REVISTA

AMAZONIA Investiga

March 2023. Vol. 12 Issue 63

ISSN 2322-6307

www.amazoniainvestiga.info

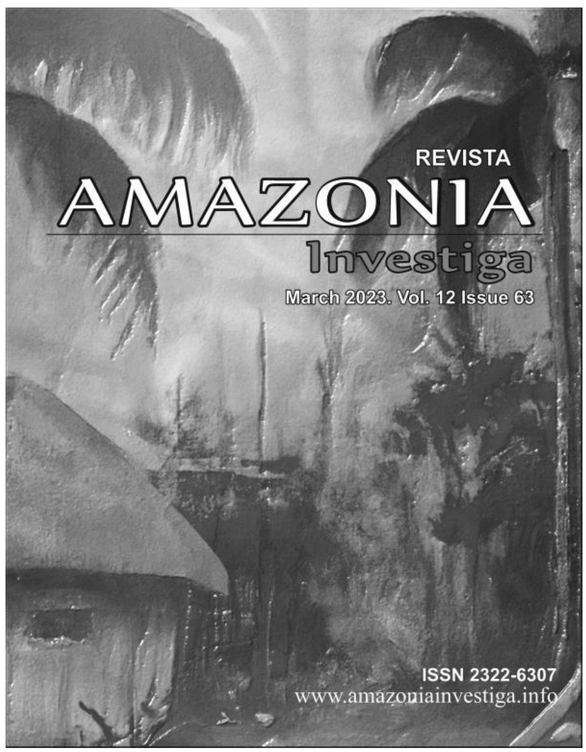
Periodicity
Montly
Since: 2012

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.

AMAZONIA Investiga

Virtual, multidisciplinary and monthly scientific publication

VOLUME 12 - ISSUE 63



Cover image
Based on the work of master Wilgberto Ramírez

AMAZONIA Investiga

CONTENIDO

REVISTA

AMAZONIA Investiga

March 2023, Vol. 12 Num. 63

DOI: https://doi.org/10.34069/AI/2023.63.03.1
How to Cite:
Aman, Q., & Altass, S. (2023). The impact of debt and equity decisions on business performance: Evidence from International Airline Corporation. *Amazonia Investiga*, *12*(63), 10-20. https://doi.org/10.34069/AI/2023.63.03.1

The impact of debt and equity decisions on business performance: Evidence from International Airline Corporation

تأثير قرارات الديون وحقوق الملكية على أداء الأعمال: دليل من شركة الطيران الدولية

Received: February 10, 2023 Accepted: March 20, 2023

Written by:
Qaiser Aman[1]
https://orcid.org/0000-0003-4358-7940
Sultan Altass[2]
https://orcid.org/0000-0003-3733-7400

Abstract

Capital structure decision remains always interesting puzzle for practitioner as well as for researchers. Capital structure of company fluctuates from company to company, country to country, nature of business to business and firm age to age. The current study examines the impact of capital structure (financial leverage and equity decision) on airline performance. The analysis is performed on secondary data. Data is taken from the financial statements of under consideration study of Pakistan International Airline. Sample period is taken from 2004 to 2020. The financial performance is measured by ROA and ROE, while independent variables are debt to asset (DTA), debt to equity (DTE), and size (natural log of total assets). Two econometric models are developed for the analysis. Regression and correlation are used to measure the impact of debt and equity on company performance. The study demonstrated that DTA has a statistically significant negative relationship with the dependent variable, ROA. Model 1 results indicated that only DTA was the good predictor of ROA and size had no significant relationship with ROA. Model 2 results demonstrated that the size had a significant but positive relationship with ROE. Meanwhile, DTA had an insignificant association with ROE.

Keywords: Financial Performance, Debt, Equity, Return on assets, Return on equity, Airline Company.

خلاصة

يظل قرار هيكل رأس المال دائمًا لغزًا مثيرًا للاهتمام للممارس وكذلك للباحثين. يتقلب هيكل رأس مال الشركة من شركة إلى أخرى ، ومن بلد إلى آخر ، وطبيعة الأعمال التجارية إلى الأعمال التجارية ومن شركة إلى أخرى. تبحث الدراسة الحالية في تأثير هيكل رأس المال (الرافعة المالية وقرار الأسهم) على أداء شركات الطيران. يتم إجراء التحليل على البيانات الثانوية. البيانات مأخوذة من البيانات المالية للدراسة قيد النظر لشركة الخطوط الجوية الباكستانية الدولية. يتم أخذ عينة الفترة من 2004 إلى 2020. ويقاس الأداء المالي حسب العائد على الأصول والعائد على حقوق الملكية ، في حين أن المتغيرات المستقلة هي الدين إلى الأصول (DTA)، والديون إلى حقوق الملكية (DTE) ، والحجم (السجل الطبيعي لإجمالي الأصول). تم تطوير نموذجين اقتصاديين قياسيين للتحليل. يتم استخدام الانحدار والارتباط لقياس تأثير الديون وحقوق الملكية على أداء الشركة. أظهرت الدراسة أن DTAلها علاقة سلبية ذات دلالة إحصائية مع المتغير التابع ROA.أشارت نتائج النموذج واحد إلى أن DTA فقط كان مؤشرًا جيدًا على العائد على الأصول وأن الحجم ليس له علاقة كبيرة مع ROA.أظهرت نتائج النموذج ثانية أن الحجم كان له علاقة مهمة ولكن إيجابية مع ROE. وفي الوقت نفسه ، كان لـ DTA ارتباط ضئيل معROE .

لكلمات المفتاحية: الأداء المالي ، الديون ، حقوق الملكية ، العائد على الأصول ، العائد على حقوق الملكية ، شركة الطيران

Introduction

Pakistan International Airline (PIA) was established on 29th October 1946 with the name of Orient Airways. It was originally based in Calcutta, British India, before partition. After

Jel Classification: C21, G32, L93, M41

[1] Qaiser Aman, Ph. D, Associate Professor, Department of Accounting, College of Business, King Abdulaziz University, Jeddah, Rabigh Campus, Saudi Arabia.
[2] Dr. Sultan Altass, Head of Accounting Department, College of Business, King Abdulaziz University, Jeddah, Rabigh Campus, Saudi Arabia.

partition, Pakistan International Airline Corporation (PIAC) took control of Orient Airways (See Appendices A). It started its international operation in 1955 to London via Cairo and Rome. One of the key performance indicator of an airline is employees-to-Fleet Ratio (See Appendices B). It is a nonfinancial indicator of airline. It explains the size of fleet with respect to number of employees. The Syrian Arab Airlines has the worst employees-to-fleet ratio, followed by PIA and Thai Airways. Garuda Indonesia has a good employees-to-fleet ratio. Meanwhile, Turkish Airlines has very strong position with respect to the size of fleet and has second good employees-to-fleet ratio. Egypt Air has third good employees-to-fleet ratio (Shah, 2016)

Financial information always plays a vital role in businesses' success, competition, growth, and the brand name of the company. A good accounting information system helps a lot in designing, maintaining, and generating needed and specific reports. Small to large and all kinds of businesses need proper accounting records in order to evaluate their progress. A sound and reliable accounting/finance section is indispensable for business development generally and particularly for corporations. In time, free from errors, verified, complete, and fair financial information about business activities assists a company in making good decisions. Proper records and organized information are equally important for businesses of all sizes and of any nature. Small size businesses require less financial and nonfinancial resources in comparison with medium and large size businesses. Companies' cross-functional decisions are very crucial. In fact, all decisions are important such as marketing, human resource, research and development, operational/production, and financial ones (Frank & Goyal, 2003). Financing requires fundamental and major decisions. Capital structure of a company is comprised of debt and long-term capital. It is utilized by a company in order to acquire the needed assets or to fill the gap of required capital (Damodaran, 2001). Both debt and equity are ultimately claimed by the investor over the assets of a company. It is crucial to use them in a proper way. Use them in productive assets so that the company generates sufficient revenues (Riahi-Belkaoui, 1999).

It is worth mentioning that financial decisions need particular attention and care. Financial decisions influence all the activities and functions of a company. Every financial decision needs proper analysis. Two basic dimensions always have to be considered in making a financial decision in the form of the costs and benefits of financing. Debt and equity decision in a company needs great care and attention. Technical analysis is needed with respect to value addition in a long run (Ardalan, 2018). Fundamental analysis helps company management to make debt and equity decisions. Numerous factors affect such decisions, including investor relations, interest rates, and conditions of a business, capacity, growth, and length of credit, dividends, earnings per share, market conditions, internal strengths, external opportunities, liquidity position, and previous earnings (Campbell & Rogers, 2018). Long-term debt and equity relate to the capital structure of a company. Top-level management is responsible for capital structure decisions. Technical analysis (ratio analysis) plays a crucial role in a firm's capital structure. It has been noted that no company is self-sufficient in terms of financial resources. Based on the corporate culture, capital structure decisions need to require a knowledge of the level of competition, market opportunities, business conditions, interest rates, and previous dividend payouts. There is no ideal figure for the capital structure of a company. It depends upon the nature, size, condition, growth, interest rates, and the past and current performance of a company. Due to the prevailing condition and the market mechanism, corporate culture has become popular. Economies worldwide promote corporate culture. Such a culture plays a significant role in those countries and is equally important for investors and for the economy in general. Different regions of the world also affect the capital structure decisions of a company differently. Institutionalized systems, quality of life, financial literacy, transparency, and quality of law also matter in capital structure decisions (Butzbach & Sarno, 2019).

Financial experts have indicated different capital structure theories since the 1950s. They have also tried to explain the effect value of the firm and capital structure on stock returns. In short, many studies have been conducted and published on this field. No one has claimed to have determined the ideal or more suitable capital structure for companies. There is no scientific rule and no agreement over the optimal level of debt and equity. Various researchers highlighted different factors for evaluating the capital structure of a firm. In particular, two key philosophies (trade-off theory and pecking order theory) explain the factors that affect the capital structure of a company. Theory of trade-off claims that there is an optimal capital setup for companies through determining the most suitable debt ratio (Jalilvand & Harris, 1984; Frank & Goyal, 2007).

(Modigliani & Miller, 1958) have suggested that capital structure theories operate under perfect market condition. Expectations of perfect capital market conditions relating to homogenous opportunities, investors, tax holidays, no transaction costs, and efficient market and capital structures are inappropriate when it comes to shaping businesses' worth. However, the capital structure proposition of Modigliani and Miller (MM) is well known as the "theory of irrelevance" of capital structure and discloses that capital structure is independent of business performance. Both new and existing businesses need an appropriate amount of capital to run the business properly. Without sufficient financial resources, a business's performance comes under pressure and the company cannot meet the expectations of investors nor that of the company's management (Ghosh et al., 2000).

Problem Statement

International business, especially the tourism and hospitality business is in full swing. Due to globalization, the boundaries of businesses have been extended, and isolation has become a dream. Tourism and hospitality are being promoted by every country. This sector has become a revenue-generating sector. The airline industry is a prerequisite for developing the tourism and hospitality sector. The airline industry requires a huge amount of funds in order to operate the business. Almost all countries worldwide have their own airline company. Consequently, it has become a very large industry globally, and capital structure decisions has a tremendous importance for airline companies. The current study analyzes the effect of financial leverage and equity decisions on airline performance.

Review of the Literature

There is no doubt that every decision has some costs and benefits. Debt has its own benefits and costs, while equity has different ones. Both are significantly affected by other factors; financial leverage and capital also affect the financial performance of a company (Miguel & Pindado, 2001). According to (Gaud et al., 2005) that the combination of long-term debt and equity of a firm impacts the business performance differently, as compared to (Flannery & Rangan, 2006) and (Gonzalez & Gonzalez, 2008). (Myers & Majluf, 1984) and (Fama & French, 2002) reported that market information and trends affect a company's capital structure decisions. Usually, internal financing is more suitable than external financing for companies. Internal financing depends upon the generation of revenue and sufficient availability of funds. In short, companies prefer debt due to the unavailability of internal funds. Therefore, the pecking-order theory stance does not claim to encourage the presence of an ideal liability ratio. It considers investor behavior, corporation tax, and principal and agent relations (Frank & Goyal, 2009).

Asgharian (2003) examined the relationship between highly debt firms and firm performance. The study findings showed that more debt leads to less sales growth and less stock return. Whereas, still highly debt firm shows greater progress in profitability. The study suggested that decline in sales of highly financial leveraged firms might be a question of management performance.

Aman & Altass (2019) analyzed the impact of capital structure and its impact on business performance over the period of 1990 to 2015 of an airline industry. They reported no significant effect of debt to assets with respect to business performance. While the results showed positive and significant impact of debt to equity on business performance of Airline Company. Nenu et al., (2018) examined the leverage on risk and performance of company. They collected data from registered firms on the Bucharest Stock Exchange. Their results demonstrated that leverage is positively correlated with the size of firm. Leverage also influences the market price of share. (Mallinguh et al., 2020) analyzed the situation with respect to age, business sector, and firm performance in terms of the mediating role of financial leverage and foreign ownership. Results indicated that debt has a significant effect on firm's performance. They investigated 146 enterprises in which leverage was found to be a significant contributor to firm's performance. They also found insignificant relation of foreign ownership with firm's performance. However, Mallinguh et al., (2020) explained that the internal ownership of a firm perceives that the availability of debt impacts the company's performance. Some financial scientists claim that leverage does not influence business performance. Debt harms firms when their conditions, growth, and performance are not up to the required standard. Although some of the literature warns against high leverage levels, high leverage actually depends upon specific businesses that need high liquidity for their processes. In short, insufficient internal funds lead to the use of external funds.

Warokka, Jose & Abdullah (2011) analyzed the capital structure and firm financial performance of 532 East Asian companies in term of post Asian Financial Crises. Their findings predicted significant association with debt and firm performance. While study depicted inverse relationship between ownership structure and firm performance. On the other hand Margaritis & Psillaki (2007) investigated the association between debt and firm efficiency. Their research questions were "Does higher leverage lead to better firm performance? And Does efficiency exert a significant effect on leverage over and above that of traditional financial measures of capital structure? What is the signaling role of efficiency to creditors or investors? Is the effect of efficiency on leverage similar across different capital structures? Their results demonstrated that efficiency declines as debt increases. While leverage has positive effect on profitability.

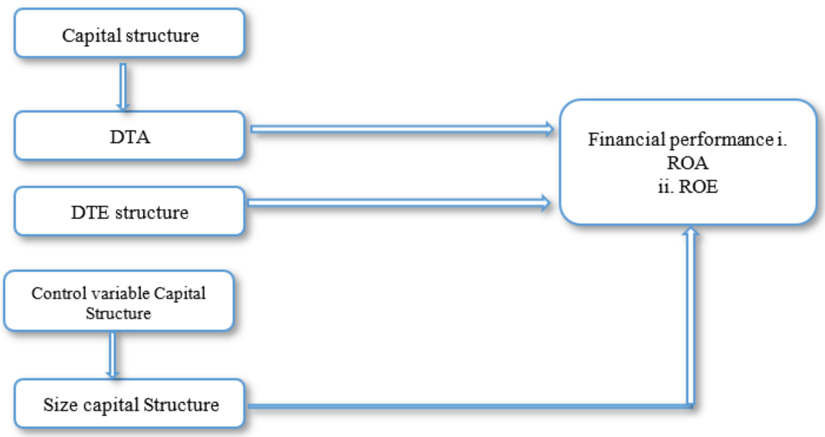
This controversial dialog has allowed different researchers to explain the attributes of various variables with respect to company and country profiles. It is a universal truth that every company and country have their own characteristics and environment, law and order, corporate laws, institutional frameworks, targets, international relations, economic situation, investors trust, and so on. Former researchers have pointed out that a company's financial arrangement is not affected by firm-specific variables. At the same time, country-specific environment impacts the financial structure of a company (Booth et al., 2001; Bancel & Mittoo 2004). Despite this, the firm particular dynamics and country-specific factors are equally important, and both influence the firm's financial leverage decisions (De Jong et al., 2008).

Usually businesses use debt for tax shield purposes. This way, a firm's value can be enhanced due to debt financing (Jensen, 1986). (Hadlock & James, 2002) also reported the same findings. On the other hand, some researchers have pointed out an adverse relationship between debt and the financial performance of a firm (Fama & French, 2002; Simerly & Li, 2000), while (Zeitun & Tian, 2007) supported the argument that financial performance depends upon a balanced capital structure.

Methodology

A study database was designed through the use of the standardized financial statements of the company. Data were collected from the company's annual reports. PIA was taken as a case to find the debt and equity impact over the period from 2004 to 2020. The first step was to download the financial reports from the given website (https://www.piac.com.pk/corporate/). The second step was to arrange and organize the data in an Excel sheet. The third step was to calculate necessary ratios for dependent and explanatory variables. The fourth step was to export organized information to SPSS software for further analysis.

Theoretical Framework:



Grafic 1. Research Study Model
Source: Researchers' developed 2023

Hypotheses of the Study

H1: It is predicted that DTA and firm performance have negative relation.

H2: The DTE has a positive relationship with business performance.
H3: The size of the firm and business performance have positive relationship.

Variables Construction and Concepts

Business performance of airline is measured by ROA and ROE ratio. The explanatory variables are measured through DTE and DTA, while the size of the company is measured through total assets of the company.

Dependent Variables

Financial performance is reflected to be a key indicator of corporate achievement. Investors and management are greatly concerned with firms' performance. Investors motivate and make investment decisions through the consideration of the financial soundness of the company. Meanwhile, management performance is checked through business achievement and financial performance of the company. Many dimensions of a firm linked with the firm's performance. Two quantitative financial parameters are taken as the dependent variables ROA and ROE.

Return on Assets

ROA or investment measures the efficiency and utilization of total assets and is considered to be a key performance indicator. It measures the cash inflows generated by the total assets of a firm.

Return on Assets = Net Profit / Total Assets

Return on Equity

ROE is also a good performance indicator. It measures the return on stockholders' equity. A high ROE increases the trust of stockholders and increases the likelihood of success if an issue regarding raising capital occurs in the future. It also portrays the good image of company in the market. A good market image ultimately increases the market price per share.

Return on Equity = Net Income / Shareholders' Equity

Independent Variables

Debt and equity decision becomes indispensable for companies. The current study utilized three independent variables in the form of DTA ratio, DTE ratio, and the total assets of the firm.

Debt to Assets

DTA measures how many assets are financed through debt of a company. Alternatively, it denotes the percentage of debt in assets. A high ratio indicates risk and reduces the net profit of the firm.
Debt to Assets = Total Debt / Total Assets

Debt to Equity

DTE is another explanatory variable which is utilized for measuring a company's financial leverage. Such ratio indicates the use of debt in comparison with equity when company makes investment.
Debt to Equity = Total Liabilities / Total equity

Size of the Firm

Total investment of the firm is measured through the total assets of the company. This study has taken the natural log of the total assets and regressed to firm performance.
Size = LNTA (Natural logarithm of total assets)

Data Examination

The trends of data are examined through descriptive analysis. Meanwhile, correlation and multiple regression are utilized for investigating the impact of debt and equity on business performance. More precisely, the relationship of debt to asset is considered with respect to a firm's performance. DTE is regressed to ROA and ROE to find the relationships and identify how much change occurs in the dependent variable when one-percent change occurs in independent variables. How debt and equity affect the firm's performance is also considered. Data analysis also checks the association, direction, and strengths of associations between independent and dependent variables. The following models are constructed based on in-depth review of the literature:

$$Yit = \alpha + \beta_{1it}\ DTA + \beta_{2it}\ DTE + \beta_{3it}\ Size + \varepsilon \qquad (1)$$

Where,

Yit is the return on assets,
A is the coefficient of intercept,
DTA is the debt to asset,
DTE is the debt to equity,
Size is the natural log of the total assets,
E (ε) is the error term.

$$Yit = \alpha + \beta_{1it}\, DA + \beta_{2it}\, DE + \beta_{3it}\, Size + \varepsilon \qquad (2)$$

Where,

Yit is the return on equity,
A is the coefficient of intercept,

DTA is the debt to asset,
DTE is the debt to equity,
Size is the natural log of the total assets,
E (ε) is the error term.

Table I.
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. deviation
ROA	17	-8.9037	40.0209	2.7995	11.2677815
ROE	17	-23.1751	73.1792	4.2010	20.0532246
DTA	17	22.7604	61.5809	3.5247	9.2527943
DTE	17	29.4673	160.2873	5.8464	30.6756934
Size	17	20.4867	21.6413	2.1113	.3530912

Source: Researchers' calculated 2022

Table II.
Correlations

		ROA	DTA	DTE	Size
ROA	Pearson correlation	1			
	Sig. (2-tailed)				
DTA	Pearson correlation	$-.604^{*}$	1		
	Sig. (2-tailed)	.010			
DTE	Pearson correlation	$-.723^{**}$	$.977^{**}$	1	
	Sig. (2-tailed)	.001	.000		
Size	Pearson correlation	$-.605^{*}$	.276	.327	1
	Sig. (2-tailed)	.010	.283	.200	

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
Source: Researchers' calculated 2022

The above explains the relationship, direction, and association strengths between the variables. Almost all the variables have significant relationship with each other. However, DTE is highly correlated with DTA and ROA. This indicates that there is a problem of multicollinearity resulting in spurious results.

Consequently, the study removed the DTE variable from the model and tested the correlation again. After removal of the DTE variable, the correlation between the variables comes within the normal range.

Table III.
Correlations

		ROA	DTA	DTE	Size
ROA	Pearson correlation	1			
	Sig. (2-tailed)				
DTA	Pearson correlation	$-.559^{*}$	1		
	Sig. (2-tailed)	.020			
Size	Pearson correlation	-.401	.220	-.267	1
	Sig. (2-tailed)	.111	.396	.300	

Correlation is significant at the 0.05 level (2-tailed).
Source: Researchers' calculated 2022

Analysis and Results of Model 1.

To draw a conclusion, the following tests results and statistics are presented below:

Table IV.
Model Summaryb

R	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
.644[a]	.414	.279	8.83827	1.949

a. Predictors: (Constant), DTA, size. b. Dependent variable: ROA.
b. Source: Researchers' calculated 2022

Table V.
ANOVAb

Model 1	Sum of squares	df	Mean square	F	Sig.
Regression	718.550	3	239.517	3.066	.066[a]
Residual	1015.494	13	78.115		
Total	1734.044	16			

a. Predictors: (Constant), size, DTA. b. Dependent variable: ROAs.
Source: Researchers' calculated 2022

Overall regression model goodness-of-fit is observed, and the results were shown to be unbiased, and the sample is normally distributed.

Table VI.
Coefficients

Model 1	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
(Constant)	182.232	166.518		1.094	.294
DTA	-.041	.019	-.470	-2.133	.053
Size	-10.261	8.947	-.256	-1.147	.272

a. Dependent variable: ROA.
Source: Researchers' calculated 2022

The results of table explain that DTA has a significant negative relationship with ROA. It indicates that DTA has a negative impact on ROA. The results demonstrate that the increase in DTA leads to a reduction in ROA of the company and vice versa. On the other hand, firm's size has no significant association with the dependent variable. The results show that only DTA is a predictor of ROA.

Research Model 2 Results

Table VII.
Correlations

		ROE	DTA	DTE	Size
RTE	Pearson correlation	1			
	Sig. (2-tailed)				
DTA	Pearson correlation	.078	1		
	Sig. (2-tailed)	.767			
DTE	Pearson correlation	-.951**	-.211	1	
	Sig. (2-tailed)	.000	.415		
Size	Pearson correlation	.096	.220	-.267	1
	Sig. (2-tailed)	.713	.396	.300	

**Correlation is significant at the 0.01 level (2-tailed).
Source: Researchers' calculated 2022

The study found the same multicollinearity problem with debt to equity in the second model. To avoid the misleading statistical evidence the study removed DTE from the model and then performed correlation analysis given below.

Table VIII.
Correlations

		ROE	DTA	Size
ROE	Pearson correlation	1		
	Sig. (2-tailed)			
DTA	Pearson correlation	.078	1	
	Sig. (2-tailed)	.767		
Size	Pearson correlation	.096	.220	1
	Sig. (2-tailed)	.713	.396	

Source: Researchers' calculated 2022

Table IX.
Model Summaryb

Model 2	R	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
	.970[a]	.942	.928	17.28118	2.413

a. Predictors: (Constant), size, and DTA. b. Dependent variable: ROE
Source: Researchers' calculated 2022

Table X.
ANOVA[b]

Model 2	Sum of squares	df	Mean square	F	Sig.
Regression	62565.277	3	20855.092	69.834	.000[a]
Residual	3882.309	13	298.639		
Total	66447.586	16			

Table XI.
Coefficients

Model 2	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
(Constant)	719.064	325.588		2.209	.046
DTA	-.056	.038	-.103	-1.485	.161
Size	37.507	17.494	.151	2.144	.052

a. Dependent variable: ROE.
Source: Researchers' calculated 2022

The above results demonstrate that DTA has no association with the dependent variable. Size also has a positive impact on firm performance. Results show that size is a predictor of ROE.

Conclusions

In order to reach sound conclusions, the current study developed two econometric models in order to analyze debt and equity decisions with respect to company's financial performance. The financial management of the airline industry is not an easy task. It is a capital-intensive industry, and its financial decisions have critical importance, especially with regard to the use of debt and equity decisions. Higher levels of debt make a firm riskier and vice versa. The advantages and disadvantages of debt and equity must be taken into account when making appropriate capital structure decisions.

PIA uses more debt in comparison with equity, even though the interest rates are high in Pakistan. The results of the first model found that only DTA plays a significant role in terms of financial performance, whereas size does not have a substantial effect with respect to capital structure. DTA was found to have negative relationship with ROA, but PIA is using more debt. This is the reason that company is going into loss. Having financial distress is why a company uses debt to operate. In fact, when company takes more debt, it can give greater returns to creditors in the form of interest expenses. The second model investigated the possibility that size plays a significant role in firm's performance. The company has sufficient total assets and can utilize them in a productive way. Efficient and effective use of total assets creates value addition to the firm, and such value addition is needed by PIA. It is essential to make the assets productive and reduce the use of nonproductive assets. In fact, nonproductive assets have a liability over the company to pay insurance, maintenance expenses, etc. There is no doubt that the airline company is extremely capital intensive and is often considered to have a high debt-to-equity ratio. Therefore, substantial amounts of capital are required to buy planes, heavy tools to support them, major fuel charges which depend upon market price, air hangars, flight simulators, maintenance to airplanes, flyers, trip attendants, luggage handlers, and catering cost. A major problem of PIA is overstaffing. It has just 28 airplanes with very low number of destinations, just 45. Approximately 10500 employees are working in PIAC which is too much as compared to its fleet. Employees-to-fleet ratio 375/aircraft which is very high. It shows worst staff-to-plane ratio in the airline industry after Syrian airline. It is a weak indicator of airline. It is highly recommended to reduce the number of employees.

PIA is a national flag airline, and company would take serious action to revive the airline. It has a lot of potential, and very huge number of Pakistanis are working abroad. Company would attract them and activate public relation department. It would also work on cost reduction strategies.

Acknowledgement: This work was funded by the Deanship of Scientific Research, King Abdulaziz University, Jeddah, Under Grant No. G: 300-849-1441. We are grateful to the Deanship of Scientific Research, King Abdulaziz University, Jeddah for their funding this project.

Bibliographic references

Aman, Q., & Altass, S. (2019) Impact of Capital Structure on Business Performance: A case of Emirates Airlin, Amazonia Investiga, 8(21), 62-72. Retrieved from https://amazoniainvestiga.info/index.php/amazonia/article/view/48

Ardalan, K. (2018). Capital structure theory: Reconsidered. Research in International Business and Finance, 39, pp. 696–710

Asgharian, H. (2003) Are highly leveraged firms more sensitive to an economic downturn? The European Journal of Finance, 9(3), 219-241, DOI: 10.1080/13518470210132381

Bancel, F., & Mittoo, U. (2004). Cross-country Determinants of Capital Structure Choice: A Survey of European Firms," Financial Management, 33, 103–132.

Booth, L., Aivazian, V., Demirguc-Kunt, A., & Maksimovic, V. (2001). Capital Structure in Developing Countries, Journal of Finance, 56, 87–130.

Butzbach, O., & Sarno, D. (2019). To What Extent Do Regional Effects Influence Firms' Capital Structure? The Case of Southern Italian SMEs. International Journal of Financial Studies, 7(1), 2-20

Campbell, G., & Meeghan, R. (2018). Capital structure volatility in Europe. International Review of Financial Analysis, 55, 128-139

Damodaran, A. (2001). Corporate Finance, Theory and Practice (2nd edition). New York: Wiley.

De Jong, A., Kabir, R., & Nguyen, T. T. (2008). Capital Structure around the World: The Roles of Firm and Country Specific Determinants. Journal of Banking and Finance, 32, 1954-1969.

Fama, E., F., & French, K. R. (2002). Testing Trade-Off and Pecking Order Predictions about Dividends and Debt," Review of Financial Studies, 15, 1-33.

Flannery, M. J., & Rangan, K. P. (2006). Partial Adjustment toward Target Capital Structures. Journal of Financial Economics, 79, 459-506.

Frank, M. Z., & Goya, V. K. (2003). Testing the pecking order theory of capital structure. Journal of Financial Economics, 67, 217–248

Frank, M., Z., & Goyal, V. K. (2007). Trade-Off and Pecking Order Theories of Debt. Handbook of Corporate Finance: Empirical Corporate Finance, 2, 1-82

Frank, M., Z., & Goyal, V. K. (2009). Capital Structure Decisions: Which Factors are Reliably Important? Financial Management, 38, 1–37.

Gaud, P., Jani, E., Hoesli, M., & Bender, A. (2005). The Capital Structure of Swiss Companies: An Empirical Analysis Using Dynamic Panel Data. European Financial Management, 11, 51–69.

Ghosh, C., Nag, R., & Sirmans, C. (2000). The pricing of seasoned equity offerings: evidence from REITs. Real Estate Economics, 28, 363-384.

Gonzalez, V., & Gonzalez, F. (2008). Influence of Bank Concentration and Institutions on Capital Structure: New International Evidence. Journal of Corporate Finance, 14, 363–375.

Hadlock C., J., & James, C. M. (2002). Do Banks Provide Financial Slack? The Journal Finance, 57(3), 1383-1419. https://doi.org/10.1111/1540-6261.00464

Jalilvand, A., & Harris, R. S. (1984). Corporate Behavior in Adjusting to Capital Structure and Dividend Targets: An Econometric

Study. The Journal of Finance, 39(1), 127-145.
Jensen, M. (1986). Agency Cost of Free Cash Flow, Corporate Finance and Takeovers. American Economic Review, 76, 323-329.
Mallinguh, E, Wasike, C, & Zoltan, Z. (2020). The Business Sector, Firm Age, and Performance: The Mediating Role of Foreign Ownership and Financial Leverage, International Journal of Financial Studies, 8(4), 79-94
Margaritis, D., & Psillaki, M. (2007). Capital structure and firm efficiency. Journal of Business Finance & Accounting, 34(9-10), 1447–1469. https://doi.org/10.1111/j.1468-5957.2007.02056.x
Miguel, A., & Pindado, J. (2001). Determinants of Capital Structure: New Evidence from Spanish Panel Data. Journal of Corporate Finance, 7, 77–99.
Modigliani, F., & Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. American Economic Review, 48, 261-97.
Musiienko, O., Kapustnyk, V., Arbeláez-Encarnación, T. F., Rojas-Bahamón, M. J., & Arbeláez-Campillo, D. F. (2022). The global economic crisis against the background of the war in Ukraine: Currant realities and prospects for overcoming. Amazonia Investiga, 11(59), 141-150. https://doi.org/10.34069/AI/2022.59.11.13
Myers, S., & Majluf, N. (1984). Corporate Financing and Investment Decisions when Firms Have Information that Investors do not Have. Journal of Financial Economics, 13, 187–221.
Nenu, E.A., Vintilă, G., & Gherghina, Ş. C. (2018). The Impact of Capital Structure on Risk and Firm Performance: Empirical Evidence for the Bucharest Stock Exchange Listed Companies. International Journal Financial Studies, 6(2), https://doi.org/10.3390/ijfs6020041
Pakistan International Airlines (2021) Website. https://www.piac.com.pk. (Retrieved on 5th April, 2021)
Riahi-Belkaoui, A. (1999). Value Added Reporting and Research. Westport, CT, Greenwood.
Shah, S. (2016) After Syrian Air, PIA has second worst employee-to-aircraft ratio. The News International. https://www.thenews.com.pk/print/96203-After-Syrian-Air-PIA-has-second-worst-employee-to-aircraft-ratio (retrieved on 21-12-2021)
Simerly, R., L., & Li. M. (2000). Environmental dynamism, capital structure and performance: a theoretical integration and an empirical test. Strategic Management Journal, 21 (1), 31-49.
Warokka, A., Jose, J., & Abdullah, H. H. (2011). East Asian Corporate Governance: A test of the relationship between capital structure and firm performance. International Journal of Economics and Finance Studies, 3(2), 1-10.
Zeitun, R, & Tian, G. G. (2007). Capital structure and corporate performance: evidence from Jordan. Australasian Accounting Business and Finance Journal, 1(4/3), 40-61.

Appendices A
Important Facts about PIAC

Established	October 29, 1946
Age	75 years
Subsidiaries	1. Roosevelt Hotel 2. Hotel The Scribe (Paris) 3. Skyrooms (Pvt) Limited 4. PIA Investment Limited
Fleet size	28
Destinations	56
Parent company	Aviation division, GoP
Revenue	$590 million
Operating income	$-4.2 million
Net income	$-220 million
No. of employees	10500 (10 April 2021)
Website	https://www.piac.com.pk/corporate/

Source: Pakistan International Airlines (2021)

S. no.	Airline company	No. of employees	Fleet	Employees-to-fleet ratio
1	Garuda Indonesia	7,861	140	1:56.15
2	Turkish Airlines	18,882	298	1:63.36
3	Egypt Air	9000	63	1:141.41
4	Etihad Airlines	17712	119	1:148.84
5	Saudi Arabian Airlines	24842	163	1:152.40
6	Qatar Airways	31,000	173	1:179.19
7	Malaysian Airlines	14,000	77	1:181.82
8	Emirates Airlines	59,519	255	1:233.40
9	Thai Airways	25,323	82	1: 308.82
10	PIA	10,500	28	1:375
11	Syrian Arab Airlines	4,000	10	1:400

Appendices B
Employees-to-Fleet Ratio of Some Airlines

Source: Shah (2016)

DOI: https://doi.org/10.34069/AI/2023.63.03.2
How to Cite:
Cherkashyna, T., Bieliavska, M., Satanovska, H., Pesotska, D., & Kushchenk, Z. (2023). Originality of chronotope palette of Amelie Nothomb works. *Amazonia Investiga*, *12*(63), 21-30. https://doi.org/10.34069/AI/2023.63.03.2

Originality of chronotope palette of Amelie Nothomb works

Своєрідність жанрового коду творів Амелі Нотомб (ukr)

Received: February 13, 2023 Accepted: April 1, 2023

Written by:
Tetiana Cherkashyna[1]
Web of Science Researcher ID: ADE-9105-2022
https://orcid.org/0000-0002-6546-4565
Mariia Bieliavska[2]
https://orcid.org/0009-0005-4551-3752
Web of Science Researcher ID: HTR-3104-2023
Hanna Satanovska[3]
https://orcid.org/0000-0002-1299-2161
Web of Science Researcher ID: HWQ-4800-2023
Diana Pesotska[4]
https://orcid.org/0000-0002-6544-3713
Web of Science Researcher ID: ABL-9655-2022
Zhanna Kushchenk[5]
https://orcid.org/0000-0001-8439-1798
Web of Science Researcher ID: HTR-6080-2023

Abstract

The article is dedicated to studying the chronotypical models and their impact upon poetical features of novels by French-speaking female writer Amelie Nothomb. Such novels by Nothomb as "Hygiene and the Assassin", "The Stranger Next Door", "Attempt", "Fear and Trembling", "The Character of Rain" and "Cosmetics of the Enemy". Attention is paid to inter-genre and enter-gender synthesis of Nothomb novels which significantly influences the specifics of building up the chronotypical models of the novels being analyzed. Studying peculiarity of genre form of A.Nothomb novels revealed polygenre synthesis which is inherent for them which is based upon diffusion of epic and dramatic kinds of great and small epic genres. Distinctive feature of novel works by this female writer is determined by complex stratification of chronotype layers, comprising chronotype models of enclosed spaces, idyll

Анотація

Статтю присвячено дослідженню хронотопних моделей і їх впливу на поетикальні властивості романів відомої бельгійської франкомовної письменниці Амелі Нотомб. У статті аналізуються романи Нотомб 'Гігієна вбивці', 'Катилінарії', 'Замах', 'Страх та тремтіння', 'Метафізика труб' та 'Косметика ворога'. Звертається увага на міжжанровий та міжродовий синтез романів Нотомб, що значною мірою впливає на специфіку конструювання хронотопних моделей аналізованих романів. Дослідження своєрідності жанрової форми творів А. Нотомб виявив здійснюваний у них поліжанровий синтез, що ґрунтується на дифузії епічного та драматичного родів великих та малих епічних жанрів. Особливість романних творів письменниці зумовлюється складним нашаруванням хронотопних пластів, серед

[1] Doctor of Science, Full Professor of the Romance and German Philology Department of the School of Foreign Languages of V. N. Karazin Kharkiv National University (Ukraine).
[2] Ph.D., Assistant Professor of the Romance and German Philology Department of the School of Foreign Languages of V. N. Karazin Kharkiv National University (Ukraine)
[3] Ph.D., Assistant Professor of the Romance and German Philology Department of the School of Foreign Languages of V. N. Karazin Kharkiv National University (Ukraine).
[4] Ph.D., Assistant Professor of the Romance and German Philology Department of the School of Foreign Languages of V. N. Karazin Kharkiv National University (Ukraine).
[5] Senior lecturer of the Cross-Cultural Communication and Foreign Languages Department National Technic University «Kharkiv Polytechnic Institute» (Ukraine).

chronotype, chronotype of raving, chronotype of art, chronotype of childhood, chronotype of love. Analysis of time-space models testifies about inclination of the writer to realistic, recognizable space with involvement of effective toponyms from historic and social-cultural contexts as different from time and space ambiguity which is inherent for postmodern text. Enclosed spaces are typical for Nothomb novels (building, house, room). Time in the novels has distinctive features of biographic, calendar, day time and historic time. Events take place in logical time sequence, creating linear process, ascending gradation of events is frequent to enhance psychological tension.

Keywords: Amelie Nothomb, chronotype, chonotype model, genre code, time, space.

яких хронотопні моделі замкнених просторів, ідилічний хронотоп, хронотоп марень, хронотоп мистецтва, хронотоп дитинства, хронотоп кохання. Аналіз часо-просторових моделей свідчить про тяжіння письменниці до реалістичного, впізнаваного простору із залученням дійсних топонімів історичного та соціокультурного контекстів, на відміну від властивій постмодерністському тексту часо-просторовій невизначеності. Типовими для романів Нотомб є закриті простори (будівля, будинок, кімната). Час у романах має чіткі ознаки біографічного, календарного, добового та історичного. Події вибудовуються у логічній часовій послідовності, утворюючи лінеарний процес, частою є висхідна градація подій для посилення психолонічної напруги.

Ключові слова: Амелі Нотомб, хронотоп, хронотопна модель, жанровий код, час, простір.

Introduction

Historic and literature process on the boundary of XX–XXI centuries is in dynamic development. It is manifested in works by writers on idea, stylistic, plot, narration levels as well as on the level of gender and genre form which ceases to be a constant value more and more frequently but gains properties of product of writer's inventiveness and creative idea where content is the master of form, and esthetic value, in its turn, is the master of content. Writing is no longer perceived as inheriting canons and formulas, but as means to search for truth, attempt of interaction between author and reader, attempt to recreate reality in its sensual aspect.

Works by Amelie Nothomb, full of grotesque, ironic comparisons and deep psychologism, honed in esthetic traditions of minimalism, provoke explosive and contradictory discussion both among scientists and among cultural figures and readers. In the opinion of some people works by this writer abound with manifestations of extreme egoism and egocentrism as the leading motive of the plot, as well as with cynicism and miserabilism, and in the opinion of others, the guarantee of her works' success is their sincerity, as if "nakedness" of plot twists that turns the genre of the novel into a confession of certain sort or repentance.

Creative work by Nothomb was object of study for Laureline Amanieux (Amanieux, 2005), Susan Bainbridge and Janette den Toonder (Bainbrigge & Toonder, 2003), M. D. Lee (Lee, 2010), our previous studies (Bieliavska, 2018; Cherkashyna, 2022a; Cherkashyna, 2022b). Most available scientific investigations about autobiographic creative work by Nothomb mostly refer to studying the most famous autobiographical novel by the writer 'Stupeur et tremblements' (Nothomb, 1999) and research of issues Me/Other, 'own'/'alien', trace correlation of eastern (Japanese) and western in life and autobiographic creative work work of the writer (Lou, 2011; Koma, 2009; Szczur, 2017). However, genre distinctiveness of her works provokes numerous literary discussions even today and requires more thorough reading.

The task of our study is to observe and analyze the functioning of chronotopic models, their combinations in the works of the writer, and thus track the formation of genre forms.

Theoretical Framework

In our study we reply on theory of genres developed by Ukrainian researcher Nonna Kopystianska (2005). Specifics of determining genre code of Nothomb's works also requires appealing to the theory of chronotope. When studying it we drawn on works by Mykhailo Bakhtin (Bakhtin, 1975), Mircha Eliade (Eliade, 2001), Nonna Kopystianska (Kopystianska, 2012), Svitlana Kryvoruchko, etc. (Kryvoruchko et al., 2022).

Bakhtin (1975) puts forward a point that in literary text chronotope becomes factor that determines movement of the plot, thus its genre-creative and content-creative function emerges. In the opinion of the researcher, consideration of artistic time and space must take place in the context of physical chronotope, i.e., to have certain reference system – therefore, various types of chronotopes are formed (chronotope of protagonist, chronotope of the plot, chronotope of reader, etc.) within the boundaries of certain literary work. In his studies of genre-creating function of the chronotope Bakhtin turns to antiquity, noting it was in that epoch that three types were formed of "novel uniformity, … three corresponding means of creative mastering of space and time in the novel … three chronotopes" (Bakhtin, 1975, p. 236). A determinant of novel types of classification that was suggested by the scientist is the corresponding form of time: the first type of novel is caused by availability of "adventurous time", the second – "adventurous-household time", the third – "biographic" or "autobiographic" time. Based on theory about interference of time and space layers in artistic work, Bakhtin suggests different chronotype kinds: "chronotype of threshold", "chronotype of castle", "chronotype of city", "chronotype of way", etc. In Bakhtin's opinion, chronotypes always remain in complex relations and cannot exist separately – they intertwine, replace each other, can be matched, or be opposed. Bakhtin emphasizes genre-creative function of time: "Chronotope in literature has significant genre meaning … genre and kinds of genres are determined by chronotype as such, whereas in literature the leading feature in the chronotype is time" (Bakhtin, 1975, p. 234).

Romanian researcher of mythology and mythopoetic Eliade (2001) underlines mythopoetic aspect of spatial images of home and way, emphasizing that the way symbolizes the "way of life", and movement along it is movement to the center of Creation. Apart from considering spatial characteristics of mythopoetic consciousness, Eliade also considers its temporal properties – in his opinion, Time, like Space, is also not uniform: there is Sacred Time and Mundane Time. The main feature of Sacred Time is its reversibility, it can be reiterated without being subject to changes, it also has no flow or duration. An example of Sacred Time manifestation are festivities – it is during festivities that a person is living through certain beginning anew, through a period when the Universe was born. "Festivities restore sacred meaning of existence, each time they teach how Gods or mythical predecessors created man and taught man various socially significant deeds or actions" (Eliade, 2001, p. 60). Unlike Sacred Time, Mundane Time is not reversible, it has duration and the beginning and the end which are clearly set.

Kopystianska is the developer of genre theory and theory of chronotope. In her studies she builds up clear system of subdivision of works into genres, genre types and genre modifications (Kopystianska, 2005). Her typology of space-time in literary work is productive and can be made of several interrelated components, such as: closed and open time-space (external and internal), personal, family, public time-space, and others (Kopystianska, 2012).

Important for our study is theory of time in memoir work, represented by Kryvoruchko, Ilona Kostikova, Olena Gulich and Iryna Rudnieva (Kryvoruchko et al., 2022), as part of Nothomb's novels have distinctively explicit memoir time.

Methodology

Our study is built up upon basics of hermeneutics with elements of structural texts analysis and psychoanalysis.

Results and Discussion

In Nothomb's works distinct process of genus-genre synthesis is traced. It is based on diffusion of epic and dramatic kinds as well as fusion of features of small epic genres of novel and tale within the boundaries of novel form, enriching it and giving it more artistic capabilities.

The first novel by the writer "Hygiene and the Assassin" (Nothomb, 1992), written in 1992 after Nothomb had returned from Japan. "Hygiene and the Assassin" is a history of life and death of mysterious and scandalous person who is writer-assassin named Pretextat Tax. Novelity of this work is determined by layering of several chronotype layers. Relying on theory of chronotope by Bakhtin (Bakhtin, 1975), two time-spacial models are singled out in the novel. They are given in sensual and emotional opposition: it is life of writer after assassination of his beloved one, his artistic work, illness, old age and in the outcome of the plot it is his death and the period of childhood and adolescence of Takh full of love and happiness. Both models embody realistic, recognizable time-space: we find toponymical names of area where the main hero was born and where he spent his childhood – estate Saint Sulpice (France, commune La Sauvta-sur-Led) (Nothomb, 1992, p. 129), year when the hero was born – 1908. (Nothomb, 1992,

p. 128), recollections of two World Wars (Nothomb, 1992, p. 131), as well as events in the Persian Gulf (January 1991) (Nothomb, 1992, p. 35) and students revolution in France (1968) (Nothomb, 1992, p. 112). By comparing year when the main hero was born (1908) and his age at the moment when actions in the novel take place (83 years), we receive exact date of events taking place in the novel – 14 – 18th January 1991.

The first chronotope model of life of Takh-assasin is riddled with psychological pressure, feeling of disgust and indulgence, whereas another model is given properties of idyllic chronotope. In their turn, both models are woven from interaction of smaller chronotopes. Thus, reporters, after having heard that death of the great writer is very close, come to him one after another to his dwelling. Takh accepts them in the living room which makes horrible impression. Dark living room is a manifestation of inner loneliness of the character as well as a challenge to society of some sort which strives to comfort and perfection. Ugliness of dwelling and Takh himself become as if contagious: 'Après avoir commandé un triple porto flip, il trouva la force de leur raconter sa mésaventure. A cause de la peur, il exhalait une odeur épouvantable, qui avait dû être celle de Jonas émergeant de son séjour cétacé. <...> - Le ventre de la baleine ! Je vous assure, tout y était ! L'obscurité, la laideur, la peur, la claustrophobie...' (Nothomb, 1992, p. 27).

Time in the chronotope of the living room has usual day properties, it flows monotonously and routinely and the repeated nature of events indicates it: 'Chaque jour, une infirmière très courageuse passait vers 17 heures pour le laver. <...> Son secrétaire, Ernest Gravelin, vivait quatre étages plus haut mais évitait autant que possible de le voir ; il lui téléphonait régulièrement <...> : ne donnait-il pas, chaque année, la moitié de ses revenus à un organisme de charité' (Nothomb, 1992, p. 10). Even Takh himself states that he does not feel impact of time: 'De mes vingt-trois ans à mes cinquante-neuf ans, les jours se sont tellement ressemblés. J'ai de ces trente-six années un long souvenir homogène et quasi dénué de chronologie : je me levais pour écrire, je me couchais quand j'avais fini d'écrire' (Nothomb, 1992, p. 14). Monotonous nature of the writer's existence transfers a range of feeling to the reader where loneliness and disappointment in life and loss of its meaning is the first fiddle.

At the same time in retrospective narrative of childhood and adolescence of the writer an idyllic chronotope can be traced where in the lap of nature a boy and a girl, free from society and any obligations, savour each minute of existence, trying to stay in the "Eden" of childhood. Idyll of love is pictured in the background of beauty and magnificence of Saint-Sulpice estate. Despite the fact that children never left its territory, staying in the enclosed space, the childhood period of Takh and his cousing is pictured in the associative image of freedom that opposes loneliness of further years spent by the writer: 'Vous avez eu une enfance bien trop belle. Vous aviez tout ce que l'on peut rêver, et plus encore : un château, un vaste domaine avec des lacs et des forêts, des chevaux, une formidable aisance matérielle, une famille adoptive qui vous choyait, un précepteur peu autoritaire et souvent malade, des domestiques aimants, et surtout vous aviez Léopoldine' (Nothomb, 1992, p. 131).

Time in children "Eden" slows down, every instance gains emotional coloring which is different from the one that fills Takh's living room for sixty-six years. Here everything around is full of sensuality, madness from love, perpetuity of feelings and infinity of unity with nature. Slowing of time flow as attribute of happy childhood is perceived as author's narrative: 'Les années s'écoulent à peine. L'enfance est une aventure si peu rapide. Qu'est-ce qu'un an pour un adulte ? Pour un gosse, un an est un siècle, et pour vous ces siècles étaient d'or et d'argent' (Nothomb, 1992, p. 131). <...>Nous n'avions plus changé d'un atome, nous nous étions seulement et prodigieusement allongés, sans que cette amusante étiration ait modifié notre complexion informe, imberbe, inodore, infantile' (Nothomb, 1992, p. 174).

Nothomb confers an interesting trait to the character of her novel when he changes in his self-perception and gains features of a young man, returning to his childhood and adolescence in his memories. Thus, in the climax of the novel Takh lives through state of catharsis, where layering of inner chronotypes of Takh-youngster and Takh-elder are traced, the synthesis whereof creates chronotope of raving.

On the level of motives in this work the chronotype of art, in particular writing, is singled out as well as the chronotype of love. They permeate the entire plot of the novel. It is complexity of the chronotype structure of this work that preconditions its novel depth in its perception by the reader. Time-space characteristics of the work clearly and consistently reflect reality, and their contradiction gives deep philosophical and psychoanalytic meaning to childhood on level of ideas, equating it with the meaning of human life. Work "The Stranger Next Door" (Nothomb, 1995) was written in 1995 and awarded with literature prize 'Le *Prix Paris-Première*', as well as 'Prix du jury Jean Giono'. This is a story that occurred with elderly married couple who had just moved into a new house far away from city fuss to fully enjoy quiet of the old age and time together. However, tranquility of the couple is disturbed by bizarre neighbors.

The novel chronotope of this work is also formed by complex system of chronotope models. Time in the novel is historically recognizable, it is indicated by birth dates of the couple and their age: 1929 – the year when the main character was born (Nothomb, 1995, p. 71), his age at the moment when the event takes place is sixty five years (Nothomb, 1995, p. 11), thus the time of event is January 1994, also there are recollections about World War II in the text (Nothomb, 1995, p. 71), at the end of which the character turned fifteen. Toponymic features in this work is the location of the new house of the couple – near village Mauves (Mauves, small village in the south-east of France) (Nothomb, 1995, p. 14).

The idea of opposition between protagonist and antagonist is based upon antithesis of chronotype of the two houses. The first model is the house of Emile and Juliette – an idyllic house engulfed in love, quiet, satisfaction from life. It is exactly the house attributed with sacred meaning by the characters: 'Il y a des maisons qui donnent des ordres. Elles sont plus impérieuses que le destin: au premier regard, on est vaincu. On devra habiter là... Nous avons vu cette maison et aussitôt nous avons su que ce serait la maison.' (Nothomb, 1995, p. 11). It becomes embodiment of childhood dreams, thus it is certainly related to the chronotope of happy childhood. Idyllic nature of the house chronotope is enhanced by its location – only nature is around it, forest, river and wisteria completely encircling the house. It is also a symbol of freedom, opposite to city fuss, a place where time slow down and gains sensuality: 'J'attendais la retraite comme le mystique attend la mort. Ma comparaison n'est pas gratuite. ... nous voulions quitter cette perte de temps qu'est le monde. Citadins depuis notre naissance, nous désirions vivre à la campagne, moins par amour de la nature que par besoin de solitude. Un besoin forcené qui s'apparente à la faim, à la soif et au dégôut' (Nothomb, 1995, p. 11). Time here combines features of calendar and day time, but, in particular, also biographic time as it is projected upon happy childhood which seems to continue in this house. It slows down in perception due to detailing of extraneous elements, such as cracking of fire in the fireplace, hypnotic breathing of Juliette in her sleep, etc.

The chronotope of house seems to continue infinite childhood, thus opening its emotional-sensual filling. It is here that the image of love is created, love that exists beyond time boudnaries, beyond mundane world as the highest value that unite Emile and Juliette: 'Le jour de la rentrée, nous nous sommes vus et nous nous sommes aimés. Nous ne nous sommes jamais quittés. Juliette a toujours été ma femme ; elle a quasi toujours été ma soeur et ma fille...' (Nothomb, 1995, p. 11). Effect of "eternal" childhood is enhanced by time shifts of the image of six-year old Juliette into the time when events of novel take place: 'Saisissement : elle n'avait pas changé d'un pouce, non pas depuis notre mariage, mais depuis notre première rencontre. Elle avait peu grandi –très peu –, ses cheveux avaient blanchi, tout le reste, c'est à dire tout,était pareil à un point hallucinant. ... je n'avais d'yeux que pour la fillette de six ans avec laquelle je vivais depuis près de soixante ans. ... Le temps n'existe pas. Je n'avais jamais été aussi heureux de ma vie' (Nothomb, 1995, p. 14).

Idyllic chronotope is opposed by infernal one which reigns in the consciousness of antagonist, bizarre neighbor as well as everywhere around him. And if the house of Emile and Juliette is a celebration of life, delight from its every second, love and cleanliness, the house of Palamed is like a waiting hall for death, denial of any manifestations of life. If the chronotope in Emile's house is emotionally colored in the atmosphere of happiness that lasts for entire life, which is its culmination, then we find mentioning about Palamed's existence as about unbearable, monotonous, lonely and without any sense at all: 'J'entrai : le halo de ma lampe éclaira une cuisine. Une odeur fétide me remplit les poumons : je n'osai imaginer ce que les Bernardin avaient mangé. <...> Comment des êtres humains pouvaient-ils vivre là-dedans ?' (Nothomb, 1995, p. 113-114). Intolerance of existence and thirst for swift death is symbolically representaed by huge number of clocks everywhere around the house that tick exactly second-wise precisely one after another (Nothomb, 1995, p. 115).

Neighbor's abuses also have their chronotypical peculiarities: for his tortures he selects time from 16.00 till 18.00, crosses the threshold of the happy house at any cost and drive its owners crazy by his silence. At first the the owners who do not understand it are happy that two hours of moral violence against twenty two hours of happiness is just a trifle, but soon the atmosphere of intolerance from the presence of unwanted guest occupy entire time of heroes, giving them no chance to think about something else. For half a year visit of the neighbor literally drive Emile crazy, creating the chronotope of boundary condition, deep despair, raving and loss of control over himself. Awareness of his own identity by the hero becomes threatened: ‘Pour la première fois de ma vie, je regrettais ma bonne éducation’ (Nothomb, 1995, p. 25), ‘Le lendemain matin, je me réveillai nerveux. Je n’osai pas m’en avouer le motif’ (Nothomb, 1995, p. 28), ‘Cela commençait à ressembler à un cauchemar’ (Nothomb, 1995, p. 29)», ‘Ce type me met hors de moi’ (Nothomb, 1995, p. 33). In the course of the text one can trace escalation of uncontrolled state. If at the beginning of the work he understands his place in life, life principles and values, then at the climax of the work we can see “rebirth” of Emile as the person who is no longer aware about the boundaries of his own “Me” or its nature: ‘Ma blancheur a fondu et personne ne s’en est apperçu. Quand je me suis installé dans la Maison, il y a douze mois, je savais qui j’étais : un nobscur petit professeur de grec et de latin , dont la vie ne laisserait aucune trace, elle aussi. Mais je comprends, maintenant, qu’elle est un mystère. Je ne sais plus rien de moi’ (Nothomb, 1995, p. 151).

Inner chronotype of the character who is in permanent focus of reader’s attention, exposing his inner struggle and experiences during a year, makes novel basis for this work. Enhancing of psychological-emotional tension in this chronotype is created by calendar contemplation of the hero over absurdity of his state and immensity of emptiness in the life of Palamed.

Romanticism of literary work “Attempt” (Nothomb, 1997) is stipulated by the buildup of consistent chronotypical periods (memories of the hero) onto the leading psychological, inner chronotope. Realism of the pictured events is stipulated by presence of time-space age benchmarks (twenty nine years) in the text and the year when the hero was born (1967) (Nothomb, 1997, p. 43), duration of events described – one year (Nothomb, 1997, p. 25), thus, the time of events described – 1996–1997. Narration is done in retrospective from the first person of diegetic narrator. As the place from which the character of the work is telling his tale is an isolated cell in prison where he is kept for murder, the time-space of narration is the chain of his memories. In it we find chronotypical models of childhood, where the wicked syndrome of the hero personality has its roots, love that lead him to “transformation” and chronotope model of art as reflection of sociocultural state of that time, chronotope of ravings that “exposes” psychological crisis of the hero in reader’s perception as well as epistolary that has time-space and emotional features of its own.

Chronotope of Epiphane’s childhood combines his biographic time of hero that makes up period from birth till sixteen years of age and mostly psychological space of his consciousness inside which the hero is trying to find reasons and exaplanation of his fate. From the points of view of emotions childhood is colored by psychological trauma of the child from his own appearance and the fact that due to its everyone turn their back on him, even his own mother. Chronotope models of love and art are taken by the writer to the motive level of the work and make up basis of the plot. Epistolary corresponds to the culmination of the plot and actualizes chronotope most of all, as it has precise time and toponymic markers: “Dated 9.01.97 in the plane (from France to Japan), <...> dated 10.01.97 in the plane, <...> Tokyo-Kanazawa flight, the same day…etc (Nothomb, 1997, p. 117-144).

States of raving which is a specific sign of the writer’s creative work unveil psychological crisis in the hero’s consciousness. Thus, we watch romantic raving of Epiphane when he meets charming Etele whom he considers to be fruit of his own imagination: ‘Je lui parlais sans peur parce qu'elle était la création de mon évanouissement. <...> J'admirai mon oeuvre. Je l'avais faite, j'avais donc tous les droits’ (Nothomb, 1997, p. 16-17). Soon he realizes that she is not his creation and does not belong to him, so nothing magical had happened. In search for answer what is love that mastered him so much, Epiphane plunges into studies of theories of sexuality and emotionality, encyclopaedia and treatises but, without satisfying his interest, he tries to find explanation for his own desires in his childhood. Then, reading the book “Quo Vadis”, he was deeply disappointed by the happy final of this work. He stuck his head under the pillow, closed his eyes and suddenly felt he was that ox who cruelly murdered a Christian virgin of amazing beauty: ‘Lygie nue est accrochée à mon dos. Je sens ses fesses virginales et ses reins archangéliques. <...> J'enfonce mes cornes dans ton ventre lisse : c'est une sensation fabuleuse. <...> Entre-temps, j'ai onze ans, je retire l'oreiller que j'avais écrasé sur mon crâne et je me lève, pantelant de délectation.' (Nothomb, 1997, p. 32-23).

Epiphane's letters to Etele also demonstrate the state of love raving which he recognizes himself: 'Mon état mental, en cette seconde, pourrait être qualifié de bizarre ; il me semble pourtant que, pour la première fois de ma vie, je suis normal' (Nothomb, 1997, p. 139). It is in the world of ravings that Epiphane gains everything that reality deprived him of, creating the effect of parallel existence which is sensually and emotionally colored.

Chronotope of novel "Fear and Trembling" (Nothomb, 1999) has distinct realistic markers. It is created by intersection of private-inner chronotope of Amelie character which prevails in the focus of attention and time-space models of events in the plot. There is no geographic designation in the text of place where "Yumimoto" company is located. However, we find the date when Amelie contract began at the Japanese enterprise – eighth of January 1990 (Nothomb, 1999, p. 7) and the date of the contract completion – seventh of January 1991 (Nothomb, 1999, p. 184). Between these two dates there are numerous designations of calendar and day time: 'It was hardly a month after (Nothomb, 1999, p. 22) <...> that February floweed into March (Nothomb, 1999, p. 31) etc.'.

