Ukraine.

¹²⁷ PhD in Pedagogical Sciences, Associate Professor, Vasyl Stefanyk Precarpathian National University, Ukraine.

different countries of the world are given, as well as dominant gender, racial or socio-cultural stereotypes that serve as barriers to inclusion. The emphasis is placed on the need to create an inclusive educational environment where all students can feel psychological comfort, understanding and mutual respect based on the generally accepted principle of tolerance – all students should study at regular educational institutions, despite difficulties or differences between them. The necessity for proper conditions for effective educational or correctional and developmental work with people with SEN, taking into account the adaptive nature of people from socially vulnerable groups, as well as mental, gender, ethnocultural characteristics of society has been proved.

Keywords: Tolerance, Inclusive Educational Environment, Secondary School, Higher Education Institution, Inclusive Education.

Introduction

At the present stage of humanization and democratization of all spheres of public life, the problem of modernization and improvement of the system of inclusive education in general secondary and higher education institutions is especially relevant (Ainscow, 2005; Budnyk, Sydoriv & Serman, 2022). Researchers analyze the quality of educational services in different types of schools on the progress of adaptation of a child with health disabilities and his/her inclusion in the social learning environment (Black, Bessudnov, Liu & Norwich, 2019).

The growth of crisis phenomena in society is, in our opinion, not so much of an economic nature as a decline of spiritual and human values. These factors affect negatively the attitude towards children with special needs, who require constant informal attention and care of parents, teachers, public and religious institutions. The reality of life itself raised the question of introduction of inclusive education, especially in the recent decade. In this aspect, we observe a tendency for social and / or personal rejection of the idea of teaching children with disabilities in regular schools (Vasianovych, Budnyk, Klepar at al., 2020).

Inclusive education is based on the principles of non-discrimination and diversity, effective inclusion of all applicants in educational services. However, many students in inclusive

de los recursos mediáticos, se dan ejemplos de intolerancia en la inclusión en diferentes países del mundo, así como los estereotipos dominantes de género, raciales o socioculturales que sirven como barreras a la inclusión. Se hace hincapié en la necesidad de crear un entorno educativo inclusivo donde todos los estudiantes puedan sentir comodidad psicológica, comprensión y respeto mutuo basado en el principio generalmente aceptado de tolerancia: todos los estudiantes deben estudiar en instituciones educativas regulares, a pesar de las dificultades o diferencias entre ellos. Se ha demostrado la necesidad de condiciones adecuadas para un trabajo educativo o correccional y de desarrollo efectivo con personas con necesidades educativas especiales, teniendo en cuenta la naturaleza adaptativa de las personas de grupos socialmente vulnerables, así como las características mentales, de género, etnoculturales de la sociedad.

Palabras clave: Tolerancia, Ambiente Educativo Inclusivo, Escuela Secundaria, Institución de Educación Superior, Educación Inclusiva.

classes face various barriers (physical, mental, informational) in their education. Often these problems are soft barriers and their contribution to aspects of school stratification by social class and special educational needs (SEN) (Cahill, 2021), “an unwillingness to embrace a philosophy of inclusion or to change existing practices, an inadequate understanding of general education practices and how students with disabilities can participate in general education instruction while providing specialized instruction in unique education goals” and others. (Villegas, 2021).

Problems of tolerant treatment of people with disabilities are particularly acute in developing countries. For example, in India, less than five percent of children with special educational needs attend school (Sanjeev & Kumar, 2007).

V. C. Blândul and A. Bradea note that society still has a tendency to segregate approaches to the education of children with disabilities. In Romania, as in Ukraine, the problem of training teachers of special education / inclusive education is acute, i.e. it is about the formation of professional competencies that allow you to effectively implement an individual approach to working with students with SEN (2017, p. 337). In many countries, especially in Eastern Europe, there are a number of difficulties in achieving these goals due to the inability of modern schools

to respond promptly and adequately to rapid changes – to introduce new educational content, innovative technologies, strategies for tolerant interaction based on personality-oriented approach.

An important aspect of inclusive education is *the existence of dominant gender, racial or socio-cultural stereotypes that characterize the mentality of a nation*. Today, there is no doubt that everyone has the right to education. However, many children with SEN in low- and middle-income countries are still deprived of educational opportunities.

The tasks of the study are (1) to study theoretical issues on the formation of tolerance in the inclusive process, (2) to present and analyze the results of an empirical study on the attitude towards people with SEN in general secondary and higher education institutions (the example of Ukraine).

Ask each of the research questions. In the methodology, the instruments used to answer each research question must be stated.

Research Methods

The *method of studying the psychological and pedagogical literature* on tolerance and inclusive education in general secondary and higher education is used for theoretical analysis of the state of the outlined problem.

The *method of media monitoring* was used to find relevant information about publications on the research problem, in particular, intolerant, contemptuous treatment of people with disabilities, especially in educational institutions of different countries.

Questionnaire method – to identify problems in educational practice, in particular individual cases of discrimination in the context of inclusion, measures to develop a tolerant attitude towards people with disabilities in society.

Methods of mathematical statistics are used for quantitative and qualitative presentation of the results of empirical research.

Instruments and Procedures

The article presents the results of an empirical study conducted in general secondary and higher education institutions in Ivano-Frankivsk, Cherkasy and Kyiv regions of Ukraine. 226 respondents of different age groups took part in

the anonymous online survey. The questions of the questionnaire were about teachers', parents', peers' attitude to students with disabilities in educational institutions.

The presented research is not representative, as it analyzes respondents' attitudes to inclusion and people with SEN in secondary schools and universities. The selected sample for the survey does not allow to extrapolate its results to all groups of respondents. However, we have identified a clear trend in the relevance of the problem under research and the necessity to develop a strategy and tactics for its solution at various levels (using the example of Ukraine).

Results of Research

In the results start with each research question and present the results obtained in the investigation

Let's consider current theoretical issues related to inclusive education. For this, it is important to find out the essence of tolerance/intolerance, to determine conditional levels of tolerance in conditions of inclusion, the concept of rational tolerance, understand meanders, antinomies, and dilemmas of inclusion in a philosophical and pedagogical context, to identify the reasons for neglecting moral rules (Rembierz, 2021) and negative attitudes towards people with special needs.

The essence of tolerance

“Tolerance is an attitude to perceived cultural or physical differences between people or differing opinions” (Lähdesmäki et al., 2022). Tolerance has been framed as a sign of steady progress toward a more civilized society (Watson, 2016).

The term “tolerance” implicitly refers to something that is perceived not only as excellent, but also to some extent as negative or undesirable, which must be accepted (Klix, 2019). Tolerance is based on toleration of others who are “not like other people.” Moreover, tolerance for other ways of life, inculture, behavior, traditions, customs, worldview, etc. And this concept can sometimes be based on prejudice against people with disabilities, negative stereotypes or general stigma. In this case, we deal with discrimination, intolerance of others, which is the opposite of the concept of “tolerance”.

“... There are different tolerance discourses that work out differently in

construing “us–them” distinctions. The power of the (in) toleration discourse depends on the meanings that are deployed, the way in which these are used, and who is using them and for which purposes. Tolerance and intolerance are discourses that have different meanings which can be used for progressive or oppressive ends and therefore are not by definition desirable or undesirable.” (Verkuyten & Kollar, 2021).

In the historical context, concerning wars and contradictions, “the model of inclusion and tolerance was unstable and fragile” (de Shalit, 2021). In today’s world there is a change in the policy of tolerance, which is interpreted as “modification of the ethos of tolerance, from tolerance and inclusion based on indifference to tolerance and inclusion based on curiosity” (Shalit, 2021).

Tolerance is a progressive concept that helps people understand and accept each other, even if they do not share certain preferences of others. After all, tolerant people show strong will coexisting and cooperating with different opinions and views, and being tolerant of diversity (Miller & Sessions, 2005). Moreover, teaching students tolerance and developing the value of diversity is necessary for the formation of their resilience to adequate perception of certain limitations (Avery, 2002). “Education for tolerance should aim at countering influences that lead to fear and exclusion of others, and should help young people to develop capacities for independent judgment, critical thinking and ethical reasoning”, *идеться у Declaration of Principles on Tolerance* (United Nations, 1995). Tolerance is thus ultimately a question of justice, recognizing differences, and ensuring they hold an equal position in the public sphere (Galeotti, 2002, p. 10).

In the psychological context, there are several approaches to the study of tolerance. Thus, the psychodynamic approach considers tolerance as a strategy of the subject aimed at self-regulation and satisfaction of needs, which develops under the influence of protective mechanisms. In line with the behavioral approach, tolerance is a constructed behavior of the subject that changes according to external stimuli (Herzberg, 2003, p. 20). For example, specific skills such as the ability to accept diversity. According to the cognitive approach, the emphasis is on the rationality of the structure and mechanisms of tolerance. The level of tolerance is determined by the level of development of the cognitive sphere concerning interpersonal relationships in the educational environment. Accordingly, the cause of intolerance is the orientation on subjective prejudices, stereotypes, attitudes, social perceptions, etc. Tolerance through the prism of the existential-humanistic approach is its connection with the value-semantic sphere of the personality (Nicholson, 1985, p. 55). It is also about a manifestation of the natural and social essence of tolerance.

Without making a detailed analysis of psychological approaches to the interpretation of tolerance, it is necessary to analyze the levels of tolerance, which are extrapolated to the conditions of inclusive education (Sajko & Ostrovska, 2016) (Fig. 1). Thus, the first level of tolerance is based on a person's tolerance of others, who tries to restrain his/her negative thoughts and emotions, refuses violence or discrimination, but his/her beliefs are not stable and behavior is characterized by indecision. The second level is based on the recognition of the values and rights of each individual and the third – a critical attitude to the situation based on critical thinking.

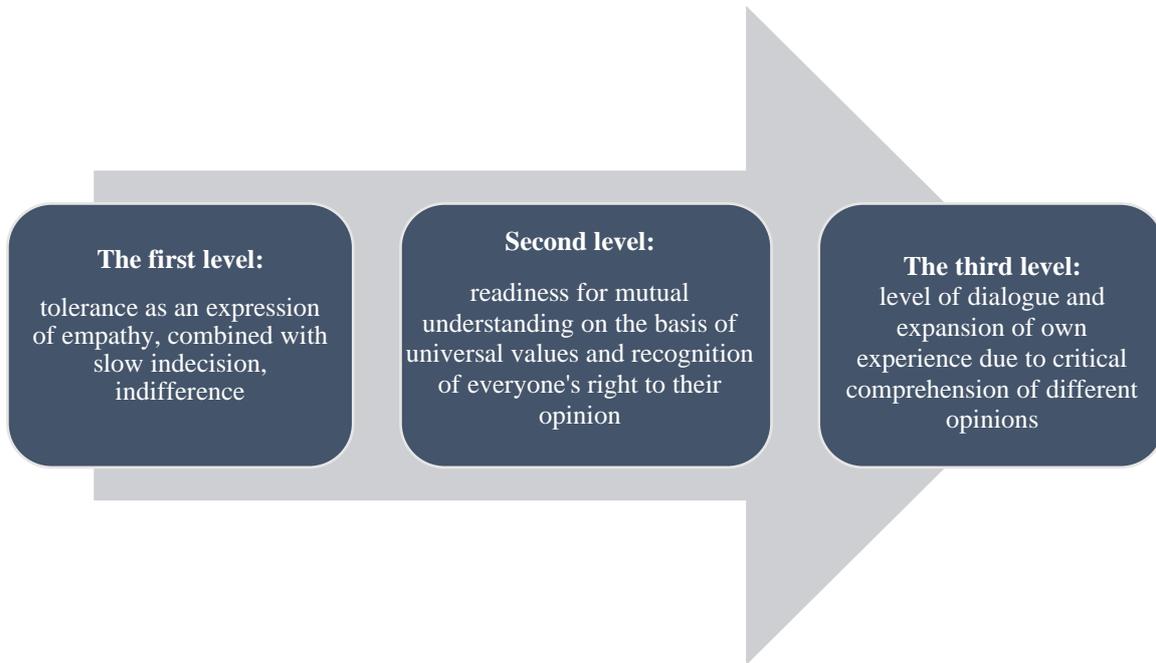


Figure 1. Tolerance level.
Source: developed by the authors.