Multiplicity of time markers testify the fixation of the heroine's consciousness onto the flow of time that opens her emotional coloring. Time-space of the "contract" turns out to be unbearable for Amelie in psychological and emotional perception, culminations of this unbearability are chronotope models of boundary states and ravings. First of all, there is a huge window that Amelie approached each time to "breathe in freedom", is a symbol of transition between two worlds: idyllic, free and unbearable imprisonement:'Il ne me restait plus qu'à coller le front au verre et à me jeter par la fenêtre. Je suis la seule personne au monde à qui est arrivé ce miracle: ce qui m'a sauvé la vie, c'est la défenestration' (Nothomb, 1999, p. 150). The culmination scene of the heroine raving state is the scene in the company's office after three sleepless nights doing work: 'Je marchai jusqu'à la baie vitrée. La ville illuminée était très loin au-dessous de moi. Je dominais le monde. J'étais Dieu. Je défenestrai mon corps pour en être quitte' (Nothomb, 1999, p. 76).

Spacial limitation in the work is localized on the forty fourth floor of the building where the entire career evolution of Amelie takes places from bookkeeping department through the department of dairy products sales to cleaner of men's rooms. Beyond the enclosed space of the company there is free space that open to the heroine through the window: 'Ces pages pourraient donner à croire que je n'avais aucune vie en dehors de Yumimoto. Ce n'est pas exact. J'avais, en dehors de la compagnie, une existence qui était loin d'être vide ou insignifiante' (Nothomb, 1999, p. 148). Contract between two worlds, idyllic and infernal, gains psychological coloring in Amelie's consciousness: 'Quand j'étais à mon poste, aux toilettes du quarante-quatrième étage de Yumimoto, en train de récurer les vestiges des immondices d'un cadre, il m'était impossible de concevoir qu'en dehors de cet immeuble, à onze stations de métro de là, il y avait un endroit où des gens m'aimaient, me respectaient et ne voyaient aucun rapport entre une brosse à chiottes et moi' (Nothomb, 1999, p. 149). Apart from opposition of two worlds the chronotope model of the period after the expiration of contract is singled out, the duration whereof is two years. Here time changes from calendar and daily to historic time with recollection of lar-scale world events as well as biographic events of the writer, and the space emerges as free and undetermined. Recollection of the events of pricate nature among events of worldwide scale in the chronology testifies strong psycho-emotional markedness of the character by the bygone experience. At the level of genre elevation of events of private nature to worldwide level grants epicness to the work with consideration that the main opposition was between representatives of two different civilizations. However, the relevance of events in this work should be noted. As the main heroine is pictured in the up-to-date socio-cultural context, i.e. as a contemporary of the author and reader, the chronotope of this work leans towards novel type.

In the novel "The Character of Rain" (Nothomb, 2000) a writer's attempt can be traced to recreate versatility of world perception by a child. The writer manages to picture the originality of child worldview due to the chronotope strategy of the "boundary". The first time and space antithesis on the boundary of which little Amelie becomes self-aware is divine and mundane space. The plot of novel tells about the birth of a baby by involving the myth about world creation to the narrative manner: 'Au commencement il n'y avait rien. Et ce rien n'était ni vide ni vague: il n'appelait rien d'autre que lui-même' (Nothomb, 2000, p. 5). The parallel between child and God that she further associates herself with creates desacralized mythical space devoid of specific salutary markers. Here it is measured by "existence" of God: 'Dieu ne vivait pas, il existait' (Nothomb, 2000, p. 5), 'Le tube n'avait aucune conscience de la durée. Il atteignit l'âge de deux ans comme il eût atteint celui de deux jours ou de deux siècles' (Nothomb, 2000, p. 16). Mundane world which is opposed to it is the world of common people who surround small girl and whom she tries to understand has realistic time and space properties among which we find the place of the main events of the plot – Kansai, region in the west of Japan (Nothomb, 2000, p. 10), the time of pictured events – 1968-1970 (Nothomb, 2000, p. 10,156), actualizing toponymic and historic markers – daily earthquakes in Kansai (Nothomb, 2000, p. 10), recollection of military actions in the territory of Japan in 1945 (Nothomb, 2000, p. 50-51), events in Vietnam in 1970 (Nothomb, 2000, p. 65), calendar and daily time markers: "this morning", "April in Japan", "the start of May was happy" (Nothomb, 2000, p. 50, 66, 81), etc.

The second antithesis of time and space models on the boundaries of which Amelie becomes self-aware, is the world of grown-ups and the world of children. The child is granted powers to understand the world of grown-ups from birth, but in order to preserve realistic nature when recreating images of the child's world, she, as it true for all babiesm is deprived of the possibility to talk. However, it seems that during her life she has already felt the most critical states of the world of grown-ups: 'Mort! Comme si je ne savais pas! ' (Nothomb, 2000, p. 45). Amelie also "exists" between the Western world, being a Belgian from birth, and the Eastern world where she is brought up by her Japanese babysitter. She understands Japanese from birth as if it was her native language. The girl gives an unconditional preference to her "eastern" existence, beginning to speak Japanese with her babysitter even before she started speaking French with her parents and relatives. Amelie felt she was Japanese, because this country became the first image of beauty for the girl: 'Etre japonaise consistait à vivre au coeur de la beauté et de l'adoration' (Nothomb, 2000, p. 57). Having two governesses, Amelie feels like staying between two poles – between good embodied by Nisio-san, and evil personified by Kasima-san. If Nisio-san, adoring the girl, succumbed to the play of her fantasy in God, Kasima-san was not willing to accept this "religion" and worship the child, thus rooting her image of evil in the eyes of Amelie. But the central chronotope opposition becomes life and death. The girl's birth was accompanied by complications, and as a result she was born with a certain mental disability. Till she was two she stayed in autistic state without showing any interest im life. The only signs of the child's life activity were feeding and defecation: 'Les parents du tube étaient inquiets. Ils convoquèrent des médecins pour qu'ils se penchent sur le cas de ce segment de matière qui ne semblait pas vivre' (Nothomb, 2000, p. 9). However, it was impossible to say that she was dead: 'Votre enfant est un légume. C'est très préoccupant. Les parents furent soulagés par ce qu'ils prirent pour une bonne nouvelle. Un légume, c'était de la vie' (Nothomb, 2000, p. 9). Subsequently, joy from the taste of chocolate take her out of living "non-existence". Still, the boundary conditions between life and death are observed during the entire plot. Thus, Amelie was drowning in the sea, savouring each instance of transition from life to death. Soon she decides to take a look at everything during the night through the open window and falls out of it: 'Je tombai... Mes mollets et mes cuisses étaient allongés sur le léger rebord du toit, mes hanches reposaient sur la gouttière, mon tronc et ma tête pendaient dans le vide' (Nothomb, 2000, p. 77). Then the girl lived through drowning again, this time in the pond, but again savouring existence on the boundary between existence and non-existence: 'Délicieusement sereine, j'observe le ciel à travers la surface de l'étang. <...> Je me sens bien. Je ne me suis jamais sentie aussi bien' (Nothomb, 2000, p. 147). The epilogue of this work also states the "non-existence" that followed separation with Japan: 'Ensuite, il ne s'est plus rien passé' (Nothomb, 2000, p. 156). Therefore, the chronotope of novel is created by overlapping the inner chronotope of the heroine, which in its turn includes mythical time-space and models of "boundary" existence over realistic one, recognizable by time and space markers.

The novel "Cosmetics of the Enemy" (Nothomb, 2001), continuing the novelistic writer's concept, operates complex combination of time-pace models. In this work we find markers of realistic chronotope: recognizable toponyms (scene of action – Paris (Nothomb, 2001, p. 42), the place where hero's wife was raped – Montmartre cemetery (Nothomb, 2001, p. 42), mentioning of the twentieth arrondisement of Paris (Nothomb, 2001, p. 56), the first encounter of the murderer with the victim–1979 (Nothomb, 2001, p. 42), etc. The central chronotope of plot actions includes time-space models of the antagonist's childhood, picturing growth of the demonic personality of the murderer: 'Mes parents sont morts quand j'avais quatre ans, en me laissant en héritage cette identité mystérieuse, comme un message que j'aurais à élucider' (Nothomb, 2001, p. 15). Mysteriousness and demonic nature of the boy named Textor is revealed in his ardent desire of superiority that pushes him to murder his competitor:'Un dimanche soir, je me suis mis à prier dans mon lit. Une prière satanique: je priai Dieu de tuer le petit garçon que je détestais... Le lendemain matin, à l'école, l'institutrice entra en classe avec un air contrit. Les larmes aux yeux, elle nous annonça que Franck était mort pendant la nuit, d'une inexplicable crise cardiaque' (Nothomb, 2001, p. 19). Childhood of mysterious orphan boy is full of states of fanatic oblivion and ravings. In his raving he feels affinity with his intestines as well as experiences split of consciousness. Protagonist also experiences states of unconscious actions, killing his own wife at first: '– Tu l'as poignardée à plusieurs reprises. Aucune parole ne fut échangée. Silence. – Je ne me souviens pas, dit Jérôme avec obstination' (Nothomb, 2001, p. 113), and soon, enraged, he kills himself: 'Le 24 mars 1999, les passagers qui attendaient le départ du vol pour Barcelone assistèrent à un spectacle sans nom. Comme l'avion en était à sa troisième heure de retard inexpliqué, l'un des voyageurs quitta son siège et vint se fracasser le crâne à plusieurs reprises sur l'un des murs du hall.' (Nothomb, 2001, p. 122). Phenomenon of split of the hero's consciousness is reached by the writer by overlaying inner chronotypes of protagonists and antagonist in the climax of the work. In this work the dominant is dramatic concept of narrative organization, represented by the dialogue that in the end turns to be an inner dialogue of the hero with himself, the tragic pathos of the work in revealed in heros's suffering that pushed him to suicide.

Conclusions

Analysis of originality of Nothomb's works highlights distinct process of genre-generic synthesis that expands their pictorial and expressive possibilities. Genre-style particularities of Nothomb's novels are stipulated by complex chronotope created by overlaying and antithesis of time-space layers. Most often the writer opposes realistic and idyllic chronotopes, building artistic reality on their boundary. Realistic chronotope in the novels has usual daily characteristics, flows monotonously and routinely, creating feeling of intolerability of life and existential identity crisis. Idyllic chronotope which is opposed to it embodies author's vision of happiness and freedom where time slows down, each minute of existence is sensually marked. Time-space of the writer's works gets more complicated by chronotope models of art, love, and metamorphic reincarnations of characters most often occur under the chronotope conditions of of raving, agony, catharsis... All this allows to speak about presence of existential worldview which separates Nothomb's novels from mass literature.

Bibliographic references

Amanieux, L. (2005). Amélie Nothomb, the eternally hungry. Paris: Albin Michel. (In French)

Bainbrigge, S., & Toonder, J. M. L. (2003). Amélie Nothomb Authorship, Identity and Narrative Practice. Bern: Peter Lang Publishing.

Bakhtin, M. (1975). Questions of literature and aesthetics. Moscow: Artistic literatura (in Russian).

Belyavskaya, M. (2018). Ideological and artistic world in the novel by A. Nothomb 'Métaphysique des tubes'. Accents and Paradoxes of Modern Philology, 1(3), 31-43. DOI: https://doi.org/10.26565/2521-6481-2018-3-2

Cherkashyna, T. (2022a). I/Other in Amelie Notomb's autobiographical hypernovel. InNy/InNity in contemporary European literature. Academic editors: Ludmila Mnich Oksana Blashkiv Valentina Krupowies (p. 149-160). University of Natural Sciences and Humanities in Siedlce (in Ukrainian).

Cherkashyna, T. (2022b). The Japanese Autobiographical Text in the Novel by Amelie Notomb. Geography and text: the literary dimension (C. 40-57). Kharkiv: V. N. Karazin Kharkiv National University (in Ukrainian).

Eliade, M. (2001). Sacred and secular. Kyiv: Osnovy (in Ukrainian).

Kryvoruchko, S., Kostikova, I., Gulich, O., & Rudnieva, I. (2022). Time Trends in Simone de Beauvoir's memoirs 'Force of Circumstance'. Amazonia Investiga, 11(52), 115-122. https://doi.org/10.34069/AI/2022.52.04.12

Lee, M. D. (2010). The identities of Amélie Nothomb: from media invention to original fantasies. Amsterdam: Rodopi.

Lou, J.-M. (2011). Japan by Amélie Nothomb. Paris: L'Harmattan. (in French)

Koma, K. (2009). The romantic 'Japan' universe as scenography in 'Stupeur et Tremblement' by Amélie Nothomb. Literatura, 51(4), 73-83.

Kopystianska, N. (2005). Genre, genre system in the space of literary studies. Lviv: PAIS (in Ukrainian).

Kopystianska, N. (2012). Time and space in the art of words. Lviv: PAIS (in Ukrainian).

Nothomb, A. (1997). Attack. Paris: Albin Michel. (in French)

Nothomb, A. (1995). The Catilines. Paris: Albin Michel. (in French)

Nothomb, A. (2001). Enemy Cosmetics. Paris: Albin Michel. (in French)

Nothomb, A. (1992). Assassin's Hygiene. Paris: Albin Michel. (in French)

Nothomb, A. (2000). Metaphysics of tubes. Paris: Albin Michel. (in French)

Nothomb, A. (1999). Stupor and tremors. Paris: Albin Michel. (in French)

Szczur, P. (2017). From the exotic novel to the (dis)exoticizing interpretation: the ‘Japanese’ novels of Amélie Nothomb and their reading. Humanities Annals. Vol. LXV. p. 5. P. 109-124. DOI: http://dx.doi.org/10.18290/rh.2017.65.5-7 (in French)

DOI: https://doi.org/10.34069/AI/2023.63.03.3
How to Cite:
Yakymenko, S., Vasiutina, T., Nefodov, D., Pankiv, L., Stryzhakov, A., & Denysiuk, M. (2023). Main directions of innovative transformations in higher education. *Amazonia Investiga*, *12*(63), 31-41. https://doi.org/10.34069/AI/2023.63.03.3

Main directions of innovative transformations in higher education

Основні напрями інноваційних перетворень у вищій освіті

Received: February 10, 2023 Accepted: March 20, 2023

Written by:
Svitlana Yakymenko[1]
https://orcid.org/0000-0003-4230-9586
Tetiana Vasiutina[2]
https://orcid.org/0000-0003-0253-1932
Dmytro Nefodov[3]
https://orcid.org/0000-0003-1992-7271
Liudmyla Pankiv[4]
https://orcid.org/0009-0009-7468-3979
Artem Stryzhakov[5]
https://orcid.org/0000-0003-1407-939X
Mariia Denysiuk[6]
https://orcid.org/0000-0003-2132-6598

Abstract

The article highlights the main directions of innovative transformations in pedagogy. The methodological concept of research based on the following provisions is highlighted: implementation of a complex of approaches of a scientific and methodological direction in the professional training of future specialists; organization of the main directions of innovative transformations in higher education; determination of the principles of functioning of the educational process; determination of essential properties and features of the studied object of innovative transformations in higher education; determination of prospects for the development of the main directions of innovative transformations in higher education. The main directions of innovative transformations in higher education have been clarified. The essence of the content of innovative pedagogical technologies was considered, and the essential features and ways of development of pedagogical innovations were listed, divided into intensive and extensive. For the purpose of effective training of education seekers, the conditions for their innovative activities have been formulated. Distance learning is presented in the article as a set

Анотація

У статті виділено основні спрямування інноваційних перетворень у педагогіці. Виділено методологічну концепцію дослідження, що базується на таких положеннях: реалізація комплексу підходів науково-методичного спрямування у професійній підготовці майбутніх спеціалістів; організація основних напрямків інноваційних перетворень у вищій освіті; визначення засад функціонування навчального процесу; визначення сутнісних властивостей та ознак досліджуваного об’єкта інноваційних перетворень у вищій освіті; визначення перспектив розвитку основних напрямків інноваційних перетворень у вищій освіті. З’ясовано основні напрями інноваційних перетворень у вищій освіті. Розглянуто сутність змісту інноваційних педагогічних технологій та виписано суттєві ознаки та шляхи розвитку педагогічних інновацій поділено на інтенсивні та екстенсивні. З метою ефективної підготовки здобувачів освіти сформульовано умови до їх інноваційної діяльності. Дистанційне навчання у статті

[1] Doctor of Pedagogical Sciences, Professor of Elementary and Preschool Education Department, V. O. Sukhomlynskyi National University of Mykolaiv, Ukraine.
[2] Doctor of Pedagogical Sciences, Associate Professor, Professor of the Department of Primary Education, Dragomanov Ukrainian State University, Ukraine.
[3] Doctor of Historical Sciences, Associate Professor at the Department of History, V. O. Sukhomlynskyi National University of Mykolaiv, Ukraine.
[4] Doctor of Pedagogic Sciences, PhD in Pedagogy, Professor of Art Department, Dragomanov Ukrainian State University, Ukraine.
[5] Ph.D. in Pedagogy, CEO, LLC “Tsyfromarket”, Ukraine.
[6] Ph.D Student, Pavlo Tychyna Uman State Pedagogical University, Ukraine.

of information technologies that students need to: ensure the volume of material for their competitiveness in the labor market; for use in the learning process of interactive interaction of students and teachers; to enable students to work independently in order to master the material; for assessment during training and monitoring of their knowledge and skills.

Keywords: innovative transformations, higher education, innovative pedagogical technologies, training students for innovative activities, information technologies.

представлено як сукупність інформаційних технологій, які необхідні студентам для: забезпечення обсягу матеріалу для їх конкурентоздатності на ринку праці; для застосування в процесі навчання інтерактивної взаємодії студентів та викладачів; для надання можливості студентам самостійно працювати з метою засвоєння матеріалу; для оцінки під час навчання та моніторингу їхніх знань та навиків.

Ключові слова: інноваційні перетворення, вища освіта, інноваційні педагогічні технології, підготовка здобувачів освіти до інноваційної діяльності, інформаційні технології.

Introduction

Scientific and technical progress, social development of the individual, development of integration and globalization of the educational field require the introduction of innovations in all spheres of human life. So, in connection with education being at the stage of intensive development, the development of the entire society and each person depends on the ability and opportunities to perceive and use innovations. Therefore, the problem of modernizing the factors and possibilities of forming actions, innovative ways of thinking, forming the ability of graduates of educational institutions for functional and psychological readiness and innovative activities is the main task of the modern educational system (Tyutyunnyk et al., 2021).

The integration of Ukraine into the world community actualizes the problem of the readiness of society and individuals for changes in all spheres of life: social, economic, scientific, political, technical and technological. The priority task of higher professional education is the development of such qualities and abilities in the future specialist that would allow him to successfully adapt to rapidly changing competitive conditions, readily perceive and implement innovations, and create a qualitatively new social space. Therefore, a characteristic trend of modern education is innovativeness, which determines its openness to new, anticipatory character in relation to other fields of human activity.

The main problems of innovative orientation of the content and technologies of modern education are: support of innovative initiative, creativity, self-activity and independence of management objects; transition from spontaneous mechanisms of application of innovative processes to consciously managed ones, strengthening their sustainability; informational, material and technical, personnel support for the implementation of the main stages of innovative educational processes; forecasting reversible or irreversible structural changes in the innovative educational environment; accelerating the development of innovative processes in institutions and educational institutions.

Innovative activity is specific and quite complex, requiring special knowledge, skills, and abilities. The implementation of innovations is impossible without a teacher-researcher who possesses systemic thinking, a developed ability to be creative, and a formed and conscious readiness for innovations. Innovative educators of this type are called innovative teachers. They are characterized by a clear motivation for innovative activity and a crystallized innovative position, the ability not only to be included in innovative processes, but also to be their initiator. The following questions are clarified in the article: signs of innovativeness; considered the qualities of innovation as a system learning; classification of innovations; content of innovative pedagogical technology; the main directions of innovative transformations in pedagogy; the conditions for effective training of education seekers with the help of innovative pedagogical transformations are shown; the basic principles of the technology of scientific and methodological support in the system of innovative educational transformations; principles of implementation of ensuring effective activity in the market of educational services.

Literature Review

V. Tyutyunnyk, V. Savchenko, & S. Vasylieva (2021) clarified the ways of innovations and the possibilities of innovative technologies. The authors consider innovative technologies to be a system of updated methods and techniques in education, with the help of which effective achievement of activity results is possible; high-quality training of the younger generation, the readiness of the individual for all innovative conditions of the development of society; directing the educational process to the development of potential achievements and abilities of the student of education.

P. Luzan, V. Manko, L. Nesterova, G. Romanova (2014) using the theoretical analysis of vocational education and the implementation of innovative learning technologies during its implementation, presented the theoretical and methodological justification of innovative learning technologies. During the analysis of the content of the practice of implementing such learning technologies in the training of qualified workers, the methodical principles of applying innovative technologies in vocational education were characterized and determined. In particular, problem-based and developmental learning, educational design, valid test control, etc. were analyzed. The peculiarities are substantiated, and the advantages of implementation and design of personal development technologies during training are shown. The ways are characterized and the possibilities of forming the readiness of future specialists for the introduction of innovative technologies in the educational space of educational institutions are shown.

V. Sydorenko (2014) substantiated and showed the advantages of using the innovative technology of scientific and methodological support - pedagogical coaching, showed effective methods that contribute to the quality of training of specialists, retraining, improving the qualifications of personnel for society, forming their ability to continuously acquire education throughout their lives.

The purpose of Ya. Boyko's (2014) work is to research innovative ways of implementing innovative technologies into the educational process. Ways of implementing research methods are shown: structural-logical, systemic, analytical, and method of comparisons, to improve the educational society.

S. Stebluk (2011) the concept of "innovation" is revealed, which is a necessary condition for improving the quality of education, for the implementation of the focus of education on training a competitive specialist, and separate innovative methods of education are presented that are effective for use in higher education of the I-II levels of accreditation.

G. Rozlutska (2011) shows the necessary mass quality education for modern society, which should meet the needs of the consumer and the producer of material and spiritual goods, which are constantly growing. It has been proven that the quality of professional training in higher education depends on the level of implementation of pedagogical technologies, which are aimed at ensuring the effective training of competitive, highly qualified specialists who can realize themselves in the conditions of the information society.

O. Dubasenyuk (2009) revealed the peculiarities of the technologies of pedagogical training of the future teacher and described the possibilities of applying various options for their implementation from the standpoint of modern scientific approaches, which improve the entire structure of the readiness of future specialists for innovative activities.

M. Kademiya (2014) considers and presents the possibilities of using modern pedagogical technologies of learning in the educational society, which are used with the help of information and communication networks and information computer technologies.

L. Nikonorova (2020) in the conditions of a higher education institution investigated the possibilities of implementing the project method to improve the process of teaching foreign languages.

The purpose of the article: to find out the main directions of innovative transformations in higher education.

Methodology

Conceptual provisions that reveal the main directions of innovative transformations in higher education as elements of a systemic vision of the organization of the educational process are presented as interconnected concepts that embody the understanding of theoretical, innovative, methodological, multiple, and practical approaches to improve the professional training of future specialists with constant innovative transformations in higher education.

The research idea reflects the main scientific ideas, content, and implementation, the improvement of which makes it possible to update and improve the system of professional training of specialists during innovative transformations in higher education. We took into account the recommendation-methodical, fundamental-scientific, and operational-technological aspects of the development of the outlined problem.

Scientific positions are considered at the levels presented as concepts (nodal parts are based on basic scientific ideas): theoretical, methodological, and practical.

The theoretical concept reflects the main provisions of the regulatory and legislative framework, which is used to update and improve the professional training of future specialists, and reflects the strategic directions of education. The terminological apparatus proposed in the study makes it possible to predict the qualitative professional identification of future specialists; apply modern intentions of pedagogical science, without which it is impossible to reveal the specifics of professional training of future specialists abroad and in Ukraine; show the prospects of the educational activity (technology, informatization, professionalization); ways of implementing high-quality and effective use of innovative technologies in education, which determine the innovative focus on improving the education of modern experimental research.

The methodological concept of the study is based on the following provisions:

- the implementation of a set of approaches of a scientific and methodological direction in the professional training of future specialists is seen in the complex application of the main directions of science, which lead to the solution of the necessary research tasks; Such approaches can be: competence, system, epistemological, integrative, complex, activity, personal, axiological, contextual, synergistic, individual-creative;
- organization of the main directions of innovative transformations in higher education, their terminological space, taking into account the civilizational development of semantic transformations in the historical context during the professional training of future specialists;
- identification of the principles of the functioning of the educational process, its regularities for the renewal of the modern system of innovations in higher education, in particular, the professional training of future specialists;
- determination of essential properties and features of the studied object of innovative transformations in higher education, which shows the expected result - readiness for professional activity of future specialists;
- determination of prospects for the development of the main directions of innovative transformations in higher education, the system of professional training of future specialists.

The practical concept improves the procedural components of the object under investigation, which are diverse when conducting experimental research in several educational institutions and reveals the prospects of implementing the main directions of innovative transformations in higher education and the system of professional training of future specialists in the educational process of other educational institutions; a mandatory component is the approval and implementation of design, stimulation, interactive, etc. learning technologies in education, with the application of which teachers create innovative conditions for the professional training of future specialists, the goal of which is to perform professional duties at a high level in an innovative way, to bring professional competences to automaticity with the effectiveness of such a process at various stages of its implementation.

In the application of the outlined concept, thanks to the practical context, the development and implementation of pedagogical conditions for the training of specialists took place, applying the main directions of innovative transformations in higher education.

In the content of the practical concept, it is mandatory to generalize the best experience of implementing the updated system of implementing the main directions of innovative transformations in higher education, professional training of future specialists (conducting open classes with a demonstration of the best experience, pedagogical workshops; using methodological developments using pedagogical innovations; conducting knowledge monitoring and expert assessment based on intuitive and logical analysis of the problem.

Taking into account the theoretical, methodological, and practical concepts of our work became the basis for the development of the author's system for the implementation of the main directions of innovative transformations in

ISSN 2322- 6307

higher education, and professional training of future specialists. The functioning of the system for the implementation of the main directions of innovative transformations in higher education is provided for in the use of the toolkit of organizational and methodical activity of the teacher, which is based on innovative pedagogical technologies (technologies of independent information search, webquest, interactive, modeling technologies of professional behavior and achieving success, project, virtual, simulation technologies).

To implement the set tasks and achieve the goal, the following research methods were used: analysis, synthesis, comparison and comparison, induction and deduction, analogy, which made it possible to characterize the state of working out the problem in scientific sources, substantiate the conceptual and categorical apparatus, study legislative and regulatory documents in the field of education, scientific literature, electronic resources, work experience of scientific and pedagogical workers of higher education institutions.

Results and Discussion

In 1986, UNESCO published and substantiated the official definition of the concept of "pedagogical technology" and showed the necessity of its application. Pedagogical technology was presented as an application of the system of introducing the main directions of innovative transformations in higher education, evaluation and monitoring of the entire learning process, a systematic method of planning, assimilation of knowledge by taking into account human and technical resources, the need for interaction between students and their teachers to achieve a more effective form of education.

All scientifically based technologies have characteristic features (Morska, (2008):

– division of the process of implementation of the main directions of innovative transformations in higher education into interconnected stages;
– coordinated and step-by-step implementation of actions to implement the main directions of innovative transformations in higher education, aimed at achieving the goal and obtaining quality results;
– unequivocal implementation of the included main directions of innovative transformations in higher education of procedures and operations into technology, which is a decisive condition for achieving results;
– repeatability and reproducibility of the process of obtaining the product of the system of implementing the main directions of innovative transformations in higher education.

Let's clarify the essence of the concept of "pedagogical technology" in the following aspects:

– pedagogical technology - a special organization of the educational process of introducing the main directions of innovative transformations in higher education;
– under the technological approach, the educational process should be aimed at achieving the set goals of implementing the main directions of innovative transformations in higher education;
– for the introduction of technology, it is mandatory to develop a project on a scientific basis;
– the project necessarily reflects the pedagogical technology as a system of implementation of the main directions of innovative transformations in higher education with specified procedures, components, stages, etc.;
– we must take into account that we can achieve guaranteed learning results when applying the system of implementing the main directions of innovative transformations in higher education, provided that we interact with participants in the educational process (Biletska et al., 2021).

The definition - pedagogical technology - is interpreted as the organization of the pedagogical process, which is purposeful, is necessary for the scientific project of a logically structured system of pedagogical interaction, which is designed for clearly achieving the planned learning outcomes. Today's challenges have made the concept of "innovative pedagogical technology" necessary in education.

Innovation in education is a phenomenon that serves to resolve contradictions between the traditional education system and the necessary needs for new, high-quality education; is a natural phenomenon, developmental in results and dynamic in nature.

Signs of innovation:

- the ability to influence the level of professional activity of a competitive specialist;
- the ability to increase the innovative field of the environment in the educational process of an educational institution or region.

Consider the qualities of innovation as a system formation:

- innovative environment,
- innovative potential,
- innovation process,
- innovative activity.

Innovations are classified as:

- by the object of influence (pedagogical, social-psychological, organizational-management). According to the object of influence, as the result of pedagogical innovations, we see qualitative changes in the educational process. The introduction of innovations of a special psychological orientation in the educational institution contributes to the creation of a positive microclimate in education and creates a high level of culture of relations between students of education. They provide an opportunity to introduce innovative forms and methods of management, provide partnership relations, provide an opportunity to overcome stereotypes of a conservative style of management - innovations of the organizational and management type;
- level of distribution (systemic-methodological and local-technological). Innovations of the system and methodological level are applied within the framework of the general system. Innovations at the local technological level create the testing of systems at individual educational facilities, personally oriented innovative methods;
- the innovative potential of the new (radical, modification, combinatorial). New ideas of innovation in the educational field are introduced based on new tools (neuro-linguistic programming, information and computer technologies, etc.). Modification innovations aimed at updating the content, methods, and forms of the education organization process. Combinatorial, these are modernized innovations adapted to the new socio-cultural environment. If we consider innovations in the system of professional and pedagogical education, we will emphasize their dual orientation. They are aimed at reorientation not only in the system of pedagogical training, which takes into account the positive changes taking place in educational institutions but also takes into account historical and pedagogical trends in the field of education (Dubasenyuk, 2009).

Let's consider the content of innovative pedagogical technology:

- systematic, purposeful, consistent application in educational practice of methods of pedagogical actions, methods, and tools that make the educational process integral - from setting its goal to obtaining predicted results;
- an integrated, complex process, which includes ways of organizing innovative activities, the subjects themselves, their ideas, and as a result, the effectiveness of the innovation is obtained.
- innovations include the creation of new means and significant changes that update the way of doing business and make thinking styles innovative. With such an approach, innovative approaches are those that rework the nature of the educational process in relation to the personal interaction of the teacher and students of education, target orientation, and change positions in the educational process (Dychkivska, 2004).

The content of innovative pedagogical transformations includes a consistent, systematic, purposeful introduction into the practical training of specialists of means, techniques, and innovative methods that ensure a holistic process in the educational field, starting from the definition of the goal of this process to the expected general results. This leads to the conclusion that the educational system of training a future competitive specialist should correspond to the trends of the modern development of society. S. Stebluk singles out the following effective learning technologies: game, problem technologies, collective and group activity technologies, etc. (Stebluk, 2011). Regarding the introduction of innovative pedagogical transformations, we mean: personal development technologies, the theory and practice of which are based on a person-oriented approach to the field of education, at the same time, the methodological principles ensure the individualization of the learning process, the interactive position of education seekers, to achieve a specifically formulated goal as a result educational activity, a practical component is necessary. The condition for the implementation of innovative pedagogical transformations is the teacher's readiness for professionalism during the conscious implementation of such pedagogical innovations (personal development pedagogical technologies) (Luzan et. al., 2014).

Innovative pedagogical transformations are the implementation of an innovative idea in the education process, which is necessary for the creative and active search for non-standard solutions. Ways of development of innovative pedagogical transformations can be divided into intensive (implemented at the expense of the education system's resources) and extensive (implemented with the help of investments, involvement of additional forces, capital investments, new means, technologies, equipment, etc.) (Kuchai et al., 2021).

Innovative transformations in pedagogy have the following main directions:

– during the assimilation of the content of education by the students, developing technologies are introduced into the education process, which stimulates activity;
– improving the education system as a whole, modernizing the management of educational institutions;
– development of the education system development program, concept, and structure of the education system;
– promotion of pedagogical personnel with the help of innovative pedagogical transformations of qualifications;
– with the help of innovative pedagogical transformations, implementation of the design of innovative models of the education process;
– ensuring with the help of innovative pedagogical transformations the success of education, the level of development of education seekers, and quality monitoring of the educational process;
– development of innovative textbooks, teaching aids, etc., with the help of innovative pedagogical transformations.

For the implementation of innovative pedagogical transformations, highly qualified specialists of promising, advanced educational institutions apply purposeful work and create innovative conditions for the development of such qualities that provide students with innovative activity, which depends on the atmosphere that has developed in the educational institution, the desire, skills, and opportunities of teachers to use innovative pedagogical transformations.

The conditions for effective training of education seekers with the help of innovative pedagogical transformations include:

1. To ensure success in innovative activities, the development of personal potential and qualities is necessary.
2. For the formation of innovative thinking and the creation of opportunities for creative self-realization, it is necessary to create such an environment that meets the needs of the development of the subject of innovative activity.
3. To improve the relationship between the teacher and the student, perseverance, tolerance, cooperation with students, initiative, expressing one's opinion, the use of methodological tools are used, to enable students to stimulate search activity and show their interests. Purposeful work to attract education seekers to scientific research and creative activities, compliance with the above conditions, will contribute to innovative ways of thinking, and the development of independence (Tyutyunnyk et al., 2021).

A prerequisite for the modernization of education using innovative pedagogical transformations as a non-linear, open, complexly organized synergistic system is the application of scientific and methodological support technology. This technology allows to overcome the detachment of course and inter-course periods with the mandatory application of innovative pedagogical transformations, ensures the professional, continuous growth of the teacher along the individual educational trajectory, and creates acmeological conditions to master new functions, roles, and professional improvement of the subject. This variety is manifested in the human-centered, humanistic orientation, the development of the teacher's pedagogical skills; characterized by subject-subject interaction, professional facilitative support, interactive mutual learning, and mutual assistance. The center of technology is a person, an active subject of creative self-realization, characterized by a demand for the provision of professional needs, requests, potential opportunities for the prediction of multi-disciplinary, pedagogical methods, methods, multivariate differentiated forms, meta-technologies, research-experimental and social activities, scientific-methodical, organizational -pedagogical conditions, adjust the teacher's goal, regarding the successful solution of professional tasks, provide the ability to overcome difficulties in professional and pedagogical activity (Shunkov et al., 2022).

The main bases of the technology of scientific and methodological support in the system of innovative educational transformations are:

- democracy (collegiality in decision-making, consideration of innovative approaches);
- the choice situation (creation of activity models, variable programs, and methods that ensure a conscious choice of the educational trajectory of those seeking an education);
- self-realization (revealing the potential of the personality of each student of education);
- co-creation (to achieve innovative quantitative and qualitative results, joint activities of education seekers who strive for high-quality competitive knowledge are necessary);
- synergy (instability, non-linearity of scientific and methodical support).

Pedagogical coaching is a qualitative technology of scientific and methodical support of innovative pedagogical transformations. At the heart of such innovative technology, the main idea is that each individual has different motives, interests, own needs, goals, and is unique. The satisfaction of such an idea with all its components involves individual forms, methods, and approaches to raising the personal and professional levels.

This technology involves:

- vertical and horizontal integrity, systematicity of the continuous process of education;
- integration of non-formal, informal, formal, educational education, self-education, and practical activities;
- application at different stages of the life cycle of the content of the teacher's educational needs;
- unity of general, professional, humanitarian education, etc (Sydorenko, 2014).

The essence of modern innovative educational transformations in education is that they are based on the processes of memory, attention, perception and are based on the productive, creative thinking, communication, and behavior of education seekers. At the same time, the educational process is organized so that students learn to interact with each other, solve complex problems based on the analysis of industrial situations, and situational professional tasks, communicate, and think critically.

The goals of innovative educational transformations are the promotion of self-affirmation and self-realization of the personality of the student of education; focus on person-oriented, humanistic, cultural values; use of active, creative, individually differentiated forms and methods of the educational process.

Innovative educational transformations include interactive technologies, information computer technologies, group and project learning technologies, modular rating system, and others. These technologies increase independence, promote activity, initiative, and enable students to be responsible for themselves and others (Kotiash et al., 2022).

Innovative educational transformations are based on increasing the quality of independent work of education seekers. Thanks to the application of Internet technologies in the pedagogical field of educational services, with the emergence of an integrated educational environment, it became possible to achieve a qualitatively new innovative level of informational, semantic, technological, and organizational connectivity of educational resources. Thanks to this, a new promising level of education, a virtual educational space is being provided. Such an education system increases the role of the teacher in a modern institution of higher education, leading to the reorganization of educational and methodical work. The main result of such an educational approach is the effectiveness of the management of the higher education system, and the production of highly qualified specialists while ensuring the updating of the educational and methodological complex, which includes the program, workshops, and guidance on disciplines. The application of innovative educational transformations is aimed at increasing the receptivity of personnel to innovations, and effective management of changes in education (Kuchai et al., 2022).

To implement the provision of effective activities in the educational services market, the education strategy must adhere to the following principles:

- a shared vision by the management of the organization's development prospects and goals;
- aspiration of the staff during innovative educational transformations to acquire new knowledge and skills in professional activity, professional continuous development;
- creation of conditions for innovative educational transformations necessary for continuous improvement of personnel;

- participation in the implementation of innovative personnel processes;
- presence of the institute in financial support of professional development;
- continuous monitoring of the internal and external environment (Boyko, 2014).

Computer technologies are of great importance for innovative educational transformations. Informatization of education requires computer literacy from the teacher and students (Kuzminskyi et al., 2018).

The structure of computer literacy in innovative educational transformations includes knowledge of modern operating systems and mastery of their basic commands; knowledge of the basic concepts of informatics and computer technology; knowledge of modern shells and operating tools.

The importance of distance learning technology has increased. The development of distance education is a pattern of adaptation of education to modern conditions: without special material costs from the state, the implementation of the social order of society. Distance education combines the elements of full-time, correspondence and evening, full-time, and extramural education based on new multimedia systems, and information technologies with innovative educational transformations. We consider distance learning in innovative educational transformations as a set of information technologies that serve to ensure the delivery of interactive interaction of students and teachers in the learning process to those seeking education; thorough amount of material; providing students with the opportunity to work independently; to assess their knowledge and skills in the educational process (Shchyrbul et al., 2022).

This technology in innovative educational transformations is characterized by a strong cognitive motivation created by the Internet and the quality of specialist training. Thanks to this, distance learning is a technology of the 21st century. Its characteristic features in innovative educational transformations are flexibility, the coordinating role of the teacher, specialized control of the quality of education, economic efficiency, modularity, and the use of specialized forms and means of education (Rozlutska, 2011). The intensive development of information and communication network technologies led to their use in educational activities.

Cloud computing in innovative educational transformations is a model of providing convenient on-demand network access to a common pool of configured computing resources that can be quickly provided with minimal operating costs or requests to the provider.

Electronic learning in innovative educational transformations is a system of the educational process that uses Internet technologies, educational and methodical multimedia materials, electronic libraries, virtual laboratory workshops, etc. Electronic learning (e-learning) in innovative educational transformations is a learning model that works for the future and is based on the use of the Internet, new multimedia technologies to improve the quality of the educational process by facilitating access to resources and services, as well as their exchange, joint work on distance (Kremen, 2008). The most relevant technologies are e-learning: virtual educational institutions, virtual classrooms, blog quests, web quests, blogs, etc. We are observing the development of mobile information technologies that make it possible to acquire knowledge with the help of pocket personal computers; mobile phones; netbooks; laptops, tablets, etc.

Mobile learning (m-learning) in innovative educational transformations is the transfer of knowledge to mobile devices using WAP and GPRS technologies. The purpose of such training is to make the process of educational space accessible, flexible, and personalized.

We are witnessing the replacement of e-learning technologies with u-learning technologies (ubiquitous learning) during innovative educational transformations, with the use of information and communication tools in all spheres of society, and pervasive learning of continuous education technologies.

In the case of innovative educational transformations, the model used in the educational space remains the blended learning model (blended learning), which combines e-learning with classroom classes and allows for the integration of e-learning into the existing education system, and in the future, blended learning on based on e-learning and traditional training, which involves the creation of new pedagogical methods (Kademiya, 2014).

The project method is relevant. Its relevance in innovative educational transformations is associated with the development of computer telecommunication technologies. In the case of innovative educational transformations, project activity takes the main place in the system of general and higher education, it allows the learner to acquire such skills that cannot be acquired by traditional educational methods. The project method is one of the most effective methods of developing the creative and cognitive abilities of students. The goal of the project method is to enable students to independently acquire knowledge in the process of solving problems and practical tasks that require the integration of knowledge in various subject areas (Plakhotnik et al., 2022).

The popularity of the project method in innovative educational transformations is provided by the opportunity to solve specific problems, combine theoretical knowledge and their practical application, support new approaches to the organization of management, provide means of building a person-oriented pedagogical system; the opportunity to individualize the educational process, the student's manifestation of independence in planning, organization and control of his activities; direction on the formation of skills for the acquisition of professional competences, independent acquisition of knowledge.

In the 21st century, the problem of innovative educational transformations occupies an important place, since the rapidity of the development of science and a large number of discoveries require a person to have developed experimental, creative thinking (Nikonorova, 2020).

Conclusions

The main directions of innovative transformations in higher education have been clarified. Innovative pedagogical technologies are considered. Signs of innovation are listed. Ways of development of pedagogical innovations are conditionally divided into intensive and extensive. The conditions for effective training of education seekers for innovative activities have been formulated. A prerequisite for the modernization of education as a complex, open, the non-linear synergistic system is the introduction of scientific and methodological support technology. Pedagogical coaching is an effective technology of scientific and methodical support. Innovative learning technologies include interactive technologies, group and project learning technologies, modular rating system, information computer technologies, and others. Internet technologies have been analyzed, thanks to which an integrated educational environment has appeared, in which a new level of informational, semantic, organizational, and technological connection of educational resources is established. The importance of distance learning is considered. Information and communication network technologies and the need to use modern ICT and computer technologies are analyzed. The role of electronic learning (e-learning), mobile learning (m-learning), and blended learning (blended learning) in education is shown; e-learning technologies on u-learning technologies. The project method is presented as one of the most effective methods of students' creative abilities.
Prospects for further research consist in revealing the scientific and methodological support of pedagogical coaching technology.

Bibliographic references

Arbeláez-Campillo, D. F., Villasmil Espinoza, J. J., & Rojas-Bahamón, M. J. (2021). Inteligencia artificial y condición humana: ¿Entidades contrapuestas o fuerzas complementarias? Revista De Ciencias Sociales, 27(2), 502-513. https://doi.org/10.31876/rcs.v27i2.35937

Biletska, O., Kuchai, T., Kravtsova, T., Bidyuk, N., Tretko, V., & Kuchai, O. (2021). The Use of the Activity Approach in Teaching Foreign Languages in Higher Education Institutions. The Romanian Journal for Multidimensional Education, 13(2), 243-267. DOI: https://doi.org/10.18662/rrem/13.2/420

Boyko, Y.M. (2014). Education and innovative technologies. Scientific Bulletin of Uzhhorod University. Economy series, 1(42), 306-309. (In Ukranian)

Dubasenyuk, O.A. (2009). Innovative educational technologies and methods in the system of professional and pedagogical training. Professional pedagogical education: innovative technologies and methods: Monograph. Zhytomyr: Publication of ZhDU named after I. Franko.

Dychkivska, M. I. (2004). Innovative pedagogical technologies: teaching. manual K.: Academvidav.

Kademiya, M. Yu. (2014). Modern pedagogical technologies for teaching adults. Modern pedagogical technologies in education. Theory and practice of social systems management, 2, 11-17. (In Ukranian)

Kotiash, I., Shevchuk, I., Borysonok, M., Matviienko, I., Popov, M., Terekhov, V., & Kuchai, O. (2022). Possibilities of Using Multimedia Technologies in Education. International Journal of Computer Science and Network Security, 22(6), 727-732. https://doi.org/10.22937/IJCSNS.2022.22.6.91

Kremen, V. G. (2008). Encyclopedia of education. K.: Yurinkom Inter.

Kuchai, O., Skyba, K., Demchenko, A., Savchenko, N, Necheporuk, Y., & Rezvan, O. (2022). The Importance of Multimedia Education in the Informatization of Society. International Journal of Computer Science and Network Security, 22(4), 797-803. https://doi.org/10.22937/IJCSNS.2022.22.4.95

Kuchai, O., Yakovenko, S., Zorochkina, T., Okolnycha, T., Demchenko, I., & Kuchai, T. (2021). Problems of Distance Learning in Specialists Training in Modern Terms of the Informative Society During COVID-19. International Journal of Computer Science and Network Security, 21(12), 143-148. https://doi.org/10.22937/IJCSNS.2021.21.12.21

Kuzminskyi, A. I., Kuchai O. V., & Bida, O. A. (2018). Use of Polish experience in training computer science specialists in the pedagogical education system of Ukraine. Information Technologies and Learning Tools, 68(6), 206–217. https://doi.org/10.33407/itlt.v68i6.2636

Luzan, P. G., Manko, V. M., Nesterova, L. V., & Romanova, G. M. (2014). Theory and practice of introducing innovative learning technologies into the professional training of skilled workers: monograph. K.: "NVP Polygraph Service" LLC. (In Ukranian)

Morska, L. I. (2008). Information technologies in teaching foreign languages: training. manual Ternopil: Aston.

Nikonorova, L. (2020). Innovative technologies in education: project method in learning foreign languages. Innovation in education, 11(2), 216-222. (In Ukranian)

Plakhotnik, O., Strazhnikova, I., Yehorova, I., Semchuk, S., Tymchenko, A., Logvinova, Ya., & Kuchai, O. (2022). The Importance of Multimedia for Professional Training of Future Specialists. International Journal of Computer Science and Network Security, 22(9), 43-50. DOI: https://doi.org/10.22937/IJCSNS.2022.22.9.7

Rozlutska, H.M. (2011). Innovative technologies in the pedagogical process of a higher school. Scientific Bulletin of the Uzhhorod National University. Series "Pedagogy, social work", 20, 121-123. (In Ukranian)

Shchyrbul, O., Babalich, V., Mishyn, S., Novikova, V., Zinchenko, L., Haidamashko, I., & Kuchai, O. (2022). Conceptual Approaches to Training Specialists Using Multimedia Technologies. International Journal of Computer Science and Network Security, 22(9), 123-130. https://doi.org/10.22937/IJCSNS.2022.22.9.19

Shunkov, V., Shevtsova, O., Koval, V., Grygorenko, T., Yefymenko, L., Smolianko, Y., & Kuchai, O. (2022). Prospective Directions of Using Multimedia Technologies in the Training of Future Specialists. International Journal of Computer Science and Network Security, 22(6), 739-746. https://doi.org/10.22937/IJCSNS.2022.22.6.93

Stebluk, S.V. (2011). Innovative learning technologies in higher education. Scientific Bulletin of the Uzhhorod National University Series "Pedagogy, social work", 20, 141-142. (In Ukranian)

Sydorenko, V.V. (2014). Pedagogical coaching as an innovative technology of scientific and methodical support of the professional and personal development of the teacher in the postgraduate education system. Scientific treasury of education of Donetsk region, 3(14), 13-19.

Tyutyunnyk, V. V., Savchenko, V. V., & Vasylieva, S. O. (2021). The problem of introducing innovative technologies in education. Psychological and pedagogical problems of higher and secondary education in the conditions of modern challenges: theory and practice: materials of the 5th International Scientific and Practical Conference (Kharkiv, March 31 - April 2, 2021). In 2 volumes. / Hark. national ped. H.S. Skovoroda University. Kharkiv: "Mitra", 1, 244-247. (In Ukranian)

DOI: https://doi.org/10.34069/AI/2023.63.03.4
How to Cite:
Alieksieieva, H., Shchetynina, O., & Nyshcheta, V. (2023). The realities of postmodern internationalization: The experience of the ukrainian vocational education. *Amazonia Investiga*, *12*(63), 42-52. https://doi.org/10.34069/AI/2023.63.03.4

The realities of postmodern internationalization: The experience of the ukrainian vocational education

Реалії постмодерної інтернаціоналізації: досвід української професійно-технічної освіти

Received: January 8, 2023 Accepted: February 28, 2023

Written by:
Hanna Alieksieieva[1]
ID Web of Science: H-1648-2018
https://orcid.org/0000-0003-3204-3139
Olha Shchetynina[2]
https://orcid.org/0000-0001-7023-1902
ID Web of Science: E-7111-2019
Volodymyr Nyshcheta[3]
https://orcid.org/0000-0002-4500-7746
Web of Science: ABD-1898-2021

Abstract

The topical problems of increasing country's competitiveness considering world experience should be solved only in accordance with modern requirements of rapidly changing information society, where competitive advantages largely depend on the quality of human resources and investments in human capital. The article describes the practical aspects of the development of internationalization of vocational education in Ukraine on the experience of Berdyansk State Pedagogical University; clarifies the current opportunities for improving the quality of education in the light of international practice on the example of the Benemérita Autonomous University of Puebla (Mexico), and identifies the ways to realize the potential of partnership in vocational education in Ukraine. The experience of Ukraine, Poland and Mexico, where the main condition for integration into the global university of knowledge is the quality of higher education institutions in accordance with international standards of curricula, has been analyzed. The practical experience of international scientific activities of Berdyansk State Pedagogical University and Benemérita Autonomous University of Puebla is described. The article concludes about the effectiveness of international cooperation in science, which

Анотація

Актуальні проблеми підвищення конкурентоспроможності країни з урахуванням світового досвіду мають вирішуватися лише відповідно до сучасних вимог швидкозмінного інформаційного суспільства, де конкурентні переваги значною мірою залежать від якості людських ресурсів та інвестицій у людський капітал. У статті описано практичні аспекти розвитку інтернаціоналізації професійно-технічної освіти в Україні на досвіді Бердянського державного педагогічного університету; з'ясовано сучасні можливості підвищення якості освіти у світлі міжнародної практики на прикладі Заслуженного Автономного університету м. Пуебла (Мексика) та визначено шляхи реалізації потенціалу партнерства у сфері професійно-технічної освіти в Україні. Проаналізовано досвід України, Польщі та Мексики, де основною умовою інтеграції у світовий університет знань є якість вищих навчальних закладів відповідно до міжнародних стандартів навчальних програм. Охарактеризовано практичний досвід міжнародної наукової діяльності Бердянського державного педагогічного університету та Заслуженного Автономного університету м. Пуебла У статті зроблено висновок про ефективність міжнародного наукового співробітництва, що

[1] PhD of Pedagogical Sciences, Associate Professor, Berdyansk State Pedagogical University, Berdyansk, Ukraine.
[2] PhD of Pedagogical Sciences, Associate Professor, Berdyansk State Pedagogical University, Berdyansk, Ukraine.
[3] Doctor of Pedagogical Sciences, Associate Professor, Berdyansk State Pedagogical University, Berdyansk, Ukraine.

determines the status and prestige of the university, examines the European integration process of higher education system of Ukraine and the existing international training technologies.

Keywords: international scientific cooperation, scientific and educational programs, internationalization of higher education, quality of education.

визначає статус і престиж університету, розглянуто євроінтеграційний процес системи вищої освіти України та існуючі міжнародні технології навчання.

Ключові слова: міжнародне наукове співробітництво, науково-освітні програми, інтернаціоналізація вищої освіти, якість освіти.

Introduction

The quality and accessibility of education today is a necessary modern requirement in a rapidly changing technological world, where competitive advantages largely depend on the quality of the human resources and investments in human capital. The level of education and the amount of constantly updated knowledge accumulated by society (Trondal, 2010; Nestorenko et al., 2018) is a key factor of national competitiveness, which reflects the implications of internationalization of higher education.

Neither natural resource wealth nor significant amounts of financial capital are competitive advantages in today's information society (Altbach, Reisberg, & Rumbley, 2009). Only by integrating into the global university of knowledge, where the criteria for determining the quality of higher education institutions is compliance with the standards of curricula of the international system, a solution to this problem is possible.

Therefore, an international cooperation in the scientific field, which determines the status and prestige of the university, will be a key factor in the training of a new type of staff with international exposure (Shchetynina et al., 2022).

Literature Review

The analysis of scientific domestic and international studies of national educational proposals shows that the issue of studying the impact of modern integration processes in the field of education and its international partnership is gaining relevance. The conceptual principles of the process of internationalization of higher education are devoted to the scientific works of many foreign scientists, in particular, F. Altbach (Altbach, Reisberg, & Rumbley, 2009), M. Bartell, (Bartell, 2003), M. Ballatore (Ballatore, 2015), N. Nestorenko, O. Bordousov (Nestorenko, & Bordousov, 2015), De Wit H. (De Wi., 2020), J. Knight (Knight, 2011), S. Marginson, J. Mason (Marginson, 2007), J. Mestenhauser (Mestenhauser, & Ellingboe, 2005), A. Ostenda (Ostenda, 2022), P. Scott (Scott, 2011), U. Teichler (Teichler, 2017), K. Schnitzer (Schnitzer, 2003), M. Van der Wende (Van der Wende, 2007), J. Fielden (Fielden, 2017), I. Ferentz (Ferentz, 2014), and others.

Ukrainian scientists, including L. Abyzova (Abyzova, 2015), H. Alieksieieva (Alieksieieva, 2012), A. Verbytska (Verbytska, 2019), M. Debych (Debych, 2020), S. Dombrovska (Dombrovska, & Husarov, 2019), O Koziievska (Koziievska, 2012), N Kravchenko (Kravchenko et. al., 2017), T. Nestorenko (Nestorenko et. al., 2018), O. Nitenko (Nitenko, 2015), etc. H. Alieksieieva (Alieksieieva et. al., 2022), T. Nestorenko (Nestorenko et. al., 2018) and others considered the relationship between the internationalization of higher education and the prospects for the development of universities. However, despite the important contribution of these scholars to highlighting issues of internationalization in higher education, many theoretical and practical aspects have not been studied enough.

The group of ISO 9000:2000 series of standards is one of the criteria for establishing a university management system in general and the quality of education in particular. They focus on process and measurement monitoring, which are necessary to obtain objective data on the organization and functioning of an educational institution as a whole, as well as to make informed decisions on the improvement and adjustment of its activities (Hura et al., 2022). At the same time, students' qualifications and education, individual characteristics such as age and research interests contribute significantly to determining the quality of education. The following factors also have a strong influence on the quality of education: socio-economic (including marital status and income), environmental and cultural (De Wit, 2020).

The studies show that quality education must necessarily be student-centered. Therefore, attention should be paid not only to the qualifications of the teacher, but also to the learning environment, taking into account the personal needs of the students and providing assistance where necessary (financial, social and academic support, counselling services, etc.) (Zlenko et al., 2019).

Quality is considered as a relative concept, responding to the priorities of different groups of beneficiaries' interests. These beneficiaries are students, teaching and academic team, technical and administrative staff, parents, potential employees, funding agencies, stakeholders and others (Ovsiannikov & Alieksieieva, 2019).

Nowadays, the development of science and education is rapid and new knowledge is quickly becoming obsolete: the educator does not teach students, but stimulates and coordinates their activities and manages the means of learning. He becomes a tutor. The main task of the teacher, reflecting his pedagogical skills, is to choose the necessary content, apply the best methods and means of teaching in accordance with the program and the set objectives (Martynovych, Hornyk, & Boichenko, 2021).

Methodology

In the work on the research, we used the following methods. Theoretical: analysis of the development of the internationalization of professional education of Ukraine based on the experience of the Berdyansk State Pedagogical University, international experience of improving the quality of education on the example of the Honored Autonomous University of Puebla (Mexico), Silesian Academy (Katowice, Poland); synthesis, generalization, comparison to reveal ways of improving the quality of education in the context of international standards; generalization of international experience regarding the investigated problem to determine the possibilities of realizing the potential of partnership in professional education of Ukraine.

The article aims are to describe the practical aspects of the development of internationalization of vocational education in Ukraine on the experience of Berdyansk State Pedagogical University, to clarify the current opportunities for improving the quality of education in the light of international practice on the example of the Benemérita Autonomous University of Puebla (BUAP, Mexico), and to identify the ways to realize the potential of partnership in vocational education in Ukraine.

The experience of internationalization

The higher education system in Poland and Ukraine started at about the same time the process of European integration, which entailed reforming the higher education system, affecting curricula and research programs, the management system of higher education institutions and mainly the organization of higher education itself.

In accordance with the main provisions of the Bologna Process, it is necessary to improve the education system and introduce innovative technologies and teaching methods (Nitenko, 2015). The current requirements of the global community for the level of education and professional competence of the individual impose great responsibility on the sphere of science and education in the training of highly qualified specialists.

There are many international programs in Poland that offer the opportunity to obtain just as good education at a much lower financial cost than at Oxford, Harvard or Sorbonne, which is automatically a guarantee of a successful career. For example, in Poland there are international study technologies, which allow students to study for some period of time in the foreign countries under the double degree program as part of academic mobility. Not only applicants from Ukraine and former CIS countries, but also from Scandinavia, Western Europe, the USA and even Emirates choose prestigious universities in Poland, because they are attracted by relatively cheap tuition fees and high quality of education at Polish universities.

Internationalization of higher education is occurring, and it is related to the strengthening of the economy, which requires highly qualified professionals (Lukianenko et al., 2013; Ostenda, 2022).

The experience of foreign countries in improving the quality of higher education is important. The main purpose of education, in our opinion, is not only knowledge transfer, but also that a future specialist is able to analyze independently and make correct strategic decisions in a complex competitive business environment. The economy of any country needs competent specialists, professionals capable of analyzing complex situations in a short time and making optimal decisions, taking into account the possible risk when making the wrong decisions (Horbatiuk et al., 2019).

Primarily, the quality of education depends on the qualifications and experience of teachers. A teacher's competence includes identifying ways to develop effective curricula for disciplines included in state educational standards and for specialties (Kramarenko et. al., 2022). A revision of curricula and syllabuses is also required, including courses from employers aimed at developing skills in line with the sectoral qualification structure and professional standards (Pavlenko & Pavlenko, 2021).

There are many basic criteria for quality higher education – teacher diplomas, academic indicators and administrative management.

For example, according to the "Regulations on the rating assessment of scientific activity and efficiency of scientific and pedagogical workers and departments of Berdyansk State Pedagogical University", which is developed on the basis of the Law of Ukraine "On Higher Education" of 01.07.2014 (Law № 1556-VII, 2014), the University Charter of 19.12.2016 (Order № 1566, 2016); Development Strategy of Berdyansk State Pedagogical University for 2022 – 2025 and other regulatory documents, the rating assessment of the scientific activity of the teacher depends on the following indicators: quantitative; qualitative; grant and financial efficiency; prestige of the academic staff and the university; and student science.

The main objectives of the rating assessment of scientific activity at the university are: to increase the interest in expanding the scientific heritage and enhancing the image, to adopt the experience of advanced science; to ensure greater objectivity in assessing the quality of scientific effectiveness of teachers through the completeness and reliability of information; to strengthen the collective interest of teachers in improving the final results of scientific effectiveness of departments and the university as a whole, increasing the position of the university in the Consolidated Ranking of Higher Education Institutions and global rankings. All of this is directly connected with the internationalization of higher education.

In recent years, BSPU has paid particular attention to a number of areas in international relations: establishing new partnerships with higher education institutions, scientific institutions and organizations in other countries; intensifying cooperation with foreign educational institutions previously signed cooperation agreements; participating in international research, educational and cultural projects; enhancing international student exchanges; organizing and conducting international scientific and scientific-practical conferences, seminars and round tables on the platform of the BSPU; participation of the University's teachers in similar events at other institutions of higher education, including foreign ones; publication of academic articles by BSPU teachers and students in foreign publications and works by foreign researchers in BSPU publications; grant activities; attraction of foreign specialists and assignment of BSPU teachers for internships abroad.

As a result of the implementation of the BSPU's internal objectives in terms of international integration of higher education into the European market of educational services according to Scopus indicators among Ukrainian universities, the rating increased from 92 (2018) to 110 (2022). According to Webometrics Ranking of World Universities-2022 (IDP Education, 2022) the ranking has increased by 30 points compared to 2019. This is a quality indicator of higher education of Ukraine.

Planning and organization of international cooperation of the University with educational institutions, organizations and institutions of foreign countries under the concluded agreements on cooperation; development and coordination of draft agreements with foreign partners; coordination of work of the University departments and divisions under the international partnership; consulting and assistance in preparation of documents for departure of students and staff of the university abroad for study and internship; organizing the training and internships of the University's students abroad; coordinating the opportunities and meeting dates for foreign specialists, delegations and students; making their meeting programs and hosting foreign delegations has allowed the University to achieve such success.

As an example, the result of active international cooperation has become the academic visit of our scientific partner, the representative of the Faculty of Computer Science of the Benemérita Autonomous University of Puebla (BUAP, Mexico), the head of the laboratory "Research of Digital Systems and Renewable Energy Sources" (LISDER), Professor Jose Italo Cortez, whose dean is Professor, Doctor of Computer Science Marcos Gonzalez Floris (2017, 2018). The lecturer of the Department of Computer

Technologies in Management and Education and Computer Science Hanna Alieksieieva participated in 2017 and 2018 in the international internship at the Benemérita Autonomous University of Puebla on the exchange of scientific and pedagogical staff.

Long-term scientific cooperation has joint developments of students of BSPU and BUAP – this is the result in the field of Embedded Systems and tools for using gateway-based devices, which allow the development of a wide range of circuits using hardware description language (HDL), such as VHDL or Verilog. On the other hand, microcontrollers are basically processors with various peripherals encapsulated in a single chip, which are programmed using low or high level languages such as Assembler, C or C++. The developments are unique and of great scientific importance (Figure 1).

Figure 1. International traineeship of Hanna Alieksieieva at the Benemérita Autonomous University of Puebla (Mexico, 2017, 2018).

The cooperation resulted in new competitive products demanded by the world market, which will allow our countries to take a worthy place in the global economic system. The higher education plays a key role here, being a supplier of highly qualified professionals, a source of new technologies and innovative products.

In March 2018 the lecturer of the Department of Computer Technologies in Management and Education and Informatics of BSPU Olha Shchetynina completed the traineeship at the Prague Institute for Qualification Enhancement entitled "Organization of the educational process, scientific projects and publication activity in EU countries" that took place in Prague, Czech Republic. The problems and prospects of European education, issues of systems and indices of citation of scientific journals, publication activity and productivity of scientists, peculiarities of academic writing, project management, project and grant opportunities of the European Union, conditions for successful implementation of scientific projects were considered (Shchetynina, 2019).

Online traineeships for Ukrainian educators in Poland are made possible by the European League for Professional Development (ELPD). It is not just about gaining new knowledge and communication, but also a real chance to broaden their academic horizons and improve pedagogical skills.

The VIII International Seminar "Quality Management in Education" held in Berlin on 11 February 2020, discussed quality assurance and development in higher education, accreditation systems, approaches to quality management and quality assurance in an international context (News, 2020). There is a productive exchange of experience and enrichment of teaching practices through such international events. Lecturers' participation in international programs, conferences and symposiums also allows for a qualitative improvement of their level.

Members of the Department of Computer Technologies in Management and Education and Informatics of BSPU Vladimir Lavrik, Hanna Alieksieieva, Olha Shchetynina, and Iryna Bardus (Lavrik, & Bardus, 2020) had presented a research paper at a IEEE International Conference on Intelligent Technologies (CONIT-2021) during 25 - 27 June, 2021 organised by the KLE Institute of Technology, Hubballi, India ((Figure 2) (Lavrik et al., 2021). The conference focused on applications of Intelligence in Science, Communication and Computers, more specifically in the areas like Image Processing, Big Data, Wireless Networks and Cloud computing, etc.

Figure 2. IEEE International Conference on Intelligent Technologies (CONIT-2021). Participation of the BSPU representatives.

On November 28, 2022, 5 lecturers and 10 students of BSPU, who are interested in information technology and management in higher education and science, took part in the International Scientific Conference "Information Technology and Management in Higher Education and Science" (Fergana, Republic of Uzbekistan) (Figure 3). The list of co-organizers of the conference shows the high level of this international event: ISMA University of Applied Sciences in Uzbekistan ISMA University of Applied Sciences, Higher School of Internal Security in Lodz Polonia Academy in Czestochowa and others (Balaban et al., 2022).

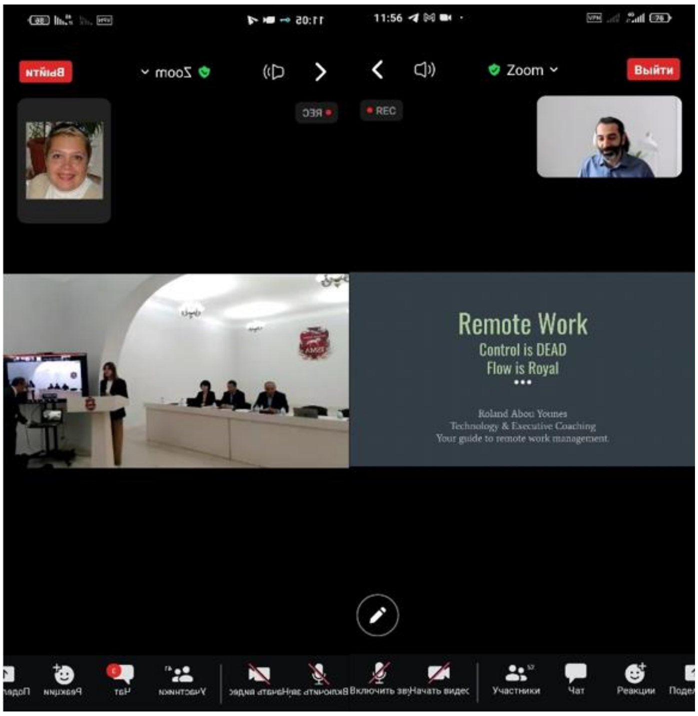


Figure 3. The fragment of the plenary session of the International Scientific Conference "Information Technologies and Management in Higher Education and Science" (Fergana, Republic of Uzbekistan).

The regular participation of BSPU lecturers in international scientific events promotes engineering and technology, related recent developments and issues that need to be discussed and experienced through interaction between researchers and academics around the world. For example, the IRAJ, one of the largest and most prestigious general scientific societies in the world, is an international non-profit academic association within the Peoples Empowerment Trust, whose stated aims are to promote cooperation between scientists, protect scientific freedom, encourage scientific responsibility, support science education, and the spread of science for the benefit of all humanity.

Therefore, cooperation with the World Research Society provides opportunities to share research findings through the organisation of international/national conferences, to establish, maintain and manage centres of excellence for research, and to run independent projects regardless of their caste, creed or religion and much more (Figure 4) (Alieksieieva et al., 2022).

Figure 4. Proceedings of the World Research Society International Conference, Puerto Plata, Dominican Republic (Hanna Alieksieieva et al., 2022).

Innovative activities of higher education institutions are based on the integration of science and education (Sbruieva & Kozlov, 2016). Thus, an important task of innovative universities in Poland and Ukraine is the development of scientific research and its incorporation into industry in cooperation with the world's leading research centers, which will contribute to the country's competitiveness in the international arena.

The Ukrainian experience of integrating science, education and production is interesting. The country has experienced significant upheaval in recent years: the Maidan Revolution, persistent protests, political disturbances, territorial disputes and, since 2022, Russian military aggression. More recently, falling steel prices, one of the country's largest export items, and declining levels of investment in general, including both foreign and domestic investment, have led to a decline in industrial production. But with a well-educated workforce, a long tradition in science and technology, natural endowments, access to markets, a large and prosperous diaspora, and a nascent but successful IT sector, Ukraine has great potential for innovation. At the same time, despite significant positive reform dynamics in recent years, political and economic instability, corruption and the poor quality of institutions and overall governance continue to constrain Ukraine's ability to create an enabling environment for broad experimentation with ideas and technologies (or for innovation) and to promote such activities, which are necessary to create a solid, diversified and well-integrated foundation for long-term sustainable economic development of the country (Unece, 2021).

However, many Ukrainian cities have built an effective innovative scientific and educational infrastructure based on strategic development programs. It includes not only educational institutions, but also offices for commercialization of innovations established in universities and academic institutions, business incubators, innovation and technological centers, and development clusters. Many universities in the country now have their own research and education complexes, which provide systematic support for the commercialization of research results and the introduction of their high-tech developments into enterprises.

For example, the experience of Berdyansk State Pedagogical University, which has been actively cooperating with stakeholders for many years, shows that the gap between business research and practice is steadily narrowing.

All these measures will help to bring academic education closer to practice and business organizations, and the possibilities for international programs will lead to the internationalization of higher education as a whole. When designing curricula, employers' views are considered and relevant elective courses are included. Particular attention is paid to the development of students' entrepreneurial skills. The courses "Entrepreneurship", "Innovative Entrepreneurship" are taught not only to students of economic specialties, but also to students of other faculties. Students participate in research projects, project development, and start-up business project competitions (Alieksieieva, 2012; Nestorenko et al., 2018). Moreover, employers, mostly university graduates, invite students for internships. This is done on mutually beneficial terms, as employers can further conclude employment contracts with the best graduates (Trondal, 2010).

In today's realities, higher education around the world is characterized as more corporate and more competitive, precisely because of internationalization

Conclusions

Participation in various international programs and projects guarantees the quality of educational services, which corresponds to the world standards of the ISO series, and the quality management process of educational services corresponds to the TQM system.

Bridging the gap between business research and practice is an important issue in the integration of science, education and industry. The task of constantly updating knowledge throughout life, as required by the current context, workplace learning is addressed with the introduction of new learning methods using information technology, e-learning and open access to the Internet also contribute to improving the quality of knowledge.

Higher education institutions in Ukraine and Poland strive to improve the quality of education in order to train highly qualified competitive specialists. The level of training and knowledge of foreign languages allows students and graduates under various international external mobility programs to gain international experience in the educational field, expand professional skills, experience international culture and useful language practice. All these measures are aimed at improving the quality of education and the competitiveness of graduates in the international educational environment.

Acknowledgement

Author 1 formulated the goal, clarified the tasks, described the experience of internationalization of the Ukrainian vocational education, described the experience of Berdyansk State Pedagogical University.
Author 2 analyzed scientific research on the problem, analyzed the experience of foreign countries, selected and presented illustrative material, analyzed and put in order the list of literature of domestic scientists, and formulated conclusions.

Author 3 researched and systematized the list of literature of foreign scholars and edited the article.

Bibliographic references

Abyzova, L. (2015). Modernization of educational strategies in the national pedagogical culture. Ukrainian studies almanac, 18.

Alieksieieva, H. M. (2012). The essence and structure of the readiness of future social pedagogues to use computer technologies in their professional activities. Scientific notes of Berdyansk State Pedagogical University. Series: Pedagogical sciences: coll. of science pr. Issue 1. Berdyansk: BDPU, № 2, 9-14. http://bdpu.org/sites/bdpu.org/files/foipt/stat_Alekseeva_8.pdf

Alieksieieva, H., Kurilo, O., & Kryvylova, O. (2022). Strengthening the Human Resources Potential of the Food Industry in the Context of Professional Creativity. World Research. Society International Conference (16th – 17th July 2022). Puerto Plata, Dominican Republic: Institute for Technology and Research (ITRESERCH), 49-56. ISBN: 978-93-90150-32-8.

Altbach, Ph., Reisberg, L., & Rumbley, L. (2009). Trends in Global Higher Education, Tracking an Academic Revolution. Paris: UNESCO, 246 p.

Arbeláez-Campillo, D. F., Villasmil Espinoza, J. J., & Rojas-Bahamón, M. J. (2021). Inteligencia artificial y condición humana: ¿Entidades contrapuestas o fuerzas complementarias? Revista De Ciencias Sociales, 27(2), 502-513. https://doi.org/10.31876/rcs.v27i2.35937

Balaban, O.K., Alieksieieva, H.M., & Antonenko, O.V. (2022). From brand to trend: the impact of the economy of impressions on the development of educational institution management. International scientific conference «Information technologies and management in higher education and sciences» : conference proceedings (November 28, 2022. Fergana, the Republic of Uzbekistan). Riga, Latvia : "Baltija Publishing", Part 1., 80-84.

Ballatore, M. (2015). International Conference "Transnational Academic Spaces" at the University of Bielefeld (Germany). Presentation of the following paper: "Internationalization or ensuring competition in European HE Systems?". In International Conference "Transnational Academic Spaces".

Bartell, M. (2003). Internationalization of universities: A university culture-based framework. Higher education, 45, 43-70.

De Wit, H. (2020). Quality Assurance and Internationalization, Higher Education. The International Encyclopedia of Higher Education Systems and Institutions. Springer Nature B.V. doi: https://doi.org/10.1007/978-94-017-8905-9

Debych, M. (2020). The Triggers for Internationalization and Quality Enhancement in Higher Education of France. International Scientific Journal of Universities and Leadership, 9, 3-14.

Dombrovska, S., & Husarov, K. (2019). Features of regulation of the migration processes in the European Union countries. Bulletin of the National University of Civil Defense of Ukraine. Series: Public administration, 1, 25-28. (In Ukranian)

Ferentz, L. (2014). Treating self-destructive behaviors in trauma survivors: A clinician's guide. Routledge.

Fielden, J. (2017). Global: Financial Aspects of Offshore Activities: International Higher Education, Summer 2013, Number 72. Understanding Higher Education Internationalization: Insights from Key Global Publications, 45-47.

Horbatiuk, L., Alieksieieva, H., Kravchenko, N., Lipych, V., & Rozumna, T. (2019). Use of Mobile Applications for Foreign Language Lexical Competence Formation. Journal of History Culture and Art Research, 8(3), 113-124. doi: http://dx.doi.org/10.7596/taksad.v8i3.2093

Hura V., Nestorenko T., & Makarenko T. (2022). Study of the category "educational service": an interdisciplinary approach. Scientific notes of the BDPU, 2, 91-104. https://cutt.ly/ANmFYwL

IDP Education (2022) Webometrics Ranking of World Universities in 2022. https://www.idp.com/middleeast/webometrics-ranking-of-world-universities/?lang=en

Knight, J. (2011). Five myths about internationalization. International higher education, (62).

Koziievska, O. (2012). Strategies of internationalisation of higher education: international experience and Ukrainian perspective. High school, 7, 30-39. (In Ukranian)

Kramarenko, A., Stepaniuk, K., Bogdanov, I., Alieksieieva, H., & Kempińska, U. (2022). The educational component "Teaching methodology of social and health-care educational sector" under quarantine restrictions. Amazonia Investiga, 11(49), 259-266. https://doi.org/10.34069/AI/2022.49.01.28

Kravchenko, N.V., Aleksieieva, H.M., Horbatiuk, L.V., & Antonenko, O.V. (2017). Increasing the academic openness of higher education institutions by means of web technologies. Physical and mathematical education, 4(14). https://cutt.ly/9NzSaIY

Lavrik, V., Alieksieieva, H., Bardus, I., & Shchetynina, O. (2021). Object-oriented Representation of Mechanical Systems for the Automated Design. 2021 International Conference on Intelligent Technologies (CONIT), 1-10. doi: https://doi.org/10.1109/CONIT51480.2021.9498445

Lavrik, V., & Bardus, I. (2020). Use of elements of dual education to prepare future engineers-pedagogues for teaching robotics (Doctoral dissertation), Cognum Publishing House.

Law № 1556-VII "On Higher Education" of 01.07.2014. https://zakon.rada.gov.ua/laws/show/1556-18

Lukianenko, D., Chuzhykov, V., Wozniak, M., Antoniuk, L., Bal-Woźniak, T., Bolonek, R., ... & Tsyhankova, T. (2013). Convergence and Divergence in Europe: Polish and Ukrainian Cases-Monograph. KNEU, 688 p.

Marginson, S. (2007). Global university rankings: Implications in general and for Australia. Journal of Higher Education Policy and Management, 29(2), 131-142.

Martynovych, N.O., Hornyk, V.H., & Boichenko, E.B. (2021). Marketing research: a study guide. Kyiv: from "Ludmila", 323 p.

Mestenhauser, J. A., & Ellingboe, B. J. (2005). Leadership knowledge and international education. International Educator, 14(6), 36.

Nestorenko, T. P. & Bordousov, O. V. (2015). The value of higher education for the individual. Bulletin of Khmelnytsky National University. Economic sciences, 3, 171-174. URL: https://cutt.ly/SGYr6T9

Nestorenko, T., Ostenda, A., Perelygina, L., & Ilina, Y. (2018). The Impact of Foreign Students on Internationalization of University and on the Economy of a Host City (Case of the Katowice School of Technology). Capacity and resources for sustainable development: the role of economics, business, management and related disciplines. EDAMBA-2018. Conference Proceedings of International Scientific Conference for Doctoral Students and Post-Doctoral Scholars. 17-19.04. 2018, 356-366, University of Economics in Bratislava, Bratislava. https://cutt.ly/RQU7NEU

News (2020) The VIII International Seminar "Quality Management in Education". Berlin. https://news.myseldon.com/ru/news/index/223789061

Nitenko, O. V. (2015). Internationalization of higher education as a factor of university development. Educational discourse, 2(10), 205–216. https://od.kubg.edu.ua/index.php/journal/article/view/249

Order № 1566. The University Charter of 19.12.2016. https://bdpu.org.ua/public-information/university-statute/

Ostenda, A. (2022). Double diploma as a tool for improving the quality of higher education. Scientific notebooks of the University of Technology in Katowice, 15.

Ovsiannikov, O. S., & Alieksieieva, H. M. (2019) The computer environment of the research work of the engineering-pedagogical studies of the computer profile as an object of design. Molod i rynok: Scientific and pedagogical magazine. Drohobych: Ivan Franko Drohobych State Pedagogical University, 9(176), 107-112. doi: https://doi.org/10.24919/2308-4634.2019.182241

Pavlenko, M., & Pavlenko, L. (2021). Formation of communication and teamwork skills of future IT-specialists using project technology. In Journal of Physics: Conference Series, 1840(1), 012031. doi: https://doi.org/10.1088/1742-6596/1840/1/012031

Sbruieva, A., & Kozlov, D. (2016). Internationalization as a driver of the development of the innovative system of the university. Pedagogical sciences: theory, history, innovative technologies, 6, 71-87.

Schnitzer, K. (2003). VI. The German Perspective Regarding the Design and Use of System-Level Indicators for Higher Education. Organization, Bucharest (Romania). European Centre for Higher Education., 83.

Scott, P. (2011). The university as a global institution. In Handbook on globalization and higher education. Edward Elgar Publishing.

Shchetynina, O. (2019). Project management systems as means of development students time management skills. CEUR Workshop Proceedings, 2387, 370–384.

Shchetynina, O., Kravchenko, N., Horbatiuk, L., Alieksieieva, H., & Mezhuyev, V. (2022). Trello as a Tool for the Development of Lifelong Learning Skills of Senior Students. Postmodern Openings, 13(2), 143-167. doi: https://doi.org/10.18662/po/13.2/447

Teichler, U. (2017). Internationalisation trends in higher education and the changing role of international student mobility. Journal of international Mobility, 4, 177-216.

Trondal, J. (2010). Two worlds of change: on the internationalisation of universities, Globalisation, Societies and Education, 8(3), 351-368. doi: https://doi.org/10.1080/14767724.2010.505097

Unece. (2021). Innovation Policy Outlook 2020: Eastern Europe and the South Caucasus. UKRAINE. https://acortar.link/InCwkV

Van der Wende, M. (2007). Internationalization of higher education in the OECD countries: Challenges and opportunities for the coming decade. Journal of studies in international education, 11(3-4), 274-289.

Verbytska, A. (2019). The stimulating directions of higher education internationalization in the process of integration into the European higher education and research area. Economics & Education, 4(1), 34-39.

Zlenko, A., Isaikina, O., & Isaikina, O. (2019). Academic mobility as an integral component of Ukraine's integration into the modern European knowledge society. Society. Document. Communication. «Society. Document. Communication", 6/2, 56-76. doi: https://doi.org/10.31470/2518-7600-2019-6/2-56-76

DOI: https://doi.org/10.34069/AI/2023.63.03.5
How to Cite:
Yan, L. (2023). Peculiarities of the manifestation of psychological barriers in the development of creative abilities in young teenagers of Ukraine and China. *Amazonia Investiga*, *12*(63), 53-66. https://doi.org/10.34069/AI/2023.63.03.5

Peculiarities of the manifestation of psychological barriers in the development of creative abilities in young teenagers of Ukraine and China

Особливості прояву психологічних бар'єрів в розвитку творчих здібностей у молодших підлітків України та Китаю

Received: January 11, 2023 Accepted: February 28, 2023

Written by:
Liu Yan[1]
https://orcid.org/0000-0001-8477-3403
https://www.webofscience.com/wos/author/record/HZK-6648-2023

Abstract

Our work is aimed at studying peculiarities of the manifestation of psychological barriers in the development of creative abilities in younger teenagers of Ukraine and China. The object of study is the mental states and abilities of young adolescents. The research methods: theoretical – analysis, generalization and systematization of theoretical approaches and empirical results; empirical – observation, conversation, analysis of activity products, testing and mathematical and statistical methods. In the scientific literature, it has long been recognized that the development of creative abilities has a significant impact on the formation of a personality, in particular, its opportunities for self-actualization increase. It is especially important to develop the creative abilities of children who are just forming as individuals. This paper presents the results of its own research and provides a comparative analysis of the manifestation of psychological barriers in the development of creative abilities in young adolescents of the Ukrainian and Chinese sample groups made it possible to reveal that the most evident barriers in the young adolescents of the Ukrainian sample group are self-doubt, lack of interest, fear of making a mistake, reluctance to take risks, and among the young teenage Chinese sample group – lack of interest, fear of being unsuccessful at school, reluctance to take risks, and fear of losing friends. However we can observe that in both sample groups there are the same barriers, which are related to the specifics of the development of children of this age and the leading activities of children in young adolescence.

Анотація

Наша робота спрямована на вивчення особливостей прояву психологічних бар'єрів у розвитку творчих здібностей у молодших підлітків України та Китаю. Об'єктом дослідження є психічні стани та здібності молодших підлітків. Методи дослідження: теоретичні – аналіз, узагальнення та систематизація теоретичних підходів та емпіричних результатів; емпіричні – спостереження, бесіда, аналіз продуктів діяльності, тестування та математико-статистичні методи. У науковій літературі давно визнано, що розвиток творчих здібностей має значний вплив на формування особистості, зокрема підвищуються її можливості до самореалізації. Особливо важливо розвивати творчі здібності дітей, які тільки формуються як особистості. У статті наведено результати власного дослідження та проведено порівняльний аналіз прояву психологічних бар'єрів у розвитку творчих здібностей у молодших підлітків української та китайської вибіркових груп, що дозволило виявити, що найбільш вираженими бар'єрами у молодших підлітків є: української вибірки – невпевненість у собі, відсутність інтересу, страх зробити помилку, небажання ризикувати, а серед молоді підлітки китайської вибірки – відсутність інтересу, страх бути неуспішним у школі, небажання ризикувати, і страх втратити друзів. Проте можна спостерігати, що в обох вибіркових групах присутні однакові бар'єри, які пов'язані зі специфікою розвитку дітей

[1] Graduate student, State institution «South Ukrainian National Pedagogical University named after K.D. Ushynsky», Odessa, Ukraine.

Key words: psychological barriers, young adolescents, creativity, creative abilities, teenagers.

цього віку та провідною діяльністю дітей молодшого підліткового віку.

Ключові слова: психологічні бар'єри, діти молодшого підліткового віку, творчість, творчі здібності, підлітки.

Introduction

The problem of psychological barriers in the development of creative abilities of an individual is one of the most relevant in modern psychology. This especially applies to children of younger teenage years. Since this age period is characterized by high sensitivity, both to the development of creative abilities and to the emergence of psychological barriers. The immediate cause of the psychological barrier is the unfavorable prediction of the child as to the process or result of performing the desired action. By its nature, a psychological barrier is a mental state that impedes the realization of intention. The development of creativity acts as a prevention and a means of overcoming psychological barriers in the creative activity of younger teenagers. The elimination of the students' tendency to experience unjustified psychological barriers promotes their inclusion in creative activity during which creative abilities are developed. The unlocking of creative potential influences the development of the individual, in particular, increasing his capacity for self-actualization. The importance of younger adolescence for the development of creative abilities is determined by the fact that at this age at the conscious level manifested the moral and social attitudes of the individual, actively formed the identity of the teenager. The social situation of development in this period becomes stressful in many ways, which entails the appearance of psychological barriers, which, in turn, complicate the formation of the younger teenager's personality and, in particular, his creative abilities. The analysis of the above implies the relevance of determining the relationship and the specifics of the manifestation of psychological barriers in the development of creative abilities of younger teenagers.

The purpose of the study is to study the peculiarities of the manifestation of psychological barriers in the development of creative abilities in younger teenagers of Ukraine and China.

The object of research is the mental states and abilities of younger teenagers, which are a manifestation of psychological barriers and hinder the development of creative abilities.

Research methods

A set of methods was used to perform a number of assigned tasks: theoretical - analysis, generalization and systematization of theoretical approaches and empirical results contained in scientific literary sources; empirical - observation, conversation, analysis of activity products; psychodiagnostic testing, during which the following methods were used: P. Torrens's method, G. Davis's questionnaire of personality creativity; a scale of personal anxiety A.M. Prikhozan, self-assessment of self-confidence, the author-developed questionnaire for the diagnosis of psychological barriers in the development of creative abilities of young adolescents (A. V. Massanov, Liu Yan).

To process the primary data, we used methods of mathematical statistics: computing of the arithmetic mean, correlation analysis (according to the Spearman's test). We used the Student's t-criteria to test the probability of a difference in mean values across samples. The data processing procedure was carried out using the SPSS v 13.0 for Windows software package.

Empirical research base. South Ukrainian National Pedagogical University named after K.D. Ushinsky, Ukrainian Children's Center "Moloda Gvardia" (Odesa), primary and incomplete secondary schools of the People's Republic of China.

The sample group consisted of 300 young teenagers aged 10-12, who were divided into two groups: 150 examinees of the Ukrainian sample group and 150 examinees of the Chinese sample group.

The study was conducted in accordance with the principles of deontology and bioethics.

Literature Review

The conducted theoretical analysis of the literature made it possible to determine that there are enough works in psychology in which various aspects of the problem of psychological barriers in creative activity were studied, but they are devoted more to the study of problems in youth and adulthood. The development of creative abilities was studied by C.V. Aymedov, Yu. O. Asieieva, H. Alieksieieva, N. Kravchenko, L. Horbatiuk, V. Zhyhir, O. Chernieha, A. Craft, V. Levkovska, V. Storozh, R. Dunn, A. Harris, G. D. Chistyakova and others (Aymedov et al., 2018, Alieksieieva et al., 2020; Asieieva & Panaiotova, 2019; Bogoyavlenskaya, 2002; Chistyakova, 1991; Dunne & Wragg, 1994, Harris, 2016). Issues of the psychology of young adolescents are considered in the researches of Yu. O. Asieieva, R. Ewing, R. Gibson, W. Forrester, A. Hui, So. Kyunghee, Hu. Yaeji and others (Asieieva & Panaiotova, 2019; Ewing & Gibson, 2015; Forrester & Hui, 2007; Kyunghee & Yaeji, 2019). There are studies in which it is noted that psychological barriers both negatively and positively affect the development of an individual and his creative abilities (G. O. Ball, M. V. Bastun, O. G. Vydra, N. I. Voloshko, L. M. Hrydkovets, D. B. Bogoyavlenskaya, Ya. A. Ponomarev, A. V. Massanov, D. Bar-Tal, E. Halperin, F. Piske, T. Stoltz, C. Vestena, S. Freitas, B. Valentim, C. Oliveira, etc.) (Ball et al., 2005; Bogoyavlenskaya, 2002; Ponomarev, 1976, Massanov, 2016, Bar-Tal & Halperin, 2014, Piske et al., 2016).

It was also established that there are contradictions in the perceptions of the role of the Examinee's personal characteristics in overcoming psychological barriers in creative activity, which are related to determining the influence of personal characteristics on the success of overcoming a psychological barrier (Craft, 2008; Ewing & Gibson, 2015; Aymedov et al., 2018; Asieieva & Panaiotova, 2019). In the works of scientists, it was proved that psychological barriers play a leading role in personality development. It is precisely the development of creative thinking that occurs during the solution of emerging problems that act as obstacles to achieving the goal (Shakurov, 2001; Bar-Tal & Halperin, 2014; Matyush, 2016). As A. A. Osipova notes, everything that happens to a person under the influence of a psychological barrier is experienced by them as a state of stress, discomfort, tension, which leads to a deviation from normal functioning. However, mental development leads to the restoration of balance and reduction of stress (Osipova & Prokopenko, 2014). Thus, the success of creative activity depends on getting rid of the template in the activity and overcoming the barrier of stereotypes. But, according to the research of T.V. Kudryavtsev and Ya. O. Ponomarev, one of the most important functions of the barrier is to ensure the stability of the individual (Kudryavtsev, 1975; Ponomarev, 1976). In his works, Ya. O. Ponomarev points out the need to research ways to overcome psychological barriers, noting that instead of searching for particular methods and algorithms that lead to the creation of a new one, it is necessary to develop a system of measures designed to prevent errors of inertia, that prevent its occurrence, and are directed, if it has already appeared, to the destruction of standard principles and routine techniques (Ponomarev, 1976). The success of a creative solution depends on the ability of a person to get rid of the template in solving the problem and to understand that the methods used before are invalid.

However, it is precisely the problem of preventing the occurrence and overcoming of undesirable psychological barriers that is relevant today, as noted by (V. Ageyev, T. V. Kudryavtsev, A. A. Matyush, R. Kh. Shakurov, etc.) (Ageyev, 2012; Matyush, 2016; Kudryavtsev, 1975; Shakurov, 2001).

Therefore, despite the large number of studies on this issue, the study of psychological barriers in the development of creative abilities of younger teenagers remains an understudied aspect and requires detailing various aspects of this phenomenon.

Results and discussion

In order to study the peculiarities of the manifestation of psychological barriers in the development of creative abilities in young adolescents of Ukraine and China, we conducted a comparative analysis of the results according to the methods of P. Torrens, G. Davis (Shestakova, 2015), Pryhozhan (2002), "Non-existent animal", the author-developed questionnaire for the study of psychological barriers in the development of creative abilities.

Tables 1-2 present the results of the study of the level of development of creative abilities and personal characteristics in the young Chinese sample group.

Based on the data in Table 1, we can say that the average level of expression of creativity as a personality quality prevails among young adolescents aged 10-12 years of the Chinese sample group. This testifies to the presence of creative abilities in the examinees. A more detailed analysis allows us to determine that among the 10-year-old examinees of the Chinese sample group, 8% have a low level of expression of creativity as a personality quality, 76% of the examinees have an average level of development of this criterion, 16% have a high level. Thus, the most revealed qualities of a creative personality identified in the 10-year-old Chinese sample group are a developed sense of beauty, a desire to experiment, a desire to stand out among others, not to be altruistic, a desire for group work, self-sufficiency, a sense of purpose. Acceptance of a disorder, risk-taking, dissatisfaction with oneself, and making mistakes turned out to be the least pronounced qualities.

Table 1.
The level of development of creative abilities of young adolescents from the People's Republic of China (according to the methods of P. Torrens, G. Davis)

Groups of examinee (N=50)	P.Torrens's method					G.Devis's method			
	Productivity	Constructive activity	Categorical flexibility	Visual creativity	Verbal originality	X_{mv}	M	St.of X	Level
10 years	0.52	1.5	0.60	0.79	1.30	11.72	12	2.72	C
11 years	0.56	1.6	0.62	0.82	1.36	11.46	12	2.51	C
12 years	0.65	1.8	0.65	0.89	1.42	12.12	12	2.66	C

Among the 11-year-old examinees of the Chinese sample group, 10% had a low level of expression of creativity as a personality quality, 82% of the examinees had an average level of expression of the specified criterion, and 8% of the examinees had a high level of the specified criterion. A more detailed analysis of the researched works of the specified group shows that the most evident characteristics of a creative personality are altruism, inquisitiveness, a tendency to individual work, self-sufficiency, a sense of beauty, a desire to experiment, and a need for activity. The least expressed qualities of a creative personality are the following - acceptance of disorder, risk-taking, dissatisfaction with oneself, unpopularity, denial of pressure, business mistakes.

It was established that among the 12-year-old Chinese sample group, 10% have a low level of this criterion, 70% of the examinees have an average level, and 20% of the examinees have a high level. Characteristics of a creative personality in 12-year-old examinees of the Chinese sample group are the desire to stand out, altruism, inquisitiveness, desire for individual work, a sense of beauty, the need for activity, as well as order in affairs, freedom from risk-taking, self-satisfaction, popularity.

So, we can observe that the level of expressiveness of creativity as a personality quality in the studied Chinese sample group increases during the studied age, and the characteristics of the creative personality in young adolescents experience some changes. Also, statistically significant differences (according to the Mann-Whitney test, $p<0.05$) were found for the criterion of expressiveness of creativity as a personality quality in young adolescents of the Chinese sample group, namely, the level of expressiveness is higher in 12-year-old than in 10-year-old examinees.

The analysis of the results of the study of the development peculiarities of structural components of creative abilities in the studied 10-12-year-old Chinese sample group made it possible to establish (see Table 1) that high scores were found for markers of constructive activity (X_{mv} =1.5, X_{mv} =1.6, X_{mv} =1.8) and verbal originality (X_{mv}=1.30, X_{mv}=1.36, X_{mv}=1.42), productivity markers were the second according to the results (X_{mv}=0.52, X_{mv}=0.56, X_{mv}=0,65) and visual creativity (X_{mv}=0.79, X_{mv}=0.82, X_{mv}=0.89), the marker of categorical flexibility is in the last place (X_{mv}=0.60, X_{mv}=0.62, X_{mv}=0.65). This distribution of markers is related to the peculiarities of the school education system in China. As pointed out by Kyunghee So, Yaeji Hu, Forrester V., Hui A, changes in school education in the country have led to the fact that students are trained to answer specific questions correctly, because examinations are conducted in the form of tests (Kyunghee & Yaeji, 2019; Forrester & Hui, 2007). But almost no attention is paid to the development of the originality of thinking and creativity. Forrester V., Hui, A. indicate that the current education system in China is based on fear and cramming of material, does not provide an individual approach and the certification system evaluates only cognitive skills (Forrester & Hui, 2007). That is, the education system is based on mechanical memorization. However, to date, the M. Montessori system and the Waldorf education system, which are currently only used in private schools, are beginning to be used in education (Liu, 2019). Also, the obtained results indicate that during the studied age there is a development of certain components of creative abilities in the young adolescents of the Chinese sample group, especially this jump is observed at the age of 11 and 12 years.

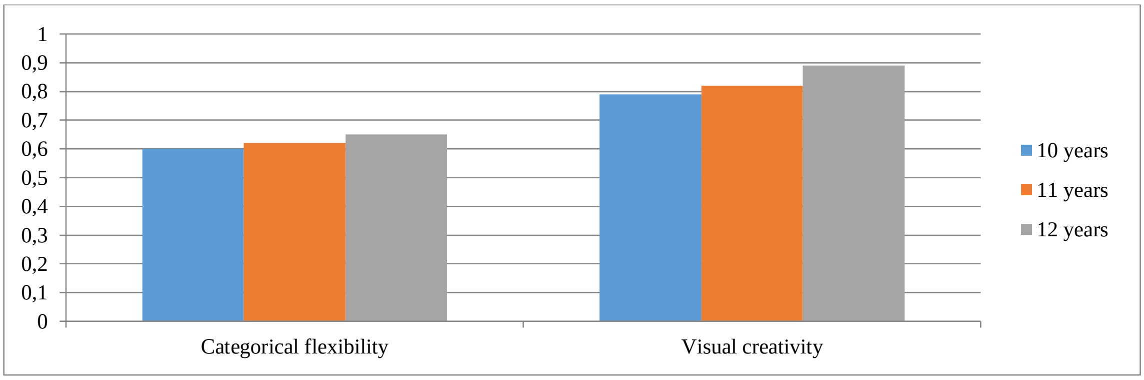


Fig. 1. Generalization of the results of the research on creativity among young adolescents of the Chinese sample group (according to P. Torrens' method).

According to the generalized data presented in fig. 1, it can be observed that during the studied age, the representatives of the Chinese sample group develop structural markers of creativity. For confirmation, we used the Mann-Whitney test. Statistically significant differences were found between performance markers of young adolescents aged 10 and 11 ($U=1060$ at $p<0.05$), 10 and 12 years old ($U=1037$ at $p<0.05$); constructive activity of young adolescents 10 and 12 years old ($U=1130$ at $p<0.05$), visual creativity of young adolescents 10 and 11 years old ($U=1095$ at $p<0.05$).

The results of the research on the level of anxiety (according to the method of H. M. Pryhozhan) of young adolescents of the Chinese sample group are presented in Table 2.

It was found that among the young adolescents of age 10 of the Chinese sample group, the scale of interpersonal anxiety is the most evident ($X_{mv}=6.3$), which has an average level and indicates that they are characterized by some anxiety in communicating with their peers. The second marker according to the results is school anxiety ($X_{mv}=6.1$), that is, anxiety in the studied 10-year-olds is caused by situations related to school, academic success and communication with teachers. The third one according to the results of the 10-year-old examinees is the marker of self-assessed anxiety ($X_{mv}=5.7$), that is, the least disturbing for the examinees are situations related to self-image.

Table 2.
Markers of the level of anxiety in young adolescents of the Chinese sample group (according to the method of H. M. Prihozhan)

Groups of examenee	School anxiety	Self-esteemed anxiety	Interpersonal anxiety	General anxiety
10 years old	6.1	5.7	6.3	6.0
11 years old	5.5	5.8	6.1	5.8
12 years old	5.4	6.2	5.8	5.8

It was found that among the young adolescents aged 11 of the Chinese sample group, the scale of interpersonal anxiety is the most evident ($X_{mv} = 6,1$), which indicates the presence of certain anxiety and fear in communication with peers. According to the results of the studied 11-year-olds, the second marker that stands out is self-assessed anxiety ($X_{mv}=5.8$), which generally indicates the possibility of anxiety in situations that actualize self-discovery. The third marker of young adolescents aged 11 is school anxiety ($X_{mv}=5.5$), i.e. the examinees are emotionally restrained in situations related to school.

The level of anxiety in young teenagers aged 12 in the Chinese sample group was studied and according to the results it was established that the self-reported anxiety marker (X_{mv}=6.2) stands out first, that is a significantly increased level of anxiety in situations related to self-discovery. The second marker of 12-year-old young Chinese adolescents according to the results is interpersonal anxiety (X_{mv}=5.8), i.e., anxiety was investigated in situations that involve communication with a large number of people. The third marker of 12-year-old teenagers according to the results is school anxiety (X_{mv}=5,4), which is the most evident in situations related to the performance of tests and receiving grades for them.

A comparative analysis of the results of the research on the levels of anxiety in young adolescents aged 10-12 years of the Chinese sample group (see Table 2.) allows us to reveal that during the studied age there are changes in the predominance of one or another type of anxiety, namely in young adolescents aged 10 and 11 the most evident is interpersonal anxiety, and self-esteem anxiety is the most evident in 12-year-old examinees. However, school anxiety is the least evident for young adolescents aged 11 and 12, and self-esteem anxiety for 10-year-old examinees. As the scientists explain, this is due to the special social situation of the development of Chinese young teenagers, as well as socio-economic and psychological reasons. Also, So. Kyunghee, Hu. Yaeji, V. Forrester, A. Hui indicate that Chinese schoolchildren are constantly under stress, which is related to the constant testing system at school (Kyunghee & Yaeji, 2019, Forrester & Hui, 2007)

The results obtained by the "Non-existent animal" method in the young 10-year-old Chinese sample group allow us to say that the most evident is the marker of experiencing fear (60%). The second marker is fear and anxiety (20%), and the least expressed in the studied group of 10-year-old teenagers are such markers as the ease of occurrence of apprehensions and fears (17%) and severe anxiety (16%). It was also found that among the studied 10-year-olds, 65% of the examinees are not confident in themselves, have low self-esteem, are indecisive, are not interested in their social position, they have no tendency to self-affirmation, and 30% of the Examinees have markers of a constant tendency to activity. 25% of the studied 10-year-old Chinese sample group are dissatisfied with themselves and depressed, have feelings of remorse; creative abilities were found in only 25% of the examinees.

Among the young 11-year-olds teenagers of the Chinese sample group, the most evident marker is experiencing fear (60%). The marker of the ease of apprehension and fear (20%) is the second most evident one, and the marker of fear and anxiety (18%) is the third one. The results for the marker of acute anxiety are slightly lower (18%). Feelings of anxiety and fear of aggression from others were also found in 37% of the examinees; 29% of the researched are characterized by conformity of judgments and attitudes in decision-making, stationarity, banality; 25% of the respondents are dissatisfied with themselves and depressed, have feelings of remorse; creative abilities were found in only 27% of the examinees.

In the works of young 12-year-old adolescents from the Chinese sample group, the marker of experiencing fear prevails (57%). The markers of ease of apprehension and fear (22%) and fear and anxiety (19%) are second ones in terms of results. Less evident in the works of 12-year-old teenagers is the marker of acute anxiety (16%). It was also established that 20% of the examinees show mistrust and verbal aggression; creative possibilities were found in 30% of the examinees.

The analysis of the results of the author-developed questionnaire for the study of psychological barriers in the development of creative abilities in young adolescents (A. V. Massanov, Liu Yan) (Liu, 2019) of a 10-12-year-old Chinese sample group revealed that among the studied 10-year-olds, 90% of teenagers attend after-school activities and clubs, 10% of respondents do not go to clubs of interests after school; among the studied 11-year-olds, 95% of the teenagers are involved in clubs and activities after school, 5% of teenagers do not attend any after-school clubs, among the studied 12-year-olds, 13% of teenagers do not attend after-school clubs and are not engaged into after-school activities, and 87% of teenagers attend clubs.

Studying in detail the results according to the specified method in each age group, we found out that if the 10-year-old young teenagers of the Chinese sample group do not attend after-school clubs, it will be due to the fact that they do not want to go anywhere, they only want to study (30%), think that school is more interesting and you can study only at school (20%), in other places besides school they feel threatened and do not go to clubs (25%), there are many friends at school (20%). However, among the respondents who do not attend creative clubs and activities, dancing, ping-pong, basketball, football, singing and drawing were singled out among the best after-school clubs where they would go. It was also established that among the most popular sections and groups among 10-year-olds are ping-pong, dancing, drawing, singing and physical education, playing a Chinese musical instrument. In 40% of the studied 10-year-olds, the desired after-school clubs differ from the ones they attend.

The results of the questionnaire on psychological barriers in the development of creative abilities of 11-year-olds of the Chinese sample group made it possible to establish that, if they did not attend clubs, what is the reason for this - they explain it by the fact that they "don't know" (15%), "I don't want to study, but I want to go out" (20%), "I need to study" (15%), "I can spend more time with friends" (55%). It was found that among the most popular clubs and groups among 11-year-olds are calligraphy, dancing, football, playing the piano, drawing, chess, and English. However, most of the studied 11-year-olds would like to change their club to another one, among which they single out dancing, piano, playing the guitar, tourism, playing a Chinese musical instrument, and playing the swirel.

In the works of 12-year-olds of the Chinese sample group, it is determined what is associated with not attending clubs - "I have many friends and I want to communicate with them more" (30%), "lessons are the most important" (15%), "I want to study more at school" (15%). So, among the most popular clubs and activities attended by 12-year-olds are the museum, summer camp, swimming, literature, drumming, chess, and playing basketball. However, the studied 12-year-olds have practically no desire to change the club to another one.

We can observe that during the studied age, the younger teenagers of the Chinese sample group have a change in the choice of after-school clubs, as well as a desire not to go to after-school clubs at all, but to rest and communicate with their peers. Such results are explained by the peculiarities of schooling. After all, children are at school from eight in the morning until three or four in the evening, and after school they return home and do numerous homework. On weekends, schoolchildren mostly visit tutors, and also attend music school, art school and sports sections. But they do all this under the pressure of their parents, who teach them that they will not be able to enter the university without passing school exams, forgetting that success in life depends on other social skills.

We also studied the specifics of the relationship between markers of creative abilities and psychological barriers, personality traits on which these barriers are based, among young teenagers of the Chinese sample group (see Tables 3-5).

According to the data in Table 3, it can be seen that there is a strong relationship between the performance marker before making visual hypotheses and general anxiety ($r=0.29$, $p<0.05$); between the marker of creative environment and productivity ($r=0.33$, $p<0.05$), constructive activity ($r=0.38$, $p<0.05$), that is, we can say that in the presence of a creative environment and a moderate level of anxiety the level of structural components of creative abilities in the examinees will increase.

Table 3.
*Indicators of correlations between creative abilities and personal characteristics in young 10-year-old adolescents of the Chinese sample group (according to the methods of P. Torrens, G. Davis and the methods of H. M. Pryhozhan, psychological barriers***)**

Indicators of the motivational sphere	Criteria according to the P. Torrens's method					G.Devis' s method
	Productivity	Constructive activity	Categorical flexibility	Visual creativity	Verbal originality	
r1	-0.32*	0.13	0.07	-0.19	0.27	-0.34*
r2	0.18	0.10	0.11	0.04	0.12	0.11
r3	-0.31*	-0.09	0.01	-0.12	-0.06	-0.32*
r4	0.29*	0.18	0.16	0.15	0.18	-0.37*
r5	0.33*	0.38*	0.20	0.24	0.13	0.29
r6	-0.34*	-0.31*	-0.16	-0.30*	0.09	-0.35*

Note: * – statistically significant differences at $p<0.05$; ** – statistically significant differences at $p<0.01$; r1 – school anxiety; r2 – self-assessed anxiety; r3 – interpersonal anxiety; r4 – general anxiety; r5 – creative environment; r6 - is an indicator of psychological barriers.

A significant inverse relationship was found between markers of school anxiety and productivity (r=-0.32, p<0.05), creativity as a personality quality (r=-0.34, p<0.05); between interpersonal anxiety and productivity (r=-0.31, p<0.05), creativity as a personality quality (r=-0.32, p<0.05); between general anxiety and creativity as a personality quality (r=-0.37, p<0.05); between the markers of psychological barriers and visual creativity (r=-0.30, p<0.05), productivity (r=-0.34, p<0.05), constructive activity (r=-0.31, p<0.05), creativity as a personality quality (r=-0.35, p<0.05), the specified personal characteristics negatively affect the development of structural components of creative abilities and creativity in the 10-year-old Chinese sample group examinees.

Table 4 presents the results of the study of the relationships between the structural components of creative abilities and personal characteristics in the works of young 11-year-old teenagers of the Chinese sample group.

Table 4.
Indicators of correlations between creative abilities and personal characteristics in young 11-years-old adolescents of the Chinese sample group (according to the methods of P. Torrens, G. Davis and the methods of H. M. Pryhozhan, psychological barriers)

Indicators of the motivational sphere	Criteria according to the P. Torrens's method					G.Devis' s method
	Productivity	Constructive activity	Categorical flexibility	Visual creativity	Verbal originality	
r1	-0,34*	-0,15	0,18	-0,37*	-0,22	-0,39*
r2	-0,14	-0,15	-0,03	-0,13	-0,10	-0,07
r3	-0,33*	-0,10	-0,05	-0,38*	-0,32*	-0,41*
r4	0,09	0,07	0,24	0,05	-0,13	0,10
r5	0,35*	0,31*	0,27	0,36*	0,22	0,20
r6	-0,39*	-0,29*	-0,27	-0,34*	-0,28*	-0,42**

Note: * – statistically significant differences at p<0.05; ** – statistically significant differences at p<0.01; r1 – school anxiety; r2 – self-assessed anxiety; r3 – interpersonal anxiety; r4 – general anxiety; r5 – creative environment; r6 – is indicator of psychological barriers.

Interrelationships were revealed in the works of young teenagers aged 11 of the Chinese sample group between markers of the creative environment and productivity (r=0.35, p<0.01), visual creativity (r=0.36, p<0.05), constructive activity (r=0.31, p<0.05), which indicates the dependence of the level of development of markers of creative abilities on the environment in which a teenager develops.

Strong inverse relationships were found in the works of 11-year-old Chinese teenagers between markers of school anxiety and productivity (r=-0.34, p<0.05), visual creativity (r=-0.37, p<0.05), creativity as a personality quality; between interpersonal anxiety and productivity (r=-0.33, p<0.05), visual creativity (r=-0.38, p<0.05), verbal originality (r=-0.32, p<0 .05), creativity as a personality quality (r=-0.41, p<0.05); between psychological barriers and productivity (r=-0.39, p<0.05), visual creativity (r=-0.34, p<0.05), verbal originality (r=-0.28, p <0.05), constructive activity (r=-0.29, p<0.05), creativity as a personality quality (r=-0.42, p<0.05), that is, the level of development of structural components of creative abilities will decrease with an increase in the number of psychological barriers and the level of anxiety in the studied 11-year-olds.

A strong relationship was found in the works of younger adolescents aged 12 years of the Chinese sample (see Table 5) between markers of the creative environment and productivity (r=0.32, p<0.05), visual creativity (r=0.36, p<0.05), constructive activity (r=0.30, p<0.05), creativity as a personality quality (r=0.31, p<0.05), that is, a creative environment promotes the development of creative abilities of the studied 12-year-olds.

An inverse strong relationship was found between markers of school anxiety and constructive activity (r=-0.29, p<0.05), visual creativity (r=-0.36, p<0.05), verbal originality (r= -0.30, p<0.05); between interpersonal anxiety and productivity (r=-0.35, p<0.05), visual creativity (r=-0.29, p<0.05), categorical flexibility (r=-0.37, p<0.05), creativity as a personality quality (r=-0.30, p<0.05); between the level of psychological barriers and productivity (r=-0.35, p<0.05), visual creativity (r=-0.32, p<0.05), verbal originality (r=-0.30, p<0.05), creativity as a personality quality (r=-0.39, p<0.05), between self-rated anxiety and productivity (r=-0.29, p<0.05), visual creativity (r=-0.34, p<0.05), verbal originality (r=-0.30, p<0.05), creativity as a personality quality (r=-0.37, p<0.05), i.e. the level of development of creative abilities will decrease with an increase in the level of psychological barriers and the level of anxiety in the studied 12-year-olds.

Table 5.
Indicators of correlations between creative abilities and personal characteristics in young adolescents 12 years old of the Chinese sample (according to the methods of P. Torrens, G. Davis and the methods of H. M. Pryhozhan, psychological barriers)

Indicator of the motivational sphere	Criteria according to the P.Torrens's method					G.Devis' s method
	Productivity	Constructive activity	Categorical flexibility	Visual creativity	Verbal originality	
r1	-0,07	-0,29*	-0,12	-0,36*	-0,30*	0,11
r2	-0,29*	-0,12	-0,03	-0,34*	-0,30*	-0,37*
r3	-0,35*	0,13	-0,37*	-0,29*	-0,17	-0,30*
r4	0,05	-0,09	-0,12	0,10	-0,11	-0,16
r5	0,32*	0,30*	0,27	0,36*	0,20	0,31*
r6	-0,35*	-0,14	0,10	-0,32*	-0,30*	-0,39*

Note: * – statistically significant differences at p<0.05; ** – statistically significant differences at p<0.01; r1 – school anxiety; r2 – self-assessed anxiety; r3 – interpersonal anxiety; r4 – general anxiety; r5 – creative environment; r6 – is indicator of psychological barriers.

A comparative analysis of the results of the study of the level of development of the structural components of creative abilities in young adolescents of the Ukrainian and Chinese sample groups was conducted (see Table 6 and Figs. 2, 3).

According to the summarized data due to the methods of P. Torrens and G. Davis, which are presented in Table 6, we can observe that the level of development of creativity as a quality of personality is higher in the representatives of the Chinese sample group compared to the representatives of the Ukrainian sample group, which is confirmed by the presence of statistically significant differences in the scores for marker in the studied Chinese and Ukrainian groups of 10, 11, 12 years old (U=997, U=956, U=923 at p<0.05).

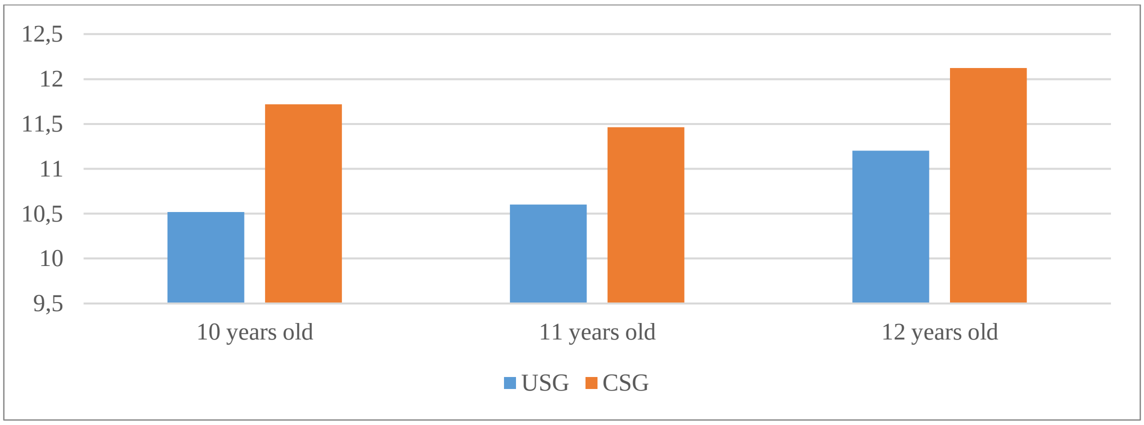
Table 6.
Comparative analysis of the results according to the methods of P. Torrens and G. Davis in young adolescents of the Ukrainian and Chinese sample groups

Criteria	Sample groups								
	10 years old			11 years old			12 years old		
	USG	CSG	U	USG	CSG	U	USG	CSG	U
Productivity	0.57	0.52	890	0.65	0.56	967*	0.71	0.65	814
Constructive activity	1.65	1.5	1001	1.87	1.6	1002	2.0	1.8	902
Categorical flexibility	0.45	0.6	805	0.35	0.62	937*	0.35	0.65	942*
Visual creativity	0.71	0.79	1028*	0.76	0.82	997*	0.86	0.89	1004*
Verbal originality	1.02	1.30	1036*	1.47	1.36	938*	1.48	1.42	822
Creativity	10.52	11.72	997*	10.6	11.46	956*	11.2	12.12	923*

Note: USG – Ukrainian sample group, CSG – Chinese sample group.

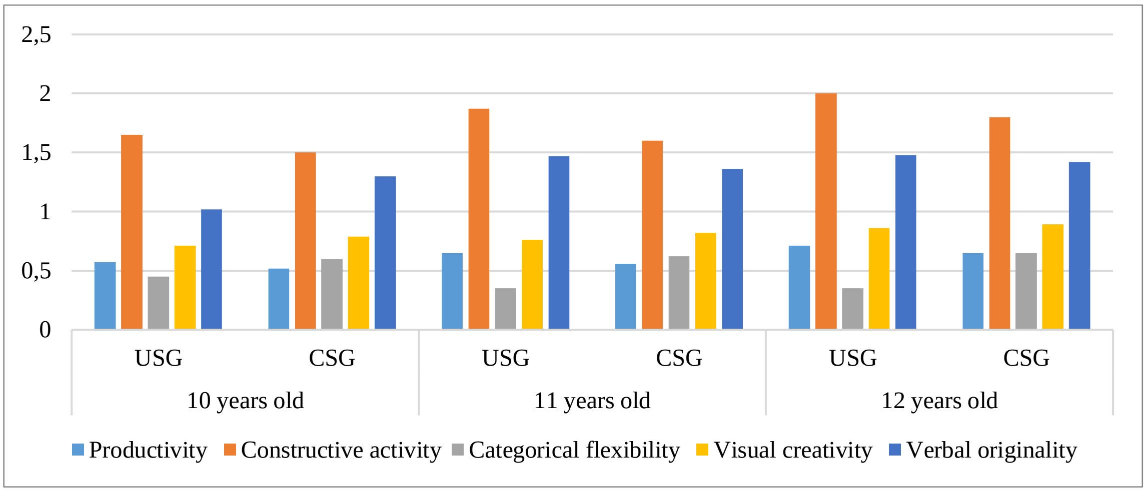
The analysis of the results of the research on the level of development of the structural components of creative abilities according to P. Torrens's method made it possible to establish that in the works of the studied 10 years differences in the levels of development of such structural components of creative abilities as productivity (X_{mv}=0.57 and X_{mv}=0.52), constructive activity (X_{mv}=1.65 and X_{mv}=1.5), i.e. the level of development of the indicated markers is higher among representatives of the Ukrainian sample group. But, according to such markers as categorical flexibility (X_{mv}=0.45 and X_{mv}=0.6), visual creativity (X_{mv}=0.71 and X_{mv}=0.79), verbal originality (X_{mv}=1.02 and Xmv=1.30) the level of development is higher in representatives of the Chinese sample group compared to the Ukrainian one. Also, we found statistically significant differences in the scores for markers of visual creativity and verbal originality among the studied Chinese and Ukrainian groups of 10-year-old teenagers (U=1028, U=1036 at $p<0.05$), that is, the level of development of the specified markers is higher among the representatives of the Chinese sample group.

The results obtained in the works of younger teenagers aged 11 of two sample groups show that the level of development of such markers of creative abilities as productivity, constructive activity and verbal originality is higher in younger teenagers of the Ukrainian sample group compared to representatives of the Chinese one (X_{mv}=0.65 and X_{mv}=0.56; X_{mv}=1.87 and X_{mv}=1.6; X_{mv}=1.47 and X_{mv}=1.36). But the level of development of such components as categorical flexibility and visual creativity is higher in examinees of the Chinese sample group compared to young adolescents of the Ukrainian one (X_{mv}=0.35 and X_{mv}=0.62; X_{mv}=0.76 and X_{mv}=0.82). Also, the obtained results are confirmed by the presence of statistically significant differences in the works of the studied Chinese and Ukrainian sample groups according to the markers of productivity (U=967, at $p<0.05$), categorical flexibility (U=937, at $p<0.05$), visual creativity (U=997, at $p<0.05$) and verbal originality (U=938, at $p<0.05$).



Note: USG – Ukrainian sample group, CSG – Chinese sample group.
Fig. 2. Comparative analysis of the level of creativity as a personality quality among young adolescents of the Ukrainian and Chinese sample groups (according to the method of G. Davis).

A comparative analysis of the results of the research on the level of development of the structural components of creative abilities among 12-year-old teenagers made it possible to establish that differences in the levels of development of such structural components of creative abilities as productivity (X_{mv}=0.71 and X_{mv}=0.65), constructive activity (X_{mv}=2.0 and X_{mv}=1.8), verbal originality (X_{mv}=1.48 and X_{mv}=1.42), i.e. the level of development of the indicated criteria is higher among representatives of the Ukrainian sample group. However, according to such markers as categorical flexibility (X_{mv}=0.35 and X_{mv}=0.65), visual creativity (X_{mv}=0.86 and X_{mv}=0.89), the level of development is higher among representatives of the Chinese sample group compared to the Ukrainian one. Also, we found statistically significant differences in the evaluations of markers of visual creativity and categorical flexibility in the investigated Chinese and Ukrainian groups of 12 years old (U=1004, U=942 at $p<0.05$), i.e., the level of development of these criterions is higher in representatives of the Chinese sample group.



Note: USG – Ukrainian sample group, CSG – Chinese sample group.
Fig. 3. Comparative analysis of the level of development of structural components of creativity in young adolescents of the Ukrainian and Chinese sample groups (according to the method of P. Torrens).

According to the comparative analysis of the level of development of the structural components of creativity in young adolescents of the Ukrainian and Chinese sample groups (according to P. Torrens's method), which are presented in fig. 3, we can observe that during the studied age, the young 10-12-year-old teenagers of the Ukrainian sample group have a higher level of development of such structural components of creative abilities as productivity, constructive activity and verbal originality in comparison with the results of the studied Chinese ones. However, the level of development of such structural components as visual creativity and categorical flexibility is higher in the studied Chinese sample group of 10-12 years old.