“Toleration is always a relationship between tolerating and tolerated individuals or groups. This relationship can be characterized in different ways but typically implies inequality whereby the tolerated other is cast in a dependent and inferior position” (Verkuyten & Kollar, 2021).

Toward rational tolerance

Considering the arguments for the need to analyze and observe the principles of tolerance in interpersonal relations, referring to everyday experience, T. Kotarbinski pointed out that “rational life includes concern for a plurality of goals that are not fully harmonized and for their fusion into an organic unity. This, in turn, requires agreements, concessions, preferences. One must reckon with the further effects of actions, with side effects, with costs, with what is sacrificed for what, what is given up for what. And it is only in such a holistic context that the problem of rational tolerance is outlined with clarity” (Kotarbinski, 1987, 254).

This statement on tolerance, which emphasizes the human struggle with a multiplicity of – to some extent incompatible – phenomena and the human uncertainty about the full legitimacy of the decisions made and about obtaining only the desired effects through the actions taken, can also serve as a motto for the following inquiries into the problem of rational tolerance (Rembierz, 2009).

If the Latin root *tolerantia* (*tolerare*) clearly directs attention to such attitudes as patience, perseverance, enduring, to show patient perseverance, then questions arise about the reasons for practicing and in the long term maintaining this inconvenient attitude. For what reasons, within what limits and against what can one show patient endurance?

The Latin root of the word tolerance is cited in encyclopedic entries and studies on tolerance, but nowadays the characteristics and conditions of patient perseverance and patient endurance are not considered more closely, because the modern concept of tolerance seems to have emancipated itself from its root word. And it points to attitudes that require considerable self-control, based on a righteous and strong character capable of bearing a difficult burden. In old church hymns there are words about the fact that human daily life is a “life’s toil” and “wearisome toil”, which man – in the face of God and thanks to divine help, as these songs proclaim – patiently endures. It is worth remembering the meaning of the Old French word “endure” – the life experience contained in it – when considering the patient enduring of ailments inherent in tolerance.

When struggling with what is tolerated, one must distinguish between two situations that, although similar in the way they are experienced, are nevertheless significantly different. It is necessary to discern when the perceived nuisance is a feature of the phenomenon’s own making that can be mitigated or eliminated, and when this

demanding patient endurance of the “nuisance” arises only in our relationship with the phenomenon, because we are unable to properly accept, understand and embrace it? An additional issue is to decide in which situations acceptance of the endured hardship should precede understanding of the phenomenon producing it, and in which situations understanding of the endured phenomenon should precede (perhaps only conditional) acceptance. When is it acceptable to patiently tolerate nuisance phenomena, and when is it advisable to recognize that the tolerated phenomena are becoming too “unbearable”, even exasperated by the tolerance shown to them, and can no longer be tolerated.

Apt arguments for the attitude of tolerance are formulated by A. Grzegorzcyk:

“The ideal of respect, tolerance and openness in human relations is based on the conviction of the basic homogeneity of people despite the existing deep differences. [...] Observation instructs us that people are often very different. Respect and tolerance, however, are based on the belief that the elements of unity are more important than differences. [...] people are the same in the deeper layers of their personality than those layers in which they differ. The elements of unity are more basic, residing, as some say, ‘in the very nature’ of man.” (Grzegorzcyk, 1963, 188-189).

On Inclusionary Aspirations. Meanders, antinomies and dilemmas of inclusion

In contemporary public and academic discourse, the issue of inclusion is taken up in various contexts when debating integration and counteracting exclusion. This is because it is recognized not only as an issue worthy of theoretical reflection, conducted from different points of view of many scientific disciplines, but also as a matter of great practical importance and even as a pressing social problem, demanding the development of appropriate solutions. Although, at the same time, in the public discourse, which has a clearly practical and performative dimension, there is a difficult to eliminate split in valuing – on the one hand – inclusion and – on the other hand – exclusivity, a split in valuing, which can definitely adversely affect the understanding and realization of inclusion. While – especially on the ground of pedagogy and social ethics, including ethics with religious inspiration – in the demands towards the shaping of social life and the education that co-shapes it,

the need (indispensability) for inclusion of people and groups threatened or affected by marginalization and exclusion is strongly emphasized, in widespread marketing slang, the qualities of some (unique) goods and services are promoted as exclusive, offered only to distinguished customers who can receive in a special way satisfactory consumption (implied: desirable consumption of valuable goods, which for the rest, however, will be unavailable). This bifurcation and this inconsistency in the valuation of inclusion and exclusivity is therefore of concern from the standpoint of pedagogy and social ethics, since the consumption mindset and the marketing activities that drive it dictate (impose, even coerce) fairly widely accepted patterns of behavior that pretend to effectively achieve personal well-being. If this is indeed the case, if the promotion of desire for exclusive goods and services effectively and profoundly forges orientations and choices among values, then consideration of inclusion may turn out to be nothing more than idle moralizing, far from being in critical and reliable contact with reality. And then the slogan of “inclusion” can be included in the list of fashionable superstitions, causing misunderstandings, multiplying illusions and delusions, contributing to the involuntary production of situations radically different from those verbally declared as the exemplary goal of aspiration. Thus, all the more necessary are insightful and realistic analyses of inclusion, especially if one shares the axiological conviction that counteracting marginalization and exclusion, as destructive processes and states, should lead to inclusion, to inclusion in situations and relations considered as goods (among other things, personality-forming goods).

Inclusion – in the most general terms – is the activity, process and result (the obtained state of affairs) of incorporating some element into a larger (containing more elements) and in its own way coherent whole. The pursuit of gradual, partial or full inclusion is motivated primarily by the fact that the element should not remain outside the whole, to which, for some reason, it should – as its constituent part – belong. Here the questions of the cost of inclusion already arise: Have undesirable – from the point of view of the whole – features been weakened or eliminated so that inclusion is possible? Were the peculiarities of a given element preserved, or were they reduced and it succumbed to the uniformity imposed by the whole? These questions are relevant when considering inclusion in an era of obliteration of opposites that allow for axiological orientation.

While the rules and procedures of inclusion in relation to abstract objects can be quite transparent and effective, the situation becomes much more complicated in interpersonal relations, when many additional (sometimes hardly predictable) factors come into play. This is especially true for people with disabilities, people who struggle with dysfunctions and disabilities that enable, as it were, “natural” inclusion, without additional support.

There are also differential (side and adverse) effects of inclusion:

- (a) If someone manages to be satisfactorily included in a given whole and, moreover, this is interpreted or exhibited as a success, the exclusion of those in relation to whom inclusion efforts were not undertaken or failed and they remained outside the whole to which – of their own or someone else’s will – they had pretended.
- (b) If someone is included in a given totality, at the same time that totality undergoes some degree of remodeling, and what’s more, this can be done at the expense of excluding someone from that totality or marginalizing him or her in that totality.

It is worth mentioning that in the theology of religion and religious studies there is a distinction between exclusivist and inclusivist positions (aspirations) as to the claims of the exclusive truthfulness and salvific power of a given religion. Nowadays, these positions are highlighted in the contemporary debate about the scope and value of religious pluralism and gradualism within inclusivist positions.

In an inspiring pedagogical reflection, the issue of inclusion in the context of the experience of mercy was addressed by Pope Francis. In the text of the catechesis “Misericordia e Inclusione” delivered (November 12, 2016) at the end of the Year of Mercy celebrations, the Pope develops in a structured form the reflection on inclusion:

„In this last Saturday Jubilee Audience, I would like to present an important aspect of mercy: *inclusion*. Indeed, God, in his design of love, does not want to *exclude* anyone, but wants to *include* everyone. For example, through Baptism, he makes us his children in Christ, members of his Body which is the Church. And we Christians are invited to use the same criteria: mercy is the way one acts, that style, with which we try to *include* others in our lives, and avoid closing in on

ourselves and our selfish securities. [...] This aspect of mercy, inclusion, is manifested in opening one’s arms wide to welcome, without excluding; without labeling others according to their social status, language, race, culture or religion: there is, before us, only a *person to be loved as God loves them*. The person whom I find at my work, in my neighbourhood, is a person to love, as God loves. “But he is from that country, or that other country, or of this religion, or another... He is a person whom God loves and I have to love him”. This is to *include*, and this is *inclusion*” (Pope Francis, 2016).

Tolerance and inclusion

Tolerance and being tolerant are narratives that circulate and are taken up in an inclusive educational environment (Watson, 2016). Tolerance in inclusion means respect for the dignity and humanity of pupils, students, teachers, and community members, including those with SEN (McGuire, 2017).

Psychological comfort, children and youth’s problems of maintaining emotional balance, mental aspect (Pascoe et al., 2020) is a priority in an inclusive classroom. After all, even under the best conditions for inclusion, some students still experience anxiety – unfairness, shouting, loneliness and seating plans – in the school environment due to interpersonal relationships between participants in the educational process (Adderley et al., 2015).

Moreover, children with special educational needs are usually more vulnerable, so they need tolerance and understanding, according to research conducted in Norwegian schools. (Faldet & Nes, 2021).

“Education for tolerance should be considered an urgent imperative; that is why it is necessary to promote systematic and rational tolerance teaching methods that will address the cultural, social, economic, political and religious sources of intolerance – major roots of violence and exclusion. Education policies and programmes should contribute to development of understanding, solidarity and tolerance among individuals as well as among ethnic, social, cultural, religious and linguistic groups and nations” (United Nations, 1995).

In this context, in our opinion, the issue of tolerant treatment of students with SEN in the context of inclusion should be considered.

Therefore, it is no coincidence that in modern educational practice various aspects of creating a proper educational environment in educational institutions of different types are increasingly relevant: Safe and Healthy School Environments (Geller et al., 2007), preservation of mental, physical, social and spiritual health of students in educational institutions (Smolinska et al., 2020), Educating Young People about Environmental Health for Informed Social Action (Keselman et al., 2011) and others.

We assume that each person has certain abilities (academic, artistic, sports, etc.), i.e. something original and unique to society. Therefore, in the context of inclusive education, it is important to develop the creativity and talents of all students, paying special attention to people with disabilities (Budnyk, Mazur & Matsuk, 2021). To do this, it is recommended to use group work, collaboration, project activities as often as possible in learning. Ch. Smith, Ch. Nerantzi, & A. Middleton (2014) argue that “truly creative learning spaces are ones in which learners and teachers are mutually engaged in diverse thinking, critiquing each other’s viewpoints and working on problems collaboratively”. Under such conditions, it is advisable to form tolerance in personal interaction.

Tolerance and discrimination of people with SEN

In today's globalized world, there are often cases of neglect of moral rules and negative attitudes towards people with special needs. Information Internet sources show various forms of psychological discrimination and social inequality concerning people (children) with special needs in different countries and continents.

In the Middle East, children with SEN are often deprived of schooling due to their disability, and most students do not receive adequate psychological and pedagogical support for effective learning. "Without any real option to get a quality inclusive education, thousands of children with disabilities are being left behind. "For example, “few schools in Lebanon are physically accessible and the government does little to provide accommodations children may need to succeed” (Human Rights Watch, 2018).

In Latin American countries, there are also problems of discrimination in inclusive

education (Oñate Escobar & Alfaro Urrutia, 2021). Scientists propose four practices of response to diversity. As a whole, they act dynamically to make visible and dismantle exclusion, segregation and integration, respectively:

“In the first place, it is necessary to incorporate into the curricular approach of the establishment an analysis and assessment of diversity, which should be made explicit in the institutional educational project. Second, and to reduce the presence of values such as individualism, mistrust and conformism, it is recommended to insert collaborative learning strategies focused on the enrichment of learning objectives (the interdependence promoted by collaborative work breaks down practices of exclusion, segregation and integration). A third recommendation - it is proposed to democratize the qualification, which materializes in the fact that the construction of the evaluation instruments are co-constructed between teachers and students. Fourth, it is proposed to modify the perception that students have regarding the professional team that provides pedagogical support” (Oñate Escobar & Alfaro Urrutia, 2021).

In Ukraine, the concept of inclusive education was adopted only in 2010, and the reforms in this area are underway at a rapid pace. But there are also cases of discrimination, especially as people with SEN are a particularly vulnerable category, especially emotionally. An example of this is the story that took place in one of the schools in Brovary, near Kyiv (Ukraine). Parents of first-graders wrote a collective demand for the separation of a child with a disability from the rest of the students in the class, thus expressing a reluctance for their children to study in an inclusive class. This is a violation of the right of a child with SEN to receive quality education, moreover – a direct manifestation of discrimination, intolerance. After all, Ukrainian legislation provides equal learning conditions for all children and gives them equal rights before the law (Ukrainian Helsinki Human Rights Union, 2016).

However, it is not only in developing countries that there are problems with tolerance in an inclusive educational environment. Unfortunately, such cases now occur in highly developed countries, such as the United States and Canada. According to scientists (Lyons,

Thompson & Timmons, 2016), the effectiveness of inclusive education in different Canadian provinces is not always high. Although the vast majority of the country's citizens approve of the idea of inclusion, they understand the importance of socializing "special" students in the educational process, forming a tolerant attitude towards them. However, a significant number of people still support traditional segregation approaches to the organization of children's education with mental and physical disabilities.

This is evidenced by the following materials, where people with disabilities in Canada admit negative public attitudes.

"Statistics Canada reports that Ontarians with disabilities continue to have lower educational achievement levels, a higher unemployment rate, are more likely to have low income status, and are less likely to live in adequate, affordable housing than people without disabilities. It is clear that people with disabilities continue to experience difficulties accessing employment, housing and various services throughout Ontario. "Disability" continues to be the most frequently cited ground of discrimination under the Ontario Human Rights Code (Code) in human rights claims made to the Human Rights Tribunal of Ontario (HRTO)" (The Ontario Human Rights Commission, 2016).

In the United States, the infrastructure of inclusive schools is extremely well developed, but there are also frequent cases of discrimination against students with SEN. For example, the case of Roncalli High School (Indianapolis). The family of an 18-year-old boy with Down syndrome has filed a civil lawsuit against the school and the Archdiocese of Indianapolis. It states that in this Catholic school the former student suffered systematic humiliation during the 2019-2020 school year (FOX 59, 2021):

"The bullying, harassment, hazing, discrimination, and abuse were more than isolated and sporadic incidents; they were serious, ongoing, and continuous and had the systemic effect of depriving John Doe to educational programs and activities" (FOX 59, 2021).

In Australia (Brisbane State School), a mother also sought help because of the despair of her 9-year-old son, who was born with Achondroplasia (the most common form of Dwarfism) after an

incident of harassment by other students. After humiliations, the vulnerable boy even began to think about suicide. Therefore, parents of children with SEN are unanimous about the need to include topics on knowledge of inclusion and tolerance in the curricula of educational institutions (Perry, 2020).

While in educational institutions the phenomenon of disrespect for students with disabilities is usually as for their academic abilities, in society intolerance in general is often related to gender, ethnic or racial inadmissibility. For example, in Africa, girls with disabilities are more likely to be sexually abused than boys with the same health problems. For example, in West and East Africa (Guinea, Sierra Leone, Nigeria, Zambia, etc.), gender often prevents a child from getting an education because of his or her mental, intellectual and / or physical development characteristics. According to research, boys and girls with disabilities are more likely than others to experience social isolation in an educational institution. Among SEN students, girls suffer more emotional trauma due to social prejudices about their educational potential. Therefore, for the effective implementation of inclusive education it is extremely important to create a safe school environment for all students, as well as to overcome gender societal stereotypes about the education of children with special educational needs (Hui, Vickery, Njelesani & Cameron, 2018). After all, the main task of inclusion is to ensure that no person feels different and / or excluded from educational, cultural and social processes.

The problem in educational practice: the results of empirical research

The generally accepted principle of tolerance in inclusion is that all students should study in a regular educational institution, despite the difficulties or differences that exist between them (Rembierz, 2020). It is necessary to create such an inclusive educational environment in which all students feel psychological comfort, mutual understanding and mutual respect. Disclosure of potential opportunities and abilities of students with SEN, the level of their social adaptation and success depends not so much on forms of education (boarding or inclusive), but on the flexibility of the special education system, the range of psychological and pedagogical services: early detection of peculiarities of psychophysical development, unity of diagnostics, correctional and developmental work, continuity and systematization in receiving educational services, etc.

In the modern educational system, specialized forms are being replaced by new forms – integration and inclusion. As a result, students with SEN have the opportunity to move from specialized schools to secondary schools in their residences. Integration involves the adaptation of children with disabilities to the requirements of the existing education system, which as a whole remains unchanged, not adapted for teaching students with specific nosology. At the same time, inclusion is the adaptation of the educational system to the needs of the child. In this context, the idea of equality, tolerance in society, regardless of physical or mental development, race, nationality, gender, religion, social status, abilities and talents.

Proper implementation of inclusion in the educational institution eliminates any forms of discrimination, examples of which are given above.

In order to investigate the state of the outlined problem in real practice, we conducted a survey in general secondary and higher education institutions in different regions of Ukraine. The survey involved 226 respondents who are directly involved in the implementation and organization of inclusive education:

- parents of children with special educational needs who study in inclusive classes;
- principles of general secondary education institutions that provide inclusive education for children with SEN;

- inclusive class teachers;
- teaching assistants in inclusive classes and other specialists of the team of psychological and pedagogical support;
- SEN graduates who studied in general secondary education institutions;
- future teachers who conducted pedagogical practice in schools with inclusive education;
- university teachers.

The study proved that, despite progressive changes in Ukraine's education system regarding the introduction of inclusive education in educational institutions at various levels, community work and the media to promote humane treatment of people with disabilities, there are still cases of teachers', students', parents' disrespect.

One third of respondents (78 persons, 34.5% of the total amount) admitted that they did not notice cases of discrimination against students with SEN in the institution where they work; about the same number (36.3%) chose the option "I don't know", 15.5% – "it's difficult to answer". But a small amount (13.7%) still noticed such cases (Fig. 2). This means that some people with disabilities suffer from humiliation, harassment in the institution where they are educated. And this happens not only among peers.

Often parents of healthy students openly or covertly protest against the education of children with SEN in secondary school (Fig. 3).

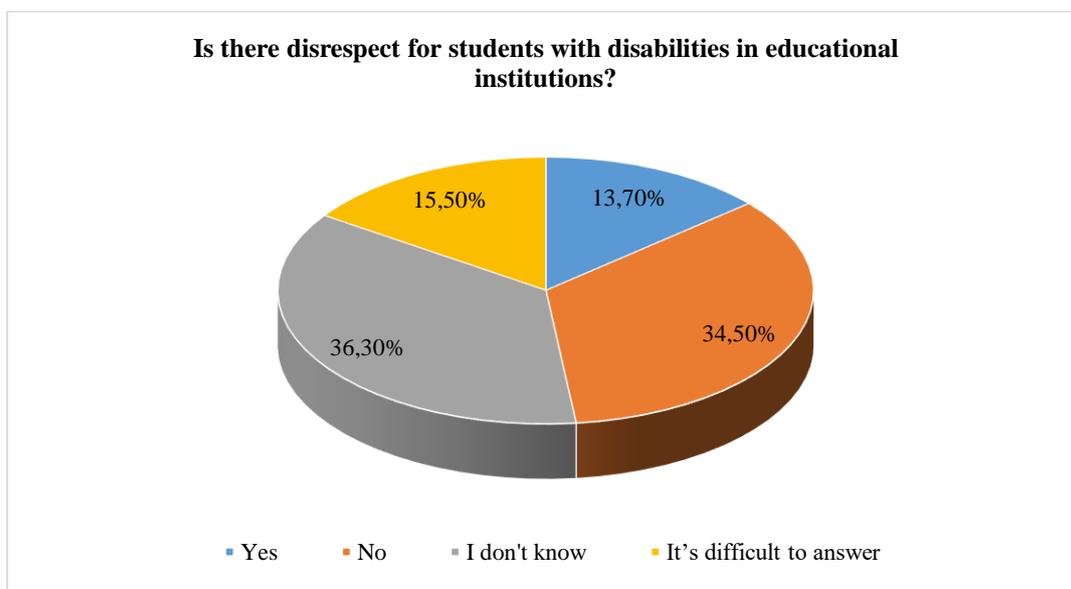


Figure 2. Intolerance among pupils / students in educational institutions of Ukraine.
Source: the results of the authors' survey.

According to the survey, the majority of respondents indicated the dominance of tolerant attitudes in an inclusive educational environment (96 out of 226 persons, i.e. 42.5%); a significant number of teachers (23%) found it difficult to answer questions about parents' outrage or protests about their children learning together with a child with special needs in an inclusive class. But there is a growing trend of

dissatisfaction among parents, in contrast to students, who are usually friendly towards their classmates with SEN. Thus, parents of healthy students mostly sporadically protest (18.6%) or secretly express their dissatisfaction with inclusion in school (9.7%). Although 6.2% (14 parents) express outrage about the education of children with special needs.