The peculiarities of the manifestation of anxiety in young adolescents aged 10-12 years of Ukrainian and Chinese samples were clarified (see Table 7 and Fig. 4). It was established that the level of school anxiety among young adolescents of the Ukrainian sample group is lower than that of the representatives of the Chinese one (10-year-old Hmv=4,12 and Hmv=6,1, 11-year-olds – Hmv=4,84 and Hmv=5,5, 12-year-olds – Hmv=4,56 and Hmv=5,4). Differences in the level of manifestation of self-evaluative and interpersonal anxiety among the representatives of the two samples were also found, namely, the level of the indicated types of anxiety is higher among the representatives of the Chinese sample group.

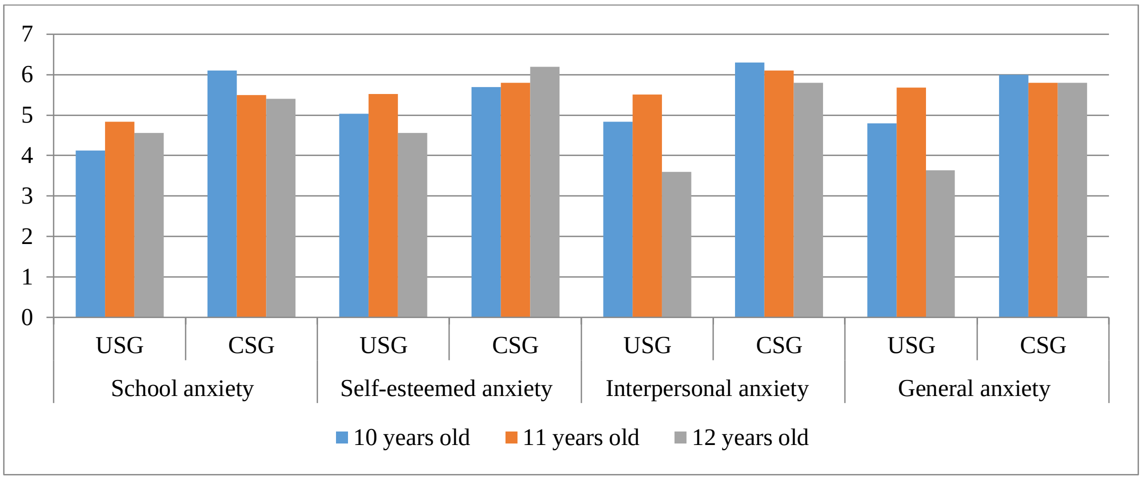
Table 7.
Comparative analysis of the results of studying the level of anxiety according to the method of H. M. Pryhozhan in young adolescents of Ukrainian and Chinese sample groups

Sample groups	School anxiety			Self-esteemed anxiety			Interpersonal anxiety			General anxiety		
	USG	CSG	U	USG	CSG	U	USG	CSG	U	USG	CSG	U
10 years old	4.12	6.1	993*	5.04	5.7	756	4.84	6.3	1089*	4.8	6.0	765
11 years old	4.84	5.5	1201*	5.52	5.8	810	5.51	6.1	1125*	5.68	5.8	901
12 years old	4.56	5.4	1095*	4.56	6.2	853	3.6	5.8	1020*	3.64	5.8	807

Note: USG - Ukrainian sample group; CSG - Chinese sample group.

A comparative analysis of the results of the study of the level of anxiety in the examinees allowed us to establish that self-esteem anxiety is the most evident in the young adolescents ages 10 of the Ukrainian sample group, and it is the least evident in the young adolescents aged 10 of the Chinese sample group. However, in the 10-year-old examinees of the Chinese sample group, interpersonal anxiety is the most evident. In the works of 11-year-old examinees, it was found that self-esteem anxiety is the most evident in the representatives of the Ukrainian sample group, and interpersonal anxiety is the most evident in the representatives of the Chinese one. School anxiety is the least evident among representatives of both sample groups.

The results of the analysis of the works of the young 12-year-olds of the two sample groups show that self-esteem anxiety is the most evident in them, but the results differ in the least evident type of anxiety: in the Ukrainian sample group - interpersonal anxiety, in the Chinese one - school anxiety.



Note: USG - Ukrainian sample group; CSG - Chinese sample group.
Fig. 4. Comparative analysis of levels of anxiety exposure in young adolescents of Ukrainian and Chinese samples groups

According to the comparative analysis of the level of manifestation of types of anxiety in young adolescents of the Ukrainian and Chinese sample groups (Fig. 4), it can be observed that there are significant differences in the manifestation of anxiety in representatives of the Ukrainian and Chinese sample groups. Namely, in young adolescents of the Ukrainian sample group, self-esteem anxiety is the most evident, and interpersonal anxiety is the least evident. On the contrary, in the teenagers of the Chinese sample group, interpersonal anxiety is the most evident, and self-esteem anxiety is the least evident. Also, statistically significant differences were found in the works of the studied Chinese and Ukrainian sample groups in the evaluations of interpersonal anxiety (U=1089, U=1125, U=1020, at $p<0.05$), school anxiety (U=993, U=1201, U=1095 at $p<0.05$). This indicates that the level of interpersonal and school anxiety is higher in the studied Chinese sample group compared to the Ukrainian one. This can be explained by the peculiarities of schooling in the countries. Chinese children study for more than 10 hours a day and have little time to communicate with their peers, which leads to misunderstandings between them.

The peculiarities of the manifestation of psychological barriers in the development of creative abilities of young Ukrainian and Chinese adolescents were studied. Thus, it was found that the most evident barriers in the young adolescents of the Ukrainian group are self-doubt, limited opportunities, lack of curiosity, fear of making a mistake, reluctance to take risks, and in the young adolescents of the Chinese sample group, the most evident are lack of curiosity, fear of bad study at school, reluctance to take risks, fear of losing friends, limited opportunities. But we can observe that there are the same barriers in both samples, which is related to the specifics of development at a given age and leading activities.

Conclusions

Having studied the peculiarities of the manifestation of psychological barriers in the development of creative abilities of young adolescents of Ukraine and China, having conducted an analysis of theoretical scientific data on selected issues, we can say that when developing a program to work with psychological barriers in the development of creative abilities of young adolescents it is necessary to take into account the following classification of them:

1. Barriers related to acquired experience (narrowness of the world picture);
2. Individual creative barriers (level of intelligence, development of critical thinking, low ability to self-regulate, inadequate self-esteem, general passivity);
3. Psychological barriers in creative activity (anxiety, fears, doubts, uncertainty, surprise, etc.).

When working with psychological barriers of teenagers, scientists single out the following most effective methods and directions: psychocorrection; social and psychological training; game activity (play therapy, communicative, role-playing, simulation games); communicative activity; collective creative activity.

The main tasks of the corrective program to work with psychological barriers in the development of creative abilities of young adolescents should be work with: emotional barriers in creativity (reducing the level of anxiety and fear, increasing self-esteem and developing self-confidence, working with doubts); creative barriers (development of creative thinking, development of adequate self-esteem, increased sense of responsibility); conditions for the development of the personal and intellectual potential of a young adolescent.

Taking into account the system of psychological and pedagogical support of teenagers in a recreational institution, the directions of activity of the facilitators, who also create conditions for the development of the creative abilities of the recreationists, should be taken into account. Such conditions include visits by teenagers to creative after-school clubs, competitions, various games, participation in concerts, debates.

Bibliographic references

Ageyev, V. (2012). Psychological Foundations of Creative Education. Creative Education, 3, 1-9. doi: 10.4236/ce.2012.31001 (in English).

Alieksieieva, H., Kravchenko, N., Horbatiuk, L., Zhyhir, V., & Chernieha, O. (2020) The Creative Abilities' Development as the Component of the Process of Formation Soft Skills with the Help of Distant Technologies. Creative Education, 11, 2499-2511. DOI: 10.4236/ce.2020.1112183 (in English).

Asieieva, Yu., & Panaiotova, M. (2019) Influence game on personal development of preschool children. Spirit time, 3(15), pp. 32-35. URL: http://www.spirit-time.xyz/wp-content/uploads/2019/03/spirit-time-15.pdf (in Ukrainian)

Aymedov, C., Levkovska, V., Storozh, V., & Asieieva, Yu. (2018). Development of creative abilities in future specialists of the social sphere in the process of their training at the institutions of higher learning Modern Science, Nemoros, 6, pp. 98-107. URL: https://drive.google.com/file/d/11hqIy-50bNE264qRnQ9sDMdkg3atpjAG/view (in English).

Ball, G. O., Bastun, M. V., Vydra, O. G., Voloshko, N. I., & Hrydkovets, L. M. (2005) Development of the psychological culture of student youth in the system of continuous professional education: teaching method. Manual. ed. V.V. Rybalka. Kyiv: IPPPO APN of Ukraine, 298 p.ISBN 966-22-22-0 URL: https://acortar.link/KTyted (in Ukrainian)

Bogoyavlenskaya, D.B. (2002) Psychology of creative abilities: Textbook for students. Higher Proc. establishments. M.: ITs "Academy", 320 p. URL: https://search.rsl.ru/ru/record/01004483193 (in Russian)

Chistyakova, G. D. (1991). Creative giftedness and learning structures' development. Questions of psychology, 6, 103-111. URL: http://pascal-francis.inist.fr/vibad/index.php?action=getRecordDetail&idt=5104336 (in Russian)

Craft, A. (2008). Studying Collaborative Creativity: Implications for Education. Thinking Skills and Creativity, 3(3), 241-245. DOI: https://doi.org/10.1016/j.tsc.2008.09.006 (in English)

Bar-Tal, D., & Halperin, E. (2014) Socio-psychological barriers for peace making and ideas to overcome them / Barreras sociopsicológicas para la paz e ideas para superarlas, International Journal of Social Psychology, 29(1), 1-30, DOI: 10.1080/02134748.2013.878568

Dunne, R., Wragg, E.C., & Wragg, P.E.C. (1994). Effective Teaching (1st Edition.). London: Routledge, 64p. URL: https://doi.org/10.4324/9780203427439 (in English)

Ewing, R., & Gibson, R. (2015). Creative Teaching or Teaching Creatively? Using Creative Arts Strategies in Preservice Teacher Education. Waikato Journal of Education, 13 (Special Issue on Creative Research and the Arts), 159–179. DOI: https://doi.org/10.15663/wje.v20i3.225.

Forrester, V., & Hui, A. (2007). Creativity in the Hong Kong Classroom: What Is the Contextual Practice? Thinking Skills and Creativity, 2(1), 30–38. DOI: https://doi.org/10.1016/j.tsc.2006.10.003 (in English)

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

Kudryavtsev, T.V. (1975) Psychology of technical thinking: the process and ways of solving technical problems. Moscow: Pedagogy, 304 p. URL: https://search.rsl.ru/ru/record/01006991510 (in Russian)

Kyunghee, So., & Yaeji, Hu. (2019) Understanding creativity in an Asian school context: Korean teachers' perspectives. Thinking Skills and Creativity, 33, 100573 DOI: https://doi.org/10.1016/j.tsc.2019.100573

Harris, A. (2016). Creativity and Education. London: Palgrave Macmillan, 156 p. DOI: https://doi.org/10.1057/978-1-137-57224-0

Liu, I. (2019) Psychological barriers in the development of creative abilities of younger teenagers. Paradigm of Knowledge, 1(33), DOI: https://doi.org/10.26886/2520-7474.1(33)2019.6 (in Ukrainian)

Massanov, A. V. (2016) Creativity as a condition for overcoming the subjective difficulties of the individual. Science and enlightenment, 9, 105-110. https://doi.org/10.24195/2414-4665-2016-9-19 (in Russian)

Matyush, A. A. (2016) The concept of "Psychological and cognitive barrier" in scientific and psychological discourse. Russian Psychological Journal, 13(1), pp. 51-60. URL: https://www.researchgate.net/publication/325116520_Koncept_psihologo-poznavatelnyj_barer_v_naucno-psihologiceskom_diskurse (in Russian)

Osipova, A. A., & bProkopenko, M. V. (2014) On the issue of strategies for overcoming psychological barriers. Russian Psychological Journal, 11(4), 38-54. URL: https://cyberleninka.ru/article/n/k-voprosu-o-strategiyah-preodoleniya-psihologicheskih-barierov.pdf (in Russian)

Piske, F., Stoltz, T., Vestena, C., Freitas, S., Valentim, B., Oliveira, C., Machado Barby, A., & Machado, C. (2016) Barriers to Creativity, Identification and Inclusion of Gifted Student. Creative Education, **7**, 1899-1905. doi: 10.4236/ce.2016.714192. (in English)

Ponomarev, Ya. A. (1976) Psychology of creativity and pedagogy. Moscow: Pedagogy, 280 p. URL: https://search.rsl.ru/ru/record/01007012898; (in Russian)

Pryhozhan, H. M. (2002). Projective technique for diagnosing school anxiety. Diagnostics of emotional and moral development (pp. 47-60). St. Petersburg. Recuperado de https://acortar.link/Y9H1ab

Shakurov, R. Kh. (2001) Barrier as a category and its role in activity. Questions of psychology, 1, pp. 3-18. URL: https://hr-portal.ru/article/barer-kak-kategoriya-i-ego-rol-v-deyatelnosti (in Russian)

Shestakova, S. N. (2015). The method of H. Davis (determining the creative abilities of students). Kyiv: Municipal Autonomous Educational Institution "Secondary School No. 16". Recuperado de https://acortar.link/ACUljD

Torrans, E.P. (1965). Scientific views of creativity and factors affecting its growth. Daedalus: Creativity and learning, pp. 663-679. URL: https://www.jstor.org/stable/20026936 (in English)

DOI: https://doi.org/10.34069/AI/2023.63.03.6

How to Cite:

Balalaieva, O., Mochan, T., Hryhorenko, T., Andreikova, I., Paltseva, V., & Podkovyroff, N. (2023). Innovative pedagogical technologies – the most important resource in modernizing the training of a modern specialist. *Amazonia Investiga*, *12*(63), 67-76. https://doi.org/10.34069/AI/2023.63.03.6

Innovative pedagogical technologies – the most important resource in modernizing the training of a modern specialist

Інноваційні педагогічні технології – найважливіший ресурс у модернізації підготовки сучасного фахівця

Received: January 19, 2023 Accepted: March 29, 2023

Written by:

Olena Balalaieva[1]

https://orcid.org/0000-0002-2675-5554

Tetiana Mochan[2]

https://orcid.org/0000-0002-7598-1988

Tetiana Hryhorenko[3]

https://orcid.org/0000-0002-4616-6853

Iryna Andreikova[4]

https://orcid.org/0000-0002-3409-2383

Valentyna Paltseva[5]

https://orcid.org/0000-0001-9959-3376

Nanouchka Podkovyroff[6]

https://orcid.org/0000-0001-6165-4436

Abstract

The article analyzes the content lines of innovative pedagogical technologies, information technologies, interactive technologies, humanitarian technologies, knowledge design technologies. The purpose of the article is to consider innovative pedagogical technologies in education and to show their influence on the training of a modern specialist. The main research methodology is the need to organize the process of training specialists, ensure their social interaction in the professional environment of using innovative pedagogical technologies in education and show their impact on the training of a modern specialist based on theory. generations, the priority of project-problem-oriented learning methods associated with educational robotics. The author proved the necessity of virtual and augmented reality technology, which provides new opportunities for

Анотація

У статті проаналізовано змістові лінії інноваційних педагогічних технологій, інформаційних технологій, інтерактивних технологій, гуманітарних технологій, технологій проектування знань. Метою статті є розглянути інноваційні педагогічні технології в освіті та показано їх вплив на підготовку сучасного фахівця. Основною методологією дослідження є необхідність організації процесу підготовки фахівців, забезпечення їх соціальної взаємодії у професійному середовищі застосування інноваційних педагогічних технологій в освіті та показ їх впливу на підготовку сучасного фахівця на основі теорії. поколінь, пріоритет проектно-проблемно-орієнтованих методів навчання, пов'язаних з освітньою робототехнікою. Методична

[1] Candidate of Pedagogical Sciences, Associate Professor, Department of Journalism and Linguistic Communication, National University of Life and Environmental Sciences of Ukraine, Ukraine.

[2] Candidate of Pedagogical Sciences, Associate Professor at the Department of Theory and Methods of Primary Education, Mukachevo State University, Ukraine.

[3] Doctor of Pedagogical Sciences, Associate Professor, Professor of the Department of Ukrainian Language with Teaching Methods, Pavlo Tychyna Uman State Pedagogical University, Ukraine.

[4] Candidate of Pedagogical Sciences, Assistant Professor of the Foreign Languages Department, Odessa Polytechnic National University, Ukraine.

[5] Professor at the Department of Romano-Germanic Philology and Methods of Teaching Foreign Languages, International Humanitarian University, Ukraine.

[6] Candidate of Pedagogical Sciences, Associate Professor, Associate professor of the Department of Foreign Languages for Humanities, Odesa I. I. Mechnikov National University, Ukraine.

education and competitiveness of a specialist in the labor market, for self-expression, directing students to continuous independent work and forms self-organization, information culture in them, provides all opportunities for their own learning rhythm. The importance of telecommunication technologies in education is substantiated, the purpose of which is to increase the motivation of education seekers to study and use innovative pedagogical technologies in the workplace for the modernization of the country.

Keywords: innovative technologies, education, specialist training, open education, distance learning.

концепція відображає взаємовплив різних підходів до навчання та їх співвідношення з інноваційними педагогічними технологіями в освіті, показуючи їх вплив на підготовку сучасного фахівця. Ці підходи розглянуті нами у статті. Автором доведено необхідність технології віртуальної та доповненої реальності, яка надає нові можливості для освіти і конкурентоздатності спеціаліста на ринку праці, для самовираження, спрямування студентів на неперервну самостійну роботу та формує у них самоорганізацію, інформаційну культуру, дає всі можливості для власного ритму навчання. Доведено важливість для освіти та роботи технологій штучного інтелекту, машинного навчання, нейронних мереж, підкреслено їх роль у створенні більш досконалих природних користувацьких інтерфейсів.

Ключові слова: інноваційні технології, освіта, підготовка фахівця, відкрита освіта, дистанційне навчання.

Introduction

The process of updating the modern education system and reforming it aims to prepare young people for life in the modern digital society. The development of a modern teacher and the improvement of his professional competence is impossible without ensuring the availability and effectiveness of education, individualization and differentiation of the education process, and this goal is precisely these positions that can be satisfied by the introduction of innovative pedagogical technologies into the training of specialists. It is the modern innovative technologies in the educational sector that are the most important resource in the preparation of a modern specialist, in the modernization of his educational component. New educational technologies are necessary criteria for the civilizational development of society, influence people's lives, increase the quality of education throughout the world, regardless of the settlement, city, and remoteness. In the conditions of reforming education, the use of the latest means of life significantly updates and even changes the character of a person's existence, his professional activity. With this approach, the most important tasks of education and human life are the preparation of a creative and educated personality with the mandatory formation of competencies for an effective life position and professional activity (Vovk, & Matvienko, 2020). So, we see the urgency of the problem of developing and implementing technologies in the educational sector that should ensure high-quality training of future specialists under the requirements of the labor market and modern society (Gurevich, 2014).

Innovative pedagogical technologies are not only considered as a disposition to perceive, produce, and apply new things, but primarily as an openness that encourages individual development. They provide conditions for the development of the individual, the exercise of his right to individual creative contribution, personal initiative, and freedom of self-development.

Innovative pedagogical technologies have a humanistic orientation in the education system, due to the coexistence and complex relationships in scientific pedagogy and pedagogical practice of traditional scientific pedagogy. They belong to the system of general scientific and pedagogical knowledge. They arose and are developing on the border of general innovation, methodology, theory and history of pedagogy, psychology, sociology and theory of management, economics of education. Innovative pedagogical technologies are one of the dominant trends in human development.

Innovative pedagogical technologies are specific and quite complex, requiring special knowledge, skills, and abilities. Innovative pedagogical technologies in the education system testify to a qualitatively new stage of interaction and development of scientific-pedagogical and pedagogical creativity and the processes of applying its results.

The article examines innovative technologies aimed at intensifying activities in the educational process and contributing to the development of individual subjects. A positive point is the focus of information technologies on mastering new search tools, which we present in the article, the use of which is necessary for processing scientific and educational information.

The article highlights the factors that influence the student's effective work on the project and its successful construction.

The authors of the article offer blogs that are used by teachers and students in the educational process using innovative technologies. The classification of innovative educational technologies by groups is also shown.

Literature Review

I. Dychkivska (2004) examines the complex and multifaceted phenomenon of innovative activity, which in its content satisfies the interaction of individuals, creates a process aimed at the transformation of the object, its professional development, and contributes to its transfer to a qualitatively new state. Innovative system activity is presented as a special type of creative activity aimed at combining various operations and actions, which as a result will ensure the acquisition of new technologies, knowledge, development application of new means, and systems for creating innovations in education.

N. Navolokova (2009) characterized various pedagogical technologies, presented recommendations for practical use, and presented modern approaches to lesson design.

R. Gurevich (2014) analyzed innovative pedagogical technologies in education and showed their influence on the training of a modern specialist, showed the application of modern learning technologies in the educational process of higher education institutions in integration with the use of Internet services, and proved their influence on the quality of training of a future specialist.

M. Kyrychenko, & L. Sergeeva (2018) reveal modern scientific approaches, innovative technologies in education, their impact on the training of a modern specialist, and single out the directions, trends, conditions, and technologies for spreading the principles of open education. Since modernity points to the need to unite specialists in various fields of knowledge to implement significant innovative changes in the open education movement, all sides of the educational process are involved in their analysis, the objectivity of the quality of education for employers, students of education, and society is presented and proven.

O. Chubukova, & I. Ponomarenko (2018) singled out the newest and most significant technologies, these are virtual and augmented reality. Common and distinctive features are singled out, their essence and necessity in the process of creating relevant products are shown, and their specific use by companies.

V. Kovalchuk, & A. Shcherbak (2018) investigated the theory and practical implementation of innovative technologies. The positions identified as the organizational beginning of the educational field, which directs all work in the necessary direction, using not only creative approaches, scientific knowledge, and pedagogical experience, but also the content of education.

T. Desyatov (2020) analyzed the content of training and outlined the ways of its organization when using digital content. Ways are proposed that give students the maximum opportunity to independently study theoretical material, learn the practice of knowledge and leave contact time for acquiring knowledge, practical skills, subject discussions, and laboratory workshops.

O. Onats (2018) a study was conducted in the managerial activity of the head of an educational institution, the essence of the content of innovative technologies in managerial activity was revealed; the features of management technologies are described, the areas of their application are shown; proposed extrapolated effective standards of management technologies from the field of business and economy, which will be useful in the management process of educational institutions to ensure its effectiveness.

S. Sysoeva & Osadcha (2019) conducted a study of the current state of distance learning, showed the possibilities of using distance learning technologies in institutions of higher education; an analysis of technologies in institutions of higher education that contribute to the application of remote technologies is made.

O. Polevikova and Zh. Shurda (2019) developed an innovative technology that ensures interactive work among children in pairs of varying composition. This approach promotes equality between the children and the teacher, encouraging the formation of values, abilities, and skills while creating an atmosphere of cooperation in the classroom. Additionally, the authors provide methodical tips for working in pairs of variable composition.

N. Machynska, & Yu. Komarova (2015) based on modern pedagogical practice, analysis of theoretical provisions, showed the features and essence of innovative education, showed the impact of such education on students and teachers; proposed ways to implement innovative approaches to the educational process in higher education, and characterized innovative learning models.

V. Senchenko, O. Shestopal, & N. Nasonova (2018) considered the possibilities for creating a new concept of education, which includes changes taking place in education about the most promising innovative technologies for the realization of the goals of education, personally oriented learning, and the introduction of innovative technologies. The problems are analyzed and the prospects for the introduction of information technologies and distance learning, and their development.

Methodology

In today's demanding and rapidly changing socio-economic environment, the level of education, its influence on the personal development of a specialist, will largely depend on the effectiveness of the introduction of innovative learning technologies based on new methodological principles, modern didactic principles and psychological and pedagogical theories that develop different approaches to teaching.

The following methods were used in the article to implement the formulated tasks and achieve the goal: analysis of pedagogical, psychological, and methodical literature, synthesis, comparison, comparison and generalization, induction and deduction, analogy, which made it possible to characterize the state of working out the problem; systematization and generalization of theoretical and methodical principles for clarifying the state of training of a modern specialist; generalization, modeling for the development of conclusions and proposals on the topic of research.

Also, the methodological basis of the research is: fundamental provisions of the theory of knowledge (historicism, systematicity, objectivity, interdependence); dialectical principles of interconnection and integrity of phenomena of pedagogical reality, unity of objective and subjective, pedagogical theory and practice; leading scientific ideas of philosophy and sociology regarding the determinism of innovative changes in modern education by the general trends of civilizational development; theories of general and pedagogical innovation: neology – creation of the new, axiology – perception and evaluation of the value of the new; praxeology - the use and application of the new to the organization of the process of implementing educational innovations.

The methodological basis of the article is the main provisions and approaches to the learning process, which imply accurate instrumental management of the learning process and guaranteed achievement of the set educational goals.

During the search stage, theoretical and methodological analysis of psychological and pedagogical literature, study of scientific documents regulating the innovative training of students at the university, analysis and synthesis of search results in information and search electronic systems in order to clarify basic concepts, study and analysis of pedagogical experience were used. This made it possible to reveal the degree of development of the problem and to determine pedagogical technologies that work most effectively to increase the efficiency of professional training of specialists.

The main methodology of the research is the need to organize the process of training specialists, ensure their social interaction in the professional environment of the application of innovative pedagogical technologies in education, and show their influence on the training of a modern specialist based on the theory of generations, the priority of project-based and problem-oriented teaching methods related to educational robotics.

The conducted research integrates interrelated methodological concepts that implement the leading idea:

The methodological concept reflects the mutual influence of different approaches to education and their relationship with innovative pedagogical technologies in education, showing their influence on the training of a modern specialist.

The interaction of different approaches during training is carried out by approaches: systemic, synergistic, person-oriented, competence-based, and cultural.

This concept takes into account the theoretical foundations of innovative pedagogical technologies in education that affect the quality of training of a modern specialist and also offers an innovative vision of the essence of the studied pedagogical process.

The theoretical concept defines conceptual constructs and basic concepts. In particular, the concept is defined as a set of interconnected and subordinate structural and functional subsystems. This is how the majority determines the achievement of the set educational goal - to consider innovative pedagogical technologies in education and show their impact on the training of a modern specialist, to show the importance of technology in professional activity; concepts are considered as a process of formation and development of knowledge, abilities, skills, value orientations and personal qualities of future specialists, which are necessary for them to use innovative technologies in their professional activities, and the result is the readiness of future specialists to use innovative technologies - as modern technological means that provide mastering primary technological and scientific-research knowledge and skills of education seekers, formation of professional values in them, important for innovativeness in education
The technological concept includes the organizational and pedagogical principles of the implementation of the system of training future competitive specialists using innovative pedagogical technologies in education and shows their influence on the training of a modern specialist, revealing the basic conditions and stages of its implementation.

Results and Discussion

Technology is a word of Greek origin (logos - "concept", "teaching", tehne - "art", "craft", "science") - a form in which human intelligence is realized, aimed at satisfying the problems of existence. Technology - "a set of knowledge about methods and means of implementing production processes" (Navolokova, 2009).

Let's consider the content of innovations in education. Innovations in education consider the introduction and dissemination in the practice of education of means, innovative ideas, the process of creating management and pedagogical technologies, which increase the performance indicators (levels) of the components of the educational process, and in this way, the education system is updated, which leads to a qualitatively new educational state. That is innovative technologies - "objectively new technologies as a result of pedagogical creativity, or known educational technologies used in new conditions" (Vovk & Matvienko, 2020).

Analysis of innovative learning technologies used in higher education institutions (innovative pedagogical technologies, information technologies, open education, technologies of artificial intelligence, machine learning, neural networks, telecommunications technologies in education, technologies of virtual and augmented reality and artificial intelligence and distance learning, humanitarian technologies, knowledge design technologies, educational robotics projects, etc.), makes it possible to present them according to a criterion such as the presence or absence of a lecture, provided that a lecture is a form of organization of the educational process. Such learning technologies are of great importance for the educational field, in which individual learning, collective learning in small groups are mandatory components, form, and main; technologies of reading a problem lecture and organizing independent activities, personal practice of a personally oriented lecture, oriented lecture, lecture-conference, etc (Biletska et al., 2021).

Let's consider interactive technologies that are aimed at intensifying activities in the education process and contributing to the development of specific subjects. This group of technologies includes: "master class" technology, game, project technologies, self-knowledge and self-assessment technologies, self-presentation, reflection technologies, etc.

A positive point is the focus of information technologies on mastering new means of search, the use of which is necessary for the processing of scientific and educational information, namely: the means of the Internet, computer equipment, audio, and video equipment. Information technologies also contribute to the formation of an informational and special environment in an educational institution, complement the communication of education seekers through modern means, and directly, intensify communication links between the subjects of the education process. In this way, it becomes possible to get an education with the help of information technologies from any location (Kuchai et al., 2021).

Communicative technologies are related to the organization of group, collective, pair, individual work and are aimed at improving communication and interaction with people. Such technologies are collective activity, communication, dialogic technologies, technologies for organizing group activities, training, etc.

From the approach to the implementation of humanistic values in education, we claim that humanitarian technologies are aimed at the implementation of such values, create various means of implementing such an educational space, ensure the formation of socially significant qualities, determine the single requirements for the development and application of solutions to educational tasks. All these technologies are necessary for all people, regardless of the level of education and professional training. Thanks to the application of technologies, the type of behavior at the level of relationships between people of different social statuses, nationalities, and cultures in families and organizations is changing (Kovalchuk & Shcherbak, 2018).

Let's emphasize the attention of the higher school to the need to use innovative pedagogical technologies that are integrated into the educational space with information and communication technologies. Technologies that integrate the project method, project learning technologies, information and communication technologies contribute to students' formation of a high level of development of creative thinking, skills, and the ability to operate with information, taking into account with this approach the development of communication skills that expand the opportunities for self-development and self-education of students, etc.

Creative cooperation between teacher and student is facilitated by intellectual partnership, knowledge design, and active activity on the part of the student. Let's highlight the factors that affect the student's effective work on the project and its successful construction:

- formation of knowledge, which is the basis for starting independent work on the project;
- presentation of new, professional knowledge that students of education receive in the process of research;
- the correct interpretation of knowledge and control over it;
- formation of skills for the professional construction of knowledge.

During the creation of the project, the student, working in small groups, acquires experience of social interaction in a creative team, uses the acquired knowledge in a specific activity, forms his idea about the principles of cooperation (independently realizes the organization of his activity, goals, introspection, self-control).

With the help of the development of social media and its services, students can communicate with each other: exchange experience and knowledge, opinions, establish contacts, interact with each other, exchange information, hyperlinks, videos, news, photos, and music. According to their features and significance, they are used in the educational process of higher education institutions. An effective tool is a blog - an Internet diary, an Internet journal of events, the content of which is images or multimedia, regular addition of records; is a Website, the main content of which is text, multimedia, images, links (called "posts"). All this makes it possible to use multimedia, create a new educational environment, expand didactic educational opportunities, and improve the quality of education (Shunkov et al., 2022).

Blogs used by teachers and students in the educational process are currently offered:

- teacher's diary: http://dnevnik-alla.blogspot.com;
- English language teacher's blog: http://askorzunina.blogspot.com;
- German language teacher's blog: http://duotschbeinns.blog.tut.by;
- a blog on learning English: http://osipovateacher.blogspot.com and others.

Web quests are of great practical importance in education, which include in their content a problematic task with elements of a role-playing game, for the implementation of which the information resources of the Internet are used.

When using the Blog Quest, as in the Web Quest, interactive communication between students is carried out. We use Web 2.0 services, the HTML language, which does not require knowledge of programming, presentation, and work with sites. Work in the Blog Quest online uses the following services: Word Press, Blogger, or My Blog. (Gurevich, 2014).

We classify innovative educational technologies by groups.

Digital technologies. They are used for the digitalization of the consciousness of education seekers, the creation of digitalization processes in society, integration of various subject areas with informatics in a professional aspect. Computer software tools are of great importance in the study of all disciplines, as a result of which, based on the use of digital technologies, a fundamental restructuring of the educational process takes place. Such an implementation increases the productivity of a specialist, improves motivation, educational outcomes form a digital culture, and is possible when disciplines aimed at studying digital technologies are included in the curriculum.

Personal-oriented technologies. Technologies that provide comfortable, conflict-free, safe conditions for the development of education seekers, put the individual at the center of the educational system, and contribute to the realization of its natural potential. Personality is the goal of a quality education system, not a means to achieve any goal.

Information and analytical support of the educational process and management of the quality of education. The use of such technology allows to objectively realize the development over time of each student of education separately, in groups, courses, and educational institutions. It is an indispensable tool in the process of preparing general control, monitoring, studying the state of teaching a certain discipline, and studying the work system (Kotiash et al., 2022).

Monitoring of intellectual development. The technology includes analysis and diagnosis of the quality of education of each student with the help of graphs of the dynamics of success, and testing. Educational technologies. In modern conditions, education is implemented in the form of additional forms of personality development: participation in student self-government, mass cultural events, etc.

Didactic technologies. Independent work, group, and differentiated learning methods can be implemented here - the "small group" system, a didactic game, project protection, learning with the help of audiovisual technical means, and the "consultant" system. Various combinations of these techniques are used (Vovk & Matvienko, 2020).

Recently, open education has gained great importance, a technology that flexibly takes place and can include distance or other forms of learning, as well as the ability to combine elements of traditional and independent learning with an appropriate form of control, it is a system of acquiring knowledge, capable of rapid response due to group educational needs, individual, changing socio-economic situations. The goal of open education, which is based on the methodological and worldview principles of continuity and openness of the learning process, is to prepare a person for professional activity, and full and effective participation in the public life of the country in the conditions of the information and telecommunication society (Kuzminskyi et al., 2018).

The general model of open education provides for the integration of all ways of human knowledge of the world; free use of information resources; openness of education in the future; personal orientation of the learning process; integrity and interconnectedness of man, nature, and society; development of information culture development; introduction of synergistic ideas about the openness of the world into educational processes. Open education promotes a combination of learning and social experiences: from learning in the immediate environment of learning colleagues and teachers, group classes to methods that emphasize the need to develop communication skills, and group work, based on such values as access, ownership, support, participation, and convenience. The environmental approach in education is being updated, which contributes to providing effective conditions for the realization of personality directions for competitiveness, which is considered one of the most effective, multifaceted factors of personality development in the process of obtaining an education. Such innovative training contributes to changes in the social environment, and culture; focused on the formation of an individual's readiness for dynamic changes in society due to forms of thinking, the development of creative abilities, as well as the ability to cooperate with other people (Kyrychenko & Sergeyeva, 2018).

Modern education is not possible without virtual and augmented reality technologies, which do not require significant financial resources and contribute to the creation of thematic visualized content that can be used by the target audience to meet certain needs with the help of modern electronic devices. There are a large number of materials and video instructions for using the technology. The majority of students have smartphones and tablets, which makes it possible to study without obstacles using augmented reality technology. At the same time, you can use a smartboard or a smart screen, for innovative pointers. For example, the Thalmic Labs product is a special bracelet that is worn on the arm and allows the user to control the content on the screen (rotate, zoom in, zoom out, scroll, etc.) through the identification of various movements, which makes it possible to control the visualized objects that are displayed using the augmented reality (Kuchai et al., 2022).

To apply augmented reality technology, use:

1. Textbooks and manuals, using specialized objects with augmented reality technology where printed illustrations are changed into three-dimensional animated objects that can perform movements and are accompanied by sounds.
2. Developmental games activate motivation and are positively perceived by students, contributing to the assimilation of knowledge, abilities, and skills.
3. Modeling of objects and situations, construction of certain situations, and creation of graphic objects save financial and material resources and allow conducting practical classes in classrooms.
4. Applications for training the skills of students outside the educational institution for the independent practice of specific practical tasks will allow institutions of higher education to raise the quality of education to a new level. It is necessary to create specialized applications for disciplines that will represent educational and methodological complexes with 3-D stereoscopy; the development of modern NMKD using augmented reality technology (Chubukova, 2018).

Distance learning technology encourages students to continuously independent work, provides new opportunities for self-expression, is relevant and necessary, allows you to choose your rhythm of learning, forms an informational culture in students, and requires greater self-organization. This technology systematizes materials, improves the content of performing practical and laboratory tasks, provides an opportunity to acquire professional knowledge at any convenient time, and improves skills throughout life. Technology increases the motivation of the teacher, students of education, contribute to the formation of creativity and professional orientation of the individual; orients students to the formation of their methods of activity, mobilization of forces for interest during training. During such an approach to education, favorable circumstances arise for providing digital content for educational programs (Desyatov, 2020).

According to New Media Consortium experts (Adams et al., 2017) technologies of neural networks, artificial intelligence, and machine learning that allow the creation of perfect natural user interfaces (use of natural languages, voice recognition, etc.) are of great importance for education. Artificial intelligence expands its potential for the development of online learning, so there is an opportunity to improve the adaptive learning and research processes of the software, which leads to intuitive interaction with students. Enterprise software such as Jenzabar and IBM SPSS with machine learning capabilities help higher education institutions interpret data to improve financial aid programs, reduce dropout rates, and predict future enrollment (Sysoeva & Osadcha, 2019).

Technological achievements in the field of education serve to interest students, for diversity to increase the motivation of students to study; allow using natural language, gestures, touch, and body movements for human interaction with computers or smartphones

Conclusions

The importance of the concept of "innovative technologies" is considered and shown.

The content of interactive technologies is revealed, the direction of which we see is the activation of the activities of the subjects of education in the process of their development; information technologies, which are necessary to master the means of searching, processing, and applying scientific and educational information; humanitarian technologies, which create a variety of means of education, are mandatory for the realization of humanistic values in education, are used to solve educational tasks, ensure the formation of qualities necessary for a person, his professional training; innovative pedagogical technologies that have integration with information and communication technologies; projecting knowledge, for active activity on the part of the student, creative cooperation between the teacher and the student, their intellectual partnership.

The classification of innovative educational technologies by groups has been made. The content of open education is disclosed and the general model of open education is analyzed.

The role of virtual and augmented reality technology is shown, which provides new opportunities for self-expression, encourages students to constantly work independently; technologies of artificial intelligence, neural networks, and machine learning, which allow the creation of more perfect natural user interfaces; telecommunication technologies in education to increase the motivation of students to study.

Bibliographic references

Adams, B., Cummins, M., Davis, A., Freeman, A., Hall, Giesinger, C., & Ananthanarayanan, V. (2017). “NMC Horizon Report: 2017” Higher Education Edition. Austin, Texas: The New Media Consortium, 46-47.

Biletska, O., Kuchai, T., Kravtsova, T., Bidyuk, N., Tretko, V., & Kuchai, O. (2021). The Use of the Activity Approach in Teaching Foreign Languages in Higher Education Institutions. The Romanian Journal for Multidimensional Education, 13(2), 243-267. DOI: https://doi.org/10.18662/rrem/13.2/420

Chubukova, O. Yu., & Ponomarenko, I.V. (2018). Innovative technologies of augmented reality for teaching subjects in higher educational institutions of Ukraine. Problems of innovation and investment development, 16, 20-27. (In Ukranian)

Desyatov, T. M. (2020). Strategies and innovative technologies for the organization of the educational process in institutions of higher education in conditions of unforeseen challenges. Bulletin of the Bohdan Khmelnytskyi Cherkasy National University. Series: "Pedagogical Sciences", 2. https://ped-ejournal.cdu.edu.ua/article/view/3810

Dychkivska, I. M. (2004). Innovative pedagogical technologies: teaching. study guide higher education Institutions K.: Academvidav.

Gurevich, R. S. (2014). Use of modern learning technologies in universities. Theory and practice of managing social systems: philosophy, psychology, pedagogy, sociology, 2, 3-10. (In Ukranian)

Kotiash, I., Shevchuk, I., Borysonok, M., Matviienko, I., Popov, M., Terekhov, V., & Kuchai, O. (2022). Possibilities of Using Multimedia Technologies in Education. International Journal of Computer Science and Network Security, 22(6), 727-732. https://doi.org/10.22937/IJCSNS.2022.22.6.91

Kovalchuk, V., & Shcherbak, A. (2018). Implementation of innovative learning technologies in the process of professional training of students of higher education institutions. Young Scientist, 3 (55), 543-547. https://molodyivchenyi.ua/index.php/journal/article/view/5001

Kuchai, O., Skyba, K., Demchenko, A., Savchenko, N, Necheporuk, Y., & Rezvan, O. (2022). The Importance of Multimedia Education in the Informatization of Society. International Journal of Computer Science and Network Security, 22(4), 797-803. https://doi.org/10.22937/IJCSNS.2022.22.4.95

Kuchai, O., Yakovenko, S., Zorochkina, T., Okolnycha, T., Demchenko, I., & Kuchai, T. (2021). Problems of Distance Learning in Specialists Training in Modern Terms of the Informative Society During COVID-19. International Journal of Computer Science and Network Security, 21(12), 143-148. https://doi.org/10.22937/IJCSNS.2021.21.12.21

Kuzminskyi, A. I., Kuchai, O. V., & Bida, O. A. (2018). Use of Polish experience in training computer science specialists in the pedagogical education system of Ukraine. Information Technologies and Learning Tools, 68(6), 206–217. https://doi.org/10.33407/itlt.v68i6.2636

Kyrychenko, M. O., & Sergeyeva, L. M. (2018). Open education: innovative technologies and management: col. monograph / for science. ed. Kyiv: Interservice. (In Ukranian)

Machynska, N., & Komarova, Yu. (2015). Implementation of innovative learning technologies in higher education. Scientific Bulletin of the Melitopol State Pedagogical University. Series: Pedagogy, 1(14), 240-246. (In Ukranian)

Navolokova, P. (2009). Encyclopedia of pedagogical technologies and innovations. H.: Ed. group "Basic".

Onats, O. M. (2018). Innovative technologies in the managerial activity of the head of a reference educational institution in a textbook for a manager. Problems of the modern textbook, 20, 287–297. https://ipvid.org.ua/index.php/psp/article/view/231

Polevikova, O.B., & Shurda, Z.I. (2019). Work in pairs of variable composition as an innovative technology of preschool education. The 9th International youth conference "Perspectives of Science and Education", New York, USA, 96-106.

http://ekhsuir.kspu.edu/handle/123456789/9154

Senchenko, V.O., Shestopal, O.V., & Nasonova, N.A. (2018). Implementation of innovative technologies in education: the challenge of the 21st century, problems and prospects. Modern information technologies and innovative teaching methods in training specialists: methodology, theory, experience, problems, 51, 20-23. (In Ukranian)

Shunkov, V., Shevtsova, O., Koval, V., Grygorenko, T., Yefymenko, L., Smolianko, Y., & Kuchai, O. (2022). Prospective Directions of Using Multimedia Technologies in the Training of Future Specialists. International Journal of Computer Science and Network Security, 22(6), 739-746. https://doi.org/10.22937/IJCSNS.2022.22.6.93

Sysoeva, S. O., & Osadcha, K. P. (2019) Status, technologies, and prospects of distance learning in higher education of Ukraine. Information Technologies and teaching aids: electronic scientific publication, 70(2), 271-284. (In Ukranian)

Vovk, B., & Matvienko, D. (2020). Innovative pedagogical technologies as a means of improving the professional activity of teachers. Young Scientist, 10 (86), 376-381. https://doi.org/10.32839/2304-5809/2020-10-86-77

DOI: https://doi.org/10.34069/AI/2023.63.03.7
How to Cite:
Koval, V., Kushnir, A., Vorona, V., Balakirieva, V., Moiseienko, N., & Golubenko, N. (2023). Formation of future specialists research competence in the process of professional training. *Amazonia Investiga*, *12*(63), 77-86. https://doi.org/10.34069/AI/2023.63.03.7

Formation of future specialists research competence in the process of professional training

Формування дослідницької компетентності майбутніх фахівців у процесі професійної підготовки

Received: March 5, 2023 Accepted: April 28, 2023

Written by:
Valentyna Koval[1]
https://orcid.org/0000-0002-7698-3600
Antonina Kushnir[2]
https://orcid.org/0000-0001-9041-7691
Vita Vorona[3]
https://orcid.org/0000-0003-4958-3019
Viktoriia Balakirieva[4]
https://orcid.org/0000-0001-5361-5568
Natalia Moiseienko[5]
https://orcid.org/0009-0001-3896-3668
Natalya Golubenko[6]
https://orcid.org/0000-0003-4014-4319

Abstract

The problem of forming the research competence of future specialists is presented as a factor of readiness for effective training in the process of professional training. The definitions of the concepts "competence" and "research competence" are given, the difference between these concepts is shown, and similar points are treated. The possibilities for the formation of research competence in the process of research activity are shown. The key concepts that show the important conditions in the educational institution for the organization of the research activity of the students of education are highlighted (independence, search, initiative, experiment, practical action, a situation of uncertainty, cooperation, the presence of different points of view, contradictions). Tasks are set and ways to solve them are shown in the process of organizing research activities. Pedagogical conditions are proposed, they are scientifically

Анотація

Проблема формування дослідницької компетентності майбутніх фахівців представлено як чинник готовності до здійснення ефективного навчання у процесі професійної підготовки. Дано визначення понять «компетентність» та «дослідницька компетентність», показано різницю даних понять та потрактовано подібні моменти. Показано можливості формування дослідницької компетентності у процесі дослідницької діяльності. Виокремлено ключові поняття, які показують важливі умови у закладі освіти при організації дослідницької діяльності здобувачів освіти (самостійність, пошук, ініціатива, експеримент, практична дія, ситуація недоозначеності, спільна робота, наявність різних точок зору, протиріччя). Поставлено завдання та показано шляхи їх

[1] Doctor of Pedagogical Sciences, Professor, Professor of the Department of Ukrainian Language with Teaching Methods, Pavlo Tychyna Uman State Pedagogical University, Ukraine.
[2] Candidate of Pedagogical Sciences, Senior Lecturer of the Department of Pedagogy, Professional Education and Management, Educational Institutions of Vinnytsia State Pedagogical University named after Mykhailo Kotsyubinsky, Ukraine.
[3] Candidate of Sciences in Physical Education and Sports, Associate Professor, Sumy State Pedagogical University named after A. S. Makarenko, Ukraine.
[4] Doctor of Pedagogical Sciences, Associate Professor of the Department of Pedagogical Technologies of Primary Education, South Ukrainian National Pedagogical University named after K. D. Ushynsky, Ukraine.
[5] Candidate of Science in Philology, Associate Professor of the Department of English Grammar, Odesa I. I. Mechnokov National University, Ukraine.
[6] Doctor of Pedagogical Sciences, Full Professor, Head of the Department of German Philology, Odesa I. I. Mechnikov National University, Ukraine.

substantiated, and they are laid as a basis for the methodology of the formation of research competence of education seekers in the educational process. The methodology is represented by the introduction of experimental technology of continuous pedagogical influence of teachers on the development of educational and research activities of students. Pedagogical approaches are singled out, as possible ways for the effective formation of the research competence of future specialists.

Keywords: research competence, future specialists, implementation of effective training, professional training, project technology.

вирішення у процесі організації дослідницької діяльності. Запропоновано педагогічні умови, науково обґрунтовано їх, покладено в основу методики формування дослідницької компетентності здобувачів освіти в освітньому процесі. Методика представлена упровадженням експериментальної технології безперервного педагогічного впливу педагогів на розвиток навчально-дослідницької діяльності здобувачів освіти. Виокремлено, педагогічні підходи, та розглянуто можливі шляхи для ефективного формування дослідницької компетентності майбутніх фахівців.

Ключові слова: дослідницька компетентність, майбутні фахівці, здійснення ефективного навчання, професійна підготовка, проектна технологія.

Introduction

The need for mobility in our time requires high-quality professional training of competitive specialists, with formed research competence, capable of productive cooperation. With such an approach, the research activity of competitive specialists is aimed at educating a creative and responsible specialist who is aware of the need to acquire professionalism and is a true citizen who understands the importance of moral aspects of professional activity.

The scientific research activity of forming the competence of future specialists as a factor of readiness for effective training in the process of professional training of future specialists allows students to become an object of scientific reflection, analyze social phenomena, integrate knowledge when studying educational disciplines in a complex manner, applying different cycles in the development of individual education strategies, approach systematically the rethinking and creative application of the accumulated social experience through its practical application, improve research skills and activate the process of acquiring the competencies of future specialists. Here the teacher plays a special role, he is not a translator of scientific information, but a specialist who ensures the self-realization of the student professionally (Barabash et al., 2021).

By training competitive and highly qualified specialists, a necessary task of higher education institutions is the formation of specialist research competence. This will provide future employees with the opportunity and readiness for self-development and constant self-realization of the individual, to acquire the ability to make non-standard decisions in given situations, to be included in innovative processes, and to organize creative training, taking into account scientific and educational innovations (Levchenko, 2020).

Research competence is considered as integrated the personal and professional quality of a specialist, which reflects the motivation for scientific research, the level of mastery of the methodology of pedagogical research, personally significant qualities of the researcher, in particular, such as innovative thinking, the ability to be creative and innovative.

Scientific and research work is a component of professional and pedagogical work activity of a teacher of a higher educational institution and promotes integration of learning and science in the educational process of a higher school.

Its successful implementation ensures a modern level of the content and methods of teaching academic disciplines, the introduction of teachers' developments into the educational process as a necessary condition for the training of competitive specialists; broad involvement of gifted youth in research work, project development, conducting scientific experiments.

The article shows the possibilities provided by research competence, revealing research activity and the level of development of thinking processes. The elements of research competence, including the student's ability to act, are highlighted.

When organizing research activities, the article proposes the main tasks that must be solved. The components of research activity that affect the formation of research competence of future specialists as a factor of readiness for effective training in the process of professional training are revealed. Approaches that will contribute to the effective formation of research competence of future specialists as a factor of readiness for effective training are substantiated.

Project activity is successfully used during students' application of scientific research methods. Modeling scientific research, the article shows the effectiveness of acquired knowledge during project work. The main components of students' research activities are highlighted.

Literature Review

K. Vasylenko (2019) analyzed the main structural components of the research competence of the future teacher.

V. Matsyuk (2022) wrote out the means of formation of research competence of gymnasium students.

V. Barabash, L. Hlebova, & A. Meheda (2021) devoted their research to the justification and disclosure of the meaning of the concept of "research activity" and proved the need for the formation of professional competence among students of higher education.

L. Sushchenko (2022) substantiated the necessity and demonstrated the effectiveness of the implementation of didactic principles of the formation of research competence of education seekers in education.

A. Proskurin, & V. Stadnichenko (2023) showed the significance and revealed the content of scientific-research competence as the basis of readiness to carry out a clear selection of future coaches in sports.

O. Grechanyk, & O. Hryhorash (2021) proved the significance, and necessity and showed the possibility of involving managers-practitioners in the disclosure and justification of the content of scientific research work, which is necessary today, meets the modern needs of education, leads to creativity.

D. Zavhorodniy (2021) developed a model for the formation of research competence of future specialists and substantiated its effectiveness, showed the features of the model, which is based on competence, system, activity, synergistic, project, personal development approaches, analyzed and showed the importance of general didactic and specific principles on which the model is based.

V. Fedorchuk (2022) identified the main indicators of the formation of research competence of future specialists in professional training.

N. Solodyuk (2018) giving his definition of "research competence", developed and analyzed the content of the concept, highlighted and showed the effectiveness of the features of the approach to the disclosure of the definitions of "competence" and "competence".

S. Belkina (2016) analyzed the model of the formation of the research competence of students, developed indicators of the readiness of specialists during the educational process for quality professional training.

O. Martynenko (2014) the content is revealed, the essence of research competence is shown, criteria, indicators, levels are developed, and various approaches are indicated, which are necessary for the formation of the professional competence of a future specialist.

I. Levchenko (2020) attributed research competence to universal, main, general, systemic competencies, substantiated research competence as one of the most essential components (can contribute to the formation of important abilities for a person and are not significantly tied to any specific subject area) of professional and pedagogical competence.

The purpose of the study: formation of research competence of future specialists as a factor of readiness for effective training in the process of professional training.

Methodology

To implement the research goal, a set of interrelated methods was used, in particular, theoretical: analysis of scientific literature, synthesis, systematization of philosophical, psychological-pedagogical, educational-methodical literature to substantiate the theoretical foundations of training future specialists, comparison, generalization of practical experience of research competence formation; terminological analysis to determine the essence and content of the key definitions of the study; structural-logical analysis to outline the content-procedural foundations of the formation of research competence of future specialists in the process of professional training, induction, deduction to determine and justify the organizational and pedagogical conditions for the training of future specialists; empirical: observational (self-observation, observation, reflection) to find out motives, values, needs, level of knowledge, identify and eliminate shortcomings.

The leading idea of the research is carried out by increasing the level of readiness of future specialists and forming their research competence as a factor of readiness to carry out effective training in the process of professional training and professional activity based on the development and implementation of organizational and pedagogical system innovations in the educational process of higher education institutions, taking into account the developed educational and methodological support, key scientific approaches, specific and general didactic principles of education.

The formation of research competence of future specialists as a factor of readiness for effective training in the process of professional training is based on methodological, theoretical, and practical concepts.

The methodological concept reflects the relationship of fundamental scientific approaches:

- a systematic approach allows for the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training from the standpoint of mutual influence, integrity, the interdependence of structural components (content-organizational, whole-methodological, result-criterial), which make it possible to ensure the dynamics of positive preparation for professional activity;
- the axiological approach subordinates the content of the formation of the research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training to the formation of their professional and value orientations, which in turn create the necessary conditions for professional development and comprehensive fulfillment of the tasks of the educational sector;
- a person-oriented approach directs the orientation and organization of the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training for the development and disclosure of the individual characteristics of the applicants, their important professional qualities, cognitive capabilities;
- the competence approach directs the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training, directs professional competence to the improvement of professional knowledge and skills, develops professional and personal qualities taking into account integration processes;
- an integrative approach directs the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training to ensure holistic training of future specialists (mastery of tools, types of joint activities, integration of the content of disciplines in the profession, which will collectively ensure the formation of research competence of future specialists);
- a synergistic approach contributes to the improvement of the professional training of future specialists and the formation of their research competence, taking into account the main factors (self-development, self-organization, self-realization, openness, self-governance, management, non-linearity of thinking);
- the activity approach directs the formation of the research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training for differentiation and contributes to the separation of the educational and cognitive functions of the students of education, ensures the use of innovations in professional training.

The theoretical concept provides a system of conceptual provisions for the formation of the research competence of future specialists as a factor of readiness for effective training in the process of professional training, making it possible to identify the leading legislative and normative principles, ideas, theories, definitions laid down as the basis of key concepts, provides a generalization and synthesis, a description of the researched phenomena, their analysis, substantiation and development of a system for the formation of research competence of future specialists as a factor of readiness for effective training in the process of professional training, which is based on specific and general pedagogical principles of the educational process.

The practical concept makes it possible to integrate theory with practice. Based on the selected methodology for the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training and the proposed provisions, the practical concept made it possible to update and integrate technologies, content, methods, forms of the educational process. This component shows the verification of the effectiveness of the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training, shows the results of theoretically grounded scientific provisions, isolated progressive conditions, and educational and methodological support.

Results and Discussion

First of all, we will consider the meaning of the definition of some concepts of research: "competence" and "research competence", which have different interpretations. In UNESCO publications, the concept of "competence" is presented as a systematic combination of values, attitudes, knowledge, and skills that we encounter every day. In the Sectoral Standards of Higher Education, the competency approach "includes knowledge and understanding, knowing how to act, knowing how to be. A subject area in which an individual is well-versed and in which he shows readiness to perform activities" (Gulo et al., 2013).

I. Bech (2012) suggests that knowledge and skills are inappropriate for equating educational abilities with corresponding competencies. All educational achievements should be transformed into life skills. He interprets the essence of the concept of "competence" as the subject's experience in a certain sphere of life. He notes that "it is the substantive emphasis that is placed on experience, and not on awareness, awareness of the subject in a certain field and should be taken on conceptual "armament".

Research competence assumes easy compatibility, provides an opportunity to enter into contacts, cooperate, forms readiness for self-determination, for changes. This is an integrative characteristic for an individual, which aims to master knowledge from the point of view of methodology, master the technology of research activities, as well as master values and readiness for use in professional activities. O. Bida (2017) considers research competence "key, the basis for the development of other competencies, as it helps a person to learn throughout his life, to become competitive, successful in later life".

The essence of research competence can be seen in the manifestation of personal traits by students of education, which are in the ability and readiness to systematically acquire new knowledge independently, while the basis is a previously acquired set of skills, knowledge, and skills in ways of working.

Let's list the opportunities provided by research competence, revealing research activity and the level of development of thought processes:

- to recognize and highlight the problems of the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training and to make assumptions about ways to solve problems, the ability to correctly set a problem, to identify its necessary conditions in it;
- be able to make assumptions about the possible causes and consequences of the phenomena of the material and ideal world, put forward hypotheses for the formation of research competence of future specialists, and substantiate them;
- simultaneously hold several meanings of complex phenomena of formation of research competence, texts, events, statements, etc.

Due to the fact that research competence is manifested in the ability to act, its elements include the ability of the student to:

- clearly set a goal and set goals (personal activity goals);
- allocate means of activity, allocate the role of the subject, implement the goal (intended actions);
- analyze performance results, conduct constant quality monitoring, and compare set goals with achieved results (reflection) (Verbytsky, 2012).

In the process of research activity, research competence can be formed. Therefore, we will highlight the key concepts that will make it possible to find out and propose the main conditions for those seeking education in an educational institution when organizing this kind of activity: independence, search, initiative, experiment, practical action, joint work, contradictions, a situation of uncertainty, different points of view.

When organizing research activities, the main tasks that should be solved are proposed:

- formation of research competence of future specialists as a factor of readiness for effective training in the process of professional training of education seekers on the example of real problems and phenomena that occur in life;
- training students to find answers to questions, identify and explain various situations and problems, evaluate activities, express their point of view and defend it, and make and implement decisions promptly;
- the use of comparison, analysis, various sources of information, and methods of systematization for the formation of research competence of future specialists;
- reinforcement of knowledge in the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training through practical actions, applying in this process specific methods of collecting, summarizing information, and analysis (Matsyuk, 2022).

During the process of professional training in the field of higher education, the formation of research competence of future specialists does not occur constantly. The main reason for this situation is the lack of a clear system of pedagogical conditions for the formation of research competence of future specialists as a factor of readiness for effective training in the process of professional training throughout the entire educational process (Levchenko, 2020).

The formation of the research skills of education seekers in the formation of the research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training should be helped by external circumstances that realize the essence of the nature of this process and make it possible to reveal the peculiarities of the educational formative influence on it. We offer the following pedagogical conditions.

1. Providing the educational process with a research focus on the formation of professional competence of future specialists as a factor of readiness for effective training in the process of professional training by creating an environment in an educational institution of an active and research-oriented nature;
2. Realization of potential resources and opportunities of education seekers during the performance of search and research tasks for the formation of research competence of future specialists by applying a differentiated approach;
3. Acquisition of research experience by students of education through the actualization of the developing subject-subject interaction of students of education and the teacher;

We propose to take such pedagogical conditions as the basis of the methodology for the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training, which involves the application of experimental technology of continuous influence of education on the development of educational and research activities of education seekers (Sushchenko, 2022).

We will reveal the components of research activity that influence the formation of research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training:

- motivational-valued (a system of emotional-volitional and motivational-valued attitudes of education seekers to activities, the world, people, their abilities, to themselves is proposed);
- cognitive (a system of knowledge about society, nature, means of activity, thinking is provided for assimilation, ensuring the formation of a scientific picture of the world in the minds of students of education; mastering a dialectical approach to practical and cognitive activity);
- activity-practical (creative experience is provided, which has a system-building property, is based on mental operations of productive, reproductive, and heuristic types) (Kovalenko, 2017).

The components of the student's research competence perform value-oriented, motivational, cognitive, regulatory, and effective functions.

We substantiate the approaches that will contribute to the effective formation of the research competence of future specialists as a factor of readiness to carry out effective training in the process of professional training:

– a personal approach (implementation takes place through the implementation of an active educational and research position of the student);
– problem-based (based on the program material of professional disciplines, a way of selecting or developing educational and research tasks is proposed);
– operational (implementation is carried out by the logic of scientific research and by organizing the educational and research activities of students). Such approaches will contribute to the effective formation of the research competence of future specialists as a factor of readiness to carry out effective training in the process of teaching professional disciplines (Belkina, 2016).