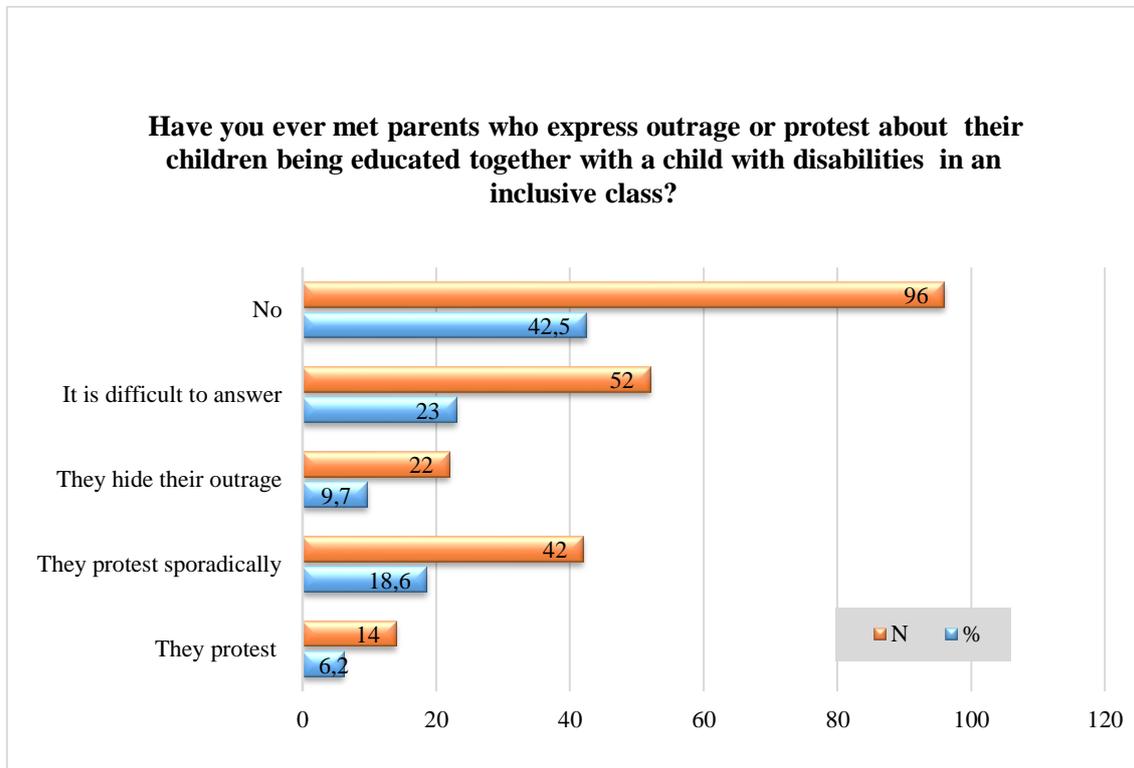


Figure 3. Intolerance of parents' to children with SEN in an inclusive class.
Source: the results of the authors' survey.

Fig. 4 presents a list of indicative measures that, according to respondents, will allow the formation of good opinion in society, in particular in the educational environment, on the necessity to identify tolerance for people with SEN. The majority of respondents (97 persons, 42.9%) point to the need for systematic outreach in the educational institution or community, and suggest more active involvement of students with

disabilities in public decision-making in community life (31.4%) to create conditions for self-expression, a sense of personal significance and opportunities for self-realization.

In addition, such work should include media, social advertising, etc., as indicated by 19 persons (8.4%).

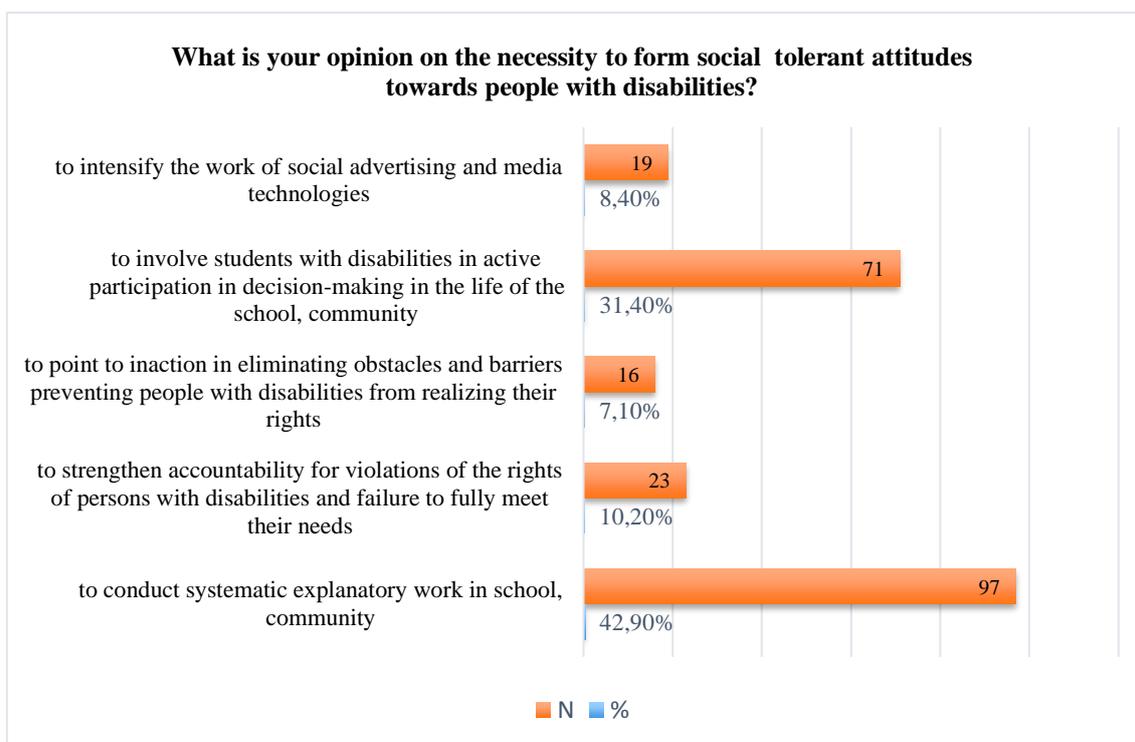


Figure 4. Measures to develop a tolerant attitude towards people with SEN in society.

Source: the results of the authors' survey.

An important priority in the formation of tolerance is to ensure the principles of health in educational institutions, namely: the creation of appropriate moral and psychological conditions for learning and development of students (Rembierz, 2020). This process requires appropriate preventive measures. "...The system of preventive measures for health care is aimed at preventing the development of students' negative emotional states, strengthening their physical, mental and social health. For this purpose in the educational environment it is necessary to eradicate the following negative factors: monotony, unfavorable sanitary and hygienic conditions that contribute to the reduction of stress resistance, fatigue, irritability, fear" (Smolinska et al., 2020).

Conclusions

Considering the fact that the concept of inclusive education reflects the priority idea of democracy that all students are valuable to society, regardless of their health, it is social and aimed at creating an inclusive educational environment in general secondary or higher education. This determines the main goal of inclusive education – humanization and tolerance towards people with disabilities, creating conditions for quality and affordable education for all citizens,

regardless of the peculiarities of their psychophysical development.

All children have the right to education. When people with SEN and typical development learn together, they have the opportunity to adapt more quickly to environmental conditions, to realize similarities and differences, to assess abilities and talents, to learn to accept others as they are, concerning the uniqueness of each individual. This process will make it possible to eliminate discrimination in educational institutions and society as a whole in terms of perception and tolerance of people with disabilities.

It is also advisable to involve the media, volunteer organizations that would promote tolerance towards people with special needs and their families through advertising, social videos on television, organizing mass events involving people with mental and physical disabilities, arranging inclusive playgrounds etc. In order to successfully integrate and obtain quality education for people with disabilities in educational institutions of various types: kindergartens, secondary schools, out-of-school educational institutions, vocational schools, universities, postgraduate education institutions, etc. "Heads of educational institutions who initiate the development, experiment, testing, implementation or application of pedagogical

innovations in inclusive education, above all, must tolerate humanism in professional interaction” (Nikolaesku et al., 2021).

Considerable attention should be paid to the socio-pedagogical aspects of the inclusive process in secondary school or university, providing conditions for effective teaching or correctional and developmental work with people with SEN, “to use innovative wellness techniques to work with children with disabilities in inclusive groups” (Smolinska et al., 2020), taking into account issues of adaptive nature in the inclusive educational environment of students from socially vulnerable groups (economically, socially, academically or intellectually vulnerable), as well as mental, gender, ethnocultural characteristics of society.

We consider *prospects for further research* in the development of organizational, content and technological tools for the effective implementation of inclusive education in educational institutions, study and analysis of progressive pedagogical experience on this issue.

Conflict of interest – The authors declare that there is no conflict of interest.

Bibliographic references

- Adderley, R. J., Hope, M. A., Hughes, G. C., Jones, L., Messiou, K., & Shaw, P. A. (2015). Exploring inclusive practices in primary schools: focusing on children’s voices. *European Journal of Special Needs Education*, 30(1), 106-121. doi: 10.1080/08856257.2014.964580
- Ainscow, M. (2005). Developing inclusive education systems: what are the levers for change? *Journal of Educational Change*, 6, 109–124. <https://doi.org/10.1007/s10833-005-1298-4>
- Avery, P. (2002). Teaching tolerance: What research tells us. *Social Education*, 66(5), 270-276.
- Black, A., Bessudnov, A., Liu, Y., & Norwich, B. (2019). Academisation of schools in England and placements of pupils with special educational needs: an analysis of trends, 2011–2017. *Frontiers in Education*, 4(3). doi: 10.3389/educ.2019.00003
- Blândul, V. C., & Bradea, A. (2017). Developing psycho pedagogical and methodical competences in special / inclusive education teachers. *Problems of Education in the 21st Century*, 75(4), 335-344.
- Budnyk, O., Mazur, P., Matsuk, L., Berezovska, L., & Vovk, O. (2021). Development of professional creativity of future teachers (Based on comparative research in Ukraine and Poland). *Amazonia Investiga*, 10(44), 9-17. <https://doi.org/10.34069/AI/2021.44.08.1>
- Budnyk, O., Sydoriv, S., Serman, L., Lushchynska, O., Tsehelnik, T., & Matsuk, L. (2022). Inclusive education in rural schools of Ukraine or how to ensure quality inclusive education in rural schools in Ukraine? *Revista Brasileira De Educação Do Campo*, 7, e13940. <https://doi.org/10.20873/uft.rbec.e13940>
- Cahill, K. (2021). Intersections of social class and special educational needs in a DEIS post-primary school: school choice and identity. *International Journal of Inclusive Education*. DOI: 10.1080/13603116.2021.1968519
- de Shalit, A. (2021). Amsterdam: tolerance and inclusion. *Critical Review of International Social and Political Philosophy*. DOI: 10.1080/13698230.2021.1881736
- Faldet, A.-C., & Nes, K. (2021). Valuing vulnerable children’s voices in educational research. *International Journal of Inclusive Education*. DOI: 10.1080/13603116.2021.1956602
- FOX 59. News. (Sep 9, 2021). Family of former student with Down syndrome sues Roncalli High School, Archdiocese of Indianapolis for failing to prevent alleged bullying by football team. <https://fox59.com/news/family-of-former-student-with-down-syndrome-sues-roncalli-high-school-archdiocese-of-indianapolis-for-failing-to-prevent-alleged-bullying-by-football-team/>
- Galeotti, A. E. (2002). *Tolerance as Recognition*. Cambridge: Cambridge University Press.
- Geller, R. J., Rubin, I. L., Nodvin, J. T., Teague, W. G., & Frumkin, H. (2007). Safe and Healthy School Environments. *Pediatric Clinics of North America*, 54(2), 351–373. <https://doi.org/10.1016/j.pcl.2007.01.005>
- Grzegorzczak, A. (1963). *Schemes and Man. Sketches of Philosophy [Schematy i człowiek. Szkice filozoficzne]*. Cracow: Sign Publishing House [Wydawnictwo Znak].
- Herzberg, F. (2003). One More Time: How Do You Motivate Employees? *Harvard Business Review*, 1, 17-29.
- Hui, N., Vickery, E., Njelesani, J., & Cameron, D. (2018). Gendered experiences of inclusive education for children with disabilities in West and East Africa. *International Journal of Inclusive Education*, 22(5), 457-474. DOI: 10.1080/13603116.2017.1370740
- Human Rights Watch (2018). *Lebanon: Schools Discriminate Against Children with*

- Disabilities
<https://www.hrw.org/news/2018/03/22/lebanon-schools-discriminate-against-children-disabilities>
- Keselman, A., Levin, D. M., Kramer, J. F., Matzkin, K., & Dutcher, G. (2011). Educating Young People about Environmental Health for Informed Social Action. *PubMed Central*, 4, 1–8. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3875179/>
- Klix, N. (2019). On the Conceptual Insufficiency of Toleration and the Quest for a Superseding Concept. *Public Reason*, 10(2)–11(1), 61–76.
- Kotarbinski, T. (1987). On the need for tolerance [O potrzebie tolerancji]. Wrocław: Ethical writings [Pisma etyczne]. <https://tezeusz.pl/kotarbinski-tadeusz-pisma-etyczne-pawel-j-red-smoczynski>
- Lähdesmäki, T., Baranova, J., Ylönen, S. C., Koistinen, A. K., Mäkinen, K., Juškiene, V., & Zaleskiene, I. (2022). Tolerance, Empathy, and Inclusion. In: *Learning Cultural Literacy through Creative Practices in Schools*. Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-89236-4_4
- Lyons, W. E., Thompson, S. A., & Timmons, V. (2016). ‘We are inclusive. We are a team. Let’s just do it’: commitment, collective efficacy, and agency in four inclusive schools. *International Journal of Inclusive Education*, 20(8), 889–907. <https://doi.org/10.1080/13603116.2015.1122841>
- McGuire, L. J. (2017). From Tolerance and Diversity to Inclusion and Celebration; New Horizons for Infusing Queer Theory into Communities. *Journal of Family Strengths*, 17(2). Retrieved from <https://digitalcommons.library.tmc.edu/jfs/vol17/iss2/9>
- Miller, K. J., & Sessions, M. M. (2005). Infusing tolerance, diversity, and social personal curriculum into inclusive social studies classes using family portraits and contextual teaching and learning. *TEACHING Exceptional Children Plus*, 1(3). Retrieved from <https://eric.ed.gov/?id=EJ966511>
- Nicholson, P. (1985). Toleration as a Moral Ideal. *Aspects of Toleration*. London: Methuen, 158–173.
- Nikolaesku, I., Budnyk, O., Bondar, V., Tepla, O., & Berezovska, L. (2021). Pedagogical Management in Inclusive Process of the Educational Institution. *Amazonia Investiga*, 10(39), 76–85. <https://doi.org/10.34069/AI/2021.39.03.7>
- Oñate Escobar, S. A., & Alfaro Urrutia, J. E. (2021). Percepciones del estudiantado, discriminación educacional por medio de la normalización de la exclusión. *Revista Actualidades Investigativas en Educación*, 21(3), 1–27. Doi. 10.15517/aie.v21i3.46483
- Pascoe, M. C., Hetrick, S. E. & Parker, A. G. (2020) The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, 25(1), 104–112. <https://doi.org/10.1080/02673843.2019.1596823>
- Perry, J. (2020). Mother of Murri boy calls for more disability awareness in schools after constant bullying. *NITV NEWS*. <https://www.sbs.com.au/nitv/article/2020/02/20/mother-murri-boy-calls-more-disability-awareness-schools-after-constant-bullying>
- Pope Francis (2016). Mercy and inclusion (Jubilee Audience, 12 November 2016). Retrieved from https://w2.vatican.va/content/francesco/en/audiences/2016/documents/papa-francesco_20161112_udienza-giubilare.html
- Rembierz, M. (2009). Should a Philosopher Be Tolerant? A Question of Tolerance in Meta-Philosophical Reflection. *World and Word [Świat i Słowo]*, 1(12), 113–132. ISSN 1731-3317.
- Rembierz, M. (2020). Hope – humanity – society: questions concerning hope and the inspirations of critical realism. *The Relational Theory of Society. “Archerian Studies”*, vol. 2. (eds.) Krzysztof Wielecki, Klaudia Sledzinska, Peter Lang, Berlin, 159–176. <https://www.worldcat.org/title/1243756965?oclcNum=1243756965>
- Rembierz, M. (2021). Revaluations of the times of pandemics: on the interference of the pandemic in the world of human values. *transformations [Transformacje]*, 3, 132–146. https://rebus.us.edu.pl/bitstream/20.500.12128/22482/1/Rembierz_Revaluations_of_the_times_of_pandemics_on_the_interference_of_the_pandemic.pdf
- Sajko, Kh. Ya., & Ostrovska, K. O. (2016). Tolerance to Children with Special Educational Needs in Inclusive School. [File PDF] <https://pedagogy.lnu.edu.ua/wp-content/uploads/2016/09/tolerantnist.pdf>
- Sanjeev, K., & Kumar, K. (2007). Inclusive Education in India. *Electronic Journal for Inclusive Education*, 2 (2). <https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1086&context=ejie>
- Smith, Ch., Nerantzi, Ch., & Middleton, A. (2014). Promoting Creativity in Learning and

- Teaching. UK: University Campus Suffolk, Manchester Metropolitan University. http://www.iced2014.se/proceedings/1120_Smith.pdf
- Smolinska, O., Budnyk, O., Voitovych, A., Palahniuk, M., & Smoliuk, A. (2020). The Problem of Health Protection in Modern Educational Institutions. *Revista Inclusiones*, 7(4), 108-116.
- The Ontario Human Rights Commission (2016). Policy on ableism and discrimination based on disability <https://www.ohrc.on.ca/en/policy-ableism-and-discrimination-based-disability>
- Ukrainian Helsinki Human Rights Union (2016) "We don't want a disabled child to study with our children," said the parents of the first-graders. <https://helsinki.org.ua/articles/my-ne-hochemo-schob-dytyna-invalid-navchalas-z-nashymy-ditmy-batky-pershoklasnykiv/>
- United Nations (1995) Declaration of Principles on Tolerance. Adopted and proclaimed by Member States of the United Nations Educational, Scientific and Cultural Organization, Paris, France, 16 November 1995. [https://www.ohchr.org/EN/Issues/Education/Training/Compilation/Pages/13.DeclarationofPrinciplesonTolerance\(1995\).aspx](https://www.ohchr.org/EN/Issues/Education/Training/Compilation/Pages/13.DeclarationofPrinciplesonTolerance(1995).aspx)
- Vasianovych, H., Budnyk, O., Klepar, M., Beshok, T., Blyznyuk, T., & Latyshevskaya, K. (2020). Pragmatism in Philosophy of Inclusive Education Studies and Problems of Teacher Training. *Revista Inclusiones*, 7(4). Octubre/Diciembre, 59-73.
- Verkuyten, M., & Kollar, R. (2021). Tolerance and intolerance: Cultural meanings and discursive usage. *Culture & Psychology*, 27(1), 172-186. <https://doi.org/10.1177/1354067X20984356>
- Villegas, T. (2021). The Biggest Barriers to Inclusive Education. *Thinkinclusive*. <https://www.thinkinclusive.us/post/barriers-to-inclusive-education>
- Watson, K. (2016). Talking Tolerance Inside the "Inclusive" Early Childhood Classroom. *Occasional Paper Series*, 36. Retrieved from <https://educate.bankstreet.edu/occasional-paper-series/vol2016/iss36/>

DOI: <https://doi.org/10.34069/AI/2022.56.08.30>

How to Cite:

Bilgin, R., Ekici, S., & Sezgin, F. (2022). The state of kurdish language through public policies in Turkey after 1980. *Amazonia Investiga*, 11(56), 320-329. <https://doi.org/10.34069/AI/2022.56.08.30>

The state of kurdish language through public policies in Turkey after 1980

1980 SONRASI TÜRKİYE'DE KAMU POLİTİKALARI İLE KÜRT DİLİNİN DURUMU

Received: September 2, 2022

Accepted: October 8, 2022

Written by:

Recep Bilgin¹²⁸<https://orcid.org/0000-0003-3760-218X>**Seydali Ekici**¹²⁹<https://orcid.org/0000-0001-8843-6092>**Fatih Sezgin**¹³⁰<https://orcid.org/0000-0003-4022-5813>

Abstract

Making of public policies is a process through which the state determines relevant topics for the sake of its citizens and implements them. In Turkey, the public policies about Kurdish language after 1980 are outstanding such that the actors of coup d'état eagerly embraced the former idea of nation state which theoretically requires one common language in the borders of the given country. In parallel with this notion, the soldiers, who are the impeccable followers of Kemalist idea, put much pressure on local languages in Turkey, especially Kurdish language. They made some laws and forbade other languages than Turkish. But later, the conservative governments reigned in Turkey which had different ideas about this topic. As they got the opportunities, they made use of them so as to improve the situation for that language. The conservative governments handled this topic in the realm of freedom and human rights and created different public policies, so the adventure of Kurdish Language followed a much different track under different governments. This is a qualitative study, and the data were compiled from the related literature and evaluated accordingly.

Key Words: Public Policies, Kurdish Language, Soldiers, Conservative Governments.

Özet

Kamu politikalarının oluşturulması, devletin vatandaşları için ilgili konuları belirlediği ve uyguladığı bir süreçtir. Türkiye'de 1980'den sonra Kürt diline ilişkin kamu politikaları dikkat çekicidir, öyle ki darbenin aktörleri, teorik olarak bir ülkenin sınırları içinde tek bir ortak dil gerektiren eski ulus devlet fikrini hevesle benimsemiştir. Bu anlayışa paralel olarak, Kemalist düşüncenin kusursuz takipçisi olan askerler, Türkiye'de yerel diller, özellikle de Kürtçe üzerinde çok baskı yapmaktaydılar. Bu bağlamda, bazı kanunlar çıkarıp Türkçe dışındaki dilleri yasakladılar. Ancak daha sonra Türkiye'de bu konuda farklı fikirleri olan muhafazakar hükümetler hüküm sürmüştü. Fırsat buldukça, o dilin durumunu iyileştirmek için gerekli politikaları uygulamışlardır. Muhafazakar hükümetler bu konuyu özgürlük ve insan hakları meselesi olarak ele alıp farklı kamu politikaları oluşturmuşlardır. Böylece Kürt Dilinin serüveni farklı hükümetlerin uygulamalarında farklı bir yol izlemiştir. Bu nitel bir çalışma olup, veriler ilgili literatürden derlenmiş ve buna göre değerlendirilmiştir.