From our own teaching experience, we would like to emphasize that students who constantly, systematically, and purposefully engage in research work differ from others in professionally formed skills that form the basis of their research competence and present competitive skills. During the formation of the research competence of future specialists as a factor of readiness to carry out effective training in the process of teaching professional disciplines, inherent cognitive activity, the desire to explore the educational process, and not just to acquire professionally significant knowledge and skills. Teachers need to pay attention to the individual characteristics of students, age, psychological capabilities, specifics of relationships with teachers, with each other, ways of applying innovative forms, teaching methods, etc. In such a process of forming the research competence of future specialists as a factor of readiness to carry out effective training in the process of teaching professional disciplines, we see the need to bring the structure, content of education, and methodical support in accordance to form the research competence of students.

One of the most effective educational technologies is project technology, which best contributes to the formation of research competence.

Let's name the victories of project technology:

– allows students to acquire knowledge independently, to use the acquired information to apply new cognitive tasks in their practical activities;
– promotes the acquisition of communication skills and abilities of future specialists, the application of promising principles of various educational cultures, and the expression of one's point of view;
– allows skillful use of research methods: put forward hypotheses, collect the necessary information, analyze it, and propose conclusions.

The goal of educational design is aimed at study the experience of practical activity, which not only encourages the motivated activity of students, taking into account age and educational interests but also transforms the role of the teacher in leading it. The teacher is no longer a carrier of ready-made knowledge but becomes an organizer of the cognitive activity of future competitive specialists, an adviser, coordinator, and consultant, who proves the correctness of his actions by his example from experience, uses weighty arguments with his wisdom, but not in an imperative form. Since the teacher has to change the work of students and his educational work by applying various types of independent activity, giving priority to activities of a search, research, and creative nature during the educational process, we observe a change in the psychological climate in the classroom.

Project activity is successfully used during the application of scientific research methods by students. Modeling scientific research, we observe the effectiveness of the acquired knowledge during project work. A group of students or each student chooses an arbitrary topic of research that he likes and in his opinion is relevant for research and society and in stages:

1) formulates relevance;
2) defines the categorical apparatus;
3) selects and compiles literary sources on the chosen topic;
4) models and describes the stages of experimental research;
5) presents the developed research.

All stages of scientific research take place by the order of mastering topics, which are studied during practical classes, and this process is gradual. As a result, students better reveal the essence and logic of research and combine the theory of studying the material with its practical application, which successfully forms research competence in specialists (Fedorchuk, 2022).

The research component, which is the basis of the formation of the research competence of the future specialist, is the main one in the structure of the training of the future specialist. The organization of students' research work must be carried out under the guidance of the teacher and using the principles of continuity and perspective. With this approach, there will be a successful formation of the research competence of students, who should be involved in scientific research activities from the first years, which will allow them to develop harmoniously, deepen their knowledge, and improve their abilities and skills of a research nature.

Let's highlight the main components of students' research activity:

- the ability to formulate the purpose and hypothesis of the research (design component);
- the ability to process sources (informational component) to collect the necessary data;
- the ability to choose research methods: basic and auxiliary (analytical component);
- the ability to determine its practical orientation in research (practical component) (Bondarenko, 2021).

Research competence includes:

- an idea of the most relevant areas of research in science;
- professional knowledge of a foreign language (several languages) in the field of professional activity;
- application of philosophical concepts in the field of science;
- highlighting the methodology of the scientific field, regularities for the possibility of use in practical activities;
- formulation of the goal, object, subject, working hypothesis, research tasks, the essence of the researched problem, planning the stages of the experiment;
- practical application of methodological research principles;
- knowledge of scientific research methods;
- the ability of theoretical substantiation and experimental verification of the investigated problem;
- analysis of the results of research activities;
- personal participation in the organization of the experiment;
- the ability to engage in scientific discussion, to prove a point of view;
- analysis of experimental data using the methods of computer technologies and mathematical statistics;
- publishing a publication or speech based on one's research work results. This approach leads to the readiness and ability to carry out research activities and speaks of the formation of research competence (Golovan, 2012).

Functional elements of research activity are at the same time components of the psychological structure of the teacher's activity, determining the possibility of analyzing the process of delivery of research tasks at the stage of their formation and interaction with students. Functional elements of research activity in the formation of research competence of future specialists as a factor of readiness for effective training in the process of professional training include: gnostic (or reflexive), projective, constructive, communicative, and organizational. Let us describe them:

- the gnostic (reflexive) element allows for the analysis of the research situation, contributes to the acquisition of new knowledge for the productive solution of the research situation and its analysis, and allows to compare of the obtained result with the real one;
- the design element provides an opportunity for modeling the teacher-researcher's activity, implementing actions related to the prediction of educational strategy: research problems, application of goals, means, and consequences of solving the system of scientific research tasks;
- the constructive element provides actions related to the selection and construction of the content of scientific information, the creation of means, forms, and methods of scientific-pedagogical interaction with students in the scientific-research process;
- the communicative element directs actions to establish optimal relationships with students, interaction with scientists of scientific research institutions, and teaching colleagues during the solution of research tasks;
- the organizational element organizes actions aimed at obtaining scientific research activities of students, scientific information in the process of its presentation, related to the assimilation of this information.

The selected functional elements are built according to the principle of enabling the functioning of each subsequent element, provided that all previous components are included, which can also be considered separately (Sydorchuk, 2020).

Conclusions

The article examines the problem of the formation of research competence of future specialists as a factor of readiness for effective training in the process of professional training.

The definitions of the concepts "competence" and "research competence", which have different positions, are given. The essence of research competence is proven, which consists in highlighting significant personal traits of future specialists, which are manifested in the ability and willingness to independently acquire and systematize the acquired knowledge, taking into account and relying on previously acquired skills, knowledge, methods of activity, and skills. The role of the research competence of students, the research activity of future specialists, and the level of development of thought processes in the process of professional research activity have been proven. The key concepts that determine the necessary conditions for the organization of this kind of activity of education seekers in an educational institution are independence, search, initiative, experiment, practical action, joint work, contradiction, a situation of ambiguity, and the presence of different points of view.

The components that perform motivational, value-oriented, cognitive, effective and regulatory functions are highlighted in the structure of the student's research competence.
The conducted research does not cover all aspects of the problem under consideration. Prospects for further research consist in the expansion and improvement of tasks, and forms of scientific research work of students.

Bibliographic references

Barabash, V., Hlebova, L., & Meheda, A. (2021). Scientific and research activities in the process of formation of professional competence of informatics students. Society. Document. Communication. Society. Document. Communication, 1(10), 216-239. https://doi.org/10.31470/2518-7600-2020-10-216-239

Bech, I. D. (2012). Competence approach as an educational strategy. Digital Library NAPS of Ukranie. URL: https://core.ac.uk/download/pdf/32308232.pdf (In Ukranian)

Belkina, S. (2016). Formation of research competence of future engineers in the process of teaching educational disciplines of the cycle of natural and scientific training. Scientific notes of Volodymyr Hnatyuk Ternopil National Pedagogical University. Series: pedagogy, 3, 19–25. http://nzp.tnpu.edu.ua/article/view/61939

Bida, O. A. (2017). The content of the concept of "research competence" in domestic and foreign literature. Bulletin of the Bohdan Khmelnytskyi Cherkasy National University. Series: "Pedagogical Sciences", 15. URL: https://ped-ejournal.cdu.edu.ua/article/view/1915

Bondarenko, H. P. (2021). The formation of research competence as a factor in improving the professional training of future teachers of the Ukrainian language and literature. Spirituality of the individual: methodology, theory and practice: collection of scientific works, 1(100). 46-56. (In Ukranian)

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

Fedorchuk, V. (2022). Formation of research competence of future teachers in the process of studying the methodology of scientific research. Adult education: theory, experience, perspectives, 21(1), 117-125. https://doi.org/10.35387/od.1(21).2022.117-125

Golovan, M. S. (2012). The essence and content of the concept of "research competence". Theory and teaching methods of fundamental disciplines in higher education: collection of scientific works, VII, 55-62.

Grechanyk, O., & Hryhorash, O. (2021). Formation of scientific and research competence of future managers of education. Trends in the development of modern science: the XXXI International Science Conference, June 22-25, 216–220. (In Ukranian)

Gulo, V. L., Levkivskyi, K.M., Kotolovets, L.O., Tymoshenko, N.I., Pogrebnyak, V.P., Goncharova, A.V., Prisenko, M.O., Simonova, M.V., & Kroshko, N.V. (2013). Methodological recommendations for the development of constituent industry standards of higher education (competence approach). K.: Institute of Innovative Technologies and Content of Education of the Ministry of Education and Culture of Ukraine.

Kovalenko, A. O. (2017). Formation of research competence of high school students in mathematics lessons using ICT. Information and communication technologies in education. Latest computer technologies, XV, 210-214.

https://lib.iitta.gov.ua/706562/1/598-1-2628-1-10-20170502.pdf

Levchenko, I. (2020). Pedagogical conditions for the formation of research competence in future specialists in labor protection. Collection of scientific papers LOGOS, 104-107. https://doi.org/10.36074/13.03.2020.v2.36

Martynenko, O. V. (2014). Research competence of a teacher of mathematics and economics: specifics of formation. Pedagogical sciences: theory, history, innovative technologies, 5, 286-294. http://nbuv.gov.ua/UJRN/pednauk_2014_5_36

Matsyuk, V. M. (2022). Formation of research competence of gymnasium students. Scientific Notes of the Small Academy of Sciences of Ukraine, 2(24), 73–81. https://doi.org/10.51707/2618-0529-2022-24-09

Proskurin, A. V., & Stadnichenko, V. S. (2023). Scientific-research competence as the basis of the future coach's readiness for sports selection. Scientific journal of the National Pedagogical University named after M. P. Drahomanov. Series 15. Scientific and pedagogical problems of physical culture (physical culture and sport), 1(159), 118-121. https://doi.org/10.31392/NPU-nc.series15.2023.1(159).28

Solodyuk, N.V. (2018). Peculiarities of formation of research competence of university students. The path to science: linguistic and cultural preparation of foreign students: materials of the 1st International Scientific and Practical Conference (May 14, 2018). Dnipro, 20-26. (In Ukranian)

Sushchenko, L. O. (2022). Didactic principles of formation of research competence of students of primary education in the learning process: research results. Academic studies. series "Pedagogy", 2, 42-49. https://doi.org/10.52726/as.pedagogy/2022.2.7

Sydorchuk, N. (2020). Acmeological growth of research competence of university teachers in the field of pedagogical education. New learning technologies: coll. of science Proceedings. DNU "Institute of Modernization of the Content of Education" MES of Ukraine, 94, 306-313. (In Ukranian)

Vasylenko, K. S. (2019). Research competence of the future primary school teacher: structural components. Educational space of Ukraine, 16, 56-62. (In Ukranian)

Verbytsky, V. V. (2012). Research competence of high school students as a means of personality formation. Modern educational process: essence and innovative potential: report materials. science and practice conf. Institute of problems of education of the National Academy of Sciences of Ukraine for 2011 (Ivano-Frankivsk, 2012). Ivano-Frankivsk, 2, 43–47. (In Ukranian)

Zavhorodniy, D. (2021). Formation of research competence of future naval officers in the process of their professional training. Education. Innovation. Practice, 8(1), 26–32. https://doi.org/10.31110/2616-650X-vol8i1-004

DOI: https://doi.org/10.34069/AI/2023.63.03.8
How to Cite:
Lepekh, S. (2023). Legal status of entities providing consumer financial services: reforming the institutional structure of the market. *Amazonia Investiga*, *12*(63), 87-98. https://doi.org/10.34069/AI/2023.63.03.8

Legal status of entities providing consumer financial services: reforming the institutional structure of the market

Правовий статус суб'єктів надання споживчих фінансових послуг: реформування інституційної структури ринку

Received: February 15, 2023 Accepted: April 5, 2023

Written by:
Svitlana Lepekh[1]
https://orcid.org/0000-0002-2111-1100

Abstract

The article analyzes the peculiarities of the legal status of banks, credit unions, pawnshops, financial companies, leasing companies, insurers, non-state pension funds, payment service providers. It also offers a description of credit organizations under national and foreign legislation.
Attention is focused on legislative changes to the principles of activity of financial intermediaries associated with the adoption of the Law of Ukraine «On Financial Services and Financial Companies». At the same time, the classification of certain participants in the financial services market to the list of financial intermediaries is criticized. The activity of financial organizations in attracting financial resources and placing them on their own behalf is called financial intermediation, taking into account its economic essence. Based on a generalized analysis of the specifics of the legal status of these subjects, it is proposed under providers of consumer financial services to understand financial organizations, and in cases specified by law, other legal entities that, on the basis of a license, provide for fee services regarding the use of financial means for the purpose of obtaining profit or other property benefit by consumers or third parties to meet their personal, family needs, not related to related to entrepreneurial or independent professional activity.

Key words: bank, financial company, credit union, insurance company, pawnshop.

Анотація

В статті аналізуються особливості правового статусу банків, кредитних спілок, ломбардів, фінансових компаній, лізингових компаній, страховиків, недержавних пенсійних фондів, надавачів платіжних послуг. Також пропонується характеристика кредитних організацій за національним та зарубіжним законодавством.
Увага акцентується на законодавчих змінах засад діяльності фінансових посередників, пов'язаних із прийняттям Закону України «Про фінансові послуги та фінансові компанії». Водночас критикується віднесення до переліку фінансових посередників окремих учасників ринку фінансових послуг. Діяльність фінансових організацій щодо залучення фінансових ресурсів та розміщення їх від власного імені названа фінансовим посередництвом, зважаючи саме на її економічну сутність. На основі узагальненого аналізу особливостей правового статусу цих суб'єктів пропонується під надавачами споживчих фінансових послуг розуміти фінансові організації, а у випадках, визначених законом, інші юридичні особи, які на підставі ліцензії надають за плату послуги щодо використання фінансових засобів з метою отримання прибутку або іншої майнової вигоди споживачами або третіми особами для задоволення їхніх особистих, сімейних потреб, не пов'язаних із здійсненням підприємницької чи незалежної професійної діяльності.

Ключові слова: банк, фінансова компанія, кредитна спілка, страхова компанія, ломбард.

[1] Candidate of Law, Associate Professor, Associate Professor of the Theory of Law and Human Rights Department, Ukrainian Catholic University , Lviv, Ukraine.

Introduction

With the development of the national economy, there was a gradual formation of the financial services market, without which the effective functioning of the socially oriented structural and innovative model of the economy is impossible. However, the modernization of this sector of the national economy was negatively affected by the financial and economic crisis, the difficult political situation, and martial law. In the conditions of world globalization processes, one of the strategic tasks of the state should be the further reform of the financial services market in order to establish the sustainable development of the national economy. Maslyaeva K. V. (2009) suggests to improve the definition of the economic and legal category «market» and defines that the market is the sphere of economic relations that arise between the subjects of market relations regarding the manufacture and sale of products, the performance of works and the provision services by agreeing on the price and are regulated by the state.

There are two main models of state regulation of the financial services market: monoregulatory and polyregulatory. Monoregulatory model is the model of a single regulator is typical for Great Britain and France. It is characterized by the functioning of a single body of state power, which regulates the activities of all financial intermediaries without exception, the powers of self-regulatory organizations are limited. The polyregulatory model assumes the presence of several state authorities that regulate the financial services market. In the countries of the polyregulatory system, a system of self-regulatory organizations is developed, including the USA and Ukraine (Yashchyshchak, 2010).

Since 01.07.2020, state regulation of financial services markets is carried out by the National Securities and Stock Market Commission in relation to securities and derivatives markets, professional activities in the securities market and activities in the accumulated pension system, and in relation to other non-bank financial markets services and banking services market - by the National Bank of Ukraine. Therefore, the functions of state regulation of financial services markets are divided between these two authorized bodies.

The market of financial services, according to its purpose, should ensure the movement and redistribution of temporarily free financial resources between business entities, the state and consumers, it performs the role of an intermediary in the movement of funds from their owners to people who need them at the moment (Venetska, 2007). Economists propose to divide the market of financial services into the market of banking services, the market of investment services and the market of insurance services based on the types of services provided (Voitenko, 2011).

Markets of financial services cover the spheres of circulation of financial means as capital. In accordance with Article 1 of the Law of Ukraine «On Financial Services and Financial Companies» (which will be implemented from January 1, 2024) (Law No. 1953-IX, 2021), financial means are funds, bank metals, financial instruments, debt obligations and the right to claim debt, which are not included in financial instruments. For example, money is the object of a wide variety of civil relations, but the subject of regulation of the legislation on financial services is its functioning as capital (it fulfills the functions of preservation, accumulation, multiplication of wealth), and not as payment, determining the measure of the value of other objects civil rights. Such capital is a commodity whose professional sphere of circulation is financial services markets.

There is no single method of structuring the financial services market. The classifications of financial services markets by various criteria offered by economists are quite approximate. Obviously, this is why lawyers try to adopt more simplified approaches as a basis. Thus, in Article 1 of the Law of Ukraine «On Financial Services and State Regulation of Financial Services Markets» (Law No. 2664-III, 2001), financial services markets include professional services in the markets of banking services, insurance services, investment services, capital and other types of markets that ensure the circulation of financial assets. Instead, in Article 1 of the Law of Ukraine «On Financial Services and Financial Companies» (Law No. 1953-IX, 2021), the financial services market is defined as the set of participants in the financial services market and the relationships between them related to the provision and receipt of financial and accompanying services.

This article aims to research the legal status of certain types of financial intermediaries and, based on the identification of common principles and features of their activities, formulate the conceptual concept of providers of consumer financial services.

Literature review

A specific feature of the financial services market that characterizes it as an independent market segment is the mandatory presence of a financial intermediary as a specific subject of the financial services market. General provisions regarding the activities of financial intermediaries were the subject of scientific research by both economists and lawyers (for example, Maslyaeva K. V., Dragan O. V., Reznikova V. V.). Peculiarities of the legal status of individual financial intermediaries were analyzed in the works of such scientists as Bezklubyi I. A., V. I. Borysov, V. I. Vitka, Y. V., Gorbachova O.O., and others. Etymologically, the term «mediation» comes from the English "intermediation", which means the help of a third party (party), connected with others by a relevant agreement (Dragan, 2011). In economic studies, the activity of such organizations as financial intermediaries is revealed through the use of contractual constructions different from intermediary contracts. Financial intermediaries are considered as investment and credit financial institutions that accumulate funds of individual investors and use them for investment or crediting (Uninets-Khodakivska, 2009). For example, Lavryk O. L. (2015) notes that «the degree of development of the financial market is characterized by the number and variety of financial intermediaries, as well as the range of financial services they provide to market participants... the key role in the implementation of intermediary activities on the financial market in Ukraine belongs to banks, and the main services they provide are bank crediting». This understanding of the essence of financial intermediation is established in economic science.

Reflecting the economic essence of the status of financial institutions as financial intermediaries and the characteristics of the main types of activities they are engaged in should have found a certain assessment by lawyers as well. Reznikova V. V. (2011) suggested the definition of the concept of financial intermediation as a professional business activity of attracting and placing funds of individual investors (clients), which involves long-term relations between individual investors and financial intermediaries and, accordingly, the accumulation of assets on the balance sheets of these financial intermediaries, and financial institutions, whose functions consist in the accumulation of funds of citizens and legal entities (individual investors) and their subsequent provision on a commercial basis to the disposal of borrowers, are called financial intermediaries. Analyzing the role of financial intermediaries in the securities market, Dragan O. V. (2011) concludes that it is manifested in the performance of the following main functions: consolidation (accumulation) of savings of individual investors into a single pool and subsequent diversified investment of the accumulated capital in various projects with promising capitalization; increasing the liquidity of the securities market through professional portfolio management of entrusted and purchased assets; ensuring balance in the market through matching the supply and demand for financial resources; redistribution and reduction of financial risks; specification (recognition; consolidation) of property rights of client-trustees.

Methodology

The methodological basis of the research consists of general scientific and special legal methods. The dialectical method accompanied the entire research process and made it possible to consider the trends in the formation of legislative requirements for financial intermediaries as subjects of the provision of financial services, in particular, to analyze the patterns of the development of the principles of activity of financial services market participants and their transformation at certain stages of updating the legislation.

The methods of analysis and synthesis, as well as the logical-semantic method, were used in connection with the formulation of the definition of the concept of providers of consumer financial services. The comparative legal method was used during the analysis of the civil legislation of Ukraine and foreign countries (France, Switzerland, Poland), in particular, about the characteristics of the types of banking activity, banking operations, and the peculiarities of the legal status of the credit organizations and financial companies. In the process of preparing the research, the formal-legal method was used (regarding the analysis of legislative prescriptions that regulate the participation of banks and other financial organizations in contractual obligations to provide financial services), and therefore to formulate the main theoretical provisions and conclusions on problematic issues of the legal status of financial intermediaries in the market of financial services.

Results and discussion

In the context of the adaptation of national civil legislation to the principles of the EU, the legislative basis for the functioning of the institutional structure of the financial services market is also being gradually updated. The requirements for the functioning of the foundations of consumer financial services are changing. In that way, in the research process, it`s necessary to ascertain which financial intermediaries will have the right to provide financial services to individuals as consumers and specify the types of such services and the requirements to which these entities must respond. Such research will allow analyzing the expedience of relevant legislative changes in Ukraine, incorporating the positive foreign experience in this area and formulating a generalized characterization of financial intermediaries as providers of consumer financial services.

Subjects of the right to carry out financial services operations are defined by Article 5 of the Law of Ukraine «On Financial Services and State Regulation of Financial Services Markets» (Law No. 2664-III, 2001). Financial services are provided by financial institutions, as well as, if it is expressly provided by law, by natural persons - entrepreneurs. The possibility and procedure for providing certain financial services by legal entities that are not financial institutions by their legal status are determined by laws and regulations of state bodies that regulate the activities of financial institutions and financial services markets, issued within their competence. Instead, in Art. 1 of the Law of Ukraine «On Financial Services and Financial Companies» (Law No. 1953-IX, 2021), the approach to determining the requirements for such entities has been changed and the provider of financial services is named a financial institution, and in cases expressly defined by special by law - another legal entity or a branch of a foreign legal entity that has the right to provide financial services in accordance with this Law and special laws. At the same time, natural persons and natural persons - entrepreneurs, along with legal entities, can provide accompanying (auxiliary and intermediary) services.

In Art. 1 of the Law of Ukraine «On Financial Services and Financial Companies» (Law No. 1953-IX, 2021) proposes the definition of a financial institution as a legal entity, the purpose of which is to provide financial services, which, in accordance with the law, provides one or several financial services based on the relevant license issued by the regulator. Providers of accompanying services who do not also provide financial services at the same time, as well as other persons who received a license to provide financial services without acquiring the status of a financial institution, are not financial institutions. Therefore, according to the functional purpose, such participants of the financial services market are more clearly divided as providers of financial and accompanying services. At the same time, the issue of using legal terminology remains debatable. Article 83 of the Civil Code of Ukraine (Code No. 435-IV, 2003) refers to any legal entity as an organization, and distinguishes a partnership and an institution as organizational and legal forms of legal entities under private law. That is, all legal entities are organizations, but some of them can be created in the form of companies, others - institutions. Therefore, the term "institution", guided by the norms of the Civil Code of Ukraine, should also be used in other legislative acts to denote the organizational and legal form of a legal entity. Therefore, for financial organizations, only an institution should act as an organizational and legal form in accordance with the above legislative provisions. Financial institutions include, in particular, banks, credit unions, pawnshops, leasing companies, insurance companies, and others. The largest group among them are banks that are created in the form of a joint-stock company or a cooperative bank. Also, insurance companies, pawnshops, and financial companies are business associations, not institutions. In addition, the very definition of the concept of an institution as an organization created by one or more persons (founders) who do not participate in its management, by combining (separating) their property to achieve the goal determined by the founders, at the expense of this property, does not comply with the principles of functioning of the specified legal entities engaged in financial activities. Borysov V. I. (2016) notes that there are significant differences between the types of financial institutions that are created only in the organizational and legal form established by special legislation, and which can be both non-entrepreneurial and entrepreneurial, public and private legal entities, do not provide an opportunity to recognize the institution as an organizational and legal form of legal entities - participants in the financial services market. In order to avoid inaccuracies in the application of legal terminology, it would be more correct to call legal entities engaged in professional activities related to the circulation of financial assets financial organizations, rather than institutions. Therefore, entities providing financial services (banks, insurance companies, financial companies, etc.) by their legal status are financial organizations under private law, and entities such as the National Bank of Ukraine, the

Individual Deposit Guarantee Fund are financial organizations under public law.

Credit institutions are distinguished among financial institutions. The definition of the term credit organization is contained in Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (Directive 2013/36/EU, 2013) and Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No. 648/2012 (European Union, 2013). So, in accordance with Clause 1, Part 1, Art. 4 of Regulation No. 575/2013, a credit organization is defined as an enterprise whose activity consists in accepting deposits or other refundable assets from an unspecified number of persons and granting loans at its own expense. At the same time, in accordance with paragraph 1 of Article 9 of Directive No. 2013/36/UE, member states are obliged to prohibit individuals or enterprises that are not credit organizations from carrying out activities to attract deposits and other assets on a revolving basis from an undefined circle of persons.

No legislative act in Ukraine contains a list of credit organizations, which also has negative consequences for law enforcement activities. According to Art. 1 of the Law of Ukraine «On Financial Services and Financial Companies» (Law No. 1953-IX, 2021) credit institutions are defined as financial institutions that, in accordance with the law on the activities of the relevant financial institution, have the right to provide financial loans on their own risk. Therefore, they are professionally engaged in the accumulation and redistribution of monetary capital. The difference in the given definitions of a credit organization is the definition of the circle of persons whose assets can be involved on the basis of return: according to the Directive and the Regulation, this is an undefined circle of persons, and the Law does not specify this aspect. Peculiarities of the legal regime of the funds involved, bank metals that can be credited in the future, make it possible to distinguish the specifics of the credit organization from other financial structures and outline its legal status. Those involved on the basis of returnability are invited to consider funds, bank metals, the receipt of which has the consequence of the emergence of a fixed-term debt obligation for the same or greater amount. The Law of Ukraine «On Financial Services and Financial Companies» (Law No. 1953-IX, 2021) does not contain a definition of the concept of a credit institution, however, it is proposed to distinguish the raising of funds by financial institutions as the provision of a financial service and other cases of raising financial assets. In accordance with Article 14, financial institutions also have the right to attract funds from: 1) participants, shareholders, owners of significant participation and affiliated persons of the financial institution - in any form; 2) other providers of financial services - in the form of a loan and/or credit, if there is a right to provide such a financial service as the provision of funds on credit; 3) international financial organizations - in any form; 4) individuals whose requirements are established by the Regulator, and legal entities - in the form of an interest-free loan (revolving financial assistance) or subordinated debt; 5) any persons - by placing emission debt securities, in accordance with the Law of Ukraine «On Capital Markets and Organized Commodity Markets» (Law No. 3480-IV, 2006). 6) any persons - by issuing shares when increasing (decrease) the size of the authorized capital of the joint-stock company; 7) Regulator - in cases provided by law; 8) any persons (including non-residents of Ukraine) - in the form of a charitable contribution, donation, grant, financial assistance, technical assistance - exclusively on an irrevocable basis and in the manner determined by the legislation of Ukraine. Such fundraising is not considered a financial service. This approach is also not without certain drawbacks. For example, financial companies and pawnshops will be able to provide loans at the expense of the funds they received on credit from banks. Such double intermediation between the entity that owns free funds and the entity that needs them to meet consumer or commercial needs will contribute to a significant increase in the interest rate. So, in Ukraine, banks and credit unions have the right to engage in activities related to the attraction of assets as a financial service for the purpose of their further placement through lending. The difference is that banks can attract financial resources from an unspecified range of persons, while restrictions are set for credit unions.

According to article L.511-1 of the Monetary and financial code of France (Legifrance, 2001), credit institutions are enterprises that carry out their activities in their own name and as a professional occupation, in order to attract repayable funds from an unspecified circle of persons mentioned in Article L. 312-2, and the provision of loans mentioned in Article L. 313-1.

Financial companies are legal entities, other than credit organizations, that carry out credit operations for their own account and on their own behalf under the conditions and restrictions determined by their accreditation. They are financial organizations within the meaning of article L.511-21.

According to article L. 311-1 of the Monetary and financial code of France (Legifrance, 2001), banking operations include the raising of funds on the basis of returns from an unspecified circle of persons, credit operations and payment banking services.

In Switzerland, the activities of financial institutions are regulated by the Federal law «On financial institutions» (Federal law No. 954.1, 2018), which in Article 2 defines the entities to which it applies, namely: managers (managers, administrators) of assets, trusts, managers of collective assets, fund management companies, securities firms. According to Article 3, commercial activity within the meaning of this law is granted if there is an independent economic activity aimed at permanent profit. The Federal Council establishes minimum requirements for the organization of financial institutions, taking into account the different business activities and sizes of companies, as well as the risks of financial institutions. However, the effect of this law does not extend to individual entities, in particular, banks whose activities are regulated by the Federal law of Switzerland «On banks and savings banks» (Federal law No. 952.0., 1934). The expression «bank» or «banker» alone or in combination with the words may only be used in the company name, in the description of the commercial purpose and in the estimate for institutions that have received a license from FINMA (the supervisory authority for the Swiss financial market) as a bank.

A bank is anyone who works mainly in the financial sector and: a. accepts deposits from the public of more than 100 million Swiss francs on a commercial basis or publicly recommends itself to do so b. commercially accepts deposits from the public up to 100 million Swiss francs or publicly recommends them and invests or pays interest on these deposits from the public; or c. is largely refinanced from several banks that do not take a significant part in it, for the purpose of financing an unspecified number of people or companies with which it does not in any way form an economic unit on its own account. The types of financial services that are provided in the course of the activity of financial institutions are determined by Federal law of Switzerland «On Financial Services» (Federal law No. 950.1, 2018).

In the Republic of Poland, Law «On banking law» (Law No. 140, 1997) divides types of banking into 2 groups. The purely banking types (of the first group) include those that are carried out on the basis of a license, namely, accepting cash deposits (on demand or time), keeping accounts for these deposits; maintaining other bank accounts, lending, providing and confirming bank guarantees, opening and confirming letters of credit, carrying out bank cash settlements, carrying out other types of activities provided exclusively for the bank in separate acts. The second group includes activities that can be carried out not only by banks, but also by non-banking organizations, if the provisions of individual acts allow them to do so. Such services include, for example, check and promissory note transactions and transactions, the subject of which is a guarantee, provision of payment services and issuance of electronic money, purchase and sale of monetary claims, other.

In Ukraine, among financial institutions, banks and non-bank financial institutions are distinguished, as well as the provision of financial services by legal entities without the status of a financial institution is regulated by separate normative acts. A significant part of consumer financial services is provided by banks. In the Law of Ukraine «On Banks and Banking Activity» (Law No. 2121-III, 2000) (Article 2) a bank is defined as a legal entity that, on the basis of a banking license, has the exclusive right to provide banking services, information about which is entered in the State Register banks. The peculiarity of banking activity is determined by the exclusive right of banks to perform banking services in aggregate, which, in accordance with Article 47 of the Law «On Banks and Banking Activity», include 1) attracting funds and bank metals from an unlimited number of legal entities and individuals into deposits (deposits); 2) opening and maintaining customer current (correspondent) accounts, including bank metals, and escrow accounts; 3) placement of funds and bank metals involved in deposits (deposits), including current accounts, on one's own behalf, on one's own terms and at one's own risk. Bezklubyi I. A. (2006) notes that the peculiarity of financial services with the participation of the bank is that there is a constant redistribution of quite significant funds within this sphere. In connection with this, the question arises regarding the ratio of private and public interests of the subjects of the relevant relations. The impact of public law norms on bank activity is due to the need to minimize the risks of loss of assets of both bank clients and the bank itself, which in turn affects the stability of the banking system and the economic indicators of the country as a whole.

Currently, the development of the financial market is closely related to the development of financial technologies (FinTech) of financial organizations (Roshylo et al., 2020). Non-banks that provide their services online are gaining considerable popularity in the financial markets. Such digital banks do not have branches, offices, they work with clients remotely, via mobile phones and computers. The first neobanks began to appear in Europe (Great Britain, Germany, France, Finland) in 2015. Famous neobanks in the world are Monzo Bank, Revolut, Roketbank, Atom Bank, Number 26, Nemea, Fidor Bank, Saxo Bank, Sberbank Direct and TVB Direct, Neat, Mondo, Solaris Bank.

Neobanking usually includes such functions as a classic or virtual payment card; mobile deposits; individual payments using phone numbers, e-mails or even identifiers in social networks; mobile budgeting tools and real-time digital technologies.

According to analysts, in the near future more than 99% of transactions will be conducted online (Guba et al., 2019). There are 2 types of neobanks: 1) which independently provide financial services on the basis of a license; 2) cooperate with traditional banks that have a license, receive financial services from them wholesale, so to speak, and then sell them retail (Payments Cards & Mobile, 2018). So, in Ukraine, in 2017, Monobank was created as a Ukrainian internet banking that uses the license of Universal Bank for its work. This digital mobile bank has no branches and provides all services through mobile applications.

Art. 1 of the Law of Ukraine «On Credit Unions» (Law No. 2908-III, 2001) contains a definition of the concept of a credit union as a non-profit organization founded by individuals, trade unions, and their associations on a cooperative basis to meet the needs of its members in mutual lending and provision of financial services at the expense of the combined monetary contributions of the members of the credit union. A credit union is a financial institution, the exclusive type of activity of which is the provision of a list of financial services defined by law. This financial institution accepts introductory and mandatory share and other contributions from union members; provides loans to its members on the terms of their payment, term and security in cash and non-cash form. Farms and private enterprises owned by the members of the credit union can also receive loans on behalf of the members of the credit union. The total amount of funds raised, including credits, cannot exceed 50 percent of the value of the total liabilities and capital of the credit union at the time of attraction.

Non-state pension provision is implemented by pension funds by concluding pension contracts between administrators of pension funds and depositors of such funds; by insurance organizations by concluding lifetime pension insurance contracts with fund participants, insuring the risk of disability or death of a fund participant; by banking institutions by concluding contracts on opening pension deposit accounts for the accumulation of pension savings within the limits of the amount determined for the reimbursement of deposits by the Individual Deposit Guarantee Fund.

The principles of the functioning of non-state pension funds are defined by the Law of Ukraine «On non-state pension provision» (Law No. 1057-IV, 2003). A non-state pension fund (NPF) is a legal entity that has the status of a non-profit organization (non-entrepreneurial company), functions and conducts activities exclusively for the purpose of accumulating pension contributions for the benefit of pension fund participants with further management of pension assets, and also makes pension payments to participants of the specified fund in the manner determined by the laws of Ukraine. In an open pension fund, participants can be any natural persons, regardless of the place and nature of their work, and in a professional pension fund, the founder(s) can be organizations of employers, their associations, associations of citizens, trade unions, their associations or individuals related by the type of their professional activity (occupation), defined in the foundation's charter. Participants of such a fund can be exclusively natural persons related by the type of their professional activity (occupation), defined in the fund charter, as well as natural persons who are employees of employers' organizations, their associations, members or employees of professional unions, their associations that created such a fund. A fund contributor is a person who pays pension contributions for the benefit of a fund participant by transferring funds to the pension fund in accordance with the terms of the pension contract and the law. These contributors can be the fund participant himself or his wife (husband), children, parents and employer, as well as a professional association of which he is a member. A participant of any NPF can be its depositor at the same time. The amount of pension payments from the National Pension Fund is determined based on the amount of accumulated funds of the participant, which depends on the amount of pension contributions, the period of their accumulation and distributed investment income.

To ensure the legal personality of the non-state pension fund, the council concludes agreements on the administration of the NPF, on the management of the assets of the NPF and on the maintenance of the NPF by the custodian. The administrator of a non-state pension fund can be 1) a legal entity that provides professional services in the administration of the NPF (professional administrator); 2) a legal entity that is the sole founder of a corporate pension fund that has made a decision to independently administer such a fund; 3) asset management company (AMC). A legal entity that intends to carry out activities in the administration of the NPF must obtain a license to carry out activities in the administration of non-state pension funds. The provision of non-state pension fund administration services can only be combined with asset management activities.

The administrator acts on behalf of the pension fund and in the interests of its participants, in particular, he concludes contracts with depositors, ensures the implementation of pension payments to participants. Vitka Y.V. (2010) notes that the legal relationship between the administrator and the NPF contains elements of the civil-law institution of representation, questions the attribution of administration services to financial services and suggests that under «administration» we understand the legal relationship between the NPF and the administrator, which consists in the provision by the administrator for a fee for a set of services for accepting pension contributions, making pension payments, keeping personalized records, organizational, technical and material support for the activity of the board and meetings of the founders of the fund, as well as advertising, agency, accounting, information and explanatory services. It should be agreed that the administrator does not provide a financial service, since the subject of the administration contract is not financial means. The administrator enters into contracts with the contributors and raises their funds on a representative basis for the NPF, and the rights and obligations under the pension contract arise for the NPF, the depositor and the member, and not for the administrator. It is proposed to exclude from the list of financial services the activities of NPF administration, provided for in Article 41 of the Law of Ukraine «On Capital Markets and Organized Commodity Markets» (Law No. 3480-IV, 2006). Instead, the financial service is provided on the basis of the pension contract itself, which is the basis for attracting depositors' funds and, in the future, non-state pension provision of participants.

Gorbachova O. O. (2014) suggests considering the legal nature of the NPF as a special type of legal entity on whose behalf other persons - professional subjects of financial services - act, by exercising the powers of the relevant bodies of the NPF (executive, supervisory, etc.). Since the NPF does not have the right to independently invest pension assets, such services in the interests of NPF participants are provided by the persons who manage them. They can be an asset management company; the bank regarding the assets of the corporate pension fund created by it, if it does not act as the custodian of this fund; the National Bank of Ukraine regarding the assets of the corporate pension fund created by it; a professional administrator who received a license to conduct asset management activities. Asset management of the pension fund is carried out on the basis of a license for carrying out professional activities on the capital markets - asset management activities, which is issued by the National Commission for Securities and the Stock Market in accordance with the procedure established by it. At the expense of pension assets, in respect of which such person is empowered to own, use and dispose with the restrictions established by the contract, he/she can conclude, in particular, contracts for a bank deposit, purchase and sale of real estate, securities, that is, invest them for the purpose of obtaining profit. Separate limitations of the manager's activity are established directly by law. For example, such person on behalf of the pension fund cannot grant a loan or take a loan or credit that is subject to repayment from the fund's pension assets.

However, the system of non-state pension provision may be at risk during a period of prolonged high inflation or a serious financial market crisis, in addition, the risk of the decreasing in the value of pension assets due to objective changes in the financial market rests with the fund participant.

Insurance companies play an important role in the market of financial services, protecting individuals and legal entities from possible losses in the event of insurance events. The basis of special legislation regulating the activities of insurance companies is the Law of Ukraine «On Insurance» (Law No. 1909-IX, 2021). Insurance market participants are insurers, reinsurers and providers of accompanying services in the insurance market, their associations, and clients. An insurer is a financial institution or a branch of a non-resident insurer that has the right to carry out insurance activities on the territory of Ukraine. Insurers in Ukraine are created in the form of a joint-stock company or a company with additional liability. The exclusive type of activity of the insurer is the activity of insurance, including the activity of providing guarantees, and the activity of providing accompanying services in the insurance market. Insurers who carry out life insurance can grant loans to policyholders who have concluded life insurance contracts.

However, to date, the market development is restrained by a number of factors, in particular, a number of insurance companies have problems with solvency and liquidity, there is no clear business model, and the level of risk management and corporate governance is low. All this makes the market opaque and non-competitive.

According to Article 27 of the Law of Ukraine «On Financial Services and Financial Companies» (Law No. 1953-IX, 2021), a financial company is a financial institution that, on the basis of a license, can carry out activities to provide one or more of the following types of financial services: provision of funds on credit; provision of guarantees; factoring; financial leasing; trading in currency values; financial payment services for transferring funds without opening an account and/or acquiring payment instruments. A financial company has the right to acquire (to purchase) rights of claim under contracts for the sale of products (goods, works, services), including contracts for the provision of financial services, as well as manage debt under such contracts.

According to Article 28 of the Law of Ukraine «On Financial Services and Financial Companies» (Law No. 1953-IX, 2021), a pawnshop is a financial institution that, on the basis of a license, has the right to provide individuals with financial services for lending funds secured by property. A pawnshop has the right to provide individuals with the following financial services if they are included in the pawnbroker's license: 1) financial payment services for transferring funds without opening an account and/or acquiring payment instruments; 2) trade in currency values. A legal entity that intends to carry out the activities of a financial company or a pawnshop acquires the status of a financial institution and the right to carry out financial services activities after obtaining the appropriate license. It specifies all financial services that a finance company or a pawnshop is allowed to provide.

A special place among the entities providing financial services to individuals is occupied by a broker /legal entity that is formed and functions in the form of a business partnership and that, in accordance with the established procedure, received a license to carry out professional activities on the stock market (securities market) - securities trading activities/. A broker can conclude a general agreement, commission agreements, and commissions with clients for the provision of services. Economists draw attention to the fact that financial intermediation is significantly different from broker-dealer activity. The peculiarity of the latter is that brokers and dealers do not create their own requirements and obligations, but act on behalf of clients, receiving income in the form of a commission (brokers) or the difference in the purchase and sale rates (dealers). Financial intermediaries operate in the market in a completely different way, on their own behalf, on their own account, creating their own liabilities. In scientific literature, the dealership contract is considered by the legal orientation of the result as a contract on the transfer of property into ownership (Yavorska, 2009). Acting in the interests of individuals on the basis of power of attorney contracts or commissions agreements, the broker provides a legal service, but not a financial one. Financial means are not the material subject of these contracts. Brokerage services consist in the performance of lawful actions of a factual and/or legal nature (according to the broker's sphere of professional activity) (Orzih, 2008). According to Article 44 of the Law of Ukraine «On Capital Markets and Organized Commodity Markets» (Law No. 3480-IV, 2006), brokerage activity is the activity of an investment firm to conclude derivative contracts and perform transactions on financial instruments at the expense and on behalf of clients or at the expense of clients, but on his/her own behalf. The broker performs pre-arranged transactions regarding financial means, i.e. does not make independent decisions, and accordingly does not assume all or part of the financial risk in relation to contracts concluded with a third party, and this is one of the main goals of the functioning of financial intermediaries.

For individuals, an investment firm can provide a financial service on the basis of a contract for managing a portfolio of financial instruments. The transfer of property into management is a way of transfer by the founder and granting the manager ownership powers over someone else's property, taking into account the restrictions defined by the contract and the law (Tsyura, 2017). Representation also differs from property management in that the representative powers provide for the performance of, as a rule, clearly defined acts, which is not typical of the powers of the property manager, since the essence of management consists in the implementation of any lawful actions necessary for the purpose of trust management, which is not can be determined by an indication of the commission of a certain one-time transaction or a combination of them (Tsyura, 2017). The scope of powers of the manager is based on the presumption of the maximum possible range of powers. The manager has the discretionary nature of powers, which is manifested in the rule, according to which, within the limits defined by law and the contract, the manager independently determines the actions that must be taken to achieve the goal of management. The founder of the administration has no right to interfere in his activities in cases not provided for by the contract, and cannot give him binding instructions (Maidanyk, 2002). The specifics of the manager's powers determine the assignment of part of the risks to him.

In accordance with Article 1 of the Law of Ukraine «On Financial Leasing» (Law No. 1201-IX, 2021), the lessor can be a legal entity that has acquired the right to provide financial leasing services in accordance with the procedure established by law and, on the basis of a financial leasing contract, transfers possession to the lessee and use of the object of financial leasing. Currently, financial leasing services are provided by banks, financial companies that are financial institutions, as well as legal entities that are not financial institutions (leasing companies). The latter must be included in the Register of persons who are not financial institutions, but have the right to provide separate financial services. In order to carry out financial leasing services, it is necessary to obtain a license. The Law on Payment Services defines nine categories of payment service providers, including: banks, payment institutions, postal operators, electronic money institutions, branches of foreign payment institutions, state authorities (under certain conditions). Non-bank providers of payment services (payment institutions, electronic money institutions, postal operators and some other payment service providers) have the opportunity to open payment accounts, to issue payment cards and electronic money (previously such opportunities were available only to banks) for conditions for obtaining a certain authorization.

Conclusions

The presented results of the analysis of the provisions of national and foreign legislation regarding the legal status of banks and other organizations as financial intermediaries testify to the relevance of scientific research on the issue of the legal status of providers of consumer financial services as a basis for changing the relevant legislative norms in order to improve the institutional structure of the financial services market to ensure optimal conditions for implementation by consumers their rights.

The activity of financial organizations in attracting financial resources and placing them on their own behalf is called financial intermediation, taking into account only its economic essence. So, the bank is considered a financial intermediary, as it is engaged in placing the involved financial resources. However, among the providers of financial services there are entities that are not financial intermediaries even by their economic characteristics (for example, leasing companies that are not financial institutions). However, at the same time, the similarity with the activity of financial intermediaries is, in particular, in the possibility of providing leasing services at the expense of borrowed funds.

The article analyzes legislative norms and scientific positions regarding the characteristics of financial intermediaries and other participants in civil relations as subjects of providing financial services to individuals. It is suggested that the ***providers of consumer financial services*** should be understood as financial organizations, and in cases specified by law, other legal entities that, on the basis of a license, provide for a fee services regarding the use of financial means for the purpose of obtaining profit or other property benefit by consumers or third parties for the satisfaction of their personal, family needs, not related to entrepreneurial or independent professional activity.

Bibliographic references

Bezklubyi, I. A. (2006) Theoretical problems of banking transactions: autoref. dissertation ...doctor of legal sciences. Kyiv: Kyiv National University named after Taras Shevchenko, 16

Borysov, V. I. (2016) Organizational and legal forms of financial institutions as participants in the financial services market (Dissertation. ... candidate of legal sciences). Kharkiv, Yaroslav Mudryi National Law University, 94

Code No. 435-IV. Civil Code. Ukraine, January 16, 2003. Recovered from https://zakon.rada.gov.ua/laws/show/435-15#Text

Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013L0036

Dragan, O. V. (2011) State-legal regulation of the activities of financial intermediaries on the securities market: autoref. dissertation ... candidate of legal sciences. Kyiv: National Academy of Internal Affairs, 9

European Union. (2013). Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012. Official Journal of the European Union, L 176/1. Retrieved from https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32013R0575

Federal law No. 950.1. On Financial Services. Switzerland. June 15, 2018. https://www.fedlex.admin.ch/eli/cc/2019/758/en

Federal law No. 954.1. On financial institutions. Switzerland. June 15, 2018. https://www.fedlex.admin.ch/eli/cc/2018/801/en

Federal law No. 952.0. On banks and savings banks. Switzerland. November 8, 1934. https://www.fedlex.admin.ch/eli/cc/51/117_121_129/de

Gorbachova, O. O. (2014) Non-state pension funds as subjects of civil law of Ukraine: autoref. dissertation ... candidate of legal sciences. Kyiv: Kyiv National University named after Taras Shevchenko, 15

Guba, M. A., Linnyk, A. O., & Kolesnyk, D. S. (2019) Development of neobanks in Ukraine and the world. Regional economy and management, 2(24), 71.

Lavryk, O. L. (2015) The essence of financial intermediation at the current stage of development of the economy of Ukraine. Economic analysis: coll. of science works, 19(1), 184-192

Law No. 140. On banking law. Poland. August 29, 1997. Recovered from Akt prawny (sejm.gov.pl)

Law No. 2121-III. On banks and banking activity. Ukraine, December 7, 2000. Recovered from https://zakon.rada.gov.ua/laws/show/2121-14#Text

Law No. 3480-IV. On capital markets and organized commodity markets. Ukraine, February 23, 2006. Recovered from https://zakon.rada.gov.ua/laws/show/3480-15#Text

Law No. 2908-III. On credit unions. Ukraine, December 20, 2001. Recovered from https://zakon.rada.gov.ua/laws/show/2908-14#Text

Law No. 1201-IX. On Financial Leasing. Ukraine, February 4, 2021. Recovered from https://zakon.rada.gov.ua/laws/show/1201-20#Text

Law No. 2664-III. On Financial Services and State Regulation of Financial Services Markets. Ukraine, July 12, 2001. Recovered from https://zakon.rada.gov.ua/laws/show/2664-14#Text

Law No. 1953-IX. On Financial Services and Financial Companies. Ukraine, December 14, 2021. Recovered from https://zakon.rada.gov.ua/laws/show/1953-20#Text

Law No. 1909-IX. On Insurance. Ukraine, November 18, 2021. Recovered from https://zakon.rada.gov.ua/laws/show/1909-20#Text

Law No. 1057-IV. On non-state pension provision. Ukraine, July 9, 2003. Recovered from https://zakon.rada.gov.ua/laws/show/1057-15#Text

Legifrance (2001) Monetary and financial code of France, from January 1, 2001. Recovered from https://cutt.ly/M6wJGeZ

Maidanyk, R. A. (2002) Problems of trust relations in civil law: monograph. Kyiv: Publishing and Printing Center «Kyiv University», 315-316

Maslyaeva, K. V. (2009) Economic and legal support for the functioning of the financial services market in Ukraine: author's abstract. (Dissertation ... candidate of legal sciences). Kharkiv, Yaroslav Mudryi National Law University, 7

Orzih, Y. G. (2008) Brokerage contract: civil law aspect: autoref. (Dissertation ... candidate of legal sciences), Odesa, Odesa National Law Academy, 11

Reznikova, V. V. (2011) Theoretical problems of regulation of mediation in the business sphere of Ukraine: author's abstract. (Dissertation ...doctor of legal sciences). Kyiv, Kyiv National University named after Taras Shevchenko, 9-10

Roshylo, V. I., Kovalevych, D. A., Gut, L. V., Ventsel, V. T., & Berdar, M. M. (2020) Current Status and Development Prospects of the Financial Services Market in Ukraine. Journal of Advanced Research in Law and Economics, 11(4), 1353. https://journals.aserspublishing.eu/jarle/article/view/5340

Payments Cards & Mobile. (2019, November 27). The global state of neobanks. Retrieved from https://www.paymentscardsandmobile.com/the-global-state-of-neobanks/

Tsyura, V. V. (2017) Institute of representation in the civil law of Ukraine (Dissertation ...doctor of legal sciences). Kyiv, Kyiv National University named after Taras Shevchenko, 193, 195

Uninets-Khodakivska, V. P. (2009) Market of financial services: theory and practice: education. manual. Kyiv, Center of educational literature, 39

Vitka, Y. V. (2010) Non-state pension funds: peculiarities of civil legal status: monograph. Kyiv: Express Polygraph, 82

Venetska, M. V. (2007) The evolution of legal regulation of financial services in the book Evolution of civil legislation of Ukraine: problems of theory and practice: monograph. Kyiv: Legal opinion, 31 (In Ukrainian)

Voitenko, O. M. (2011) Transformation of the world market of financial services in conditions of global instability (Dissertation ... candidate of economy science) Ternopil, Ternopil National University of Economics, 33

Yashchyshchak, O. R. (2010) State regulation of the financial services market in Ukraine: organizational and legal aspect (Dissertation …candidate of legal sciences) Kyiv, Institute of State and Law named after V.M. Koretsky, 9

Yavorska, O. S. (2009) Contractual obligations on the transfer of property into ownership: civil and legal aspects: monograph. Ternopil: Textbooks and manuals, 260 (In Ukrainian)

DOI: https://doi.org/10.34069/AI/2023.63.03.9

How to Cite:

Bondarchuk, N., Hrytsiv, N., Bekhta, I., & Melnychuk, O. (2023). Sentiment analysis of weather news in British online newspapers. *Amazonia Investiga*, *12*(63), 99-108. https://doi.org/10.34069/AI/2023.63.03.9

Sentiment analysis of weather news in British online newspapers

Сентимент-аналіз новин про погоду у британських електронних газетах

Received: January 22, 2023 Accepted: March 30, 2023

Written by:

Nataliya Bondarchuk[1]

https://orcid.org/0000-0002-5772-8532

Nataliia Hrytsiv[2]

https://orcid.org/0000-0001-6660-7161

Ivan Bekhta[3]

https://orcid.org/0000-0002-9848-1505

Oksana Melnychuk[4]

https://orcid.org/0000-0003-4619-363X

Abstract

The advancement of modern technologies has influenced the way news is presented and consumed, particularly online. Weather is an important topic for the public as it relates to the human experience and addresses current societal issues. In this paper, we introduce a systematic approach to conduct sentiment analysis of weather news stories, to specify the emotional tone and examine the role of subjectivity in online news reporting. This research falls within the scope of a lexicon-based (unsupervised) approach to sentiment analysis, which involves finding the sentiment polarity of words. The analysis is predominantly based on sentence-level sentiment analysis. Two popular online web services, MonkeyLearn and SentiStrength, were applied to automatically detect human emotions. We compared the efficiency of each tool and found that MonkeyLearn provided better final results in comparison to SentiStrength, which tended to misclassify negative sentiments into neutral ones. The final results of frequency calculation showed the dominance of weather news stories with negative sentiment polarity over positive and neutral ones, with neutral sentiments being in the minority. Based on the empirical findings, we observed an objectivity-to-subjectivity shift in online news reporting.

Анотація

Розвиток сучасних технологій вплинув на процес подання та сприйняття новин, передусім онлайн. Тема погоди має велике значення для населення, оскільки вона резонує з людським досвідом і зачіпає актуальні суспільні проблеми. У цій статті пропонуємо системний підхід до проведення сентимент-аналізу новин про погоду для визначення емоційної тональності/навантаження досліджуваних текстів та вивчення ролі суб'єктивності у висвітленні онлайн-новин. Це дослідження підпадає під сферу застосування лексикографічного підходу до аналізу сентиментів/оцінки, який полягає у визначенні полярності (позитивної, негативної чи нейтральної) слів. Дослідження переважно базується на аналізі сентиментів на рівні речення. Два популярні онлайн-сервіси, а саме MonkeyLearn та SentiStrength, були застосовані для автоматичного виявлення людських емоцій (сентиментів). Крім того, ми оцінили ефективність кожного інструменту, порівнявши отримані результати. Виявилося, що MonkeyLearn дає кращі кінцеві результати порівняно з SentiStrength, хоча останній схильний помилково класифікувати негативну оцінку як нейтральну. Остаточні результати підрахунку частоти показали домінування новин про погоду з негативною оцінкою над позитивними та нейтральними. Новини з нейтральною оцінкою

[1] Candidate of Philological Sciences (PhD), Associate Professor, Lviv Polytechnic National University, Institute of Computer Sciences and Information Technologies, Department of Applied Linguistics, Ukraine.

[2] Candidate of Philological Sciences (PhD), Doctoral Researcher, Lviv Polytechnic National University, Institute of Computer Sciences and Information Technologies, Department of Applied Linguistics, Ukraine.

[3] Doctor of Philology, Professor, Lviv Polytechnic National University, Institute of Computer Sciences and Information Technologies, Department of Applied Linguistics, Ivan Franko National University of Lviv, Faculty of Foreign Languages, Department of English Philology, Ukraine.

[4] Candidate of Philological Sciences (PhD), Doctoral Researcher, Lviv Polytechnic National University, Institute of Computer Sciences and Information Technologies, Department of Applied Linguistics, Ukraine.

Keywords: text, emotion, natural language, negative/positive sentiment, polarity, sentiment analysis, subjectivity, weather news.

виявилися найменш численними. Спираючись на емпіричні дані, ми спостерігаємо зміщення акцентів від об'єктивності до суб'єктивності в онлайн-новинах британських газет про погоду.

Ключові слова: Ключові слова: текст, емоція, природня мова, негативний/позитивний сентимент, полярність, сентимент-аналіз, суб'єктивність, новини про погоду.

Introduction

Sentiment analysis, also known as opinion mining, is one of the most common methods in computational linguistics. The method is used to identify and/or extract subjective information in text data as well as research person's attitude towards the topic described. Sentiment analysis tools determine whether data is positive, negative or neutral, thus specifying the emotional tone/load of the text. This study focuses on sentiment analysis of weather news in British online newspapers based on a lexicon-based method.

The presentation of news has changed considerably over the last decades in the light of technological advances. The new electronic environment determined the emergence of a new electronic form (apart from written and oral forms) of communication, where the information is conveyed across time and borders (Bhatia et al., 2022; Blake, 2019, Yates & Orlikowski, 1992) and is manifested in the combination of interaction and communication.

Changes brought about by innovative technologies have also transformed the consumption and perception of the news content. Greater accessibility of news for the users, its increasing importance, and ubiquitous presence in a new medium (electronic one) induced linguistic research and predetermined the material for our scrutiny. As such we have chosen online British newspapers: two quality papers (The Times, The Guardian) and two mass ones (The Sun, The Daily Mail) as these four are the most powerful newspapers in the UK and can best demonstrate the use of a language in the current time.

The increasing number of weather disasters over the last years in most parts of the world cannot be ignored. Frequent hurricanes, floods, droughts, and long heatwaves causing bushfires, started the list of news on extreme weather events over the last years. The idea of weather extremes has become widely synonymous with that of global warming and anthropogenic climate change. Climate controversy is becoming a key issue, as well as a growing consensus for scientists, political bodies, media, and general public. Moreover, the weather topic has an anthropocentric focus as everything happening in the weather domain has a direct impact on people. Abnormal weather events, weather catastrophes and climate changes leading to the destruction of the environment, mutilation, and death of people immediately become hard news.

On the one hand, weather news is a piece of writing the structure, topic, and language use of which is strictly governed by the requirements/conventions for news reporting. It should be objective, include facts, and be concise with stable clichés typical for newspaper style. The information is to be communicated with a standard set of lexis which makes the text recognizable and identifiable as a member of a specific genre and enables the reader to better comprehend, process, and interact with the text. On the other hand, it is a product/creation of the journalist with his own stock and choice of vocabulary, attitude towards the events/facts he describes, opinions, a peculiar style of writing (Bondarchuk & Bekhta, 2021), the use of emotional appeal and/or persuasion techniques to gain credibility of the reader (Al-Omari et al., 2019; Bekhta & Hrytsiv, 2021; Wiebe & Riloff, 2005), which altogether affect the reception of such news.

The lexical choices, selection of events and their formulation in the news have a persuasive intent, and display idiosyncratic features of writer's style and culturally-specific conventions governing the behavior and attitude of people. In this context, any news text can be approached from three different perspectives – the author, reader and text itself. In this paper we aim to identify whether weather news stories are predominantly objective or subjective, and whether subjective type includes more positive or negative segments, thus focusing on text perspective.

According to the rules and norms of news writing, news stories should report factual news or events without clearly stating the opinion or attitudes to facts, i.e. in an unbiased and depersonalized manner. However, in the daily news practice it can be observed that traditional boundaries of journalism (especially in online news environment) are crossed and the separation of facts and personal opinion is blurred. In addition, the journalists write from a first person perspective mainly and perceive the information through the prism of their “subjective sensory-emotional consciousness” (Zhou, 2021). This explains the rationale behind the difficulties in differentiating the public experience from the private (journalist’s) one.

Theoretical Framework

While the issue of binary opposition fact/opinion in the news has been analysed in a number of studies (Boesman & Costera, 2018; Höller, 2021; Alhindi, Muresan, & Preotiuc-Pietro, 2020) the application of sentiment analysis to news texts needs commensurate attention.

Sentiment analysis is a field of Natural Language Processing that focuses on discovering techniques to decipher the sentiments hidden in text comments from reviews or opinions posted online (D’Aniello et al., 2022). Thus, the goal of sentiment analysis is to identify, study or categorize the emotions/opinions of people that are expressed in a written text. There are two generally accepted ways to approach sentiment analysis: lexicon-based (unsupervised) and machine learning (supervised) methods. The lexicon-based method lies in the use of specific lexicons containing the words which have been tagged as being positive, negative, or neutral to automatically detect the sentiment polarity and further classify the sentiments. Machine-learning approach deals with the automated calculation of the sentiment scores within a particular text based on trained data and test data.

Normally, sentiment analysis can be performed on three different classification levels which are presented in Figure 1. Sentence-level classification is based on sentiment detection of individual sentences, in turn, document-level classification means to recognize the sentiment of the whole document (Wiebe et al., 2002; Mahmood et al., 2020). Aspect-level classification is related to the detection of sentiments on entities and their features.