Anahtar Kelimeler: Kamu Politikaları, Kürt Dili, Askerler, Muhafazakar Hükümetler.

¹²⁸ PhD Candidate, International Relations and Diplomacy Department, Faculty of Administrative Sciences and Economics, Tishk International University, Erbil, Iraq.

¹²⁹ PhD. Candidate, Department of International Relations and European Studies, Faculty of Economics and Social Sciences, International Burch University, Sarajevo, Bosnia Herzegovina.

¹³⁰ PhD. Candidate, Campus Director, Glenbow College, Calgary, Canada.

Introduction

Public policies are a kind of map through which the state tries to find solutions to the problems which emerge among public. But there could be many different circumstances which affect the policies. Accordingly, the outcomes of the policies and the processes are re-assessed, and some modifications or even radical changes are made. The public policies about Kurdish Language in Turkey went through a similar path as it was depicted above.

This study draws attention to the link between language and nationalism by explaining what public policy is, how its processes are and who its actors are. In this context, state policies after 1980 towards Kurdish, the language of the Kurdish minority, as a reflection of nationalism in Turkey, were evaluated. After specifying Turkish as the official language of the state in the Constitution of the Republic of Turkey, policies were followed that would not allow the development of any other minority language. At this point, the language of the Kurds, the largest minority in Turkey, was banned for a long time, and then these bans were lifted by governments with democratic tendencies. In fact, these prohibitions were not lifted to allow the natural development of Kurdish. In accordance with the conditions of each period, some changes were made in the framework stipulated by the governments. In line with the democratization of Turkey, the processes of lifting the bans on Kurdish and encouraging it at some points by the state are discussed in this article.

Literature Review

Public Policy

Public policy could be defined as a state's using its authority through the laws which it made itself and implementing them with the hands of an official (Hill & Hupe, 2002). According to a different definition, public policy is something that the state chooses to do or chooses not to do (Dye, 1981). As it is understood from these definitions, if a state intentionally does something or intentionally does not do anything, it could be defined as public policy.

The Merriam Webster Dictionary defines this term as follows: "government policies that affect the whole population" (Merriam Webster Dictionary, 2022).

It is not an easy attempt to try to define this term so as to be accepted by everyone. As the nature of

the term requires, it is not suitable to come up with a common definition for everybody to come to terms. In general terms, public policies are the goals and actions of the officials who try to change the public service (Akindele & Olaopa, 2004).

These policies are the actions of the governments and the intentions which give way to these actions. So public policy is "an intentional course of action followed by a government institution or official for resolving an issue of public concern (Cochran et al., 2015)."

For an action to be public policy, it should be focused on a pre-determined topic and have an aim. Moreover, the actors should have intentional actions or the state of no actions (Erat, 2014). It is clear from these definitions that a state of not doing anything about a topic needs to be intentional in order to be seen as a public policy.

When the state implements the laws and regulations, there should be the citizens who are affected by these actions. Then it is possible to mention public policies, otherwise they are not suitable to name as that. When the modern state is looked into more deeply, it is clearly seen that it has the authority and the opportunity to intervene in all aspects of social life. By the way of imposing laws and using the authority, the state affects social life, economic situation, environment, family life and many other areas. An important aspect of all of the public policies implemented by the state is that they are originated in the laws and judicial system, so if a state acts in the realm of the given laws and rules and it affects the public, then it is possible to mention public policies there. What is to be underlined here is that the framework of these policies is determined by the current laws (Akdoğan, 2011).

After the industrial revolution, especially with the effect of liberal thoughts, the role of the state was re-determined and it was given a minimal role in public life, which is not more than being a referee in case of disagreements. But in the modern world, the state has been redefined and it has been given many other duties especially because of the reason that the citizens expect many things from the state to take action. As a result of this notion, the role of the state has again been prevalent in modern life and it has been more effective to implement public policies. Therefore, the state has been more inclined to intervene in public life,

which could come up with some positive and negative results (Dollery & Wallis, 1997).

Public Policy Actors

Throughout time, diplomatic communication has played an important role in human society (Yildiz & Dayan, 2022). Although the modern state has many opportunities and much authority to determine public policies, there are many other factors that affect these processes. There are different human groups, clubs, associations, corporations which could intervene in the policies and even have the effect to change the direction or even stop them. In modern terms, the public policies are handled under two different headings:

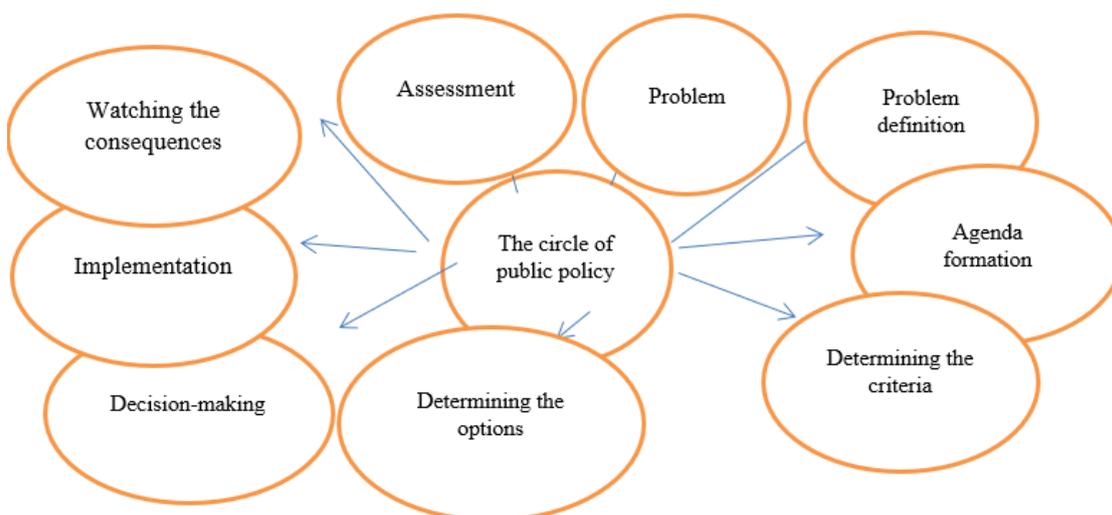
- 1) state-focused
- 2) society focused

When there are state focused policies, the government and the bureaucrats play the crucial role to determine the policies. When they are society-focused, there are other actors than the state and they could be able to put weight on them and direct them. But although there are many different actors, the main actor has always been the state (Paffenholz, 2010).

Public Policy Processes

Throughout these processes, the first step is to define a problem in society. The second step is to come up with different policy offers which are brought together in order to assess them altogether. At this point, especially the problem-

related sectors take the major action for their offers for solution. The next step is to bring these offers to the issue. At this point, one of the most crucial actors to determine public policies is the media because it has the effect to present the topic to the public as a problem in order to take action more easily and with the consensus of the majority of public. The media has the role of creating awareness of the problem among the public and they are prepared for next action. The coming step is determining and adopting the policies, which is the most intensive part of the decision-making process. At this stage, all of the alternatives are assessed and the most suitable one is pinpointed to implement. Then the implementation process starts. The authorities take the concrete action to solve the problem. One of the most important steps of the public policies is to evaluate the implemented policies. During this process, the success of the implemented policies is looked through and if there are any unsuccessful outcomes, they are corrected, or necessary changes are made. Therefore, with the help of these outcomes, new plans are made for better results. The points that are not equally handled are determined and policy changes are made during this process. The last of all of these processes is redefining the problem because when the authorities complete the circle of the policy making process, the solutions generally come with next problems. In order to find more effective solutions to the newly emerged problems, this step plays crucial role for future problems and their solutions (Cochran et al, 2015).



Graph 1. The circle of making public policies could be shown like this (Akgül & Kaptı, 2010):

Public Policy Analysis

It could be stated that public policy analysis is an effort to get the best result while comparing the analysis of the system in which the policy is made and its position in the professional field it was created (Dror, 1967). While analyzing these policies, paying attention only to the ideas which were created by the politicians will not sufficiently reflect the real situation. Because at this point, the bureaucrats, legislative organs, interest groups, experts and many other actors play very crucial roles. The relation among these actors is very important factor while determining public policies. Moreover, the relation between these actors and the society is also at the core point. For the public policy analysts, all of the actors in this network are of crucial importance and deserve to be focused. While determining these policies, what is more important than the current situation is that the analysis of the process should be done primarily (Sabatier, 1991).

Nationalism And Language

Nationalism refers to being a member of the same nation and sharing some common values. Since this is a subjective definition, it is possible to come up with many others. An objective definition of the term nationalism is almost impossible to offer. The nation could be defined as the people who come together under the same values and common cultural constituents. But this term came to existence in the framework of subjective understanding, so many other different definitions were also offered. Basically, the idea of nationalism stemmed from French Revolution in 1789. Later during the Industrial Revolution, the states perceived it as a must to bring people together under the reign. During this period, the states were in need of educated and literate people and in order to meet this need, they created the nation is a new category come to terms with the requirements of that age. The idea of nationalism was thought to be an effective factor to bring people together and give them the idea of commonality (Gellner, 2015).

After that time, nation states started to emerge and they had the idea that it was only possible to protect themselves and remove the differences via having the idea of being a member of common nation and creating power through psychological processes, the end result of which was the people who came together around the idea of nationalism in the same political unit. By this way, an emotional affinity was created among people who had patriotic feelings for their country and people. As a result,

nation was thought to be created using the notion of nationalism (Heywood, 2013).

While nationalism could be defined as above, it should be stated that it has much broader definition in political science literature. The mutual point that all of the definitions focus on is that this term was developed after the Industrial Revolution in order to help Capitalism to improve. The idea of nationalism serves to design the society in parallel with the requirements of new age (Sadoğlu, 2002).

The focus on the communality of the society in which many different cultures and lifestyles had the opportunity to exist emerged as a new trend after Industrial Revolution and was given much more importance during the process of building a new nation. Communicating with others, comprehending what is read, and maintaining one's own sanity all depend on one's command of the language (Celik & Yildiz, 2019). Since there were many different lifestyles and cultures in those societies, there was a need for a common thing that everybody in a society would share, which was nothing but language. In the same society, while there were many differences, people all shared one common point; that was the language they were communicating. For that reason, the nationalist ideas gave much importance to language. The main reason pointing to this importance was that there was no other concept that strongly emphasizes their common point. For that reason, the nation states took the language as the first reference for nation building and the importance of language became part of the political processes so much that all of the nation states developed new policies about languages they speak and some of them developed new policies about the local languages which are spoken in the country. One of the pillars of the nationalism is differentiating yourself from others and showing your differences so as to form a unique society and languages served much for this notion (Sadoğlu, 2002).