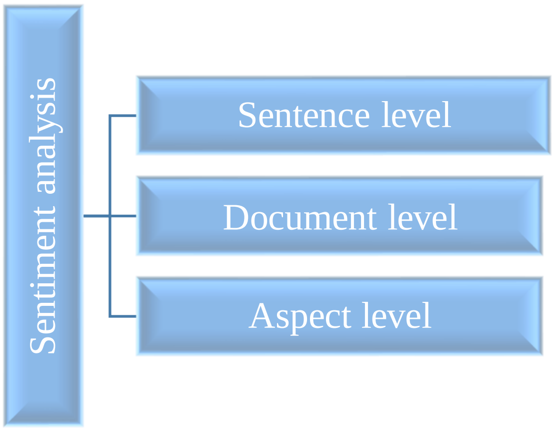


Figure 1. Classification levels of sentiment analysis

Much work on news sentiment analysis has been carried out using both lexicon-based (Hota at al., 2021, Dharmale et al. 2023, Gupta & Urvashi., 2023, Beigi & Moattar, 2020, Bonta et al., 2019, Mutinda et al., 2020) and machine learning approaches (Garay et al., 2019, Dagar et al., 2021, Jurafsky & Martin, 2021, Mahmood et al. 2020, Amin et al. 2021, D’Aniello et al., 2022). In recent research on news subjectivity (Wilson et al., 2019) sentiment computation was conducted using a Naive Bayes classifier (basic classifier in machine learning). The focus of another survey carried out by Chaturvedi et al., (2018) was subjectivity detection based on word embeddings. The issue of climate change sentiment analysis on social media platforms has been analyzed by performing a comparative evaluation of different sentiment analysis techniques, namely lexicon-based, machine learning, and hybrid approaches (Mohamad Sham & Mohamed, 2022). This research showed that hybrid approaches outperformed both lexicon and machine learning approaches.

Methodology

Manual identification of either positive or negative sentiments would be a very challenging and time-consuming process. Our analysis of subjectivity and opinion is automatic and utilizes the lexicon-based (unsupervised) method, which consists in finding sentiment polarity of the words.

The automatic processing of texts to identify positive, negative and neutral sentiments was conducted using online web services MonkeyLearn (https://monkeylearn.com/) and SentiStrength (http://sentistrength.wlv.ac.uk/). The results obtained by applying both the SentiStrength algorithm and MonkeyLearn have been compared to evaluate the performance of each tool in this study. We hypothesize that sentence-level sentiment analysis best fits the aim of the survey, as it would be problematic to detect subjectivity (subjective sentences) on a document level since weather news stories can include not only topics related to weather but also other ones. Document-level classification may be applied when analyzing, for instance, reviews or comments, i.e. texts on one topic.

The dataset contains 125 news stories (which should be enough for granting the representativeness of the results) related to the topic of weather collected on the dates between 2014 and 2018 from four official websites of British quality and mass newspapers (www.thetimes.co.uk, www.theguardian.com/uk, www.www.thesun.co.uk, www.thedailymail.co.uk). The news stories have been queried by using the keyword “weather”.

To compare the performances of MonkeyLearn web service and SentiStrength program for sentiment analysis, different pre-processing steps have been used. For sentiment analysis, pre-processing methods are of crucial importance and their proper use increases the accuracy of the results. Therefore, two datasets, which are composed of 6000 sentences each, have been formed.

We have registered an account in MonkeyLearn. For MonkeyLearn dataset weather news stories have been captured in a CSV file (Figure 2).

	A
5	The bout of warm weather which had everyone reaching for a cold drink was caused by a continental air mass that had formed in France and Spain over the last few weeksResidents in Cambridge making the most of
6	The balmy mass drifted north and settled over the UK for the last seven days with Brize Norton in Oxfordshire recording a sweltering 33.5C last Tuesday, the hottest anywhere in the country.
7	Cooler temperatures are expected over the next few days and next week with the mercury rising as high as 28C.
8	The south of the UK is set for the best of the conditions with weather maps showing rain and cloud in the north as well as thundery downpours in north-west Scotland.
9	A COOL FRONTThis poor bloke just did the entire weather forecast live on TV with his FLIES OPEN
0	SKIRT SLEEVE ORDER Teenage boys go to school wearing girl's clothes in protest at ban on them wearing shorts in hot weather
1	BABY WARNINGThis is the reason you should NEVER put a blanket over your child's pram in hot weather
2	HEAT RAVE!Bookies slash odds on the UK experiencing the hottest weather EVER recordedENJOYING PRE-BREXIT WEATHER'
3	Paloma Faith makes the most of 'pre-Brexit weather' with an exercise session in the park
4	BOILING POINT!Brits can't cope with the hot weather... so they're reacting to the heatwave with hilarious memes
5	Luke Miall, a meteorologist at the Met Office, said that today was likely to see "some outbreaks of rain in Scotland with thicker cloud extending across much of the west of the country and towards Northern Ireland.
6	"Some of that cloud is also infringing on parts of western Wales and the south-west of England as well. The further south you go, the less rain you'll find."
7	He said that the rest of the country would be largely dry with hot sunshine expected in the south-east of England with the mercury expected to push as high as 28C in London.
8	St Michael's Mount in the distance from the National Dahlia Collection
9	"A wide swathe through the midlands and southern England could see temperatures in the mid-20s with the odd shower possibly breaking out in the lat afternoon."
0	He explained that tomorrow would see rain developing in the south-west of Britain that is likely to move northwards over the day into Wales and Northern Ireland.
1	By the evening the rain could also arrive in northern England and western Scotland. He said: "Some of the rain could by heavy at times but for many it is just going to be a generally cloudier day with some showery o
2	The south and south-east are likely to see some decent spells of sunny weather with brighter conditions also expected in East Anglia too.Today's forecast shows sunshine mainly in the south and east of EnglandTom
3	Temperatures there are likely to nudge 27C while the north and west of Britain are likely to feel cooler with the mercury remaining around the high teens.
4	"Overall not too bad a weekend, some rain at times, but the best of the dry and fine weather will be found further south."
5	Monday is expected to see rain in the northern and western areas of Britain with "sunny spells and showers around on a day that is expected to be mostly cloudy".
6	Similar conditions are also expected on Tuesday as well with rain expected in Northern Ireland and western Scotland by the evening.
7	Tuesday is likely to see similar conditions with some westerly showers
8	It's also likely to feel cooler next week in comparison with the balmy temperatures of the last few days as the hot continental air mass which had everyone reaching for a cold drink moves away towards the east.

Figure 2. MonkeyLearn dataset in CSV format

Pre-Processing stage

Every weather news story underwent the following pre-processing procedures to lessen the noise of the text:

1) All words were changed into lower case using python string lower() method.

Example: Why do cars slide into each other when in Sweden you are required by law to change to your snow tyres on national snow-tyre day.

Outcome: why do cars slide into each other when in sweden you are required by law to change to your snow tyres on national snow-tyre day.

2) All stop words were obtained from Natural Language Tool Kit (hereinafter –NLTK) and further removed to provide more accurate results.
3) Lemmatization and stemming were performed using NLTK.
4) All punctuation marks, numeric values and unnecessary spaces have been removed.

Example: Ash rain – such a common sight now it feels strange to think it needs an explanation – is caused as the rain picks up the smoke, the filth, the charred debris floating over cities.

Outcome: ash rain such a common sight now it feels strange to think it needs an explanation is caused as the rain picks up the smoke the filth the charred debris floating over cities.

For SentiStrength dataset, there are 4 separate input text files necessary for the algorithm to work properly which are;

- Emoticon LookUp Table – contains a list of emoticons with a strength 1 to 5 or -1 to -5
- Idiom Lookup Table - includes idiomatic phrases and sentiment strengths.
- Negating Word List - a list of negation words which reserve the polarity
- Booster Word List - a list of sentiment intensity modifiers

In SentiStrength dataset we have split a text document into sentences and made it into Excel file. We have mainly been interested in capturing the polarity of the sentences in which the sum of polarities of individual words comprise the polarity of a sentence.

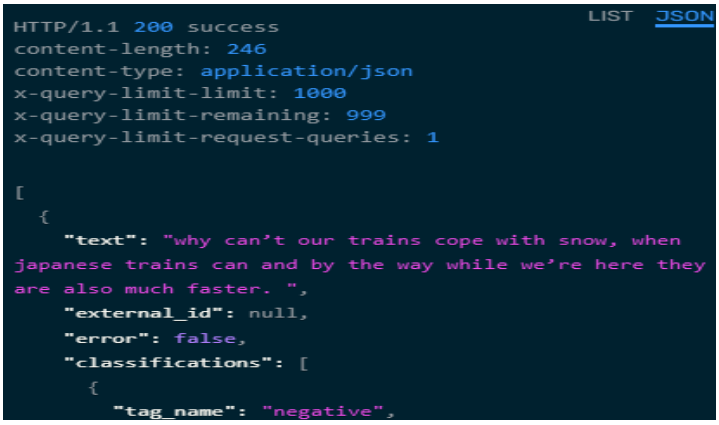
Frequency analysis was used to calculate the frequency of positive, negative and neutral sentiments to identify a general tendency characteristic of weather news stories. Some failures of automatic detection of sentiments have also been observed and described with illustrative examples.

Results and Discussion

Having used Monkeylearn web service, the sentences have been further classified into 3 types: positive, negative and neutral. Table 1 shows some of the examples of such classification and Figure 2 exemplifies the code used to perform such classification.

Table 1.
Classification results using MonkeyLearn

Sentiment score	Total
why can't our trains cope with snow when Japanese trains can and by the way while we're here they are also much faster	negative
And this chorus of self-immolation is taken up countrywide: why non-Londoners ask, is the capital brought to a standstill by a little snow?	positive
The weekend will start with a bang today as Scotland is engulfed by violent storms	positive
The Met Office has said winter had begun to bite after an unseasonably warm December, with large parts of the UK facing snow, ice and frost	negative
In fact, our miserable, grey weather is all the fault of the jet stream	negative
So next time some pub bore tells you that this cold month is caused by the extensive melting of arctic sea ice last summer ask him if the same thing happened in	negative
The grey mass appears to show the outline of mainland Great Britain as the sun begins to break through the dark clouds on the horizon	neutral
On the canal bridge just behind Kings Cross, a policeman took a huge snowball full in the face and – I couldn't quite believe this was happening – giggled delightedly (it must have really hurt)	negative
With a little luck, the freeze will come just in time to deliver a near universal white Christmas	positive
The sky is streaked with the world's highest type of cloud, visible only in summer after the sun has set	negative
My God, I told myself as I walked through a heavenly avenue with snow-laden branches bejewelling my steps, this is the most beautiful city in the world	positive
My soul was swooning (there, I admit it) yesterday as I stood and saw the snow falling, not on Joyce's Ireland, but on dirty old London, reborn as a thing of beauty"	positive
With a little luck, the freeze will come just in time to deliver a near universal white Christmas	positive
On Tuesday afternoon the air seemed to grow colder, the sky turned dark, and then came a surprise – big beefy snowflakes came tumbling down like large white butterfly	positive
In November the skies can be slate-grey and sullen, high and blue, or illumined by low, lemony winter light.	negative
It felt as though it was never going to end, but the „Beast from the East" will seem a distant memory this week	negative
Residents braced themselves for further flooding as the wettest December since records began continued to deluge the region	negative
Warned to expect at least two more days without electricity following the weekend's floods, Lancaster's hardy residents faced the darkness with sunny stoicism.	negative



```
HTTP/1.1 200 success                                    LIST  JSON
content-length: 246
content-type: application/json
x-query-limit-limit: 1000
x-query-limit-remaining: 999
x-query-limit-request-queries: 1

[
  {
    "text": "why can't our trains cope with snow, when
japanese trains can and by the way while we're here they
are also much faster. ",
    "external_id": null,
    "error": false,
    "classifications": [
      {
        "tag_name": "negative",
```

Figure 2. Example code used for classification

The program SentiStrength gives sentiment score to the words with a range -5, -4, -3, -2, 2, 3, 4, 5 showing not only the polarity of words but strength of the opinion. Table 2 presents some results of such classification.

Table 2.
Classification results using SentiStrength

Sentiment score	Positive	Negative	Total
why can't our trains cope with snow when Japanese [proper noun] trains can and by the way while were here they are also much faster	1	-1	0
and this chorus of self-immolation is taken up countrywide why non-londoners ask is the capital brought to a standstill by a little snow			
the weekend will start with a bang today as Scotland is engulfed by violent storms			
the met office has said winter had begun to bite after an unseasonably warm december, with large parts of the uk facing snow ice and frost	1	-1	0
In fact, our miserable grey weather is all the fault of the jet stream	1	-3	-2
so next time some pub bore tells you that this cold month is caused by the extensive melting of arctic sea ice last summer ask him if the same thing happened in	1	-1	0
the grey mass appears to show the outline of mainland Great Britain as the sun begins to break through the dark clouds on the horizon	1	-2	-1
on the canal bridge just behind Kings Cross, a policeman took a huge snowball full in the face and – I couldn't quite believe this was happening	1	-2	-1
– giggled delightedly (it must have really hurt).	3	-1	2
With a little luck, the freeze will come just in time to deliver a near universal white Christmas	4	-4	0
The sky is streaked with the world's highest type of cloud, visible only in summer after the sun has set	3	-1	2
My God, I told myself as I walked through a heavenly avenue with snow-laden branches bejeweling my steps, this is the most beautiful city in the	1	-1	0
world	3	-1	2
My soul was swooning (there, I admit it) yesterday as I stood and saw the snow falling, not on Joyce's Ireland, but on dirty old London, reborn as a thing of beauty"	3	-3	0
On Tuesday afternoon the air seemed to grow colder, the sky turned dark, and then came a surprise – big beefy snowflakes came tumbling down like	2	-2	0
large white butterfly	1	-2	-1
In November the skies can be slate-grey and sullen, high and blue, or illumined by low, lemony winter light	1	-1	0
It felt as though it was never going to end, but the „Beast from the East" will seem a distant memory this week	1	-2	-1
Residents braced themselves for further flooding as the wettest December since records began continued to deluge the region	2	-1	1
Warned to expect at least two more days without electricity following the weekend's floods, Lancaster's hardy residents faced the darkness with sunny stoicism			

We have also computed and annotated a list of most common adjectives in terms of positive and negative polarity which is presented in Table 3.

Table 3.
Llist of adjectives in terms of positive and negative polarity

Positive evaluation	***Negative evaluation***
cool, balmy, natural, decent, bright, calm, delightful, excellent, exceptional, fair, favourable, fine, glorious, good, great, ideal, light, lovely, mild, nice, clear, pleasant, promising, superb, perfect, clear, suitable, improved, gentle, fantastic, delightful, amazing)	extreme, severe, chilly, dirty, ugly, unfavourable, bad, failed, vicious, apocalypti unpleasant, adverse, shocking, awkward, odd, unseasonable, miserable, relentless, appalling, awful, freak,rotten, beastly, brutal, frightful, terrible, difficult, depressing, disgusting, disturbed, dull, foul, deteriorating, poor, gloomy, grey, grim, hard, harsh, fierce nasty, overcast, rough, filthy,

Our last step was to calculate the frequency of positive, negative, and neutral sentiments in the corpus under research. The results are presented in Figure 3 where negative sentiments comprise 3276 (55 ٪), positive – 2345 (39٪) and neutral – 379 (6 ٪). We consider that neutral sentiments denote objectivity in weather news reporting.

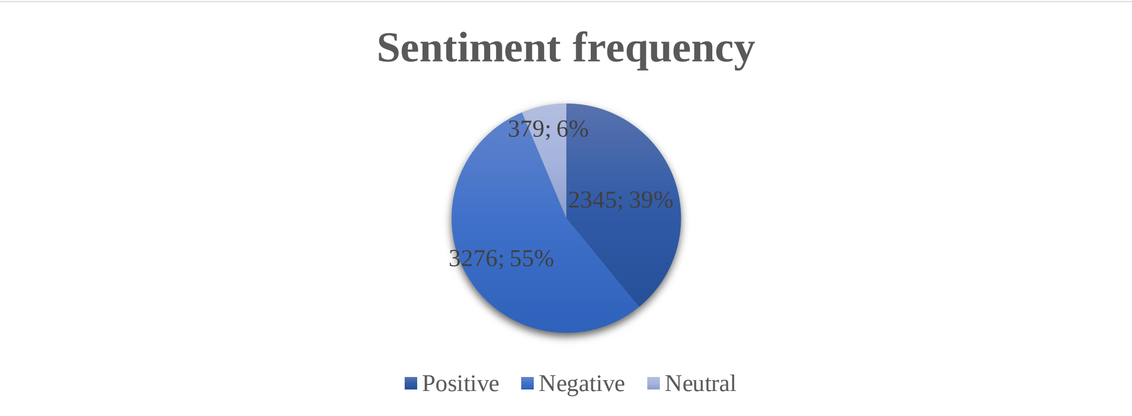


Figure 2. The results of sentiment frequency calculation

From the above analysis, it can be observed that the majority of weather news stories are with positive or negative sentiment polarity with negative sentiments prevailing over the positive and neutral ones, thus testifying to the general tendency towards negativity and subjectivity of weather news stories. The results of the automated sentiment analysis have also been compared with the manual linguistic analysis of texts. Therefore, some limits of the study must be emphasized. Remarkably, the most challenging for both web services was to detect the sentiment scores in the studied corpus when the opinion was integrated on events and conveyed implicitly.

An examination of the data revealed some inaccuracies and failures in the automatic detection of sentiments when metaphorical expressions, irony, and sarcasm were employed. For example, the following two examples with irony created ambiguity and were incorrectly identified by SentiStrength (unlike MonkeyLearn) as being positive (3 – positive sentiments, -1 – negative; and 2 – positive sentiments, -1 – negative respectively). However, the second example was correctly classified by MonkeyLearn as being negative.

“Why do schools close, when in Finland they use the inclement weather to teach children about the unending miracle of nature’s beauty – and that, give or take a bit of screen time, is why their children are so much happier than ours?”.

„GET those thermals out — the country will feel like a fridge, if not the freezer, this month”.
Let us consider some other errors/inaccuracies:

- SentiStrength incorrectly classified the sentence as being neutral (2 – positive sentiments, -2 – negative):

“The heaviest snow in March for 50 years – felt like a crushing iteration of the coalition government, its endless austerity Narnia, always winter, never Christmas, the feeling of sun on your skin a distant memory from a better age, like free tertiary education or a humane social security system”.

- Failures in differentiating the polarity when ironic juxtaposition of contexts or metaphor was used. The following examples illustrate such failures when sentences were incorrectly typified as being: 1) positive (MonkeyLearn) and neutral (SentiStrenth); 2) negative (MonkeyLearn) and positive (SentiStrenth);

1) *“And the cry is international too: as I walk through the St Pancras Eurostar terminal, a French couple consulting the warnings about the tube, roll their eyes as one”*
2) *“In Britain, a flurry of the white stuff makes everything pretty for about five minutes, but then we’re smothered by a blanket of national humility”*

- Errors happened when allegedly positive statements have a negative meaning, such as in the following examples:

„We are overdue a genuine heatwave and you know that when one late bus arrives it’s often followed by two or three”

“On the canal bridge just behind Kings Cross, a policeman took a huge snowball full in the face and – I couldn't quite believe this was happening – giggled delightedly (it must have really hurt)”.

Conclusions

The technological innovations brought about transformations in the structure and content of newspapers. This article details the methodology and results of sentiment analysis of weather news stories carried out with the help of two web services (MonkeyLearn and SentiStrenth) to detect/classify positive, negative and neutral sentiments, thus specifying emotional tone of the texts and examine the role of subjectivity in online news reporting. Such automatic detection turned out to be quite efficient, apart from some inaccuracies when the opinion was not clearly marked (implicit) or figurative language was used. It can also be concluded that SentiStrength has the tendency to mistypify negative sentiments into neutral. In this sense, MonkeyLearn gave better classification results in comparison with SentiStrenth. Moreover, we can conclude that there is a general tendency towards negativity the news, even though the frequency of positive sentiments is quite high.

The application of computer software to the analysis of opinion and subjectivity of weather news stories falls within the scope of computational linguistics and may contribute to the understanding of the role of emotions in newspaper discourse, furthermore, findings obtained from this research outline the tendency towards the objectivity to subjectivity shift in news reporting. The method presented in this research provides more options for further content analysis of weather news stories in the British press. Future scrutiny may also include the comparative analysis of both lexicon-based and machine learning approaches. We also intend to investigate additional web services/programs and their efficiency in detecting the sentiments of weather news stories. Such a survey may shed light on the issue of customizing the news by the readers.

Bibliographic references

Alhindi, T., Muresan, S., & Preotiuc-Pietro, D. (2020). Fact vs. Opinion: the Role of Argumentation Features in News Classification. In Proceedings of the 28th International Conference on Computational Linguistics, pages 6139–6149, Barcelona, Spain (Online). International Committee on Computational Linguistics.

Al-Omari, H., Abdullah, M., & Bassam, N. (2019). EmoDet at SemEval-2019 Task 3:

Emotion Detection in Text using Deep Learning. International Workshop on Semantic Evaluation.
Amin, S., Uddin, M.I., Al-Baity, H.H., Zeb, M.A., & Khan, M.A. (2021). Machine Learning Approach for COVID-19 Detection on Twitter. Comput. Mater. Contin., 68, 2231–2247.
Beigi, O.M., & Moattar, M.H. (2020). Automatic construction of domain-specific sentiment lexicon for unsupervised domain adaptation and sentiment classification. Knowl. Based Syst., 213, 106423.
Bekhta, I., & Hrytsiv, N. (2021). Computational Linguistics Tools in Mapping Emotional Dislocation of Translated Fiction. International Conference on Computational Linguistics and Intelligent Systems.
Bhatia, T. K., Chauhan, K., & Suden, R. (2022). "A Novel Technique to Detect the Fake News by Using the Machine Learning Approaches." 2022 10th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), 1-6
Blake J. S. (2019). News in a Digital Age: Comparing the Presentation of News Information over Time and Across Media Platforms. Rand Corporation.
Boesman, J., & Costera-Meijer, I.C. (2018). "Don't read me the news, tell me the story": How news makers and storytellers negotiate journalism's boundaries when preparing and presenting news stories. pp. 13–32.
Bondarchuk, N., & Bekhta, I. (2021). Quantitative Characteristics of Lexical-Semantic Groups Representing Weather in Weather News Stories (Based on British Online Press). International Conference on Computational Linguistics and Intelligent Systems
Bonta, V., Kumaresh, N., & Janardhan, N. (2019). A Comprehensive Study on Lexicon Based Approaches for Sentiment Analysis. Asian Journal of Computer Science and Technology, 8, pp. 1–6.
Chaturvedi, I., Cambria, E., Welsch, R.E., & Herrera, F. (2018). Distinguishing between facts and opinions for sentiment analysis: Survey and challenges. Inf. Fusion, 44, 65-77. https://doi.org/10.1016/j.inffus.2017.12.006.
Dagar, V., Verma, A., & Govardhan, K. (2021). Sentiment analysis and sarcasm detection (using emoticons). In: Applications of artificial intelligence for smart technology. IGI Global, pp 164–176
D'Aniello, G., Gaeta, M., & La Rocca, I. (2022). KnowMIS-ABSA: An overview and a reference model for applications of sentiment analysis and aspect-based sentiment analysis. Artif. Intell. Rev. 1–32.
Dharmale, G., Karjagi, S., Kotalwar, H., & Khobragade, S. A. (2023) Detailed Survey on Sentimental Analysis on Social Media. In: Gunjan, V.K., Zurada, J.M. (eds) Proceedings of 3rd International Conference on Recent Trends in Machine Learning, IoT, Smart Cities and Applications. Lecture Notes in Networks and Systems, vol 540. Springer, Singapore. https://doi.org/10.1007/978-981-19-6088-8_22
Garay, J., Yap, R., & Sabellano, M. J. (2019). An analysis on the insights of the anti-vaccine movement from social media posts using k-means clustering algorithm and VADER sentiment analyser IOP Conference Series: Materials Science and Engineering, 482(1), 012043
Gupta, S., & Urvashi, S. A. (2023). A Vocabulary-Based Framework for Sentiment Analysis. In: Shukla, A., Murthy, B.K., Hasteer, N., Van Belle, JP. (eds) Computational Intelligence. Lecture Notes in Electrical Engineering, vol 968. Springer, Singapore. https://doi.org/10.1007/978-981-19-7346-8_43
Höller, M. (2021). The human component in social media and fake news: the performance of UK opinion leaders on Twitter during the Brexit campaign. European Journal of English Studies, 25, 80 - 95.
Hota, H.S., Sharma, D.K., & Verma, N. (2021). Lexicon-based sentiment analysis using Twitter data. Data Science for COVID-19, 275-295. doi: 10.1016/B978-0-12-824536-1.00015-0
Jurafsky, D., & H Martin, J. (2021). Naive Bayes and sentiment classification. In: Speech and language processing. Stanford University.
Mahmood, A., Kamaruddin, S., Naser, R., & Nadzir, M. (2020). A combination of lexicon and machine learning approaches for sentiment analysis on Facebook. J. Syst. Manag. Sci., 10, 140–150.
Mohamad Sham, N., & Mohamed, A.H. (2022). Climate Change Sentiment Analysis Using Lexicon, Machine Learning and Hybrid Approaches. Sustainability. https://doi.org/10.3390/su14084723
Mutinda, J., Mwangi, W., & Okeyo, G.O. (2020). Lexicon-pointed hybrid N-gram Features Extraction Model (LeNFEM) for sentence level sentiment analysis. Engineering Reports, 3.
Wiebe, J., & Riloff, E. (2005). Creating Subjective and Objective Sentence Classifiers from Unannotated Texts.

Conference on Intelligent Text Processing and Computational Linguistics.

Wilson, T., Hoffmann, P., Somasundaran, S., Kessler, J., Wiebe, J., Choi, Y., Cardie, C., Riloff, E., & Patwardhan, S. (2019). "Opinion Finder: A system for subjectivity analysis". In Proceedings of hlt/emnlp on interactive demonstrations, pp. 34-35.

Yates, J., & Orlikowski, W. J. (1992). Genres of organizational communication: A structurational approach. Academy of Management Review, 17, pp. 299–326.

Zhou, Z. (2021). Emotional thinking as the foundation of consciousness in artificial intelligence. Cultures of Science, 4, 112-123. https://doi.org/10.1177/20966083211052651

DOI: https://doi.org/10.34069/AI/2023.63.03.10
How to Cite:
Yucedal, H.M. (2023). Integration of web 2.0 tools in EFL classes: Barriers and solutions. *Amazonia Investiga*, *12*(63), 109-122. https://doi.org/10.34069/AI/2023.63.03.10

Integration of web 2.0 tools in EFL classes: Barriers and solutions

Web 2.0 Araçlarının EFL sınıflarına entegrasyonu: Engeller ve Çözümler

Received: February 2, 2023 Accepted: March 30, 2023

Written by:
Hur Mustafa Yucedal[1]
https://orcid.org/0000-0002-8246-3214

Abstract

Technology is in the center of all disciplines including education thanks to the rapid development of information and communication technologies. Accordingly, the influence of Web 2.0 tools has increased exponentially in education. However, a gap in literature has been observed to define the barriers and get sensible resolutions from the educators as a career saving endeavor. In this regard, this study was carried out to highlight the barriers to the integration of Web 2.0 tools in EFL classes and provide rational solutions. Thirty English teachers who have been working actively at different educational institutions abroad were chosen via convenience sampling method in this qualitative study. The participants were the members of a knowledge sharing page on Facebook for English teachers. The data were collected within 6 weeks via a comprehensive questionnaire and interview which were analyzed by Microsoft Excel and NVivo. The collected data revealed that teachers encountered problems related to lack of time, competence, infrastructure and support. They expressed that reserving a certain amount of time for training, receiving the support of the parents, administrators and colleagues, assigning mentors for novice teachers and teaching how to use time in the activities wisely can be of greatest importance to remove these barriers completely.

Keywords: Web 2.0 tools, barriers, solutions, EFL, mentor.

Özet

Teknoloji, bilgi ve iletişim teknolojilerinin hızla gelişmesi sayesinde, eğitim de dahil olmak üzere tüm disiplinlerin merkezinde yer almaktadır. Buna bağlı olarak, Web 2.0 araçlarının eğitimdeki etkisi katlanarak artmıştır. Bununla birlikte, eğitimcilerden engelleri tanımlamak ve kariyer kurtaran mantıklı kararlar alma yönünde literatürde bir boşluk gözlenmiştir. Bu bağlamda bu çalışma, Web 2.0 araçlarının EFL sınıflarına entegrasyonunun önündeki engelleri vurgulamak ve akılcı çözümler sunmak amacıyla gerçekleştirilmiştir. Bu nitel çalışmada yurt dışındaki farklı eğitim kurumlarında aktif olarak çalışmakta olan otuz İngilizce öğretmeni uygun örnekleme yöntemi ile seçilmiştir. Katılımcılar, İngilizce öğretmenleri için Facebook'ta bir bilgi paylaşım sayfasının üyeleriydi. Veriler 6 hafta içinde Microsoft Excel ve NVivo tarafından analiz edilen kapsamlı bir anket ve görüşme ile toplanmıştır. Toplanan veriler, öğretmenlerin zaman, yeterlilik, altyapı ve destek eksikliği ile ilgili sorunlarla karşılaştıklarını ortaya koymuştur. Eğitim için belirli bir süre ayırmanın, ebeveynlerin, yöneticilerin ve meslektaşların desteğini almanın, meslegin ilk yillarindaki öğretmenler için mentor atamanın ve etkinliklerde zamanın akıllıca nasıl kullanılacağını öğretmenin bu engellerin tamamen kaldırılması için büyük önem taşıyabileceğini ifade etmişlerdir.

Anahtar Kelimeler: Web 2.0 araçları, engeller, çözümler, EFL, mentor.

Introduction

Technology is a crucial instrument for language teachers to facilitate the learning of their students (Yildiz, 2021). Teachers are able to spend more time interacting with students and monitoring their progress thanks to the integration of technology into classroom instruction. The time spent preparing and giving lectures is reduced, allowing teachers to spend more time interacting with their students (Daskan & Yildiz, 2020). Information and communication technology

[1] Ma, Instructor, English Language Teaching Department, Faculty of Education, Tishk International University, Erbil/Iraq.

(ICT herein after) plays pivotal roles in all fields thanks to their availability and numerous advantages. A number of ICT tools which are laptops, cellphones, tablets and PDAs have been produced to meet the needs of the users in different occasions. Given devices are so versatile that they allow the users to gain information, spread their ideas through posts and create content (Sanchez & Aleman, 2011; Sadiq, 2023). In this regard, envisioning a life without ICT tools is unavoidable, so reflections of it can be seen in social, personal and professional lives starkly. To illustrate, students can employ the features of their laptops to complete their projects via office programs and send by e-mail which is so convenient to be in touch with the teachers officially. Likewise, a businessman can get the offers and filter the best product to order electronically as a part of online shopping. In addition, colleagues can have a video talk through social media platforms or chat applications to exchange their information and come to mutual decisions in cooperation. Subsequently, a newly graduated engineer can see job opportunities available online with his/her mobile phone and secure the position if both parties agree. Moreover, users can develop various skills on YouTube ranging from learning how to cook and be a good public speaker. After that, ICT tools allow the parents to monitor their children’s progress at schools via learning management systems, so they can take action instantly if needed. It can be stated that ICT tools have numerous dimensions to carry out different tasks in a convenient format.

The popularity of ICT tools has also triggered a need to increase the efficiency of them with numerous proxy applications. Correspondingly, the advent of Google Play, App Store and Amazon App Store has contributed significantly to use more applications actively (Peterson et al., 2020; Hur, 2023). To illustrate, an ICT tool becomes handier once used with office programs. Users can write, calculate and create presentations via Microsoft Word, Excel and PowerPoint. Additionally, users can use any chat applications such as WhatsApp, Viber and Telegram flexibly, so they can stay in touch with others whenever they want. In the same vein, GPS applications relieve the stress of the drivers to find the destination abruptly. Similarly, social media platforms such as Facebook, Instagram, Twitter, YouTube, Snapchat and others are one click away to access to rich content anytime and anywhere. Additionally, online education came about as an alternative to face-to-face education, and it was used mainly to get rid of some opportunity gaps. With the speed of data transfer on the internet getting faster to meet the needs, this training model has become more common and is used by more people (Dzakpasu & Adom, 2017; Yildiz, 2022a). The popularity of online education has boomed since 2020, so Zoom, Microsoft Teams, Cisco Webex, Google Meet applications have been used in increasing numbers globally to receive the education continuously. Afterwards, some applications which are Spotify, Netflix, Amazon Prime, Disney Plus, have been quadrupled to entertain people with appealing features. Subsequently, children's cerebral growth and social adaptability can be sped up by exposing them to a variety of games at different points in their lives. Considering these features, it's clear that games have found widespread use in the realm of education, so some applications to play online games have also increased dramatically to have fun and develop various skills (Celik et al., 2022). Considering the given applications, it can be stated that the duration of using ICT tools has been multiplied with the help of related applications.

Apart from using ICT tools in numerous fields, they have been used extensively in education as Web 2.0 tools which refer to employing a group of technologies to add, make modifications and benefit collaboratively. Blogs, wikis, podcasts, quiz applications, video and presentation applications can be prominent examples of Web 2.0 tools in education. To name a few, YouTube can be used in various ways to expand students’ learning in classes as it offers billions of valuable videos to be used in education and it is a huge resource for learning new languages and for viewing informative TV lectures and conferences (Kara & Yildiz, 2022). In addition, Kahoot and Quizizz can be used actively to check students’ understanding and allow them to see their reports and learn from their mistakes. Additionally, Zip Grade can be used to design exams and grade electronically, so teachers can have a chance to see mean, median and most frequently made mistakes in a second. Moreover, Padlet can be used to make writing activities more appealing for students and activate peer learning. When students write on Padlet, all students can learn from each other. Additionally, different graphics, images, videos, presentations can be offered to enrich students’ learning with supplementary materials on Padlet. Likewise, Google Form can be used without any hesitation to create short quizzes which may include different types of questions, videos, photos, audios according to the priorities of the teacher. The underlying point for these applications is that they are user-friendly, convenient, professional and revolutionary because they permit users to construct their own learning and trigger different learning channels which are fundamental principles of inquiry-based learning.

Implementation of Web 2.0 tools in education requires professional conduct as well. Although they can be used as a vehicle to transform the education on a global scale, some adverse effects can be unavoidable if not conducted with a systematic plan and monitoring mechanism (Ziegler, 2022; Soran & Kara, 2022). Insufficient internet coverage, inadequate infrastructure, having less training period, having negative attitudes towards computer literacy, unable to reserve time due to having content-heavy curricula can be given as some examples to reduce the feasibility of Web 2.0 tools in education (Lim & Khine, 2006; Geyer, 2010). To illustrate, the educational goals cannot be realized if the internet is down several times. In addition, educational institutions' infrastructure such as network, devices, accessories should work in a trouble-free way to get the highest benefit. Likewise, lack of training period can disrupt students' learning because teachers cannot apply all the steps successfully in this situation. After that, developing computer literacy skills of the teachers in general can have far-fetching effects to raise the awareness and put Web 2.0 tools into practice successfully. Moreover, content-heavy curricula prevent the teachers from integrating Web 2.0 tools into education. Considering the given hesitations, it can be stated that taking some measures in advance can increase the positive outcomes of Web 2.0 tool enhanced education at institutions.

Purpose of the Study and Research Questions

The primary purpose of the current study is twofold. First, common barriers of Web 2.0 tool-based education were defined. Next, some rational solutions were offered to guide the pre-service and professional teachers throughout their career. Correspondingly, research questions were formed to be investigated thoroughly.

- What are some barriers to prevent successful implementation of Web 2.0 tools into EFL classes?
- What measures can be taken to resolve the barriers against employing a Web 2.0 tool enriched instruction?

Literature Review

The World Wide Web has undergone radical transformation since its launch by Tim Berners-Lee in 1991. Correspondingly, web tools have evolved drastically from Web 1.0 to Web 3.0. The former only allowed users to read basic web pages using HTML and JavaScript, such as MySpace, LiveJournal, and Geocities. The latter, like ChatGPT, Google Bard, Apple Siri, and Amazon's Alexa, use artificial intelligence to make interpretations, offer customized solutions, and create content. For example, chatbots use artificial intelligence to comprehend queries more quickly and provide effective responses. Consequently, conversations in online chat and/or with chatbots can take the form of text (text chat) or voice (voice chat), as if the user were conversing with the instructor (Yildiz, 2022b).

On the other hand, Web 2.0 tools such as YouTube, Facebook, Twitter, and Kahoot were used to join, edit, and share in an interactive environment. The term Web 2.0 was coined by O'Reilly in 2004, and its usage has expanded exponentially since that time. Web 2.0 tools have been actively used in all disciplines, particularly in education, because their theoretical background is consistent with constructivist learning theories advocated by Piaget and Vygotsky, who argued that learners should construct their learning actively in an interactive environment and progress gradually. The pace of learning, the degree of difficulty, and the type of media can be easily customized, so Web 2.0 tools have expanded the scope of the territory at educational institutions.

Some scholars (Kara, 2023; Egüz, 2020; Monje, 2014; Vurdien, 2012) argue that Web 2.0 tools have increased the success rate of students in various aspects, while others (Ertmer, 1999; Pritchett et al., 2013; Mauch & Tarman, 2016; Prasojo et al., 2019) postulate that implementing Web 2.0-based instruction in education can be a fruitless attempt. The findings of the studies differ greatly, as exemplified in detail below:

Schulz et al., (2015) highlight that Web 2.0 enhanced instruction offers unmatched potential for educational institutions, such as expanding learning sources with various alternatives, increasing efficiency, raising the quality of education, driving students to develop new skills at ease, becoming lifelong learners, and closing the gap in terms of ICT literacy. Similarly, Salehi and Salehi (2012) postulate that employing web-enhanced tools in education allows educators to switch the focus from the teacher to the student, unlocking the full potential of the students. They assert that ICT tools and modern teaching methodologies to foster communication and interaction in classes have many common points, so they support each other for the betterment of the education offered on a global scale.

In contrast, conducting web-enhanced instruction in classes can encounter barriers. Küçük (2023) reiterates that lack of skill, insufficient competence, and inadequate infrastructure can undermine the reputation of technology-integrated classes. He asserts that investing time and money in training staff and purchasing necessary items can yield better results. Otherwise, the process can be disrupted several times, reducing the efficiency of web-enhanced education. In the same vein, Schmitz et al., (2022) divide the barriers into two broad categories: external and internal factors. The former refers to technology and equipment, while the latter is related to beliefs and skills of the teaching staff and administrators. They conclude that external barriers have significantly reduced since people have access to mobile devices at an affordable price.

Similarly, Korukluoğlu et al., (2022) conducted a study in a Turkish context on primary school students which uncovered that Web 2.0 based instruction boosted students' critical thinking skills, helping them develop good habits of asking accurate questions, seeking novel information, and demanding a more appealing classroom atmosphere. They concluded that improving students' critical thinking skills initiated a positive chain reaction that resulted in the development of their academic and personal skills, making them role models for other students. Additionally, Chen et al., (2022) conducted a study in Taiwan on primary school students, which found that Web 2.0 tools urged students to learn through inquiry, helping them figure out how to access trustworthy information and manage it during the learning process.

Being based in a time and place where so many people are dependent on electronic devices makes it difficult for teachers to instill a love of reading in their students (Yildiz, 2020). Another notable study was conducted by Nasr (2022), who measured the effects of Web 2.0 enriched reading instruction on university students, showing that the success rates of students increased dramatically after being exposed to e-reading activities. Additionally, Kara (2023) found that Web 2.0 tools enhanced students' overall performance in English, resulting in a substantial increase in their proficiency in English at a tertiary level in Iraq. Considering the aforementioned studies, it can be stated that Web 2.0 tools offer various benefits in classes, ranging from academic success to personal development.

Apart from studies that have emphasized the positive effects of Web 2.0 enhanced instruction, a growing number of studies have been carried out to warn education stakeholders about the barriers and possible solutions. To name a few, Khan et al., (2022) conducted a study in Nigeria that revealed regional discrepancies in income, a relatively slow pace of technology adoption, and a lack of mentors to train teachers on ICT literacy as chronic problems that need to be addressed for successful implementation of Web 2.0 tools. Similarly, Zakrzewski and BriAnne Newton (2022) conducted a comprehensive study on pre-service teachers in the USA, revealing that while pre-service teachers had positive views on the implementation of Web 2.0 tools, periodic orientation periods, assigning a mentor who is an expert in employing Web 2.0 tools in classes successfully, and ensuring the quality of the network were distinguishing factors that increased the satisfaction rate of web-enhanced enriched education. An insightful study was conducted by Schmitz et al. (2022), including the perceptions of teachers and students spanning 30 European countries, which uncovered that old electronic devices, low levels of ICT literacy, inflexible curriculums, a lack of support from administrators, and a lack of teachers' interest in developing their ICT skills can reduce the possibility of success. Therefore, each sub-category should be discussed to find a resolution in cooperation. They conclude that although the number of such problems is not high, they have the potential to affect other educators negatively, and undertaking some initiatives to handle this issue can be of great help in promoting the positive use of Web 2.0 tools.

Methodology

Research Design

In this study, a qualitative research design was employed, requiring the researcher to collect data through the interview and a questionnaire using the grounded theory method. As a qualitative study method, grounded theory was employed to investigate the central theme and make interpretations by following specific stages with multiple evaluations until saturation (White & Cooper, 2022). The grounded theory is an inductive method for discovering novel interpretations from gathered data.

The grounded theory method consists of several steps, including determining research questions, collecting data in a planned and disciplined manner, converting the interview recording into a transcript, coding, classifying data based on common cases, and analyzing data until theoretical saturation (Walker & Myrick, 2006). These steps were also followed in this study, so it may be beneficial to elucidate them in greater detail. The initial stage involved the formulation of clear questions. The interview was then recorded to elicit the interviewees' genuine opinions. In the subsequent phase, the recorded version was transcribed into a modifiable format so that adjustments could be made if new data were added using the Nvivo software. This software enables researchers to evaluate the interviews meticulously (Dhakal, 2022). The subsequent step was coding to classify the themes so that distinguishing characteristics of each theme could be readily identified. The transcribed data were then classified so that interpretations could be made based on common themes.

Two open-ended questions about a barrier the teacher encountered while using one of the Web 2.0 tools in classes were asked to the participants to exemplify it and offer some sensible precautions to eliminate the possibility of having such problems in the future. The questions in the interview are presented below:

- Did you encounter any barriers against implementation of Web 2.0 tools?
- How did you overcome these barriers?

Apart from the interview, the participants answered several questions via a questionnaire, so their tendencies to use Web 2.0 tools were determined closely.

Setting, Participants, Sampling

As data were gathered virtually via Facebook Messenger and Video Talk features, there was no specific setting for this study. On a social media platform, the participants uncovered their ideas on barriers to the integration of Web 2.0 tools in education. The participants were chosen based on convenience sampling method because it accelerated data collection process dramatically. The researcher has been the member of the group for over 5 years, so s/he has known them because they have shared files and novel ideas with each other for a long time. In this research, samples were drawn from the population using the technique of convenience sampling. The researcher informed the participants about the study, and s/he started the procedures with 30 teachers who responded earlier than others. Figure 1 illustrates the nationality of each teacher respectively.

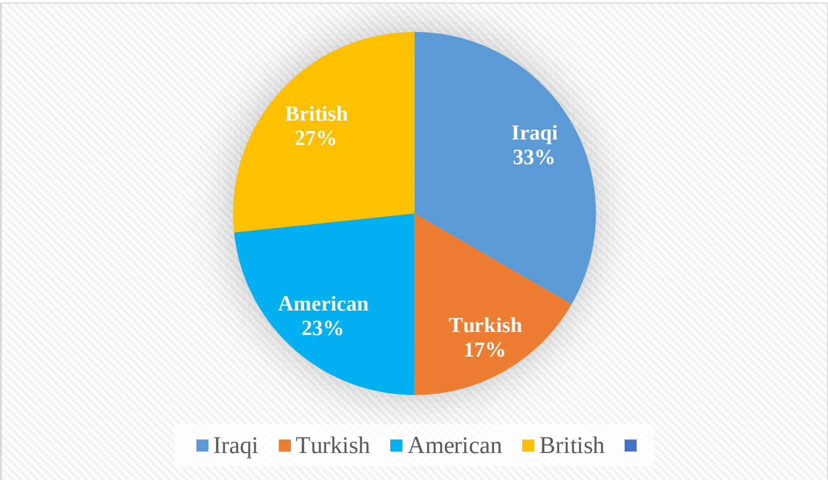


Fig 1. Nationalities of teachers

Figure 1 clearly represents that 4 different nationalities were included in this study with varying numbers. The percentage of the participants had a descending order from Iraqi to Turkish ones.

Figure 2 depicts the number of years the teachers have worked so far.

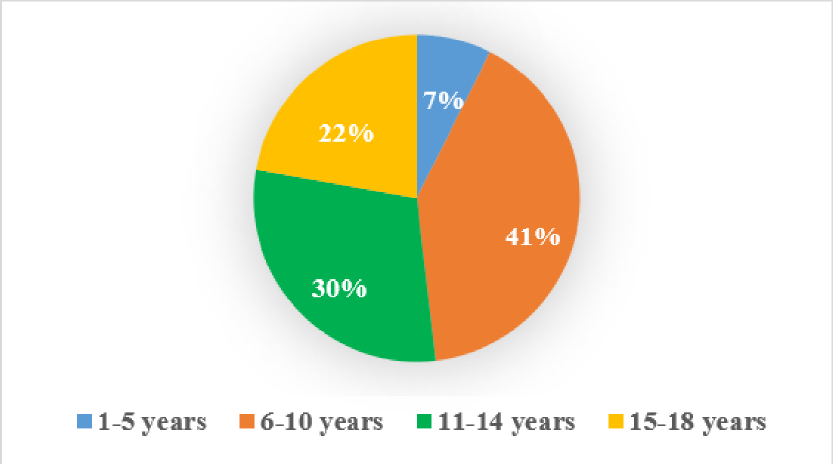


Fig 2. Professional careers of teachers

According to Figure 2 illustration, it is observed that more than 40 % of the teachers have been working professionally between 6 and 10 years. In addition, the second highest category is working between 11 and 14 years. On the other hand, working between 1-5 and 15-18 years is relatively less than other categories which are 7 and 22 percent respectively.

Table 1.
Participant Demographics

Variables	Option	Frequency	%
Gender	Male	12	40
	Female	18	60
Highest Degree	Bachelor	22	73.3
	Master’s	5	16.7
	PhD	3	10
Current Educational Institution	Primary School	16	53.3
	Secondary School	5	16.7
	High School	7	23.3
	University	2	6.7
Total		30	100

As shown in Table 1 clearly, female students are higher than male ones. In addition, the majority of the teachers have earned bachelor degree as the highest one. Subsequently, more than half of the teachers have been studying in a high school

Data Collection Procedure

Data collection process lasted 6 weeks in this study which included the questionnaire and the interview. Upon persuading them to be a participant in this study, the researcher shared the link of the questionnaire on relevant Facebook Page designed for English teachers who have been living abroad. In the next stage, the researcher set an appointment to have a video talk and ask items in the interview. The researcher had the interview as one on one, so it took around 4 weeks to set a common free time for both parties. Once the questionnaire and the interview were held, they had the last virtual meeting on Zoom to highlight certain points and brainstorm. Finally, collected data were fetched and analyzed by Excel and NVivo respectively. The former was employed to measure teachers’ tendencies on Web 2.0 tools precisely, while the latter was used to transcribe and categorize the excerpts of the interview. In the final period, the data were cross-checked whether they complied with each other.

Research Process

This study was planned to have 6 consecutive phases, so all details could be uncovered in detail on time.

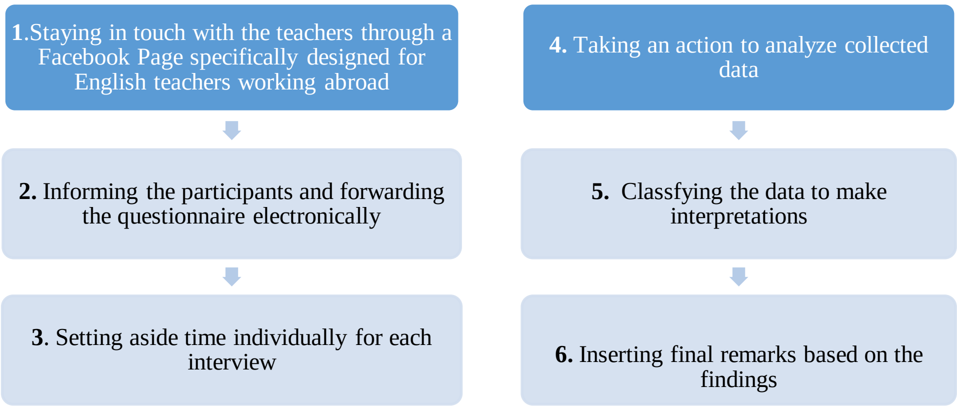


Fig 3. Stages of the study

Figure 3 illustrated the stages of the study clearly. It was observed that the study started by informing the teachers, continued with data collection process and ended by analyzing the results meticulously to make certain interpretations.

Findings and Results

The findings of the study were channeled into two groups as the questionnaire and the interview which could be explored in detail below.

The Analysis of the Questionnaire

Table 2.
Teachers' genuine opinions on Web 2.0 tools

Items	Variables	Frequency	%
What is your favorite Web 2.0 tools?	Kahoot	6	20
	Padlet	4	13.3
	Prezi	2	6.7
	YouTube	5	23.3
	Zip Grade	11	36.7
	Google Form	2	6.7
Are you in favor of using Web 2.0 tools in education?	Yes	27	90
	No	3	10
	I am not sure.	0	0
How do you take advantage of Web 2.0 tools?	As a class activity	10	33.3
	As an assignment	7	23.3
	In a hybrid format	8	26.7
	I have never used them	5	16.7
How long have you been using Web 2.0 tools for educational purposes	0-5 years	8	26.7
	6-10 years	17	56.6
	11-15 years	5	16.7
How often do you use Web 2.0 tools on a weekly basis?	Never	2	6.7
	Sometimes	8	26.7
	Usually	14	46.6
	Always	6	20
Which expression describes the administrators' genuine opinion for Web 2.0 tools integration?	Encouraging	17	56.6
	Hesitant	8	26.7
	Opposed	5	16.7
What is the colleagues' tendency to use Web 2.0 tools in classes?	Enthusiastic	25	83.3
	Hesitant	2	6.7
	Opposed	3	10
How often do you receive intensive training on Web 2.0 tools?	Never	4	13.3
	Sometimes	9	30
	Usually	15	50
	Always	2	6.7
What is the gravest barrier against using Web 2.0 tools in education successfully?	Lack of competence	5	16.7
	Lack of support	10	33.3
	Lack of time	6	20
	Lack of infrastructure	9	30

Table 2 illustrates teachers' tendencies to use Web 2.0 tools. According to the questionnaire, the teachers use Zip Grade the most frequently, while Prezi is used the least. In addition, the majority of teachers are in favor of using Web 2.0 tools in education actively. Subsequently, they take advantage of Web 2.0 tools as a class activity and assignment with varying degrees. After that, more than half of the teachers use them between 6 and 10 years. Afterwards, nearly half of the teachers reiterate that they usually use the Web 2.0 tools. Furthermore, more than half of the teachers attest that the attitudes of the administrators are encouraging. Additionally, teachers have postulated that most of the teachers are enthusiastic to integrate Web 2.0 tools into education except some hesitations. In addition, half of the teachers elucidate that they usually get intensive training on Web 2.0 tools. The last item in the questionnaire is related to the barriers against using Web 2.0 tools which shows that lack of support and lack of infrastructure are leading factors to hinder teachers in their efforts to use Web 2.0 tools periodically. These figures hint that Web 2.0 tools will play pivotal roles in their career if some obstacles are handled professionally in a systematic manner.

The Analysis of the Interview

Common themes in the interview were presented with distinguishing examples in this section.

Having Challenging YouTube Videos and Kahoot Quizzes

I have worked in various countries so far as an EFL and ESL teacher. My career has spanned more than ten years. I am interested in integrating new technologies into my lessons actively. My favorite Web 2.0 tools are YouTube and Kahoot. Although I believe that they are revolutionary applications, some problems may arise if not planned well. For example, I showed a YouTube video to connect to my topics in the past. I noticed that the degree of difficulty was beyond students' understanding in terms of the pace of the speaker. I realized that considering students' current levels can be a distinguishing factor to choose relevant videos, so students' enthusiasm can increase accordingly. Otherwise, students can gradually close their learning channels for web-enhanced tools. Subsequently, I encountered some problems while using Kahoot to present continuous. I used to choose ready materials on the website. However, the ready quiz I chose had many challenging exceptions which demotivated my students. In addition, they got confused about the basics of present continuous. The questions included all exceptions of present continuous which I did not expand in my lessons according to the curriculum. This lesson was a fruitful one for me to have some lessons for future endeavors. I learned that assigning relevant quizzes and showing easily comprehensible videos should be my rule of thumbs in the future. (Teacher 3)

Not Setting Aside Time for Zip Grade and Padlet Orientation Period Before Practical Sessions

I have worked in 5 countries so far as an ESL teacher. I have been working actively since my graduation. I prioritize Padlet and Zip Grade in my classes as they are more convenient than others. However, I had some problems about using Padlet in the early years of my career. I conducted some exams with the enrichment of Zip Grade, but I did not orient my students about using it successfully in advance. My students took the exam without a proper training period, so they made many mistakes which urged me to repeat the exam. Thus I lost my credibility, time and money. It was uncovered that the students filled more than one option for a lot of questions. The worse part of the story was that they used a pen which made erasing process impossible. I had another serious issue while using Padlet application. I assigned a writing task to be submitted on Padlet, but I did not inform my students about noting their names. Once they completed their tasks, I figured out that they did not write their names. Fortunately, they remembered their writing works, so they highlighted later, but we wasted some valuable time until the problem was fixed in cooperation. My bitter experiences confirmed that a brief training period with some practical sessions can be a time-saver in order not to come across more serious and dreadful mistakes. (Teacher 4)

Unable to Cope with the Lost Internet Coverage and Unfair Collaboration on WhatsApp Application

I have worked in 8 countries so far as an English teacher. My career spanned more than 7 years. I was using YouTube actively to show some videos related to my topics, so their learning channels would be activated by different sources. Once the internet connection was lost in the class which reduced the quality of my lesson dramatically. I got used to typing in the search bar and being directed to the chosen video. However, the internet coverage was lost on that day. As a result, I could not enrich students' learning with different materials. Although I made all my plans to complete the lesson with a video, I could not realize it due to having such technical issues. Starting that day, I have started downloading the videos to save in my USB flash player and reserving some supplementary materials to use my time efficiently in case a problem arises. I had another serious problem while using WhatsApp for educational purposes. I informed my students to send their essays to me by WhatsApp at a university. However, I noticed that they were pasting the same essay from one of their friends in their groups with some minor changes. After this valuable lesson, I planned all writing activities to be completed in the lesson rather than being flexible to welcome submissions in an online format. Losing the internet connection and pasting the same essay from their friends were essential problems to be handled in my classes. (Teacher 7)

Unable to Manage Time Wisely in Zip Grade Exams

I have worked in 11 countries so far as an EFL teacher. I have been working professionally since 2011. I have used many types of Web 2.0 tools in education particularly Zip Grade. I had some conflicts with my students about the duration of the exams in Zip Grade enriched exams. Although the duration was written clearly and I set the timer during the exam, my students complained several times. Then I devised a plan to develop their time-management skills with workshops. I divided the sections of the exams into manageable tasks. They took the exam section by section. Once they were ready to complete all sections within one session, they took the exam by racing against time. After several attempts, they learned how to manage their time wisely, so we have not had any problems about the duration since that time. They could answer the questions and transfer all the answers to the answer sheet within given time without causing a common nuisance. (Teacher 9)

Having E-mail Address Related Problems in Google Form Quizzes

I have worked in 13 countries so far as an English teacher. I have been working enthusiastically since 2005. I am interested in employing Google Form Quizzes for educational purposes. Once I formed a quiz after working tirelessly for days and sent the link to the students with a timer. However, I did not know that their email would be collected during the exam. Once the time started, they could not start the exam on grounds that they did not have a valid e-mail address. It took around 20 minutes to fix this issue for all students. When the exam was over, it was revealed that only 20 percent of the students could take it successfully. As a result, there was no chance but to repeat the exam by spending around 5 hours from beginning till the end. After this first-hand experience, I learned all the features of Google Form by watching some tutorials and reading some articles in the blogs. Now I know when to activate and deactivate e-mail collection feature. If I need to collect their emails, I help them create one in advance, print their email addresses and passwords individually to have peace of mind during the quizzes. Realizing the possible technical issues in advance can increase the possibility of conducting the exam successfully. Otherwise, spending a lot of time for technical issues can distract the attention from the exam to minor problems. (Teacher 13)

Unable to Create Prezi Presentations on Time

I have worked in 9 countries so far as an English teacher. I have been working actively for 15 years. Once I assigned my students at university to create presentations via Prezi. However, they were not familiar with the program. I had some brief workshops on how to create them successfully, but they were not comprehensive enough to figure out all details easily. I thought that they were digital natives who could learn further on the internet with different tutorials. However, it turned out that they could not understand well. When I welcomed their presentations, they struggled a lot to use it actively. Additionally, some students complained about the program due to not being able to use features easily. Although the topics were quite engaging, the result was dreadful. I wish I could set aside more time for further explanation. Also, offering some recorded videos could be a great time-saver for me. Now my policy is to explain all details meticulously before introducing a novel application. (Teacher 16)

Having Misinformation During a Common Exam

I have worked in 12 countries so far as an ESL teacher. I have been working actively for 14 years. I had some administrative duties in the past. During that time, I organized a Zip Grade enriched exam to be conducted for the whole school. We had some meetings to carry out it successfully. Once the exam was held, it was noticed that there were some missing points. The students did not fill their Zip Grade codes which made receiving analysis for each class and student impossible. Additionally, some students filled multiple choice options in the wrong order because they were in a rush while filling the options in the last 5 minutes. The number of problematic papers was so high that we had to repeat the whole exam. Thus we had to prepare another unique exam, proofread all questions, make announcements on all bulletin boards and print all question booklets. It was a bitter experience for me. Since that time, I have been keeping a checklist to orient the students, teachers in advance, so troublesome issues will be eliminated in advance. (Teacher 19)

Unable to Balance the Degree of Difficulty in a Google Form Exam

I have been working actively as an EFL teacher since 2005. I am interested in integrating web-enhanced tools into education. A few years ago, I wanted to conduct some exams on Google Form. I had 4 sections to measure students' 4 skills in one exam. However, it turned out that they lost their enthusiasm as they progressed. At the end of the exam, some students complained that the number of questions to be responded was overwhelming. Once the results were announced, I observed that even the best students made a lot of mistakes which were more than tolerable. It was a turning point in my professional career. After this exam, I divided the sections into manageable chunks. For example, the students were required to answer the questions section by section rather than answering all sections at once. In addition, I merged some questions to eliminate some barriers in their minds, so they could answer less questions. (Teacher 22)

Using Web 2.0 tools as Homework

I have been working actively as an English teacher for 15 years. During my early years of career, I supposed that we had to stick to the curriculum, so I did not enrich any of my lessons with web-enhanced tools. However, my policy was to assign some homework via Kahoot, Google Form or Padlet. All procedures seemed fine at first. However, I carried out a general exam whether they were doing the homework themselves or not. The results revealed that the students got help from someone else whose English was better than them. As a result, it was a fruitless attempt for me. Starting that time, I have employed a hybrid system in my classes. The students took the exam with web-enhanced tools such as Zip Grade or Kahoot. I also assigned them as homework to take them again until they had no mistake. At the end of the year, this cycle yielded better results. Their performance improved dramatically. I suggest my colleagues to use traditional and online assessment tools harmoniously. (Teacher 27)

Unable to Progress According to the Syllabus

I have been working actively as an EFL teacher for 8 years. I was inexperienced during my early years of the career, so I made some grave mistakes. For example, I was obsessed with integrating web-enhanced tools into education. However, I did not proceed according to the expectations of the administrations based on the syllabus. As a result, I was three units behind the syllabus when my students took the exam. The results were terrible as expected. After the exam, my students and parents filed a complaint for my grave fault. I was investigated thoroughly after this incident. They issued a warning letter for me by hinting a more severe punishment in the following cases. The school administration assigned two mentors to monitor all my files and actions for the betterment of the education, but this process was a stressful one for me. I was afraid of being sacked sooner or later. In the following years, I mastered as a professional teacher. I integrated web-enhanced tools into the education if time allows after completing all procedures based on the syllabus. I suggest my colleagues to keep the balance between the expectations of the syllabus and enriching lessons with relevant web-enhanced tools. (Teacher 30)

Discussion

This study was carried out to investigate the barriers of Web 2.0 tools and offer sensible solutions. Correspondingly, the obtained findings represented that the barriers could be handled if certain criteria were met in advance. Considering the findings of the questionnaire, several points were emphasized. To name a few, the popularity of Zip Grade has grown tremendously thanks to its various advantages such as conducting exams for large volume of students, grading instantly in a second, getting detailed feedback for each student and class, observing the most frequently made mistakes. This finding was in line with Saenkhot and Boonmoh`s (2019) study which unearthed that Zip Grade transformed the assessment system from a tiring process to practical one. Subsequently, approximately all teachers reported that they were in favor of using Web 2.0 tools in education despite some minor hindrances which was consistent with Ningsih and Mulyono's (2019) study which uncovered that students' perceptions on using Web 2.0 tools were mostly positive. In addition, teachers reiterated that they took advantage of Web 2.0 tools in various formats such as a class activity, an assignment or in a hybrid format. This finding was supported in Conole and Alevizou's (2010) study which indicated that there were numerous ways to integrate Web 2.0 tools into education. Moreover, more than half of the teachers elucidated that they have been using Web 2.0 tools between 6 and 10 years. Crook (2012) asserts that the adoption rate of web-enhanced tools in education has been higher in digital natives because they are born in the age when there are ubiquitous examples of tools to be used in education and daily life. After that, nearly half of the teachers preferred choosing the frequency adverb ''usually'' which showed that it was their habit to employ a web-enhanced tool instruction in classes. Kongchan (2008) and Abubakr et al. (2022) postulate that digital natives are capable of finding logical solutions to Web 2.0 tool related issues, so they know how to take advantage of these tools wisely. Another point to deserve special attention was the attitudes of administrators and colleagues towards a web-enhanced tool enriched classroom which revealed that they were supportive to implement them in increasing numbers. Şenel (2016) states that the success rate of web-enhanced education increases accordingly once all units at a school work collaboratively and harmoniously. Furthermore, half of the teachers highlighted that they received intensive training on web-enhanced tools frequently. This finding confirms that stakeholders of education are aware of the significance of them to have more engaging classes (Alhassan, 2017). Subsequently, a number of teachers reiterated that lack of support was a serious hindrance while putting a Web 2.0 tool-based instruction into practice. This insufficient support may be related to technical help, parents' or students' attitudes to embrace this type of instruction, receiving professional help from top-notch experts on integrated technology in education or expecting assistance from colleagues and administrators to find some common grounds and implement it in cooperation. Pritchett et al. (2013) contend that lack of support can be a demotivating factor for the teachers, so taking necessary measures can be of greatest importance to increase the success rate of the program.