In addition to these, language had a different aspect from nationalism, which made it more valuable for the next processes. Nationalism was something imagined, in other words, it was an artificial thing to be created in the minds of people and later societies were categorized according to this understanding. Nationalism did not emerge as a universal thing in the normal human life but brought into existence towards the end of the eighteenth century. But for language, it was not a result of these artificial processes and it existed together with the humanity as a natural entity. While nationalism was imagined and it was very difficult for the society to accept it as it was, language was totally different. Since it was

something natural, it was thought to give support to this notion because there was no other thing that could emphasize on communality among people. Even the ideologists of the nationalism in the eighteenth century supported the idea that national units were based on mutual languages. In other words, those who speak the same language could easily be categorized under the same nation (Rocker, 1998).

Methodology

This is a comparative analysis of different periods in which the public policies in Turkey about Kurdish language went through various phases. To achieve this aim, the atmosphere of the periods and the political developments were discussed, and how Kurdish language policies changed was revealed under the effect of political developments. This qualitative study compares and contrasts different periods by indicating the paradigm shifts and the effects of them on Kurdish language. The clearest signs of the public policy changes of the state are reflected on the laws that were made in the parliament as a state organ. Since these laws reflected some extreme points in opposition, they also indicate the paradigm shifts clearly. For that reason, the laws made in the process are the main sources used in this study. Later, the implementation of the laws is shown with political developments in Turkey.

Results and discussion

Kurdish Language After 1980 In Turkey

Many of the nation states developed the strategy to gradually outlaw the local languages in public sphere so as to make the official language more visible. Creating a new nation and assimilating the minorities were two crucial premises to build a nation state, so they perceived applying these strategies as legitimate actions and acted in this way (Sadoğlu, 2002).

In 1980, soldiers came to power with a coup d'état and started to change the state so as to adapt it to the Kemalist ideas once more. When Turkish Republic was founded in 1923, it was formed as a nation state and ideologically it was inclined towards the Western World. As they determined their route like that, they adopted all of the literature about nationalism, which was created in West, the framework of which was shown above. For that reason, they put much importance on Turkish Language and tried to disseminate it to the public with its new form which was freed from Ottoman components. But later, the conservative governments did not own that sort of policy and

changed many things about it. When the soldiers came to power in 1980, they tried to turn the state into the form of Kemalist ideas again. In order to achieve this, they firstly made a new constitution and made many new laws. They again put the article in the constitution saying that the official language was Turkish (Law 2709, 1982).

The Army in Turkey was the first institution to westernize in 19th century and after that time it became the representative of Western idea in the country. Especially the Kemalist notion expressed itself with that idea and it was represented by the soldiers. Nation-state in Western terms was not supported by conservative governments and the soldiers generally complained about it. When they came to power in 1980, they started to revitalize that western tradition. In order to make Turkey an impeccable nation state, they started to apply the nationalist heritage to the country once again. Since they had very little time until they leave the power to civilian authorities, they tried to make many laws until the elections in 1983. They also made laws about local languages and tried to strengthen the position of Turkish language. The act number 18199 on 22nd October 1983 was named as "The Act about Broadcast (and publishing) in Other Languages than Turkish."

The first article of this law perfectly reflects the notions which developed in nationalism.

Article 1 is as follows:

"This law regulates the principles and the procedures about the forbidden languages in which thoughts are expressed in order to protect social order, national security, Republic, national sovereignty, the indivisible integrity of the state with its country and nation (Law No. 2932, 1983)".

This article clearly states that if any language other than Turkish is used in public sphere, the security of the whole country will be in danger.

The third article of the same act is as follows:

"Article 3: The mother tongue of the Turkish citizens is Turkish.

a) It is forbidden to attempt to use and disseminate other languages than Turkish."

It also outlaws broadcasting and publishing in any other languages. The law also determined harsh punishment when the law is violated.

The 2nd article of this law also forbids any second language of the other sovereign countries which

signed some international treaties with Turkey. Only the first official language of those countries is acceptable in Turkey. In fact this article implies the Iraqi constitution that accepts Kurdish language as a second language and Iraq is accepted as a sovereign country by Turkey. As a result of this, Turkey could have been recognizing Kurdish because it already recognized Iraq. In order to remove the ambiguity here, this law outlawed the second language of that country which already recognized it in the constitution; so Turkish authorities clearly state that when they recognize another country, it does not mean that they recognize their second language, namely Kurdish (Kubilay, 2005).

It should be clearly stated here that when Kurdish language was forbidden as a public policy, it was not an instant idea that emerged all of a sudden. It is certainly a reflection of nationalist ideology which developed throughout these two centuries. Since the state has secular nationalist ideology, they gave special importance to mother tongue and assistance to nationalist idea. As a result, they develop that kind of public policy and implemented it in order to strengthen Turkish nationalist approach, which led to many different developments.

On 25th January 1991, that law was abolished by the ruling Motherland Party. At that time the founder of the party, Turgut Ozal, was the President of the country and played important role to abolish this law. After that, all of the local languages had the opportunity to live in public sphere. But the pressure of the soldiers on the system was so strong that Turgut Ozal had to rationalize this step by referring to the international treaties. He did not attempt to show this initiative as a step towards liberty but as a requirement of the international treaties. Turgut Ozal expressed that Helsinki Final Act which was signed in 1975 and the Vienna Convention in 1989 were recognized by Turkey and they should do what they require for the countries. These two documents forced the states to assure to protect and develop local cultures and their languages (Whitman, 1992).

During the soldiers' rule between 1980 and 1983, many laws were made to redesign the state according to nationalist ideology. It is very hard to say that these policies emerged as a requirement of social sphere or social demands, but the soldiers felt obliged to re-define the ideological position of the state in parallel with nationalistic ideas. As for the conservative ruling party in 1991, they did not directly oppose to the soldiers but put forth a different rationale for their change.

During 1990s, there were many economic problems, PKK terrorist attacks increased, and the Islamist movements gradually got stronger; so, the politicians had to deal with these problems and did not find any opportunity to handle the Kurdish Language issue.

It was another conservative ruling party that implemented liberal policies about Kurdish and tried to give more freedom. Justice and Development Party (AKP) took some major actions to liberate this language.

Turkey went through several coup d'états and military interventions during its history. One of the interventions took place on 12 March 1971 asserting that the current government was not capable enough to stop the anarchy and strife and the state was diverging from the principles of Ataturk. As a result of this memorandum, Demirel government resigned, and a semi-military government formed and started to make reforms as the soldiers wished (Ahmad, 1977).

The new government made a law on 5 May 1972 and hindered giving names in any other languages than Turkish. They made an Act of Demography no 1587 and outlawed the names which were not suitable for national culture. The AKP government changed the article 16 of the act in 2003. Later in 2006, they totally abolished the act. The change in 2003 was as follows:

"The parents give the name to their children. But the names that are against the common ethical rules and that offend people cannot be given to children (Law No. 1587, 1972)."

The first form in 1972 included "against our traditions" which implies the names other than Turkish was taken out of the text, so the names in local languages again made legal in the laws.

Since Kurdish issue was very controversial in Turkey, AKP government was not able to do much about it, especially under the surveillance of the soldiers during the first years of their rule. They went through some clashes in political arena and when it came to the year 2007, there was the general election which ended up with a victory for AKP and the military pressure dwindled after that time. Later on, the government found the opportunity to take major actions. But all of them came gradually. Firstly in 2009, a Kurdish TV channel under the surveillance of the state opened up with the name TRT 6. TRT itself is the official broadcasting company and the channel started to serve with its name (TRT, 2022).

In 2011, another act number 6112 about the foundation and broadcasting services of Radio and Television Supreme Council was issued and private broadcasting companies were allowed to broadcast in other languages. Article 5 of this act says:

"Broadcasting Language

Broadcasting is primarily done in Turkish. But it is also possible to broadcast in other local languages and dialects. It is mandatory to broadcast in the grammatical rules of the given language (Law No. 6112, 2011)."

The agenda formation process started two years earlier than this act because this is a very controversial issue, and it is difficult to prepare the public for such a change. The Prime Minister of that time, Recep Tayyip Erdogan, expressed that this could be handled as a part of democratic initiative program. An authority from the Supreme Council announced that this kind of initiative is something that European Union also endorsed so it should be supported. Moreover, there were other broadcasting companies which broadcast in local languages through satellite. He said that it was not true to totally forbid this kind of initiative and it is also not true to give total freedom, so they should be under state control (Haber 7, 2009).

It seems that the government wanted to base this initiative on some logical assumptions:

- 1) It is part of the democratization process in the country.
- 2) European Union also endorsed such a libertarian attempt.
- 3) Modern technology already gives way to such initiatives and the governments cannot hinder them.

As it was the same with Turgut Ozal, this government also puts forth the outer sources compelling them to act like that. As a result, the agenda formation process continued with convincing the public for such policies and later they determined what to do and how to do drawing the boundaries and taking it under state control. Later on, there emerged many TV channels broadcasting in Kurdish Language (T24 Bağımsız İnternet Gazetesi, 2012).

Although AKP government started radical initiatives, they could not take major action until 2009, which was after 2007 elections in which they came to rule more powerfully. But during 2002-2007 period, AKP government did not use any initiative because of other balancing powers,

namely the soldiers who were still very effective over political life in Turkey. Their control over politics could be originated in the 28 February process. As it is seen above, the second initiative after 2009 came in the year 2011 because that year was the year of the coming elections, and the government was still had much public support.

It is clear from these processes that the Kemalist ideology is strictly bound to the nationalist ideas which emerged in West and tried to revitalize this ideology when they had the opportunity free from the conjuncture of the time; so, they incessantly supported the same ideas about language issue in every period after the foundation of Turkish Republic in 1923.

But the template-breaking initiatives came out in conservative world, and they followed such policies about languages that the difference in their ideologies is reflected here very clearly. While Kemalist idea was bound to the premises of nationalism and tried to assimilate the local languages for a stronger nation, the conservative idea continuously supported freedom to local languages.

The policy making processes of these two different ideas could be pinpointed in any period of time during the Republic era. Kemalist idea took the acquis of the western-originated nationalism for granted and determined the policies in this direction and they tried to create a new and powerful nation, but for the conservative wing, they had very different perspective and they were partial to liberal ideas. What puts barriers on the policies of the Kemalist ideas is first of all the international treaties and conventions. Since even Kemalist idea turned its face to the West, the institutions and the rules imposed by European countries were always very effective in Turkey (Oran, 2009). Especially after the World War II, the western heritage rendered liberal ideas and formed their institutions in parallel with democracy, liberal ideas, human rights...etc. For this reason, Kemalist ideology did not feel free to implement their policies. Even the conservative governments used western ideas as their rationale in order to alleviate the pressure coming from Kemalist elites. As it was mentioned above both Motherland Party government in 1991 and Justice and Development Party government in 2009 emphasized on the same topic and showed the western institutions and laws as a source for their attempts. When we look at the conservative governments, they generally felt the pressure coming from soldiers, but when they found an opportunity to act freely, they made radical

changes in the system as it was shown in Kurdish Language issue.