Apart from the questionnaire, the findings of the interview shed light on essential points. To name a few, balancing the degree of difficulty was observed as a serious issue which can increase or decrease the satisfaction rate. Dohn (2009) asserts that challenging tasks which are beyond students' understanding can have adverse effects in education, thereby, increasing the difficulty gradually should be the rule of thumb for educators. In addition, setting aside insufficient time for orientation period was noticed as a troublesome point both for teachers and students. Doherty (2011) elucidates that reserving time for the training of teachers and students can increase the chance of realizing educational goals, otherwise, it can be unavoidable to be in chaotic situations. Additionally, planning the activities within the class can reflect more trustable results was another finding of the interview. The teachers stated that using Web 2.0 tools only as homework can have opposite effects because they can get help from web-sources or people around them. They suggested using hybrid version to use primary tests in classes and assign some tasks to develop their learning. Crook et al. (2008) assert that urging the students to join web-enhanced activities by racing time in class can yield better results than only assigning as homework.

Conclusion and Recommendations

This study was sought to determine major barriers of Web 2.0 tools in education and offer constructive feedback and alternative solutions to remove these barriers for the sake of having a world-renowned education system by receiving 30 teachers' opinions with their international working experience as an EFL or ESL teacher. The analyzed data revealed that some problems were prevalent such as lack of support, time, infrastructure or competence. However, the promising point was that all problems could be solved if parents, teachers, administrators and policy makers have some common grounds to gather, discuss and set guidelines to remove the barriers gradually. In addition, most teachers highlight that the advantages of Web 2.0 tools are far more than the disadvantages.

Some recommendations can be made for future studies. This study encompassed 30 teachers from 4 countries who have been working abroad. Further studies can be carried out to increase the sample with higher participants from many different countries so that the population can be represented more accurately. Additionally, primary means of data collection was online sources which can be extended with face-to face data collection tools. In addition, only qualitative data collection tools were used in this study. Further studies can be conducted to measure the effects of teachers' attitudes on students' learning rate. Furthermore, most of the teachers have been working in primary school level which can be equalized with other stages of education to have a clearer image about various institutions.

Bibliographic References

Abubakr Abdulrahman, S., Bingol, M., & Kara, S. (2022). Body Language in Education and Effective Recommendations to Pre-Service Teachers in Classroom Management. International Journal of Social Sciences & Educational Studies, 9(1).

Alhassan, R. (2017). Exploring the Relationship between Web 2.0 Tools Self-Efficacy and Teachers' Use of These Tools in Their Teaching. Journal of Education and Learning, 6(4), 217-228.

Celik, B., Bilgin, R., & Yildiz, Y. (2022). 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.

Chen, C. M., Li, M. C., & Chen, Y. T. (2022). The effects of web-based inquiry learning mode with the support of collaborative digital reading annotation system on information literacy instruction. Computers & Education, 179, 104428.

Conole, G., & Alevizou, P. (2010). A literature review of the use of Web 2.0 tools in Higher Education. A report commissioned by the Higher Education Academy. The Open University Walton Hall, Milton Keynes

Crook, C. (2012). The 'digital native'in context: tensions associated with importing Web 2.0 practices into the school setting. Oxford Review of education, 38(1), 63-80.

Crook, C., Fisher, T., Graber, R., Harrison, C., Lewin, C., Cummings, J., ... & Sharples, M. (2008). Implementing Web 2.0 in secondary schools: Impacts, barriers and issues. Becta.

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.

Dhakal, K. (2022). NVivo. Journal of the Medical Library Association, 110(2), 270-272.

Doherty, I. (2011). Evaluating the impact of educational technology professional development upon adoption of Web 2.0 tools in teaching. Australasian Journal of Educational Technology, 27(3).

Dohn, N. B. (2009). Web 2.0: Inherent tensions and evident challenges for education. International journal of computer-supported collaborative learning, 4, 343-363.

Dzakpasu, P. E., & Adom, D. (2017). Impact assessment of information and communication technologies on lesson delivery and students' performance in selected tertiary institutions in Ghana. Journal of Computer Sciences and Applications, 5(1), 29-41.

Egüz, E. (2020). Using Web 2.0 Tools in and beyond the University Classrooms: A Case Study of Edmodo. International Online Journal of Education and Teaching, 7(3), 1205-1219.

Ertmer, P. A. (1999). Addressing first-and second-order barriers to change: Strategies for technology integration. Educational Technology Research and Development, 47(4), 47- 61.

Geyer, R. (2010, March). Web 2.0 Technology Infusion in Kurdish Iraq. In Society for Information Technology & Teacher Education International Conference (pp. 2466-2470). Association for the Advancement of Computing in Education (AACE).

Hur, M. Y. (2023). Using Google Play Applications to Improve Language Preparatory School Students Pronunciation Skills (A Study on Tishk International University Students in Erbil, Iraq). International Journal of Social Sciences & Educational Studies, 10(1), 369.

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

Kara, S. (2023). The Effects of Web 2.0 Tools on Foundation English Students' Success Rates at A Private University in Iraq. International Journal of Social Sciences & Educational Studies, 10(1), 22.

Khan, H. U., Aruya, J. A., & Gill, A. Q. (2022). Web 2.0 technologies adoption barriers for external contacts and participation: a case study of federal establishment of Africa. International Journal of Business Information Systems, 39(2), 278-297.

Kongchan, C. (2008). How a non-digital-native teacher makes use of Edmodo. In 5th Intenational Conference ICT for language learning. https://acortar.link/nt4ukZ

Korukluoğlu, P., Çeliköz, M., & Gürol, M. (2022). Investigating the Effectiveness of Web 2.0-Based Critical Thinking Curriculum Developed for Secondary School Students: A Mixed-Methods Study. Journal of Learning and Teaching in Digital Age, 7(2), 175-191.

Küçük, T. (2023). Technology Integrated Teaching and Its Positive and Negative Impacts on Education. International Journal of Social Sciences & Educational Studies, 10(1), 46.

Lim, C. P., & Khine, M. (2006). Managing teachers' barriers to ICT integration in Singapore schools. Journal of technology and Teacher Education, 14(1), 97-125.

Mauch, J., & Tarman, B. (2016). A historical approach to social studies laboratory method. Research in Social Sciences and Technology, 1(2), 55-66.

Monje, E. M. (2014). Integration of Web 2.0 Tools in a VLE to improve the EFL Spanish university entrance examination results: A quasi-experimental study. Calico Journal, 31(1), 40-56.

Nasr, M. A. A. N. (2022). The Effectiveness of a Web 2.0-based Reciprocal-teaching Paradigm in Developing Saudi-university Students' Reading Comprehension. Jordan Journal of Educational Sciences, 18(2), 385-400.

Ningsih, S., & Mulyono, H. (2019). Digital assessment resources in primary and secondary school classrooms: Teachers' use and perceptions. International Association of Online Engineering. Retrieved from https://www.learntechlib.org/p/216529/

Peterson, J. B., Townsend, S. D., & Onak, N. (2020). Utilizing Flipgrid Application on Student Smartphones in a Small-Scale ESL Study. English Language Teaching, 13(5), 164-176.

Prasojo, L. D., Mukminin, A., Habibi, A., Hendra, R., & Iqroni, D. (2019). Building quality education through integrating ICT in schools: Teachers' attitudes, perception, and barriers. Calitatea, 20(172), 45-50.

Pritchett, C. G., Pritchett, C. C., & Wohleb, E. C. (2013). Usage, Barriers, and Training of Web 2.0 Technology Applications. SRATE Journal, 22(2), 29-38.

Sadiq, D. A. (2023). The Effects of E-Feedback (Electronic Feedback) on Developing EFL StudentsWriting Competence: A Case Study on Tishk International University Students in Erbil, Iraq. International Journal of Social Sciences & Educational Studies, 10(1), 320.

Saenkhot, A., & Boonmoh, A. (2019). Factors affecting teachers' use of technologies as teaching aids in Thai EFL classrooms. Journal of Liberal Arts Prince of Songkla University, 11(1), 269-306.

Salehi, H., & Salehi, Z. (2012). Integration of ICT in language teaching: Challenges and barriers. In Proceedings of the 3rd International Conference on e-Education, e-Business, e-Management and e-Learning (IC4E, 2012), IPEDR (Vol. 27, No. 1, pp. 215-219).

Sanchez, J. J. C., & Alemán, E. C. (2011). Teachers' opinion survey on the use of ICT tools to support attendance-based teaching. Computers & Education, 56(3), 911-915.

Schmitz, M. L., Antonietti, C., Cattaneo, A., Gonon, P., & Petko, D. (2022). When barriers are not an issue: Tracing the relationship between hindering factors and technology use in secondary schools across Europe. Computers & Education, 179, 104411.

Schulz, R., Isabwe, G. M., & Reichert, F. (2015, September). Investigating teachers motivation to use ICT tools in higher education. In 2015 Internet Technologies and Applications (ITA) (pp. 62-67). IEEE.

Soran, A. A., & Kara, S. (2022). Mentor-Mentee Relationship: Fifteen Career Saving Suggestions. International Journal of Social Sciences & Educational Studies, 9(3), 138.

Şenel, M. (2016). Virtual Learning Environments (VLE) and Virtual Classrooms: Edmodo. Participatory Educational Research, 4(2), 49-57.

Vurdien, R. (2012). Enhancing writing skills through blogs in an EFL class. The EUROCALL Review, 20(1), 156-159.

White, R. E., & Cooper, K. (2022). Grounded theory. In Qualitative Research in the Post-Modern Era: Critical Approaches and Selected Methodologies (pp. 339-385). Cham: Springer International Publishing.

Walker, D., & Myrick, F. (2006). Grounded theory: An exploration of process and procedure. Qualitative health research, 16(4), 547-559.

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.

Yildiz, Y. (2022a). Technological Problems That Teachers Encountered in Online Education during Covid-19 Process: Stirling Schools Sample. International Journal of Social Sciences & Educational Studies, 9(1), 255-268.

Yildiz, Y. (2022b). An Examination of the Experiences of Turkish ELLs about the Chatbot Apps to Learn English. Canadian

Journal of Language and Literature Studies, 2(5), 32-41.

Zakrzewski,J., & Newton, B. (2022). Technology in Teacher Education: Student Perceptions of Instructional Technology in the Classroom: Journal on Empowering Teaching Excellence, 6(1), 2-13. DOI: https://doi.org/10.26077/0b43-c702

Ziegler, M. G. (2022). Web 2.0 and knowledge sharing. A literature review. AI, Computer, 1(1), 1-14. https://doi.org/10.5772/acrt.03

DOI: https://doi.org/10.34069/AI/2023.63.03.11

How to Cite:
Shareef, L.A. (2023). Improving IELTS speaking skills of EFL learners through the extensive reading at a tertiary level. *Amazonia Investiga*, *12*(63), 123-133. https://doi.org/10.34069/AI/2023.63.03.11

Improving IELTS speaking skills of EFL learners through the extensive reading at a tertiary level

تحسين مهارات التحدث في امتحان ايلتس لمتعلمي اللغة الانجليزية كلغة اجنبية من خلال القراءة الموسعة على مستوى التعليم العالي

Received: February 2, 2023 Accepted: March 30, 2023

Written by:
Liva Adil Shareef[1]
https://orcid.org/0000-0001-6485-5911

Abstract

Extensive reading has increased its popularity globally as it offers flexibility to choose any book and read in an increasing volume to derive pleasure. Accordingly, the number of studies regarding it has increased in the last two decades. It has been observed that a gap is prevalent in the literature to measure the effects of ER on students' speaking competence through a standardized test at a tertiary level in Iraq context which has prompted the researcher to conduct this study. In this regard, the present study was carried out to investigate the effects of extensive reading on students' speaking competence through the IELTS Academic Speaking Test within a span of 10 weeks. 45 Foundation English course students who joined lessons actively at TISHK International University in Erbil, Iraq were chosen by convenience sampling method in the 2022-2023 Academic Year. The data were collected through speaking exams and interviews in this mixed methods design study. Collected data analysed by SPSS 23 or NVivo revealed that extensive reading substantially increased students' marks in the IELTS Speaking test, restored their self-confidence, improved their motivation and affected their overall attitudes towards learning English in a pleasurable way. This study's implications can provide a basis for education stakeholders who are considering introducing an extensive reading-enriched program at educational institutions.

Keywords: Extensive reading, IELTS Speaking Test, self-confidence, motivation.

ملخص:

زادت القراءة المكثفة من شعبيتها على مستوى العالم لأنها توفر المرونة في اختيار أي كتاب وقراءته بحجم متزايد لاستمداد المتعة. وفقا لذلك ، زاد عدد الدراسات في العقدين الماضيين. وقد لوحظ وجود فجوة سائدة في الأدبيات لقياس آثار ER على كفاءة التحدث لدى الطلاب من خلال اختبار موحد على مستوى التعليم العالي في السياق العراقي ، مما دفع الباحث إلى إجراء هذه الدراسة. في هذا الصدد ، أجريت هذه الدراسة للتحقيق في آثار القراءة المكثفة على كفاءة التحدث لدى الطلاب من خلال اختبار المحادثة الأكاديمي IELTS في غضون 10 أسابيع. تم اختيار 45 طالبا من طلاب دورة اللغة الإنجليزية التأسيسية الذين انضموا إلى الدروس بنشاط في جامعة تيشك الدولية في أربيل ، العراق ، بطريقة أخذ العينات الملائمة في العام الدراسي 2022-2023. تم جمع البيانات من خلال امتحانات التحدث والمقابلات في دراسة تصميم الأساليب المختلطة هذه. كشفت البيانات التي تم جمعها والتي تم تحليلها بواسطة SPSS 23 أو NVivo أن القراءة المكثفة زادت بشكل كبير من علامات الطلاب في اختبار IELTS Speaking ، واستعادت ثقتهم بأنفسهم ، وحسنت دوافعهم ، وأثرت على مواقفهم العامة تجاه تعلم اللغة الإنجليزية بطريقة ممتعة. يمكن أن توفر الآثار المترتبة على هذه الدراسة أساسا لأصحاب المصلحة في التعليم للنظر في تقديم برنامج مكثف غني بالقراءة في المؤسسات التعليمية.

الكلمات المفتاحية: القراءة المكثفة ، اختبار المحادثة في IELTS ، التحفيز ، الثقة بالنفس.

Introduction

The concept of literacy has received increasing attention in the last two decades for its numerous implications in people's social, educational and professional lives. Although there are different definitions of literacy in many contexts, it can be briefly defined as the ability to read, write and make interpretations on the focused item without having difficulty (Wildova, 2014). In other

[1] Ma, Assistant Lecturer, English Language Teaching Department, Faculty of Education, Tishk International University, Erbil/Iraq.

words, being literate has many reflections in practice with various types of literacy. It can be attested that reading literacy has a direct link with all other literacy types because reading requires the readers to figure out the themes in the text and make logical interpretations like other types of literacy (Tan et al., 2022). For example, digital literacy refers to knowing how to take advantage of the websites on the internet via mobile technologies such as cell phone, laptop or tablets. In addition, media literacy means distinguishing the fake news from realistic ones by analyzing the contents critically. Subsequently, visual literacy can be basically defined as the ability to convert written materials into a more appealing visual format or describe the images accurately. Additionally, data literacy equips the individuals with the ability to analyze and synthesize large chunks of information. After that, critical literacy urges people to evaluate the events critically to notice the weakness and inform the relevant bodies for an improvement. Afterwards, financial literacy drives the individuals to come to the right decisions financially. Moreover, health literacy directs the people to prioritize their health by taking necessary measures in advance. Additionally, mathematical and scientific literacy support the individuals during their education and later substantially. It can be stated that reading literacy can pave the way for continuous inspiration and success in life (Yildiz, 2020).

Reading can be depicted as figuring out the written texts and making interpretations based on the meaning. It is one of the fundamental macro-skills along with listening, writing and speaking (Tegmark et al., 2022). In addition, it facilitates mastering grammar, pronunciation and vocabulary if certain connections are assured between reading and these micro-skills. Being exposed to comprehensible input has been regarded as a prerequisite to master a language, so reading plays an integral role to access to a rich content (Krashen, 1992). Reading materials, which are ordered considering the readers' levels, motivate them to be more creative because they learn how to predict, infer, draw conclusions, form logical conclusions, summarize, skim through and scan while analyzing the texts. Two prominent reading approaches, which are intensive and ER, have received increasing popularity in the 21st century. Intensive reading necessitates reading materials under the strict guidance of the teacher. Focusing on form, reading slowly, choosing difficult texts, being compulsory to understand the text completely and using dictionaries are common points of intensive reading activities (Andrés, 2020). On the other hand, ER has been known for reading to get pleasure, have freedom what to read, focus on figuring out the overall meaning, read extensively from different genres in a quick way (Nakanishi, 2015). In other words, intensive reading urges the readers to develop their accuracy in a teacher-centered setting, whereas ER drives the readers to improve their fluency in a student-centered atmosphere.

IELTS, which can be taken in a paper-based or computerized format, has been recognized as a leading standardized test by more than 11000 institutions globally since 1989 (Ebadi et al., 2023). It has been run by British Council and Cambridge University Press to measure test-takers linguistic competence in 4 essential sections which are reading, listening, speaking and writing with a scale between 1 and 9. The test takers who earn 1.0 are classified as non-user, whereas test-takers who earn 9.0 are categorized as expert user. IELTS exam has been particularly designed to facilitate the process of working and studying in English speaking countries (Baghaei et al., 2020). Additionally, the exam has been widely taken to be promoted or earn extra benefits in private or state institutions on a global scale. IELTS exam has been offered within two formats which are IELTS Academic and IELTS General Training. While the former has been taken to be admitted to higher education institutions to earn a bachelor, master's or doctorate degree, whereas the latter has been preferred to adapt to social and workplace environments within a short time. Read (2022) reports that 75.44 % of test-takers chose to take IELTS Academic, while 24.56 % of them chose to take IELTS General Training in 2021. Additionally, female test-takers accounted for 51.55 % and male test-takers' percentage was 48.45. Subsequently, test-takers residing in Greece, Malaysia and Spain were placed as the most successful ones in IELTS Academic consecutively while test-takers living in the USA, South Africa and Jamaica earned the highest scores in IELTS General Training consecutively. Moreover, German, Greek and Romanian people were more successful than others in terms of ordering them by mother tongue.

Speaking skills have an indispensable function in people's lives in this globalized world. Speaking, which necessitates combining many elements in harmony to convey the message clearly, is one of the productive skills along with writing. Additionally, it is the fastest skill to exchange ideas in conversations. Informing, entertaining and persuading people are main purposes of speaking, so the importance of speaking skills has been prevalent regardless of being in childhood or adulthood period. However, speaking has been considered as the most challenging skills to develop on grounds that learners' background knowledge is not sufficient; their public speaking abilities are not improved or their pronunciation is not satisfactory enough (Oflaz, 2019). In this respect, providing a welcoming atmosphere to exchange ideas, reading books to have background knowledge, watching movies, listening to podcasts or songs, joining live chat programs, playing interactive games, and recording videos for social media platforms have been suggested to overcome the barriers against speaking in English (Yildiz, 2015; Soran & Kara, 2022). It is expected that individuals, who have mastered speaking English fluently, can adapt to real-life situations, school settings, professional life more easily.

The purpose of the study was threefold: to measure students' speaking skills in terms of IELTS, to investigate their motivation and self-confidence levels and to seek their overall attitudes towards learning English upon completion of the study. Correspondingly, given research questions were formulated:

- Does ER enhance learners' speaking performance in IELTS Academic Module?
- Does ER boost students' motivation and self-confidence?
- Does ER increase students' overall attitudes towards mastering English?

Literature Review

ER is equal to reading large amounts of materials to get pleasure by focusing on the general understanding in a flexible format. Day (2018) who has contributed tremendously to increase the implementation of ER practices on a global scale, highlighted 10 principles of ER which can be summarized as choosing easy to comprehend texts in a variety of genres freely, reading by increasing the number of books gradually, deriving pleasure, being guided by a teacher to read individually and silently. These principles indicate that students read to get a general understanding rather than focusing on specific points and teacher serves as a guide rather than the sole authority to exert pressure. A plethora of research has been conducted which revealed positive gains in terms of reading fluency (Ateek, 2021), speaking (Abdulrahman & Kara, 2023), vocabulary (Celik, 2018), grammar (Alqadi & Alqadi, 2013), listening (Fujimori, 2007), writing (Park, 2016) and pronunciation (Cakir, 2012). To name a few, Huffman (2014) carried out a study lasting a span of one semester on 66 Japanese students at a tertiary level which unearthed that the participants whose instructions were redesigned according to ER procedures outperformed in terms of reading rate gains without losing comprehension. In other words, the students in the experimental group could increase their word per minute (WPM) reading from 110 to 133, whereas the students in control group reduced from 103.76 to 103.14. Similarly, Horst (2005) finalized a study lasting 6 weeks on 21 ESL learners in Canada which indicated that ER expanded their vocabulary gains substantially. Subsequently, Milliner (2019) carried out a study lasting 15 weeks on 58 Japanese university students which revealed that the gains in ER increases dramatically once the learners listen the audio tracks and read the books consecutively. He attests that various learning channels are activated if they read and listen in harmony. In addition, Khansir and Dehghani (2015) finalized a study on 40 EFL learners in Iran lasting 7 weeks which revealed that the students who were exposed to ER enhanced their grammatical competence significantly, whereas the improvement was far from being noticeable in control group students who followed a traditional instruction. Moreover, a notable study was conducted by Gu and Reynolds (2013) on 37 Korean students at a tertiary level lasting 6 weeks which revealed that ER fostered students' speaking skills substantially. They concluded that reading activities can be more engaging if merged with relevant speaking exercises. Furthermore, Park (2016) conducted a study to measure the effects of ER on 56 Asian students who were taking an Academic Writing course at a US university within a span of 15 weeks which indicated that ER fostered learners' writing performance tremendously. A significant gain was also recorded in Novita's (2016) study which revealed that ER yielded better results in terms of developing 27 students' pronunciation skills at a university in Indonesia. Considering aforementioned studies, it is safe to conclude that ER is a promising approach to raise the standards in many aspects at educational institutions.

Global and local initiatives to increase the popularity of ER have increased substantially in the last two decades. For instance, Extensive Reading Foundation was founded by Dr. Richard Day in 2004 to promote reading globally. This foundation has organized 6 World Congress, expanded reading associations to many countries, offered Graded Readers List, placement tests, free reading materials and

MReader website to allow readers to take quizzes related to 4000 books. A large-scale study was also conducted by Puripunyavanich (2022) in Thailand on 5000 university students and 60 lecturers which unearthed that ER activities increased students' engagement and overall attitudes towards learning English. Additionally, lecturers reiterated that an online reading platform, Xreader, was efficient to monitor students' progress, see quiz results and assign new books. It can be argued that ER initiatives have spread to many countries thanks to their numerous advantages.

On the other hand, a limited number of studies conducted could not reveal a positive relationship between extensive reading and grammar (Johansson, 2014) conducted a study in Sweden on a PhD student who was exposed to ER which indicated that ER did not yield satisfactory results in terms of showing progress in grammar. Likewise, Archer (2012) underlined that poor reading habits, several distractions, consecutive exams reduce the quality of extensive reading activities, so learners cannot take advantage of this reading cycle as much as expected. Similarly, Huang (2015) postulates that time-consuming assignments, stressful projects, thinking about future job prospects, students' priority may be switched from ER to other topics. It can be stated that some pre-requisites should be considered to increase the success rate of ER programs.

Methodology

Research Design and Instruments

Interview and speaking exams, which were analyzed through NVivo and SPSS 23 respectively, were employed as data collection instruments in this mixed methods design study. The rationale to implement a mixed methods design was to take advantage of strengths of each method harmoniously. Additionally, it was expected to cross-check results whether exam results were compatible with students' opinions in the interview. Leavy (2022) postulates that a mixed methods design offers ample opportunity for researchers to use verbalized and numerical data equally.

Participants, Setting and Sampling Procedure

The population of the study was chosen TISHK International University (TIU hereafter) serving to 5000 students in 29 departments since 2008 in Erbil Iraq. TIU was chosen on grounds that all courses have been conducted in English, so this setting was feasible to implement an ER program successfully. Additionally, the university has taken initiatives to offer a welcoming atmosphere for students from different countries, so the scope of the study was enriched with students from 10 countries accordingly. The participants, who were taking Foundation English course at TIU in 2022-2023 Academic Year, were chosen through convenience sampling method from the population. Stratton (2021) states that convenience sampling method has been preferred in studies widely as it is handy to choose participants conveniently without requiring so much effort. Foundation English course is a non-elective technical course which appeals to students who need to improve their English considerably to adapt to lessons in their departments. Thus, these students were placed in the Foundation English category upon taking TIU Proficiency Exam run by Language Preparatory School. In this regard, 45 participants out of 150 Foundation English students were chosen to be exposed to an ER program within 10 weeks. Their syllabus was redesigned to accommodate the needs of ER program.

Table 1.
Participants` distribution of gender and age

Variable(s)	Option	F	%
Gender	Female	28	62.22
	Male	17	37.78
Age	17-20	43	95.56
	21-25	2	4.44
Total		60	100

As shown in Table 1, 28 (62.22 %) female students participated in the study, whereas 17 (37.78 %) male students joined the study. Additionally, 43 (95.56 %) were between 17 and 20 years old and 2 (4.44 %) students were between 21 and 25 years old. It was observed that female students were higher than male ones, and students aged 17 and 20 were higher than other categories in this study.

Data Collection Procedure

The students are exposed to ER activities systematically within a span of 10 weeks in this study. Certain steps were followed rigorously to conduct the study successfully, so the highest benefits can be reaped. Prior to conducting the study, the participants joined a workshop to be familiar with key points of the study, sign the consent form to join voluntarily and ask any questions to be clarified as well as taking the exam on IELTS Speaking to be used as pre-test. Subsequently, they were introduced with a large collection of Oxford Dominoes Graded Readers available in the library. Oxford Dominoes Series Graded Readers have a good reputation in ER activities which made them reasonable in this study. Participants decided the name of the publishers, levels and books under the supervision of the lecturer. After choosing the books, they read a book in a week, listened to the audio version, watched some relevant videos or movie versions of the books if available readily. In the second week, the lecturer created a debate atmosphere to welcome students' ideas about specific themes in the book. In addition, the lecturer highlighted some key words which can be helpful while responding to speaking questions in IELTS. Moreover, the lecturer converted some topics of the book into IELTS speaking format. For instance, the lecturer asked them about their role models, favorite footballers or telling some reasons to read books while analyzing *True Heroes of Sport* book which was about inspiring stories of famous figures with different occupations ranging from athlete to dancers. After speaking activities were completed, they wrote a summary for each book, so students were granted equal rights to foster their English in a written and spoken format. As can be seen clearly, speaking activities were at the heart of the instruction in ER activities, but other skills were integrated into activities to support each other. Once a 10-week period was over, the students took a speaking exam including questions of IELTS Speaking Part 1 and Part 2 as post-test. The results of two exams were fetched to be analyzed and interpreted correspondingly. Subsequently, the interview was held to uncover students' sincere opinions on the effects of ER based instruction.

Graded Readers and Items of IELTS Academic Speaking Test

Table 2.
Graded reader list chosen by the participants in cooperation

Title & Author	Type	The number of pages & words Level	Publisher	Title & Author
Around the World in 80 Days by Jules Werne	Adventure	56, 1918	Starter	OUP
Journey to the Centre of the Earth by Jules Werne	Science Fiction	56, 2674	Starter	OUP
Sherlock Holmes The Speckled Band by Arthur Conan Doyle	Detective Fiction	56, 3372	Starter	OUP
Lisa's Song by Lesley Thompson	Drama	33, 1426	Starter	OUP
True Heroes of Sport by Donatella Fitzgerald	Biography	5611	Starter	OUP

Around the World in 80 Days depicts Phileas Fogg's incredible adventures with his servant Passepartout, embarked on it as a bet, around the world in 80 days. Phileas Fogg lives in London in the 1870s, and he embarks on a journey to travel round the world in 80 days after making a bet with Stuart. They visit France, Italy, Egypt, India, Hong Kong, China, Japan, Ireland. During their journey, they save a princess from dying in the fire, enter a temple with shoes which is against the law, are mistaken as a thief, are attacked by gangs, lose each other. Once they return to London, Mr. Fogg wins the bet which is related to travelling round the world in 80 days. Finally, Fogg and Mrs. Aouda get married and live happily. The lesson to be learned in this book is that challenges encountered during the journey can lead to victory in the end after combating fake news and misinformation.

Journey to the Center of the Earth describes the journey of German Professor Otto Lidenbrock with his nephew Axel to an old volcano called Snaefells in the 1860s. They start this journey after buying an old Icelandic book which is about a message to the center of the Earth. They go to Denmark to sail to Iceland. They hire a guide called Hans. They went up the mountain. They see three black holes in the crater. They went forward inside the tunnels with the help of the compass and a portable lamp. They see magnificent crystals on the wall. They make a hole in the wall to quench their thirst. They have a journey under the sea with a hand-made raft, see fighting monsters. Their raft blows up after being hit by lightning. They see some monsters and skeletons, use gunpowder to clear their ways. Finally, the raft exits the tunnel with the help of a large amount of water, but their raft is under fire due to the lava from the volcano. Next, they meet a lonely boy who tells that they are near Etna in Italy. They see that they travel 5000 kilometers from Snaefells. Finally, they return and the professor writes a book about this unforgettable expedition. The lesson to be learned is that life is full of surprises with expeditions which can be fruitful or terrible.

Sherlock Holmes the Speckled Band revolves around the murder of Julia and finding the culprit. Helen Stoner arrives at the residence of Sherlock Holmes and Dr. John Watson early one morning in April 1883 to investigate the murder of his beloved sister Julia. Helen and her twin sister Julia are just two years old when their father passes away and their mother marries Dr. Grimes by Roylott. Mrs. Stoner passes away shortly thereafter, leaving behind a fortune. Julia dies in a suspicious incident. On the night of her death, Julia notices the smell of their stepfather's cigars seeping into her bedroom and a strange continuous whistle. Helen blames the people outside for the endless sound and smell. Julia collapses into her sister's arms and utters her final words: "It is the band!" The band Speckles!" Helen is unable to know what to say, but she assumes that her sister is killed by people chatting outside, some of whom wear spotted handkerchiefs. After a thorough probe, it is confirmed that Dr. Roylott's poisonous snake kills Julia and Dr. Roylott, respectively. Dr. Roylott hopes that the snake will kill Helen and Julia, so he will receive the fortune left by Mrs. Stoner. The lesson to be learned from this detective story is that realities concealed beneath the surface are revealed sooner or later.

Lisa's Song illustrates the life of a boy called Al Brown who lives in the USA with his parents. He is interested in playing guitar in a band. His life changes dramatically after having a sister called Lisa. His parents spend all their time with Lisa which drives AI to feel alone at home. Unfortunately, Lisa's heart does not beat properly. The family needs a lot of money to send her to the USA for an operation which is not available in the UK. Al`s grandpa comes up with a wonderful idea to write a song for Lisa and launch a charity campaign. The audience come to the concert and pay the money for Lisa's operation. The band also broadcast the song on the website. Finally, they can collect sufficient money to cover the expenses of Lisa's operation in the USA. The lesson to be learned in this book is that there may be ups and downs in life, but launching some campaigns to show solidarity helps society to be happier again.

True Heroes of Sport tells incredible success stories of sportspeople from a lot of different races and nationalities. In other words, it shows to power of defying and overcoming challenges starkly with each example. To illustrate, it can be learned that Pele scores 1363 goals, stops a war for a while; Mohammed Ali raises the awareness for black people in the USA after earning an unmatched respect in boxing; Babe Ruth becomes one of the most successful baseball players of all time despite being away from the parents due to staying at a boarding school; Caty Freeman wins gold medals as a sprinter despite being raised in a poor family who can`t buy running shoes for her; Nadia Comaneci becomes the best gymnast in the world by breaking many records when she is 15; Michael Phelps earns 8 gold medals as a swimmer in spite of being diagnosed with attention deficit hyperactivity disorder as a child and being labelled as ‘’ too unmotivated to learn and be successful at school and in life’’; Lance Armstrong wins many trophies in cycling tournaments after beating cancer disease successfully; Niki Lauda wins many cups in Formula 1 after being burned by a terrible accident and restoring her health within a short time. The lesson to be learned in this book is that given sportspeople can be a genuine inspiration for many people who have some difficulties in their lives but drive their ambition to earn a huge success in sport.

IELTS Speaking Questions Directed to Participants

The questions were chosen from the readily available materials on the internet.

Pre-test

- Could you introduce yourself briefly?
- What do you like doing at the weekends?
- Do you want to live in a nuclear or extended family?
- What is the best invention?
- What are your predictions about the life in the 2050s?

Post-test

- Could you describe your neighborhood in detail?
- What have you done recently?
- What are the key differences between the life in the previous century and now?
- What is the best book you have ever read?
- What are the pros and cons of internet?

The degree of difficulty has been increased based on the concept of IELTS speaking section.

Additionally, the questions were customized according to students' status.

Table 3.
Speaking grading rubric

Criteria	Percentage
Fluency and Coherence	25 %
Lexical Resource	25 %
Grammatical Range and Accuracy	25 %
Pronunciation	25 %
Total	100 %

Note. Adjusted from '' Ielts.org''. Retrieved March 15, 2023, from (https://www.ielts.org/-/media/pdfs/speaking-band-descriptors.ashx.) Copyright 2023 by British Council and Cambridge University Press.

Students were expected to develop topics from different points, use varied words to convey the meaning, command principles of grammar and pay attention to articulation, stress and intonation. Their marks were finalized based on these expectations meticulously checked by the committee.

Findings

Quantitative data were gathered via IELTS Speaking Tests, while qualitative data were collected via an interview. The findings of each instrument were explored below:

The Analysis of the IELTS Speaking Tests

Descriptive data were gathered and analyzed via paired samples t test to run to test whether the means of two paired measurements within control or experimental group are statistically different. Students' marks were graded over 100 instead of a range between 1and 9 to analyze the results easily.

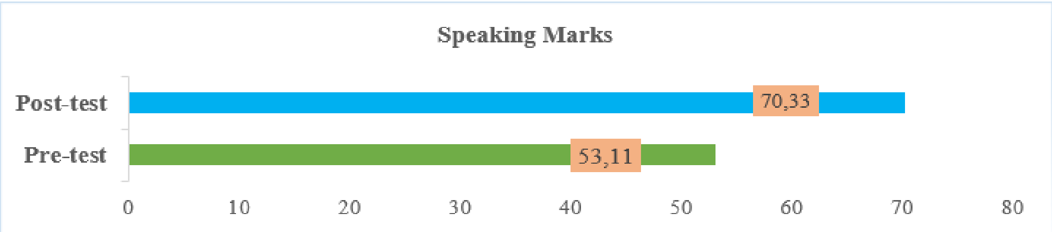


Fig. 1. Students' progress in IELTS speaking test

Paired samples t test analysis was given in Table 4.

Table 4.
Paired samples t test analysis

Paired Samples Test								
	Paired Differences							
				95% Confidence Interval of the Difference		t	df	
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper			Sig. (2-tailed)
Control Pre-test Post-test	-17.222	19.527	2.911	-23.089	-11.356	-5.916	44	.000

Note. $P<0.05$

Paired samples t test was run to figure out whether students' speaking marks differed significantly after treatment period lasting a span of 10 weeks. Upon comparing pre-test results with post-test ones, p-value was recorded as .000 which was less than 0.05 significance level. Recorded p-value revealed that there was significant progress in terms of speaking marks. Additionally, mean, standard deviation, t and df figures were -17.222, 19.527, -5.916 and 44.

Table 5.
Participants` common words to describe ER based instruction

	Categories	Frequency	%
1	Enjoyable	41	91.1
2	Fun	42	93.3
3	Interactive	37	82.2
4	Developing Good Habits Towards Reading	39	86.6
5	Improved Vocabulary	36	80
6	Enhanced Self-Confidence	44	97.7
7	Reading Fast	38	84.4
8	Increased Comprehension	37	82.2
9	Being More Creative	43	95.5

Table 5 figures revealed that participants used some expressions more commonly than others. To illustrate, enhanced self-confidence (44), being more creative (43) and fun (42) were expressed more than others, while improved vocabulary (36), increased comprehension (37) and interaction (37) were chosen less than others.

The Analysis of the Interview

The participants' genuine opinions were transcribed and categorized with the help of NVivo software program. Common themes were highlighted below:

Selected Interviews in Experimental Group

It was a mind-blowing period for me to be a part of this study. I had the freedom to choose any books in cooperation. Additionally, we had many opportunities to expand our learning. For example, we read the books from our mobile devices; we watched the video or movie versions of the books and made a comparison; we summarized the books in a written and spoken format; we composed new sentences by the key words and we raced against time while answering questions in IELTS speaking section. I wish all students around the world could grab this opportunity. (P21)

Reading books traditionally and electronically enriched our learning substantially because we could see the meaning instantly once we install a dictionary on our mobile devices. Additionally, we exchanged our ideas after reading, so peer-learning period was so fruitful. Moreover, our instructor converted reading activities into speaking formats, so we practiced a lot to sharpen our skills for IELTS speaking section. I noticed that my imagination, creativity and word power expanded tremendously once I joined this study. I recommend all educators to consider positive influences of ER and implement it at educational institutions. (P 27)

Although we read many books, True Heroes of Sport was special for me because I not only expanded my English knowledge but also learn how to boost my motivation. During the book, I was familiar with many success stories despite the obstacles sports people encountered. Additionally, I figured out how to contribute to society with humanitarian activities after earning much money and fame. Now I believe that there is a chain reaction between being successful and supporting needy people with logical initiatives. (P 32)

Reading activities were quite fun in this study because the level of the books was not challenging. Additionally, the themes in each book were interesting enough to follow till the end. For example, we had an incredible journey when we read Around the World in 80 Days and Journey to the Centre of the Earth because these books had some mysterious and intriguing moments. Additionally, Lisa's Song taught us how charity events can transform society and increase the level of happiness in society. Moreover, Sherlock Holmes the Speckled Band showed us how to examine the cues and ultimately uncover the truth. In addition, True Heroes of Sport inspired us to follow our dreams although there were some barriers in life. In the end, these reading activities produced better results in terms of speaking, so I improved my performance in IELTS speaking section. (P34)

One of my major obstacles in speaking activities was choosing the right word. I solved this problem after this study by enriching my vocabulary considerably. I used in English in many situations during the study, so I fostered my communication skills. In addition, my instructor showed us some sample responses in IELTS speaking section, so it was a piece of cake for me to analyze the questions and respond accordingly within the given time. (P37)

I learn well when I am exposed to some visual materials. My instructor displayed e-books, showed some related movies and illustrated some words with images in presentations which increased my learning and motivation dramatically. In addition, sample responses displayed by the instructor helped me to compose my templates in my mind. Once different materials were used harmoniously, I became more engaged to go beyond my current level in English. (P40)

The books chosen in this study were so interesting and relevant. While we were reading the books, we noticed that the stories were catchy to tell in our social lives as well. For example, I told the story of Around the World in 80 Days within my friend circle who listened to it attentively. Additionally, inspiring stories of sportspeople captured their attention to research further on the internet later. I can assure you that reading under the guidance of the instructor was a great idea to learn in cooperation. (P43)

Discussion

This study investigated the effects of ER on students' IELTS speaking section score via exams and an interview which showed that ER helped them to progress in multiple dimensions. To name a few, exam results revealed that ER boosted students' marks in IELTS speaking dramatically from 53.11 to 70.33 which was in line with Mart's (2012) findings. He found that the correlation between ER and speaking was positive. Likewise, Muravev (2023) states that reading activities helps the students to learn subconsciously in a context which can increase students' marks in standardized tests such as IELTS, TOEFL and PTE. In addition, not only students but also teachers appreciated the learning period as it was supported by different tools such as e-books, e-dictionaries, movies, presentations which was consistent with Celik and Kara's (2022) and Ulker et al.'s (2021) findings. They postulated that combining traditional methods with proven modern teaching ones can pave way for an improvement in learning. Subsequently, the students reiterated that their self-confidence was restored because they joined numerous activities in a written and spoken format. Arnold (2009) states that ER increases speaking performance of the readers because it urges the readers to summarize, join a debate, compose sentences etc. Furthermore, students were more engaged as they increased their knowledge in each book. They noticed that they could use the themes they learned in the book in daily lives. Boyd et al. (2009) and Ulker and Yildiz (2021) attest that real life connections and authentic materials raise students' engagement with well-designed reading activities. Another notable finding of the study was related to imagination and creativity which were boosted by reading different genres in a welcoming atmosphere. The books chosen included science fiction, detective stories and biographies, so students had a chance to trigger their imagination and come up with novel ideas. Sumara (2002) states that reading books changes the atmosphere of educational institutions because they learn how to imagine, predict and be creative with numerous activities
.

Conclusion and Recommendations

This study sought the effects of ER on students' IELTS speaking score at a tertiary level. The findings, gathered by employing qualitative and quantitative instruments, indicated that ER period was promising in many aspects. The results of IELTS speaking revealed that students' achievement levels improved substantially. Likewise, students' engagement levels were more noticeable because they derived pleasure while reading books in a welcoming atmosphere. In addition, students transferred the knowledge they gained from the book to their real lives which boosted their motivation as well because they thought that they had to listen more attentively to express their ideas about the book well later in their circle of friends. Subsequently, their self-confidence was restored because they were urged to be active participants in different activities. All in all, their overall attitudes towards learning English have changed positively because they read in large numbers; they learned many new words; they watched some movies; they read e-books and they exchanged their ideas in peer-learning activities. This study reflected the effects of ER on IELTS Speaking Test at a tertiary level. Further studies can be conducted to investigate the effects of ER on other essential skills. Additionally, only freshman students accounted for the participants which can be expanded with other stages such as sophomore, junior and senior ones. Subsequently, only Graded Readers published by Oxford Dominoes were employed which can be enriched with other prominent publishing companies such as Collins, Macmillan, Pearson, Penguin or Cambridge.

Bibliographic References

Abdulrahman, S. A., & Kara, S. (2023). The Effects of Movie-Enriched Extensive Reading on TOEFL IBT Vocabulary Expansion and TOEFL IBT Speaking Section Score. Journal of Qualitative Research in Education, 33.

Alqadi, K. R., & Alqadi, H. M. (2013). The effect of extensive reading on developing the grammatical accuracy of the EFL freshmen at Al Al-Bayt University. Journal of Education and Practice, 4(6), 106-113.

Andrés, I. C. (2020). Enhancing Reading Comprehension through an Intensive Reading Approach. HOW, 27(1), 69-82.

Archer, A. V. (2012). Analyzing the extensive reading approach: benefits and challenges in the Mexican context. HOW, 19(1), 169-184.

Arnold, N. (2009). Online extensive reading for advanced foreign language learners: An evaluation study. Foreign Language Annals, 42(2), 340-366.

Ateek, M. (2021). Extensive reading in an EFL classroom. Impact and learner's perceptions. Eurasian Journal of Applied Linguistics, 7(1), 109-131.

Baghaei, S., Bagheri, M. S., & Yamini, M. (2020). Analysis of IELTS and TOEFL reading and listening tests in terms of revised bloom's taxonomy. Cogent Education, 7(1), 1720939.

Boyd, N. C., Williams-Black, T. H., & Love, F. E. (2009). Using real-world connections to engage graduate students in authentic reading and writing. Reading Improvement, 46(4), 238-247.

Cakir, I. (2012). Promoting Correct Pronunciation through Supported Audio Materials for EFL Learners. Online Submission, 4(3), 1801-1812.

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

Celik, B. (2018). Effects of extensive reading on learners: How it develops certain points in vocabulary and sentence structure. International Journal of English Linguistics, 8(2), 73-84.

Celik, B., & Kara, S. (2022). Students' perceptions of the general english proficiency test: A study on Tishk International University students in Erbil, Iraq. Amazonia Investiga, 11(59), 10-20. https://doi.org/10.34069/AI/2022.59.11.1

Day, R. R. (2018). Extensive reading. In J. I. Liontas (Ed.), The TESOL encyclopedia of English language teaching (pp. 1–7). John Wiley & Sons. https://doi.org/10.1002/9781118784235.eelt0472

Ebadi, S., Karimi, E., & Vakili, S. (2023). An exploration into EFL learners' perspectives on online computerized listening comprehension dynamic assessment. Language Testing in Asia, 13(1), 5.

Fujimori, C. (2007). The effects of an extensive reading program on reading and listening comprehension among senior high school students. The Bulletin of the Kanto-koshin-etsu English Language Education Society, 21, 13-24.

Gu, S., & Reynolds, E. D. (2013). Imagining extensive speaking for Korean EFL. Modern English Education, 14(4), 81-108.

Horst, M. (2005). Learning L2 vocabulary through extensive reading: A measurement study. Canadian modern language review, 61(3), 355-382.

Huang, Y. C. (2015). Why don't they do it? A study on the implementation of extensive reading in Taiwan. Cogent Education, 2(1), 1099187.

Huffman, J. (2014). Reading rate gains during a one-semester extensive reading course. Reading in a Foreign Language, 26(2), 17-33.

Johansson, E. (2014). Extensive reading and grammatical development: A case study within SLA. (Graduation thesis) Halmstad University, Sweden.

Ielts.org. (2023). IELTS Speaking Rubric Available at: https://www.ielts.org/-/media/pdfs/speaking-band-descriptors.ashx

Khansir, A. A., & Dehghani, N. (2015). The impact of extensive reading on grammatical mastery of Iranian EFL learners. Theory and Practice in Language Studies, 5(7), 1501.

Krashen, S. (1992). The input hypothesis: An update. Linguistics and language pedagogy: The state of the art, 409-431.

Leavy, P. (2022). Research design: Quantitative, qualitative, mixed methods, arts-based, and

community-based participatory research approaches. Guilford Publications
Mart, C. T. (2012). Developing speaking skills through reading. International Journal of English Linguistics, 2(6), 91.
Milliner, B. (2019). Comparing extensive reading to extensive reading-while-listening on smartphones: Impacts on listening and reading performance for beginning students. The Reading Matrix: An International Online Journal, 19(1), 1-19.
Muravev, Y. (2023). Improving Second Language Acquisition by Extensive and Analytical Reading in a Digital Environment. Journal of College Reading and Learning, 53(1), 3-19.
Nakanishi, T. (2015). A meta-analysis of ER research. Tesol Quarterly, 49(1), 6-37.
Novita, L. (2016). Relationship between reading and pronunciation and students' speaking skills. In Proceeding of the International Conference on Teacher Training and Education, 2(1), pp. 527-532.
Oflaz, A. (2019). The Effects of Anxiety, Shyness and Language Learning Strategies on Speaking Skills and Academic Achievement. European Journal of Educational Research, 8(4), 999-1011.
Park, J. (2016). Integrating reading and writing through extensive reading. Elt Journal, 70(3), 287-295.
Puripunyavanich, M. (2022). The implementation of a large-scale online extensive reading program in Thailand—From decision-making to application. LEARN Journal: Language Education and Acquisition Research Network, 15(1), 320-360.
Read, J. (2022). Test Review: The International English Language Testing System (IELTS). Language Testing, 39(4), 679-694.
Soran, A. A., & Kara, S. (2022). Mentor-Mentee Relationship: Fifteen Career Saving Suggestions. International Journal of Social Sciences & Educational Studies, 9(3), 138.
Stratton, S. J. (2021). Population research: convenience sampling strategies. Prehospital and disaster Medicine, 36(4), 373-374.
Sumara, D. J. (2002). Why reading literature in school still matters: Imagination, interpretation, insight. Routledge.
Tan, Y., Fan, Z., Wei, X., & Yang, T. (2022). School belonging and reading literacy: A multilevel moderated mediation model. Frontiers in Psychology, 13, 816128.
Tegmark, M., Alatalo, T., Vinterek, M., & Winberg, M. (2022). What motivates students to read at school? Student views on reading practices in middle and lower-secondary school. Journal of Research in Reading, 45(1), 100-118.
Ulker, U., Ulker, V., Celik, B., Yildiz, Y., & Bilgin, R. (2021). E-Book Reading Genre Preferences of Teachers Teaching in Foreign Languages in Private Schools (Case Study/Iraq). International Journal of Social Sciences & Educational Studies, 8(4), 158-170.
Ulker, V., & Yildiz, Y. (2021). The implementation of the authentic assessment in EFL classes in Erbil. International Journal of Social Sciences & Educational Studies, 8(2), 206-221.
Wildova, R. (2014). Initial reading literacy development in current primary school practice. Procedia-Social and Behavioral Sciences, 159, 334-339.
Yildiz, Y. (2015). Time spent in target language-oriented extracurricular activities and foreign language students' satisfaction. In 5th International Research Conference on Education.
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

DOI: https://doi.org/10.34069/AI/2023.63.03.12
How to Cite:
Shareef, L.A. (2023). Perceptions of EFL students on e-book based extensive reading at a tertiary level. *Amazonia Investiga*, *12*(63), 134-147. https://doi.org/10.34069/AI/2023.63.03.12

Perceptions of EFL students on e-book based extensive reading at a tertiary level

Yüksek Öğretim EFL Öğrencilerinin E-Kitap Tabanlı Kapsamlı Okumaya İlişkin Algıları

Received: January 22, 2023 Accepted: March 30, 2023

Written by:
Liva Adil Shareef[1]
https://orcid.org/0000-0001-6485-5911

Abstract

Printed reading texts have been transformed drastically which allows readers to read books in an electronic format flexibly. Reading e-books extensively has received much attention globally thanks to their advantages such as portability, convenience and affordability. Likewise, the popularity of extensive reading programs has increased dramatically. Correspondingly, the number of publications related to e-books and extensive reading has risen tremendously which has urged the researcher to combine both in a single study. In this respect, the current study was conducted to pinpoint the perceptions of students who joined an e-book based extensive reading program at TISHK International University within 2022-2023 Academic Year in Erbil, Iraq. 50 freshman students were chosen by adopting convenience sampling method, and the data were collected via an extensive questionnaire, a survey and interview. The data collection process which included the instruments of a mixed methods design within 11 weeks through SPSS 23 and NVivo revealed that e-book based extensive reading improved students' performance, increased their motivation, facilitated overcoming language learning anxiety and changed overall attitudes towards learning English with reading e-books extensively. The findings of this study can have some implications for researchers who are planning to conduct an e-book-based ER instruction at their institutions.

Keywords: Extensive reading, IELTS Speaking Test, self-confidence, attitudes towards learning English.

Özet

Basılı okuma metinleri, okuyucuların elektronik formattaki kitapları esnek bir şekilde okumalarını sağlayarak büyük ölçüde dönüşüm geçirmiştir . E-kitapları yoğun bir şekilde okumak, taşınabilirlik, kolaylık ve satın alınabilirlik gibi avantajları sayesinde küresel olarak çok dikkat çekmiştir. Aynı şekilde, kapsamlı okuma programlarının popülaritesi önemli ölçüde artmıştır. Buna paralel olarak, e-kitaplarla ve kapsamlı okumalarla ilgili yayınların sayısının muazzam şekilde artması araştırmacıyı her iki konuyu tek bir çalışmada birleştirmeye yönlendirmiştir. Bu bağlamda, mevcut çalışma, Irak'ın Erbil kentinde 2022-2023 Akademik Yılı kapsamında TISHK Uluslararası Üniversitesinde e-kitap tabanlı kapsamlı okuma programına katılan öğrencilerin algılarını belirlemek amacıyla yapılmıştır. 50 birinci sınıf öğrencisi kolaylık örnekleme yöntemi benimsenerek seçilmiş ve veriler kapsamlı bir anket, ve görüşme yoluyla toplanmıştır. SPSS 23 ve NVivo aracılığıyla 11 hafta içinde karma bir yöntem tasarımının araçlarını içeren veri toplama süreci sonunda, e-kitap tabanlı kapsamlı okumayla öğrencilerin performans ve motivasyonları artmış, onların dil öğrenme kaygısının üstesinden gelmelerine yardımcı olmuş ve e-kitapları kapsamlı bir şekilde okuyarak İngilizce öğrenmeye yönelik genel tutumlarını değiştirmiştir. Bu çalışmanın bulguları, kurumlarında e-kitap tabanlı bir kapsamlı okuma talimatı yürütmeyi planlayan araştırmacılar için bazı etkilere sahip olabilir.

Anahtar Kelimeler: Kapsamlı okuma, IELTS Konuşma Sınavı, özgüven, İngilizce öğrenmeye yönelik tutumlar.

[1] Ma, Assistant Lecturer, English Language Teaching Department, Faculty of Education, Tishk International University, Erbil/Iraq.

Introduction

Learning a language is related to effective communication. Therefore, proficiency necessitates accuracy and facility (Daskan & Yildiz, 2020). In this context, reading plays an indispensable role in people's lives, so reflections of reading can be observed at different stages of lives. Mastering reading by following proven techniques is essential to unlock the full potential. Reading ability cannot be underestimated as having endeavors to decode words because reading is an active process that requires the learners to integrate six essential elements into their learning environments successfully. These elements include oral language growth, phonemic awareness, phonics, vocabulary, fluency and comprehension, which can serve as a milestone in learners' lives (Kumar & Palukuri, 2022). The learners who are equipped with these elements are expected to master other vital 21st-century skills such as information, digital, media and financial literacy without having much difficulty. Likewise, the learners who have mastered reading and other 21st-century skills can earn more dignity in society (Kara & Yildiz, 2022; Ulker et al., 2021). To illustrate, a good pilot who keeps regularly can develop problem-solving skills to be used in an emergency while flying. In addition, a journalist who is familiar with current news by following various websites can be distinguished from others in terms of having accurate and updated information. Moreover, a software engineer who catches up with the latest developments in computer science can grab the opportunities to make a difference in the field. After that, a visionary farmer who reads frequently to be knowledgeable about the latest proven techniques on agriculture can be a role model for others. Similarly, an educator who reads on a daily basis to fill the knowledge gaps can earn the respect of other educators and revolutionize education to a large extent. It can be stated that reading helps individuals to unlock their full potentials regardless of their occupations.

Extensive reading (ER hereafter) is a promising approach to second language learning which highlights granting freedom to the readers about the content, duration and genres. In addition, it prioritizes getting pleasure and increasing knowledge rather than sticking to certain activities and forms in English. Therefore, language learning effectively depends on learner autonomy. Language learners must be self-directed (Yildiz & Yucedal, 2020). In this regard, it differentiates from other approaches because learners can actively construct their knowledge and progress accordingly. According to Robb and Kano (2013), implementing an ER based instruction at educational institutions offers several benefits such as increasing word power, developing reading fluency, figuring out grammar patterns, incidentally, learning various collocations and enhancing overall comprehension skills. The learners who have improved their skills considerably through ER can also have certain advantages in other subjects because they can identify, comprehend and make interpretations easily while reading texts. In addition, teachers are encouraged to enrich their classes with supplementary activities in line with modern teaching methodologies, so ER can be of greatest importance to change learning atmosphere positively (Celik, 2018). Thanks to the increased popularity of ER globally, several prominent publishers such as Oxford, Penguin, Cambridge and Pearson have been increasing the number of publications in various stages to welcome all learners and allow them to progress gradually.

Traditional teaching practices have transformed tremendously thanks to the advent of web-enhanced tools in education. Web-enhanced tools such as YouTube, Zoom, Flickr, Zip Grade, Kahoot, Padlet have contributed significantly to increase the engagement of the students in classes. In the same vein, the practices of reading have been affected from this modification as well. E-books have been receiving much attention as they offer numerous advantages for readers and teachers (Abdulrahman & Kara, 2023). E-book is an electronic version of the traditional book which allows readers to read on the internet through their mobile devices such as laptops, cell phones, tablets and PDAs. Reading books online is flexible because readers can read with their readily available mobile technologies conveniently. In addition, they can zoom in and out to focus on certain points, bookmark and save the page to be continued later. In addition, they can install an e-dictionary and figure out the meaning of any unknown word instantly. After that, mobile technologies are at the heart of students' lives, so they can find more common grounds if they read the books with them. Subsequently, they can improve other skills while reading electronically because e-books are mostly accompanied by audio-tracks or illustrated videos. Readers can improve their listening and pronunciation as well. On the other hand, it has some negative implications which need to be handled wisely to increase the satisfaction rate of the students. To illustrate, distractibility, increasing costs, limited battery life, eye fatigue and losing the respect for reading on the paper need to be considered and fixed, so readers can develop good habits towards reading books electronically (Fraser & Abbot, 2016). In addition, balancing the time is fundamental while implementing an e-book-based instruction because reading on paper is the standard globally despite some advancements in e-book technologies. Readers can easily feel demotivated in their classes where they are exposed to traditional instruction including reading paper-based books if e-book sessions last longer than pedagogically advised time. It can be argued that e-book-based ER can help students develop their linguistic competence if certain measures are taken to implement it in a professional manner.

Purpose of the Study and Research Questions

The research questions of the study were:

This study investigated the perceptions of students on an e-book-based ER program. In this regard, the research questions were formulated to be explored in the survey, questionnaire and the interview.

- Does e-book-based ER program increase students' motivation to read more ambitiously?
- Does e-book-based ER program enhance students' performance in classes?
- Does e-book-based ER program affect their overall attitudes towards learning English?