The initiatives of AKP government were not limited to the ones mentioned above. After the democratization process, Kurdish Language started to appear more in public sphere. It started to be used in media, education, local governments and many public places more freely. During this process, people were given the right to support themselves in the courts of law and the local governments were able to give Kurdish names to streets. Kurdish Language courses were allowed to open and later it was expanded to universities which had the right to open Kurdology departments and even use Kurdish as a medium language. It was also freed to give Kurdish names and some letters which do not exist in Turkish alphabet but used in Kurdish were allowed to be used (İnal, 2012).

What is here to be emphasized is that the AKP government felt obliged to take action about this issue because of its ideology, but this was not the pure reason. There were demands about it from the Kurdish community after 2000; especially the Kurdish university students asked for the rights to get education in their native language. Even in 2004, they took this issue to European Court of Human Rights, which caused many debates in Turkey. The soldiers tried to stop these initiatives, but the government tried hard to give freedom at that time. In 2010, Peace and Democracy Party, a political party which asserted that they were trying to get rights for Kurdish people, started a campaign and did not send Kurdish children to schools until they got their rights. In fact, they intended to put pressure on the government for more freedom to Kurdish people and language (İnal, 2012).

From another point of view, it is seen that there are some external reasons forcing governments to adopt all these policies. Especially after 1999, with the process of harmonization with the European Union, many freedoms were tried to be opened and local languages took their share in this regard. Within the framework of these harmonization studies, many issues in the European Union acquis came to the fore and it was tried to harmonize with the European Union with the laws made. In this context, freedoms also were given to local languages (İnal, 2012).

At this point, it should be noted that the policies put into practice by the state regarding the Kurdish language are not in a position to be discussed only in its own context. More generally, within the general framework of some of the rights that are demanded to be granted to all Kurdish citizens,

their own language was also included and discussed in this context. Therefore, policies related to Kurdish emerged as a sub-title of policies regarding Kurdish citizens, which can be discussed in a wider context.

Conclusion

The situation of Kurdish language, which emerged as a public policy in the state, took shape as a reflection of ideological approaches and took different positions within the state according to the periods when different understandings prevailed. It was seen in this period that each understanding followed consistent policies in its own ideological perspective. However, when this issue was understood differently by various actors, different problems emerged, and different policies were produced within the state in response to this situation. After 1980, the members of the army, who adopted the Kemalist view, forbade the speaking of other languages in Turkey as a requirement of the nationalist ideology and engaged in an uncompromising behavior in this regard. These policies, on the one hand, created a situation contrary to the agreements put forward by the international community, which brought a different dimension to human rights and continuously developed this understanding, and on the other hand, they were not found correct by conservative governments that adopted liberal and libertarian understanding in Turkey.

Within the framework of this understanding, the fact that conservative parties were generally more generous about the rights to be given to the Kurds also affected public policies on Kurdish language and urged them to take initiatives to pave the way for freedoms in this regard.

As a result, it is possible to talk about three main factors affecting the public policies regarding Kurdish language:

- 1) Turkey's efforts to adapt to the development of the idea of providing freedom to any local language, which is a natural structure within the framework of the understanding of human rights developed by the international community, and the insistence of this idea by international agreements.
- 2) Conservative governments see this issue as an area of freedom within the framework of a more liberal and libertarian understanding and act accordingly.
- 3) Demands from citizens of Kurdish origin create pressure.

With the compulsion of these three main motives, libertarian steps were gradually taken in the Kurdish language and some arrangements were made despite traditional statist objections.

Bibliographic references

- Ahmad, F. (1977). The Turkish experiment in democracy, 1950-1975. Royal Institute of International Affairs.
- Akdoğan, A. A. (2011). Historical Traces of Public Policy Discipline in Turkey [Türkiye’de Kamu Politikası Disiplininin Tarihsel İzleri]. Public Administration and Public Policies in Turkey. Ankara, TODAİE Publications [Türkiye’de Kamu Yönetimi ve Kamu Politikaları, Ankara, TODAİE Yayınları], 75-98.
- Akgül, A., & Kaptı, A. (2010). Turkey's Drug Enforcement Policy: Policy Process Analysis, Transnational Crimes from Local to Global [Türkiye'nin Uyuşturucu ile Mücadele Politikası: Politika Süreç Analizi, Yerelden Küresele Sınırşan Suçlar]. Ankara: Police Academy Publications [Ankara: Polis Akademisi Yayınları].
- Akindele, S. T., & Olaopa, O. R. (2004). A theoretical review of core issues on public policy and its environment. *Journal of Human Ecology*, 16(3), 173-180.
- Celik, B., & Yıldız, Y. (2019). The role of foreign language culture on teaching the language and learner motivation. *International Journal of Social Sciences & Educational Studies*, 5(4), 150-161.
- Cochran, C. E., Mayer, L. C., Carr, T. R., Cayer, N. J., & McKenzie, M. (2015). American public policy: An introduction. Cengage Learning.
- Dollery, B. E., & Wallis, J. L. (1997). Market failure, government failure, leadership and public policy. *Journal of Interdisciplinary Economics*, 8(2), 113-126.
- Dror, Y. (1967). Policy analysts: A new professional role in government service. *Public Administration Review*, 197-203.
- Dye, T. (1981) *Understanding Public Policy*, Fourth edition, Prentice Hall: Englewood Cliffs, NJ, https://repository.vnu.edu.vn/handle/VNU_123/89996
- Erat, V. (2014). A review on public policy field in Turkey [TÜRKİYE'DE KAMU POLİTİKASI ALAN YAZINI ÜZERİNE BİR İNCELEME]. *Gümüşhane University Electronic Journal of the Institute of Social Science* [Gümüşhane Üniversitesi Sosyal Bilimler Enstitüsü Elektronik Dergisi], 5(10).
- Gellner, E. (2015). Nations and nationalism. In *Conflict after the Cold War* (pp. 378-389). Routledge.
- Haber 7 (2009) Preparation of permission for Private Kurdish Television [Özel Kürtçe Televizyona izin hazırlığı] <http://www.haber7.com/medya/haber/434257-ozel-kurtce-televizyona-izin-hazirligi>
- Heywood, A. (2013) *Politics*. Fourth Edition. Palgrave Foundations.
- Hill, M., & Hupe, P. (2002). *Implementing public policy: Governance in theory and in practice*. Sage.
- İnal, K. (2012). The nationalization of the Kurdish language in the language AKP period as an important dimension of the Kurdish problem [Kürt sorununun önemli bir boyutu olarak dil akp döneminde kürtçenin kamusallaşması]. *Education Science Society [Eğitim Bilim Toplum]*, 10(37), 76-112.
- Kubilyay, Ç. (2005) *Regulations Regarding Mother Tongues and Public Space in Turkey: Breaking the Synchronization of Mother Tongue and Official Language [Türkiye’de Ana Dillere Yönelik Düzenlemeler Ve Kamusal Alan: Anadil Ve Resmi Dil Eşitlemesinin Kırılması]*. *Journal of Educational Research [Eğitim Araştırmaları Dergisi]*, 2(2)
- Law No. 1587. Population Law, Acceptance Date: 5/5/1972 Published in the R. Newspaper: 16/5/1972 Number: 14189 Published Code: Issue 5 Volume 11, Page. 2272 [Nüfus Kanunu, Kanun Numarası: 1587 Kabul Tarihi: 5/5/1972 Yayımlandığı R. Gazete: 16/5/1972 Sayı: 14189 Yayımlandığı Düstur: Tertip: 5 Cilt: 11 Sayfa:2272] / <https://www.nvi.gov.tr/kurumlar/nvi.gov.tr/mevzuat/yururluktentkaldirilanlar/kanunlar/1587sayilininufuskanunu.pdf>
- Law No. 6112. Law on the establishment and broadcast services of radio and televisions. Presidency of the Republic of Turkey. Date of Adoption: 15/2/2011, Published in Official Gazette: Date: 3/3/2011 Number: 27863, Code of Publication: Arrangement: 5, Volume: 50 [RADYO VE TELEVİZYONLARIN KURULUŞ VE YAYIN HİZMETLERİ HAKKINDA KANUN, Kanun Numarası: 6112, Kabul Tarihi: 15/2/2011, Yayımlandığı R.Gazete: Tarih: 3/3/2011 Sayı: 27863, Yayımlandığı Düstur: Tertip: 5, Cilt: 50] <https://www.mevzuat.gov.tr/mevzuatmetin/1.5.6112.pdf>
- Law No. 2932. Law on Publications in Languages Other than Turkish, (Published in

- the Official Gazette: 10.22.1983 Number: 18199), Date of Acceptance: 10.19.1983 [Türkçeden Başka Dillerle yapılacak Yayınlar Hakkında Kanun, (Resmî Gazete ile yayımı: 22.10.1983 Sayı: 18199), Kanun No. 2932, Kabul Tarihi: 19.10.1983] https://www.tbmm.gov.tr/tutanaklar/KANUNLAR_KARARLAR/kanuntbmmc066/kanundmc066/kanundmc06602932.pdf
- Law No. 2709. CONSTITUTION OF THE REPUBLIC OF TURKEY, Date of Approval in the Constituent Assembly: 10.18.1982; Date of acceptance : 7.11.1982 [2709 Sayılı Kanun. TÜRKİYE CUMHURİYETİ ANAYASASI, Kurucu Meclis'te Kabul Tarihi: 18.10.1982, Kabul Tarihi: 7.11.1982] <https://www.tbmm.gov.tr/anayasa/seksen-iki-anayasasi>
- Merriam Webster Dictionary (2022). “public policy” <http://www.merriam-webster.com/dictionary/public%20policy>
- Oran, B. (2009) Turkish Foreign Policy, Volume 1. İstanbul: İletişim Publications [Türk Dış Politikası, Cilt 1. İstanbul: İletişim Yayınları]
- Paffenholz, T. (Ed.). (2010). Civil society & peacebuilding: a critical assessment (pp. 43-64). Boulder, CO: Lynne Rienner.
- Rocker, R. (1998). Nationalism and Culture, Translated by Ray E. Chase. Montreal/New York/London: Black Rose Boks.
- Sabatier, P. A. (1991). Toward better theories of the policy process. *PS: Political Science & Politics*, 24(2), 147-156.
- Sadoğlu, H. (2002). Turkish language policies in the process of nationalization (1839-1950) [Uluslaşma sürecinde Türk dil politikaları (1839-1950)] (Doctoral dissertation), Marmara Üniversitesi, Turkey.
- T24 Bağımsız İnternet Gazetesi (2012). Roj TV kapatıldı (Roj TV was closed down). <https://t24.com.tr/haber/roj-tv-nin-kapatildi-yerine-5-kanal-geldi,209734>
- TRT (2022). History [Tarihçe] <http://www.trt.net.tr/Kurumsal/Tarihce.aspx>
- Whitman, L. (1992). Denying human rights and ethnic identity: the Greeks of Turkey. Human Rights Watch.
- Yildiz, Y., & Dayan, S. (2022). A Tiny Look at Hizmet (Service) Movement Teachers' Diplomatic Mission. *International Journal of Social Science Research and Review*, 5(6), 188-191.



Revista Amazonia Investiga
www.amazoniainvestiga.info