Significance of the Study

Extensive reading programs have been implemented at many educational institutions. Once the published studies have been examined, it has been observed that accessing to a wide range of paper-based books has been one of the most chronic problems suffered by the researchers. In the same vein, the cost and unable to highlight certain points electronically or use e-dictionaries have been cited as other weaknesses of extensive reading. In addition, it has been scanned that the number of publications on e-book-based extensive reading has been limited with a few studies, so this study was conducted by combining extensive reading with e-book initiatives to measure the effects of it on students' motivation, performance and overall attitudes at a tertiary level in Iraq context. However, it is rare to encounter highly motivated and focused students, as most students are preoccupied with their untouchable social media accounts, which tends to transform students into introverts. Still, this condition can be beneficial in leading students to read online (Yildiz, 2019).

Literature Review

Extensive reading programs have been prevalent in different versions on a global scale as it allows more freedom to readers about the content, duration and level. Another intriguing point of ER is that readers join reading activities to derive pleasure rather than being forced to take the exams upon reading the book (Day, 2018). There are some theoretical underpinnings of ER, so its popularity has been increasing in the last two decades. For example, Krashen's five hypothesis which are natural order, acquisition, monitor, input and affective filter can be noticed clearly in ER activities. Krashen (1992) puts forward the idea that learners can learn well if activities are ordered in a logical order where the items to be learned should be neither too easy nor too difficult. In other words, learning goals should be in line with learners' current levels. Krashen (1983) also postulates that learners with a high degree of motivation, self-esteem and a low level of anxiety progress faster than others who have less motivation, self-respect and more anxiety. In addition, Vygotsky's (2011) ZPD was in line with ER programs because ZPD urges the learners to improve their skills with the guidance of an expert which are ensured with a teacher in ER programs. In other words, learners can embark on a learning journey with their teachers, so they can enhance their performance correspondingly in ER programs. Likewise, ER programs are consistent with John Dewey's (1938) theory of learning which highlights that students learn well when they join, discuss, brainstorm, experience, share, evaluate and apply actively. ER programs offer a welcoming learning atmosphere to read, exchange their ideas, improve critical thinking skills and learn some valuable lessons from the books to be used in social life.

Different versions of ER programs can include paper-based, online or hybrid which have certain advantages and disadvantages. A number of scholars postulated that extensive reading is a more fruitful approach than others in terms of improving cognitive, affective and psychomotor domain of learning (Horst, 2005), lexical expansion (Nation, 2009), reading comprehension (Nuttall, 2005), enhanced listening skills (Renandya & Jacobs, 2016), mastering grammar (Celik, 2019) and boosting speaking (Mart, 2012). In addition, a growing number of scholars asserted that ER affects motivation positively (Tanaka, 2017), changes students' overall attitudes towards learning English in a positive way (Takase, 2009) and reduces language learning anxiety sharply (Kargar, 2013). Accordingly, there is a plethora of study in this respect.

To name a few, Iwata (2022) conducted a study on Japanese university students which revealed that ER improved their reading fluency and vocabulary knowledge considerably when they read the books by choosing from different genres available in the school library. Hussein Hakeem Barzani (2020) conducted a study on university students majoring in ELT at a private university in Iraq which displayed that students noticed positive effects of ER during their education because ER helped them to fill the knowledge gaps gradually and become proficient in English. Additionally, Kargar conducted a notable study in Iran context where she examined the effects of ER on reading anxiety at a tertiary level which revealed that ER reduced reading anxiety after being exposed to graded readers. Afterwards, Jang et al. (2015) explored the effects of ER on motivation with Korean high school students which unearthed that ER not only increased their motivation but also developed their proficiency in English. Similarly, Dickinson (2017) found that Japanese university students changed their overall attitude towards learning English after being exposed to ER in a systematic way. They reiterated that they were hopeful to master English in the short run because they noticed that language learning was not as challenging as expected if materials were graded based on their levels.

Some studies focused on the effects of online ER on improving students' linguistic competence. To illustrate, Al-Jarf (2022) integrated mobile fiction apps into the curriculum to support students' learning at a tertiary level in Saudi Arabia which unearthed that they encouraged the students to read more e-books based on fiction stories and novels, so students' attitudes towards reading changed positively. Similarly, Keita (2022) encouraged Japanese university students to read books and take relevant quizzes on XReader website which offers online books and quizzes to promote reading rate globally. His study uncovered that reading e-books and taking quizzes increased students' awareness to read more carefully and get pleasure simultaneously. Likewise, Zhou and Day (2021) conducted a study at an American university which revealed that XReading program improved their English proficiency. The students asserted that using portable devices and accessing electronic books at any time were main reasons to join this study more enthusiastically. In addition, Nkomo (2020) conducted a pioneering study in South Africa on primary school students which revealed that online ER program not only improved them academically but also personally. Students reported that they improved their English and became active speakers in conversations thanks to reading various books electronically.

Apart from traditional and online ER, some studies reflected the effects of hybrid ER programs on improving students' skills in various domains. To name a few, Fatimah et al., (2022) conducted a study on Indonesian EFL students at a tertiary level which revealed that hybrid extensive reading activities raised the standards in many dimensions. They attested that reading books traditionally and electronically increased students' engagement, so they were more motivated during the study which boosted their overall performance dramatically. Additionally, Kuru Gönen and Zeybek (2022) carried out a pioneering study in Turkey on integrating QR codes into ER books which revealed that being directed to further information to satisfy curiosity about certain themes in the books increased EFL students' motivation and marks tremendously in a British culture course. Furthermore, Klassen and Allan (2017) found that Japanese students increased their success considerably when they read the books from the library and took online quizzes on MReader website which offers free quizzes for graded readers globally.

Methodology

Research Design and Instruments

Research design to have been adopted in this study was mixed methods on grounds that it allows the researchers to use quantitative and qualitative instruments based on the necessities. Additionally, a mixed methods research design reduces the pressure on the researcher to stick to only one method which can limit the flexibility to a great extent. Thus, the researcher had the freedom to organize the study in a way to receive numerical and verbalized data as equal as possible and cross-check them (Morgan et al., 2004; Dhakal, 2022). In this regard, a questionnaire, an interview and a survey were formed to receive quantitative data. The survey and the questionnaire were analyzed by SPSS 23. which required to use Cronbach Alpha reliability test, Shapiro Wilkinson Normality Test, Mann Whitney U Test, Frequencies. In addition, NVivo application was used to categorize the transcripts in the interview and analyze accordingly.

Participants, Sampling and Setting

The setting of this study was TISHK International University (TIU hereinafter) where around 5000 students have received a top-notch education in 29 departments in Erbil, Iraq as of 2022-2023 Academic Year. Convenience sampling methods were employed to narrow the population and analyze them thoroughly. Thus, 50 Foundation English course students out of 150 were chosen to initiate and finalize the study. Foundation English course has been offered at the university by TIU Language Preparatory School as a technical non-elective course spanning the whole year so that freshman students, whose English levels are not sufficient according to taken English proficiency exam, can sharpen their English in 4 domains with experienced and dynamic academicians. Their lessons are enriched with CALL and MALL to catch up with the demands of the 21st century and keep the students engaged with real life examples. Additionally, students are encouraged to join some short talks and write some essays, so they are granted privileges to improve their English in a written and spoken format. The underlying reason to choose TIU as the setting of this study was that it has been offering all the courses in English and encouraging the academicians to take advantage of the current trends in language learning and teaching process.

Validity and Reliability

The items in the questionnaire were cross-checked by the committee who were experts in testing and evaluation, so the researcher tested the constructs in the questionnaire were relevant and easy to comprehend. Thus, content validity was ensured by updating the questions according to the opinions of the experts. Later, Cronbach Alpha was run to measure the reliability of the items within 5 main categories which culminated in .877, so internal reliability was also sufficient enough to conduct the questionnaire in practice with the participants.

Table 1.
Reliability statistics of piloting phase.

Reliability Statistics	
Cronbach's Alpha	N of Items
.877	5

Procedure

The students joined this study for 11 weeks which encompassed orientation workshops, receiving consent forms, showing the procedures, giving some tips to increase the satisfaction rates. The first week was the orientation period which was designed to introduce the basics of e-book-based ER with clear examples from around the world. In the next step, students were provided with a wide range of graded readers which were available in the school library. Once students decide upon the title of 5 books in cooperation, the researcher provided audio-tracks and illustrated video versions on YouTube. The conduct of the lesson was to read and listen to the books individually at first which converted to having reading, listening, speaking and writing activities in the second week. The rationale to have some flexibility at first was that the students would get pleasure and set their reading pace themselves while they were reading. The researcher expected that students would be more alert to join further activities about the book if they read in advance. In the second week, students read the chapters, listened to the audio versions, summarized key points, wrote a short summary and took a brief quiz having only 5 questions for each book. The essential difference of this study was that students followed the activities with their mobile devices to zoom in, go forward, rewind, use dictionaries and be directed to other websites related to the book summaries. This cycle was repeated in each book. As can be seen, the researcher prioritized 4 skills simultaneously to support each other. When all the books were covered and analyzed correspondingly, the students took a survey and questionnaire to collect the data, so students' sincere opinions could be uncovered.

Table 2.
Graded reader list chosen by the participants in cooperation.

Title	Author	Type	The number of pages	Words	Level	Publisher
Eyes	Rob Sved	Narrative Non-fiction	32	672	1	Oxford
Earth	Richard Northcott	Narrative Non-fiction	40	820	2	Oxford
Jobs	Kamini Khanduri	Narrative Non-fiction	40	855	2	Oxford
Free Time Around the World	Julie Penn	Travelogue	48	1328	3	Oxford
Super Structures	Fiona Undrill	Narrative Non-fiction	48	1200	3	Oxford

Eyes illustrates the function of eye for animals and people with distinctive examples. Additionally, it depicts parts of an eye to teach some daily- life words. Furthermore, it shows positions, numbers of eyes. Subsequently, it gives some tips to keep eyes safe and healthy. Ducks, geckos, crabs, elephants, hawks, monkeys, owls, sharks, frogs, chameleons, seals, lemurs, dogs, cats, spiders, scallops, dragonflies, camels, meercats and people are described starkly in this book while describing distinguishing qualities of eyes and their importance. The lesson to be learned in this book is that eyes can serve different purposes according to the particular need of the environment.

Earth helps the readers explore different places on the Earth such as rivers, mountains, seas, oceans, plains, deserts and forests. It also gives information about Earth's rotation and its meaning for a sustained life. It also depicts some mountains in China, cliffs in Australia, canyons in Peru, caves in Slovenia, waterfalls in Canada and deserts in the USA. Additionally, it shows magnificent photos taken in the Arctic. In addition, it tells that Monsoon Rains mean a period of heavy rain in India; Amazon Rainforests have diverse plants and animals in a humid tropical climate. The lesson to be learned in this book is that Earth is a vast area to explore more and more.

Jobs introduces various jobs such as being a doctor, a teacher, an office worker, a flight attendant, a construction worker, a fire fighter, a tour guide, a chef, a potter, a bus driver, a farmer, a fisher, a miner, an engineer, a police officer, a vet, a railway worker, a soccer player, a taxi driver, a musician, a director, an actor, a producer and a cameraperson. After describing their duties consecutively, it gives further information about their shifts which can be part-time or full-time. The lesson to be learned in this book is that chosen occupations may span the whole career, so it is essential to choose a job through which you will get pleasure and work with an increasing enthusiasm each passing day.

Free Time Around the World illustrates different free time activities based on the popularity for given countries. For instance, it depicts that football and futsal are so popular in Brazil where players can play on the street with or without trainers. Skiing, tobogganing, dog sledding are popular winter sports in Canada. Additionally, an artificial snow dome, built on a desert, in the UAE allows the people to do different winter sports. Subsequently, Bollywood dance is more famous than any other ones in India and is spreading to other countries as well. Moreover, Tae kwon do is a national sport in South Korea where it is so popular that some courses are integrated into school curriculums about Tae kwon do. Furthermore, manga, a type of comic book, is the most popular genre in Japan. Also, basketball is so popular in the USA and China where there are many events to increase the popularity of it. After that, singing, dancing and playing instruments are popular pastimes in Nigeria. Afterwards, beach sports are favorite pastimes in Australia where a beach cricket championship has been held annually. Finally, scouting and cycling are popular pastime activities in the UK and the Netherlands respectively. The lesson to be learned in this book is that there are different inclinations about popular sports in each country mostly shaped by the climate and promotions.

Super Structures promotes various schools, bridges, castles, skyscrapers, tunnels with clear examples. For example, it can be learned that Seikan Tunnel in Japan is one of the longest tunnels in the world. Likewise, Laerdal Tunnel in Norway is one of the longest rod tunnels in the world. In addition, the Lake Pontchartrain Causeway is one of the longest beam bridges in the USA. In addition, Burj Dubai and Petronas Twin Towers are famous landmarks as skyscrapers in the UAE and Malaysia respectively. Furthermore, the Itaupu Dam, between Paraguay and Brazil, is one of the tallest dams in the world. Subsequently, Beijing Capital International Airport is one of the biggest terminals in the world. The book also depicts some structures with different shapes such as O2 in London, Biosphere in Arizona, Ice Hotel in Sweden, the Poseidon Undersea Resort in Fuji, Halley Research Station in the Antarctic, the International Space Station in space.

The book ends with different structures built by animals such as tunnels by wombats, dams by beavers, mounds by termites. The lesson to be learned in this book is that human beings and animals are capable of building unique structures according to their creativity and needs.

Considering the genres and levels, it can be suggested that a variety of genres and levels were integrated into e-book-based ER to increase the engagement of the students.

Findings

Three subcategories, which were survey, questionnaire, and survey were forged to interpret the findings in detail. The findings of each data collection tool can be explored below:

Survey

Items in the questionnaire included strengths and weaknesses of e-book based ER activities and students' inclinations to join such studies in the future voluntarily.

Table 3.
Thematic distribution of items on e-book based ER program

Items	Options	N	Percentage
	Having fun in an interactive learning environment	42	84 %
	Expanding knowledge on numerous fields	46	92 %
	Deriving pleasure	49	98 %
	Developing a regular reading habit	39	78 %
	Convenient to read via mobile technologies	41	82 %
What are some appealing sides	Being more creative	44	88 %
of e-book based ER?	Enhancing critical thinking skills	40	80 %
Mean	86 %		
	Distractibility	37	74 %
	A variety of eye problems	34	68 %
	Technophobia	4	8 %
	Financial burdens	42	84 %
	Battery related issues	46	92 %
What are some weaknesses of e-book based ER?	Unable to take notes and transfer them conveniently	47	94 %
Mean	70 %		
Would you join a similar study	Yes	41	82 %
in the future?	No	9	18 %

Once Table 3 was analyzed on e-book-based ER, it was observed that participants were asked to choose some options which applied to them regarding advantages, weaknesses and preferences for a future study. To illustrate, they emphasized getting pleasure, increasing knowledge and being more creative as advantages, however, they warned about difficulty taking notes, distractibility, and financial burdens as the weaknesses. When the mean scores were compared, it was also revealed that advantages of e-books (86 %) outweighed the weaknesses (70 %). Another noteworthy finding of the survey was about their preferences which showed that an overwhelming majority of the participants (92 %) would like to join such a similar study in the future.

Questionnaire

Table 4.
Students' Overall Satisfaction Rates within 5 primary categories

Construct	Item	Min	Max	Mean	SD	Variance
Macro-skills	E-book based ER program helped me improve my reading skills.	2	5	4.58	0.81	0.657
	E-book based ER program helped me enhance my listening performance.	3	5	4.86	0.45	0.204
	E-book based ER program helped me boost my speaking performance.	3	5	4.66	0.56	0.311
	E-book based ER program helped me sharpen my writing skills academically.	1	5	3.94	1.28	1.649
Micro-skills	E-book based ER program helped me sharpen my grammatical competence.	2	5	4.14	1.14	1.307
	E-book based ER program helped me boost my pronunciation.	4	5	4.8	0.4	0.163
	E-book based ER program helped me expand my vocabulary knowledge.	4	5	4.6	0.5	0.245
Motivation	E-book based ER program helped me increase my intrinsic motivation.	1	5	4.66	0.8	0.637
	E-book based ER program helped me spark my extrinsic motivation.	2	5	4.28	1.18	1.389
	E-book based ER program helped me restore my self-confidence in terms of reading.	4	5	4.74	0.44	0.196
	E-book based ER program helped me restore my self-confidence in terms of listening.	4	5	4.76	0.43	0.186
Overcoming Language Learning Anxiety	E-book-based ER program helped me restore my self-confidence in terms of speaking.	3	5	4.56	0.73	0.537
Overcoming Language Learning Anxiety	E-book-based ER program helped me restore my self-confidence in terms of writing .	2	5	4.12	0.77	0.598
Overall Attitudes Towards learning English	E-book based ER program changed my overall attitudes towards learning English positively.	4	5	4.96	0.2	0.039

Table 5.
The Analysis of 5 main categories.

Construct	Item	Min	Max	Mean	SD	Variance
Macro-skills	Developing 4 macro-skills	3.5	5	4.51	0.452	0.204
Micro-skills	Improving 3 micro-skills	3.7	5	4.51	0.427	0.182
Motivation	Increasing intrinsic and extrinsic motivation.	1	5	4.48	0.639	0.408
Overcoming Language Learning Anxiety	Coping with language learning anxiety in 4 domains.	3.8	5	4.54	0.377	0.142
Overall Attitudes Towards learning English	Being hopeful in the language learning process.	4	5	4.96	0.198	0.039

As shown in Table 4 and 5, e-book-based ER was appreciated by the participants with varying degrees in terms of macro-skills. For example, their satisfaction level descended from listening to writing. Although the satisfaction level was significant in reading. listening and speaking, the same satisfaction level was not observed in writing. It can be argued that reading in large volumes, listening to audio tracks and summarizing the key points improved their skills in 3 domains, however, writing necessitated setting aside much time which could reduce the number of books read in this study. It can be stated that some modifications could be needed to enhance students' writing skills as well.

The questionnaire uncovered noteworthy points in terms of sharpening micro-skills which encompassed grammar, vocabulary and pronunciation. The findings revealed that participants noticed a considerable improvement in vocabulary enhancement and pronunciation thanks to following the program by reading and listening to the audio-tracks simultaneously. In other words, designing the reading and listening activities harmoniously helped the participants to have some gains in vocabulary and pronunciation. However, grammatical competence was not prioritized as it was the pre-requisite of intensive reading activities. It can be stated that ER could improve students' macro and micro skills with a well-established program. Findings of the questionnaire on participants' motivation deserve special attention as well. The findings unearthed that their intrinsic motivation was stimulated more than extrinsic motivation. In other words, they participated in the activities in a voluntary way rather than being motivated for a reward or punishment. It can be stated that real-life connections, having fun, learning cooperatively could increase their enthusiasm towards joining the reading activities more actively.

Suffering from language learning anxiety is another phenomenon which grips many students. The findings in the questionnaire offered some data to monitor closely. The majority of the students reiterated that they stepped forward on the way of fixing the obstacles in 4 macro-skills except writing. This finding hints that more connections needed to be built between ER and writing.

The last construct in the questionnaire was designed to measure whether participants were driven to change their overall attitudes towards learning English. Nearly all participants unanimously chose strongly agree which can be interpreted as a positive gain. It can be stated that ER can support language learning process and change students' overall attitudes tremendously.

Once the items in the questionnaire were analyzed categorically, it was observed that e-book based ER produced more promising results in terms of handling anxiety and changing overall attitudes towards learning English. Additionally, positive gains in other categories were also appreciated with a 4.48 and higher mean scores. It can be stated that the findings of the items were consistent with the common categories.

Prior to conducting further analysis, a normality test was run in order to figure out whether the gathered data were distributed in a normal range or not. This test was put into practice through Shapiro Wilk formula of SPSS 23.0 for windows. The criterion was whether p-value was higher or less than 0.05. The result of normality test of the writing test could be observed in the table 2.

Table 6.
Normality test of questionnaire items

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Macro-skills	.211	50	.000	.859	50	.000
Micro-skills	.213	50	.000	.862	50	.000
Motivation	.292	50	.000	.752	50	.000
Anxiety	.167	50	.001	.899	50	.000
Overall Attitudes	.540	50	.000	.198	50	.000

a. Lilliefors Significance Correction

In this study, in inference statistics, if the data was normal, parametric statistics was used which required t-test and if the data was not normal, non-parametric statistics was applied which required Mann Whitney U test. Once p-values of Shapiro Wilk test were observed, they were measured as .000 which was less than 0.05. The p-values revealed that the distribution deviated from the normal distribution in a significant way, so it required to apply Mann Whitney U-test to test whether there was a statistically significant difference between the findings of the questionnaire and independent variables such as age and gender.

Table 7.
The Analysis of Mann Whitney U Tests in terms of age

Mann Whitney U Test					
Age	Macro-skills	Micro-skills	Motivation	Anxiety	Overall Attitudes
Mann-Whitney U	65.000	110.000	103.000	86.000	67.500
Wilcoxon W	1100.000	1145.000	118.000	101.000	82.500
Z	-1.572	-.084	-.332	-.876	-4.287
Asymp. Sig. (2-tailed)	.116	.933	.740	.381	.000
Exact Sig. [2*(1-tailed Sig.)]	.132[b]	.950[b]	.778[b]	.412[b]	.150[b]

Upon analyzing the participants' responses in general, Mann Whitney U-test was run to pinpoint whether there was a statistically significant difference between participants in terms of age and gender. Once p-values were analyzed in terms of age, it was noticed that there was no statistical difference between participants except overall attitudes category. P- value,.000, was less than 0.05, so a significant difference was prevalent in overall attitude category, however other p-values which were .116, .933, .740, .381 were higher than 0.05, so no significant difference was observed between participants in terms of age. It can be argued that participants aged between 18 and 22 had a higher satisfaction rate than 22 and 26 ones in terms of changing overall attitudes toward language learning process.

Table 8.
The Analysis of Mann Whitney U Tests in terms of gender

Mann Whitney U Test					
Gender	Macro-skills	Micro-skills	Motivation	Anxiety	Overall Attitudes
Mann-Whitney U	293.500	306.500	301.000	305.500	286.000
Wilcoxon W	699.500	712.500	554.000	558.500	692.000
Z	-.290	-.030	-.148	-.050	-1.267
Asymp. Sig. (2-tailed)	.772	.976	.882	.960	.205
Exact Sig. [2*(1-tailed Sig.)]	293.500	306.500	301.000	305.500	286.000

Moreover, participants were analyzed in terms of gender which revealed that there was no significant difference between male and female ones. P-values were recorded .772, .976, .882, .960, .205 consecutively, so no p-value was less than 0.05. Considering these figures, it can be argued that no statistical difference was observed in terms of gender.

During the study, I got so much pleasure because I joined all the activities willingly. The instructor designed the lessons in an engaging way. We read, listened to, spoke and wrote. Additionally, we expressed our ideas about each book independently. After that, the quizzes were so useful to increase our comprehension and read more carefully in the following days. Personally, the most useful part of this study was about improving pronunciation. I listened to the audio tracks several times which helped me master my pronunciation skills. I wish I had read book in this version previously, so I could get so much pleasure. (P 4)

I used to hate reading books during my high school years because it was very tiring to read and understand. However, we studied the books chapter by chapter in this study which increased my motivation. Additionally, we learned from each other by telling the summaries. Once we exchanged our ideas about the books, I saw that there were many interesting points in the book. Thus, I read the following books more eagerly to notice more secrets and learn more novel information. Splitting the activities into manageable sessions in an interactive environment was awesome for me. I am glad to have joined such a unique study. (P 9)

I am interested in travelling to different places, so Earth, Free Time Around the World and Super structures were real page-turners for me. I could not stop reading them again and again because there were many interesting details in them. Once I read passionately, I joined all activities willingly. As a result, my satisfaction rate was quite high. Another point to be emphasized was that we were granted the freedom to use our mobile devices, so reading closely, using search engine freely and expanding our knowledge about the books on the web increased our learning and motivation dramatically. (P13)

My favorite subject was geography in high school, so the book named Earth was the best one in this study. I learned a lot about the planets and their functions. Additionally, I got much information about mountains, deserts, rivers and oceans. Once I continued reading and listening to the sentences, I figured out many new words and improved my pronunciation. In addition, speaking and writing activities were designed by considering our levels, so I derived so much pleasure from beginning till the end. (P21)

My weakness in English is figuring out the topics in listening. I practiced a lot to sharpen my listening in this study. In addition, having e-book and using mobile technologies increased my motivation to read and listen to them as much as I want. When I understood all topics easily in the books, I could express my ideas confidently. As a result, the period when I participated in activities was a memorable one because I increased my knowledge in terms of different skills. (P34)

I learn better when I am exposed to learning materials visually. The learning materials in this study was enriched with visual materials, so I was so enthusiastic to join activities voluntarily. When I noticed that I could learn challenging words without having difficulty, I looked forward to having another memorable class. In addition, our instructor corrected some our pronunciation mistakes s/he noticed with the help of an e-dictionary. Listening to the books and reading aloud later helped us to fix many mistakes related to pronunciation. Upon listening to the books, we discussed common themes in each book briefly which was also another mind-blowing period. I was so satisfied with the top-notch education provided in this study. (P37)

Our instructor urged us to form some groups and complete some activities related to books. During that time, we strengthened our relationship with our friends. When we had a tight relationship with them, we could ask further questions to learn better. In addition, the students, whose English levels were better than others, tutored the other students who could not learn well. Once students learned from each other, their success rate rose accordingly. Transferring the sole responsibility from the instructor to some clever students yielded better results in this study. (P 39)

My weakness in English is writing which demotivates me. In this study, we summarized key points in a spoken and written format. Although I improved my speaking dramatically, I could not show the same success in writing. I wished to have had more writing activities in this study, but my instructor told me that reading and listening were main areas to be developed in this study.S/he also expressed that speaking and writing activities were designed to support reading and listening skills. I think I need to study much more in Academic Writing course to be better. (P41)

The most favorable part of this study was boosting my intrinsic motivation. I got so much pleasure as I progressed. I learned a wide variety of words, fixed my chronic pronunciation mistakes and restored my self-confidence. Correspondingly, I could express my ideas easily in speaking sessions. I realized that feeling motivated for the sake of learning English and getting pleasure individually was what I needed most in language learning and teaching process. (P45)

Upon completion of this study, I changed my overall attitudes towards learning English. I had some hesitations on language learning before because of having some bitter experiences, however, I took up new perspectives after this study. I realized that language learning can be as engaging as possible while reading books because we not only study for main skills but also have a chance to improve our micro-skills. There is an idiom in English which is,'' Kill two birds with one stone.''. It means that we can realize multiple goals by doing only one action which summarizes all my gains via this study. Now I know how to expand my learning in English, so I changed my overall attitudes towards learning English. I am hopeful that I will master English soon. (P 47)

Discussion

Recent innovations in digital technology have prompted the researcher to integrate e-book based ER into the curriculum and investigate its effects thoroughly in this study. Considering the findings of the study via a questionnaire, an interview and a survey, several points were highlighted which could be explored below:

Based on the findings in the questionnaire, the participants stated that they improved their macro-skills considerably. They reiterated that they developed good habits towards reading, listening and speaking, however, they demanded more instructions in terms of writing. These findings were consistent with Huang's (2013) study which revealed that e-book paves the way for e- discussion, so students can expand their learning in all skills subconsciously. Subsequently, the participants attested that they increased their knowledge in terms of pronunciation and vocabulary. In contrast, they also postulated that grammatical competence was not triggered as much as expected. It was in line with Isaqjon's (2022) finding which unearthed that intensive reading was implemented to develop students' grammatical competence, however, extensive reading did not prioritize teaching grammar units. Likewise, Kirchhoff and Mision (2022) assert that audio assisted ER is a rational idea to teach some words and develop pronunciation. Another notable finding of the questionnaire was on motivation. The participants stated that they improved their intrinsic motivation more than extrinsic one because they read for the sake of getting pleasure and meaning throughout the process. Celik (2018) elucidates that reading e-books drive the learners to read regularly, so they read more willingly in a more motivated way. Apart from macro-skills, micro-skills, motivation, participants' opinions were explored in terms of overcoming language learning anxiety which affects many learners adversely. The participants articulate that the study helped them to overcome their language anxiety in four domains. This finding was in line with Turel and Sanal' s (2018) study which reported that e-book based ER can train the readers on how to overcome language learning barriers and read more confidently. The last thing to think about in the questionnaire was that almost all of the people who filled it out said that their overall feelings about learning English had changed. Pattuelli and Rabina (2010) and Yildiz (2020) say that e-book activities encourage learners to change their overall attitudes about learning English because learners can see the positive effects of e-books right away and this leads to academic success.

Findings of the interview emphasized noteworthy dimensions of e-book reading as well. To name a few, many students reported that they were more engaged to enhance their learning. In addition, the study helped them to overcome their weaknesses such as expressing their ideas in a confident way, comprehending conversations in the audio tracks and handling chronic pronunciation mistakes. Subsequently, they asserted that they removed some barriers in their minds, so their overall attitudes towards learning the language by technologically enriched proven techniques yielded fruitful results. After that, they stated that reading e-books expanded their learning in other skills thanks to having an integrated approach to teach language through e-books.

The findings of the survey unearthed essential points to be considered as well. The participants appreciated e-book-based ER for having fun, expanding knowledge, deriving pleasure, developing a regular reading habit, being more creative and improving critical thinking skills. Waller (2013) elucidates that e-books are feasible because learners can have fun, read in large numbers and derive pleasure, read more frequently, stimulate their creativity and evaluate the events from a critical perspective. The participants also stated that using mobile technologies in class enhanced their performance. Kara (2020) asserts that using mobile technologies in classroom activities can take the education into another level, so multiple benefits can be gained simultaneously if planned and monitored professionally. On the other hand, the participants alleged that some drawbacks such as distractibility, being unaffordable, leading to poor vision, suffering from technophobia, unable save notes conveniently and charging issues may reduce the positive effects of e-book-based ER. Alsadoon (2020) convenes that some barriers related to concentration, affordability and health can hinder students' learning rates in e-book based reading activities. The last item in the survey was whether they had positive views to join such a study again in the future which culminated in a hopeful way. All students except 9 stated that they would join an e-book-based ER voluntarily in the future. Noor et al., (2012) proposed that e-book-based reading satisfaction rate made it a reasonable technique to implement in future studies.

Conclusion and Recommendations

This study sought the effects of e-book-based ER program on students' performance, motivation and devising ways to overcome language learning anxiety. Analyzed and cross-checked data revealed that students improved their primary skills considerably except writing. In addition, it was indicated that students sharpened their pronunciation and expanded their vocabulary power. However, the same success could not be observed in improving grammatical competence. In terms of motivation, intrinsic motivation was triggered more than extrinsic motivation. Subsequently, students reiterated that e-book-based ER encouraged them to overcome language learning anxiety in 4 domains. The final point to be considered was that they changed their overall attitudes drastically at the end of the study.

Some recommendations can be made for future studies. This study welcomed students' opinions on e-book-based ER which could be enriched with the exam results. Additionally, this study employed an ER based instruction which could be compared with an intensive reading group. Subsequently, the number of male students were less that female ones which could be equalized to get a more satisfying data from each gender. Moreover, the data was collected from a university which can be expanded with other educational institutions in the region.

Bibliographic References

Abdulrahman, S. A., & Kara, S. (2023). The Effects of Movie-Enriched Extensive Reading on TOEFL IBT Vocabulary Expansion and TOEFL IBT Speaking Section Score. Journal of Qualitative Research in Education, 33.

Al-Jarf, R. (2022). Mobile Fiction Apps for Enhancing EFL Students' Reading and Appreciation Skills. International Journal of Linguistics Studies, 2(2), 15-23.

Alsadoon, H. (2020). Obstacles to using E-books in higher education. International Journal of Education and Literacy Studies, 8(2), 44-53.

Celik, B. (2018). Effects of extensive reading on learners: How it develops certain points in vocabulary and sentence structure. International Journal of English Linguistics, 8(2), 73-84.

Celik, B. (2019). The role of extensive reading in fostering the development of grammar and vocabulary knowledge. International Journal of Social Sciences & Educational Studies, 6(1), 215-223.

Daskan, A., & Yildiz, Y. (2020). A simultaneous dual focus on form and meaning to enhance language learning. International Journal of Social Sciences & Educational Studies, 7(4), 59-63.

Day, R. R. (2018). Extensive reading. In J. I. Liontas, T. International Association & M. Delli Carpini, (Eds.), The TESOL encyclopedia of English language teaching (pp.1-7). https://doi.org/10.1002/ 9781118784235.eelt0472

Dewey, J. (1938). Experience and education. New York: Macmillan

Dhakal, K. (2022). NVivo. Journal of the Medical Library Association, 110(2), 270-272.

Dickinson, P. (2017). Effects of extensive reading on EFL learner reading attitudes. In Selected papers of the 21st conference of Pan-Pacific association of applied linguistics (pp. 28-35). http://paaljapan.org/conference2016/pdfs/04.pdf

Fatimah, A. S., Marlina, N., & Dewi, N. S. N. (2022). Scrutinizing Activities in Online Extensive Reading Classroom: Highlighting Students' Voice. AL-ISHLAH: Journal of Education, 14(3), 2993-3006.

Fraser, M., & Abbott, M. (2016). Using electronic readers: Action research in an intermediate adult ESL class. The Canadian Journal of Action Research, 17(2), 3-18.

Horst, M. (2005). Learning L2 vocabulary through extensive reading: A measurement study. Canadian Modern Language Review, 61(1), 355-382. doi:10.3138/cmlr. 61.3.355

Huang, H. C. (2013). E-reading and e-discussion: EFL learners' perceptions of an e-book reading program. Computer Assisted Language Learning, 26(3), 258-281.

Hussein Hakeem Barzani, S. (2020). Kurdish efl students' attitudes and preferences toward extensive reading. PalArch's Journal of Archaeology of Egypt/Egyptology, 17(7), 8192-8207.

Isaqjon, T. (2022). Strategies and techniques for improving EFL learners' reading skills. Involta Scientific Journal, 1(11), 94-99.

Iwata, A. (2022). The Effectiveness of Extensive Reading (ER) on the Development of EFL Learners' Sight Vocabulary Size and Reading Fluency. The Reading Matrix: An International Online Journal, 22(2), 74-91.

Jang, H., Kang, M., & Kim, Y. (2015). The effect of English extensive reading activities on students reading proficiency and reading motivation. Advanced Science and Technology Letters, 92(1), 92-95.

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.

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

Kargar, A. A. (2013). Investigating the effect of scaffolded extensive reading as an anxiety reducing strategy in an Iranian EFL context. International Journal of Foreign Language Teaching and Research, 1(1), 35-44.

Keita, Y. (2022). An Exploratory Study of an Extensive Reading Program with Xreading in a Japanese University. ICU Language Research Bulletin, 37(1), 24-34. https://doi.org/10.34577/00005194

Kirchhoff, C., & Mision, M. (2022). Audio-assisted Extensive Reading: Learners' Experience and Attitudes. The Reading Matrix: An International Online Journal, 22(2), 1-12.

Klassen, J., & Allen, D. M. (2017). Assessing the risk of saltwater intrusion in coastal aquifers. Journal of Hydrology, 551, 730-745.

Krashen, S. (1992). The input hypothesis: An update. Linguistics and language pedagogy: The state of the art, 409-431.

Krashen, S. D., & Terrell, T. (1983). Natural approach (pp. 20-20). New York: Pergamon.

Kumar, K. V., & Palukuri, V. (2022). Does Instructions Enhance Reading Comprehension Abilities in the ESL Classroom? Journal of Positive School Psychology, 6(2), 5755-5758.

Kuru Gönen, S. İ., & Zeybek, G. (2022). Using QR code enhanced authentic texts in EFL extensive reading: a qualitative study on student perceptions. Education and Information Technologies, 27(2), 2039-2057.

Mart, C. T. (2012). Developing speaking skills through reading. International Journal of English Linguistics, 2(6), 91-96.

Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2004). SPSS for introductory statistics: Use and interpretation. Psychology Press.

Nation, I. S. P. (2009). Teaching ESL/EFL reading and writing. New York, NY: Routledge.

Nkomo, S. A. (2020). Implementing a bilingual extensive reading programme in the Foundation Phase: Theory and practice. Per Lingua: A Journal of Language Learning = Per Lingua: Volume for Language Learning, 36(2), 126-137.

Noor, A. M., Ali, R. M. M., Bakar, Z. A., & Amin, A. R. M. (2012). Teachers-Perceptions on the Use of E-Books as Textbooks in the Classroom. International Journal of Educational and Pedagogical Sciences, 6(10), 2638-2644.

Nuttall, C. (2005). Teaching reading skills in a foreign language. Oxford, England: Macmillan Education.

Pattuelli, M. C., & Rabina, D. (2010, May). Forms, effects, function: LIS students' attitudes towards portable e-book readers. In Aslib Proceedings (Vol. 62, No. 3, pp. 228-244). Emerald Group Publishing Limited.

Renandya, W. A., & Jacobs, G. M. (2016). Extensive reading and listening in the L2 classroom (pp. 97-110). Springer International Publishing.

Robb, T., & Kano, M. (2013). Effective ex-tensive reading outside the classroom: A large-scale experiment. Reading in a Foreign Language, 25(2), 234-247.

Takase, A. (2009). The effects of different types of extensive reading materials on reading amount, attitude and motivation. Extensive reading in English language teaching, 7(1), 451-465.

Tanaka, M. (2017). Factors affecting motivation for short in-class extensive reading. Journal of Asia TEFL, 14(1), 98-113.

Turel, Y. K., & Sanal, S. O. (2018). The effects of an ARCS based e-book on student's achievement, motivation and anxiety. Computers & Education, 127, 130-140.

Ulker, U., Ulker, V., Celik, B., Yildiz, Y., & Bilgin, R. (2021). E-Book Reading Genre Preferences of Teachers Teaching in Foreign Languages in Private Schools (Case Study/Iraq). International Journal of Social Sciences & Educational Studies, 8(4), 158-170.

Vygotsky, L. (2011). Interaction between learning and development. Reading on the Development of Children, 7(1), 34-40. Retrieved from: https://ia.eferrit.com/ea/a6589cd862231ed3.pdf

Waller, D. (2013). Current Advantages and Disadvantages of Using E-Textbooks in Texas Higher Education. FOCUS on Colleges, Universities & Schools, 7(1), 1-6.

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., & Yucedal, H. M. (2020). Learner autonomy: A central theme in language learning. International Journal of Social Sciences & Educational Studies, 7(3), 208-212.

Zhou, J., & Day, R. R. (2021). Online extensive reading in EAP courses. Reading in a Foreign Language, 33(1), 103-125. http://hdl.handle.net/10125/67395

DOI: https://doi.org/10.34069/AI/2023.63.03.13
How to Cite:
Tamozhska, I., Tymofiienko, N., Demianiuk, A., Klyap, M., & Tsurkan, M. (2023). Features of professional and pedagogical activity of a higher education teacher. *Amazonia Investiga*, *12*(63), 148-155. https://doi.org/10.34069/AI/2023.63.03.13

Features of professional and pedagogical activity of a higher education teacher

Специфіка професійно-педагогічної діяльності викладача вищої школи

Received: January 21, 2023 Accepted: March 30, 2023

Written by:
Iryna Tamozhska[1]
https://orcid.org/0000-0003-0865-2380
Nataliia Tymofiienko[2]
https://orcid.org/0009-0009-8770-2235
Antonina Demianiuk[3]
https://orcid.org/0000-0002-8994-7633
Marianna Klyap[4]
https://orcid.org/0000-0003-4677-8718
Maria Tsurkan[5]
https://orcid.org/0000-0003-2866-1743

Abstract

Determining the peculiarities of the pedagogical activity of higher education teachers is important not only from a scientific viewpoint but also for solving strategic and tactical educational problems. Among these problems is the improvement of the quality of higher education, which is one of the priorities. The article aims to reveal the peculiarities of the work of a higher education teacher, his or her professional competencies, and requirements for this profession to improve the efficiency of the educational process and train quality specialists with higher education. The methods used to write the article were analysis, synthesis, generalization, explanation, and qualification of data. One of the main specifics of the professional and pedagogical activities of a higher education teacher is the need to combine research and teaching. A teacher must have a high level of scientific knowledge, be aware of the latest achievements and trends in their field, conduct research, and publish scientific papers. Moreover, he or she must be able to translate complex scientific concepts into an accessible language for students and other listeners to transfer the necessary knowledge and skills.

Анотація

Визначення особливостей педагогічної діяльності викладачів вищої школи має важливе значення не лише в науковому плані, а й для вирішення стратегічних і тактичних освітніх проблем, серед яких підвищення якості вищої освіти займає одне з пріоритетних місць. Метою теми є розкриття особливостей роботи викладача вищої школи, його професійних компетенцій та вимог, які ставляться до цієї професії, з метою підвищення ефективності навчального процесу та підготовки якісних фахівців з вищою освітою. Методами написання статті стали аналіз, синтез, узагальнення пояснення та кваліфікація даних. Однією з основних специфік професійно-педагогічної діяльності викладача вищої школи є необхідність поєднання науково-дослідницької та навчальної роботи. Викладач повинен мати високий рівень наукових знань у своїй галузі, бути в курсі останніх досягнень та трендів у своїй галузі, проводити наукові дослідження та публікувати наукові праці. При цьому він

[1] Doctor of Pedagogical Sciences, Kharkiv Auto-Transport Applied College, Kharkiv, Ukraine.
[2] Candidate of Psychological Sciences, Associate Professor, Department of Deaf Pedagogy and Deaf Psychology named after M. D. Yarmachenko, Faculty of Special and Inclusive Education, Ukrainian State University named after Mykhailo Drahomanov, Kyiv, Ukraine.
[3] PhD in Economics, Associate Professor of Department of Educology and Pedagogy, Faculty of Humanities and Social Sciences, West Ukrainian National University, Ternopil, Ukraine.
[4] Candidate of Pedagogical Sciences, Associate Professor, Department of Physical Rehabilitation, Faculty of Health and Physical Education, Uzhhorod National University, Uzhhorod, Ukraine.
[5] Doctor of Pedagogical Sciences, Professor, Department of Social Sciences and Ukrainian Studies, Bukovinian State Medical University, Chernivtsi, Ukraine.

Keywords: higher education teacher, professional competencies, requirements for professional activity, specifics of working with students, teaching and assessment methods, research activities, formation of professional identity, challenges, and prospects for the development of the profession.

повинен вміти перекладати складні наукові концепції в доступну мову для студентів та інших слухачів, щоб передати їм необхідні знання та вміння.

Ключові слова: викладач вищої школи,професійні компетенці,вимоги до професійної діяльності, специфіка роботи зі студентами, методи навчання та оцінювання, науково-дослідницька діяльність, формування професійної ідентичності, виклики та перспективи розвитку професії.

Introduction

Higher education is one of the key sectors that determine the development of modern society. In turn, teachers of HEIs play an important role in shaping the next generation of professionals. The professional and pedagogical activity of a higher education teacher has its specifics, which differ from the work of teachers at other levels of education.

The article aims to study the specifics of the professional and pedagogical activity of a higher education teacher and to identify the main requirements for the teacher's professional activity. Additionally, the article is devoted to the study of professional competencies, specifics of working with students, teaching and assessment methods, research activities, formation of the teacher's professional identity, challenges, and prospects for the development of the profession of higher education teacher.

In their professional activities, teachers of HEIs should set themselves the task of providing quality education, and the formation and development of research competencies and intellectual skills of students. Moreover, they should be ready to solve complex problems caused by modern teaching technologies and changes in the sociocultural environment (Berk, 2005).

In this regard, the article will focus on issues related to the requirements for the professional activity of a higher education teacher, the specifics of working with students, and teaching and assessment methods. The article will analyze the key professional competencies essential for the successful implementation of professional tasks, as well as highlight important aspects of the research activities of a higher education teacher.

Furthermore, the issues of educators' professional identity formation, challenges, and prospects for the development of the profession of higher education teachers in the context of current trends in education and science will be considered.

The article aims to reveal the peculiarities of the work of a higher education teacher, his/her professional competencies, and requirements for this profession to improve the efficiency of the educational process and training of high-quality specialists with higher education.

Literature Review

There have been many studies in the scientific literature on the professional and pedagogical activities of higher education teachers. Among the most significant are the following studies by A. M. Aivazian, A. I. Baibaryna, T. V. Bila, V. I. Borodina, O. I. Holovchenko, V. M. Kunantseva, S. I. Lytvynenko, I. V. Naida, N. V. Novikova, N. I. Parasiuk, V. S. Peretiatko, and others.

In their research, they focus on the professional competence of teachers, their role in the process of training qualified specialists, the specifics of the educational process in higher education institutions, and other aspects of teachers' professional activities.

Moreover, the need for teachers of HEIs to develop students' professional knowledge and skills, as well as general educational and research competencies, is now recognized. This is a key factor in shaping the competitiveness of graduates and determines their success in their future careers.

Thus, the literature provides a clear picture of the requirements for the professional activity of a higher education teacher and the educational process in general. The article will apply the results of these studies to formulate conclusions and suggestions for the development of the profession of higher education teachers.

Methodology

To achieve the aim of this article, various research methods were used. These methods include:

Analysis: There was analyzed relevant literature and articles to gain a comprehensive understanding of the peculiarities of the pedagogical activity of higher education teachers. The analysis helped to identify common themes and patterns and to develop a framework for the research.

Synthesis: There was synthesized the findings from the literature analysis and combined them with the results of the empirical research to develop a comprehensive understanding of the topic.

Generalization: There was conducted empirical research with a sample of higher education teachers to gather data on their professional competencies and the requirements for the profession. The findings were generalized to develop a broader understanding of the topic.

Explanation: There was explained the complex concepts and findings of the research in an accessible language for readers to understand.

The research methods used in this study, including analysis, synthesis, generalization, explanation, and qualification of data, helped to achieve the aim of the study and provide a comprehensive understanding of the topic.

Results

One of the key aspects of the professional activity of a higher education teacher is the development of professional competence. Studies show that a teacher should be an expert in his or her field of study, and have high academic qualifications and work experience per the profile of the HEI. They should not only impart knowledge to students, but also develop their critical thinking, maintain a dialog, and encourage them to actively participate in the learning process (Dewey, 1938).

However, it is worth noting that the formation of professional competence is only one aspect of the work of a higher education teacher. Another important aspect is the formation of students' general education and research competencies. In the context of current trends in higher education, students should be allowed to acquire not only professional knowledge and skills but also to develop their general education and research interests.

In the course of teaching and learning activities, the teacher should be able to create appropriate conditions for the formation of these competencies. To do this, he or she should master the appropriate pedagogical technologies and methods of working with students, such as active teaching methods, problem-based learning, interactive forms of work, and others (Felder & Silverman, 1988).

Moreover, the teacher should promote students' self-development and support their scientific and research activities. To do this, he or she can create additional opportunities for students to participate in research, conferences, seminars, and other scientific events (Doghonadze, 2016). In addition, the teacher should provide methodological assistance and support in the process of writing students' research papers and dissertations.

Another important aspect of the professional and pedagogical activity of a higher education teacher is the development of interpersonal relationships with students. A teacher needs to ensure that they build trusting relationships with their students, promote their moral and ethical development, and support them in difficult life situations (Shakuna et al., 2016). They should understand the needs and interests of students, show respect for them as individuals, and treat them with understanding and patience.

It should also be noted that a teacher should be able to work in a team with colleagues and cooperate with other departments and faculties of the university. He or she should not only fulfill his or her teaching duties but also actively participate in the development of the HEI, its research, and cultural and educational initiatives (Gibbs & Coffey, 2004).

The professional and pedagogical activity of a higher education teacher requires high scientific qualifications, pedagogical skills, professional ethics, and readiness for self-improvement. The teacher must communicate effectively with students, staff, and other university stakeholders to ensure a high level of quality education and development at the university.

One of the important aspects of a teacher's interaction with students is the ability to create a favorable learning atmosphere in the classroom. This means that the teacher should be open to dialogue, maintain interaction with students and allow them to express their opinions and ask questions.

Moreover, the teacher should understand that each student has his or her requirements and expectations regarding the learning process. Therefore, it is important to consider an individual approach to each student, given their needs and capabilities (Hattie, 2009).

It is also important to provide clear and accessible information about the course materials and requirements for students. The teacher should be prepared to explain complex topics and help students with issues related to the learning process.

Apart from communicating with students, a teacher must also be able to collaborate with colleagues and other staff members of the HEI. This means that a teacher should be ready to work on projects together, share experience and knowledge with other teachers, and participate in research and conferences.

Therefore, a higher education teacher should be aware of the importance of effective communication with students, colleagues, and other stakeholders of the HEI. This will help ensure high quality of education and development at the university, as well as make the learning process more productive.

Moreover, the teacher should be open to using a variety of teaching and assessment methods. Modern teaching methods, such as active learning, collaborative learning, project-based learning, and others, help students learn more effectively and develop the skills they need for their future careers.

It is also essential to pay attention to student assessment. The teacher should use various assessment methods to determine students' knowledge and understanding. These methods can include tests, essays, projects, speeches, and written as well as oral responses (Casal-Otero et al., 2023). It is also important to ensure the objectivity of the assessment and to explain to students the requirements for their work.

Finally, a higher education teacher must constantly prepare for self-education and professional development. Science and technology are constantly evolving, so a teacher should be aware of the latest developments in their field and use them in their work. Furthermore, it is crucial to engage in self-education and improve one's skills in pedagogy and communication (Shulman, 1987).

The professional and pedagogical activities of a higher education teacher are an important element of high-quality education and student development. A teacher should have professional knowledge and communicate effectively with students and other stakeholders. Moreover, it is important that the teacher uses a variety of teaching and assessment methods and is ready for self-education and professional development. All these factors help to create a favorable environment for the learning and development of university students.

Professional communication between teachers and students is a key aspect of their work, as it helps to create trusting relationships between them and maintain open dialogue and exchange of information. In this process, the teacher should demonstrate a high culture of communication, show respect for their students and their opinions, and provide timely assistance and support.

To achieve effective professional communication, a teacher should use different communication strategies and know how to apply them depending on the situation. It is also equally important to have the skills to use different teaching methods that increase interactivity and engage students in active participation in the learning process.

Besides, an important aspect of professional communication is the ability of a teacher to conduct discussions and distinguish between different points of view. A teacher should be open to the opinions of his or her students and able to have a reasoned discussion with them. This contributes to the development of critical thinking and the ability to analyze different views on a problem.

Thus, professional communication between teachers and students is an important component of their work, which determines the effectiveness of the learning process and student development. A teacher needs developed communication skills, knowledge of different communication strategies, and knowledge of how to use different teaching methods.

Interaction with students is an integral part of the professional and pedagogical activity of a higher education teacher. It requires the development of special skills and abilities for successful communication with students.

Pedagogical communication is a system of interaction between a teacher and students based on mutual understanding and interaction between them. This system includes certain elements, such as the ability to listen, understand and adapt to the individual characteristics of each student, as well as to convey material from different perspectives using a variety of pedagogical technologies.

The teacher has to master the art of communication, which includes such skills as communicating freely and openly with students, maintaining a positive atmosphere in the classroom, establishing trusting relationships with students, listening to students' questions and concerns, and resolving conflicts (Mitchell, 2013).

The success of a teacher in pedagogical communication depends on the extent to which he or she possesses such qualities as empathy, patience, tolerance, responsibility, and others. A lecturer should be prepared for any situation and know how to communicate effectively with students to maximize productivity and achieve the goal.

Pedagogical communication also includes the use of various methods and forms of work with students, such as individual consultations, group discussions, projects, workshops, etc. Each of these methods of cooperation with students plays an important role in the development of their knowledge and skills, promoting active involvement of students in the learning process, the formation of their critical thinking, and the development of their creative abilities.

Pedagogical communication between teachers and students can be realized through the use of various interactive technologies and tools that ensure effective dialogue between teachers and students. Such tools include virtual platforms, online courses, electronic notes, and various software tools. This will help to develop students' competencies and ensure their active participation in the learning process.

The professional and pedagogical activity of a higher education teacher involves a high level of interaction with students, and the use of various methods and forms of work. A teacher needs to master modern technologies and tools that ensure an effective dialog with students and maximize the productivity of the learning process.

Considering the specifics of the professional and pedagogical activities of a higher education teacher, one should note another aspect – research. A higher education professor should not only impart knowledge, but also conduct research, publish scientific articles, and participate in conferences and other scientific events. To do this, a teacher must have deep knowledge in his or her scientific field and be an active researcher, capable of finding new approaches to solving problems facing the scientific world.

We emphasize that the professional-pedagogical activity of a higher education teacher has its characteristics compared to other levels of education. A higher education teacher must have deep scientific knowledge, a high level of professional competence, and be ready to continuously improve their knowledge and skills. Another important component of the professional activity of a higher education teacher is his or her ability to adapt to different groups of students, solve complex pedagogical problems and use an innovative and creative approach to teaching.

Thus, the professional and pedagogical activity of a higher education teacher is a complex but very important process. It requires high responsibility, professional competence, creative thinking, and personal development (Shelestova, 2019).

Moreover, higher education teachers have to master innovative teaching methods and be able to apply modern technologies in their work. Nowadays, technological progress changes and improves approaches to teaching. Therefore, a lecturer should be prepared to use the latest tools and instruments to improve the quality of education.

In the process of professional and pedagogical activity, it is important not only to be competent in your field of knowledge but also to be able to adapt to changes in the social and cultural environment. It is also important to have the skills of teamwork and cooperation with colleagues to achieve a common goal - to provide quality education for students.

Thus, the professional and pedagogical activity of a higher education teacher requires competence, innovation, and the ability to adapt to changes in the social and cultural environment. Only such a teacher can ensure the high quality of education and success of their students in their future professional activities.

Discussion

In this article, we have considered the specifics of the professional and pedagogical activity of a higher education teacher, focusing on the aspects of communication between the teacher and students and pedagogical communication as a system of interaction between the professor and students.

However, it is worth noting that this is not a complete list of factors that influence the success of the professional activity of a higher education teacher. Besides the knowledge and skills necessary to conduct a high-quality educational process, a teacher must also be a pedagogue capable of finding an individual approach to each student and adapting his or her methods to different groups of students (Ramaliyov, 2019).

Furthermore, an important success factor is an ability to create a favorable learning atmosphere in the classroom. This helps to engage students in the learning process. Also, a teacher should be capable of continuous professional development and updating their knowledge and methods depending on changes in the educational system.

Thus, the professional and pedagogical activity of a higher education teacher is a complex and multifaceted process that requires a high level of professional and pedagogical skills. Knowledge of the theory and methodology of teaching, as well as the ability to communicate with students, create a favorable atmosphere, and develop as a professional are the basis for the successful activity of a higher education teacher.

An overview of the various aspects of the professional and pedagogical activities of higher education teachers demonstrates the complexity of their tasks and the high level of responsibility (Yoon, 2002). To successfully fulfill their duties, teachers must not only have in-depth knowledge in their field but also be able to transfer this knowledge to students using various pedagogical methods and technologies. They must be highly skilled and able to plan and conduct lessons, engage in dialogue with students, assess their achievements, and support them in their educational process.

However, it is important to note that the teaching profession is dynamic, so teachers need to constantly maintain their professional level and develop. As the world is changing, with new technologies and pedagogical approaches emerging all the time, higher education teachers need to stay abreast of the latest developments in their fields and adapt their teaching strategies accordingly. This requires a commitment to lifelong learning and a willingness to participate in professional development activities such as conferences, workshops, and training seminars, as well as to collaborate with colleagues to share best practices.

Given the importance of the professional and pedagogical activities of higher education teachers, the question arises of how to optimize them. This can be achieved by developing the skills of interactive communication between teachers and students using various methods and approaches, such as active learning technologies, interactive teaching methods, project-based learning, and others.

Moreover, it is important to take into account the individual characteristics of students, their needs, and their interests. This will help increase motivation to learn, and make the learning process more interesting and informative. Teachers must be prepared for various challenges and changes that arise during the learning process and have a sufficient level of competence to address them.

It is also essential that teachers cooperate, as this helps to solve various problems that arise during the learning process and allows them to share experiences and information. Furthermore, it is also important for teachers to cooperate with scientific institutions and enterprises, which allows them to update their knowledge and use it in their activities (Brown, Roediger III & McDaniel, 2014).

In general, the professional and pedagogical activity of a higher education teacher has its peculiarities and requires high qualifications, professional competence, creativity, and pedagogical skills. Therefore, the effectiveness of this professional group is of great importance for the quality training of young professionals in various fields of science and technology. This, in turn, will contribute to the development of the national economy and strengthen Ukraine's position in the global labor market.

Conclusions

Thus, the professional and pedagogical activity of a higher education teacher is a complex and responsible job that requires high qualifications, professional competence, and pedagogical skills. A teacher should be well versed in his/her field of knowledge, be able to communicate effectively with students, and use various pedagogical technologies. An important component of a teacher's professional activity is his or her personal qualities, such as responsibility, creativity, empathy, and others. Thanks to these qualities, a teacher can become a real authority for students and develop their faith in their abilities and potential. Therefore, preserving and improving the quality of the professional activity of teachers in HEIs is an important component of the development of education in Ukraine and around the world.

In conclusion, we can say that the specificity of the professional and pedagogical activity of a higher education teacher is a complex and multifaceted process. This process includes both the transfer of knowledge and the formation of students' personal qualities, active participation in research, and the development of creativity.

Although higher education teachers face numerous challenges and difficulties, such as low levels of preparedness of students, lack of motivation to learn, etc., they play an important role in shaping the future of our society.

Therefore, the professional and pedagogical activity of a higher education teacher requires a high level of competence and professional skills. To be successful, a teacher must be highly trained and ready for development. They also need to be able to create a comfortable atmosphere for students' learning and development. This is the only way a teacher can achieve maximum results in his or her professional activity.

Bibliographic references

Berk, R. A. (2005). Survey of 12 strategies to measure teaching effectiveness. International Journal of Teaching and Learning in Higher Education, 17(1), 48-62. Retrieved from https://doi.org/10.4236/ojpm.2014.41007

Bok, D. (2006). Our underachieving colleges: A candid look at how much students learn and why they should be learning more. Princeton University Press. Retrieved from https://psycnet.apa.org/record/2008-01930-000

Brown, P. C., Roediger III, H. L., & McDaniel, M. A. (2014). Make it stick. Harvard University Press. Retrieved from https://psycnet.apa.org/record/2013-42812-000

Casal-Otero, L., Catala, A., Fernández-Morante, C., Taboada, M., Cebreiro, B., & Barro, S. (2023). AI literacy in K-12: a systematic literature review", International Journal of STEM Education, 10(1). https://doi.org/10.1186/s40594-023-00418-7

Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. American Association for Higher Education Bulletin, 3-7. Retrieved from https://eric.ed.gov/?id=ED282491

Dewey, J. (1938). Experience and education. Kappa Delta Pi. Retrieved from https://acortar.link/rIsPvp

Doghonadze, N. (2016). The state of school and university teacher self-development in Georgia. International Journal of Research in Education and Science (IJRES), 2(1), 104-113. https://files.eric.ed.gov/fulltext/EJ1105141.pdf

Felder, R. M., & Silverman, L. K. (1988). Learning and teaching styles in engineering education. Engineering Education, 78(7), 674-681. Retrieved from https://acortar.link/FtNmSf

Gibbs, G. & Coffey, M. (2004). The impact of training of university teachers on their teaching skills, their approach to teaching, and the approach to learning of their students. Active Learning in Higher Education, 5(1), 87-100. Retrieved from https://doi.org/10.1177/1469787404040463

Gibbs, G. (2010). Dimensions of quality. York: Higher Education Academy. Retrieved from https://www.sparqs.ac.uk/ch/E4%20Dimensions%20of%20Quality.pdf

Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge. Retrieved from https://acortar.link/agwZaY

Mitchell, K. (2013). What makes a great lecturer? Times Higher Education. Retrieved from https://www.timeshighereducation.com/features/what-makes-great-lecturer.

Ramaliyov, R. (2019). How to become an effective teacher: experience of an English language teacher. Bulletin of Kharkiv National University named after V. N. Karazin. Series: Pedagogical sciences, 55, 100-109.

Shakuna, K. S., Mohamad, N., & Ali, A. B. (2016). The effect of school administration and educational supervision on teachers teaching performance: training programs as a mediator variable, Asian Social Science, 12(10), pp. 257–272.

Shelestova, I. V. (2019). Formation of professional competence of teachers in higher education institutions in the conditions of higher education modernization. Scientific

Bulletin of Kherson State University. Series: Pedagogical sciences, 2, 54-58.

Shulha, T. M. (2019). Formation of competencies of higher education teachers in the process of qualification improvement. Polissya scientific bulletin, 1, 161-167.

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. Harvard Educational Review, 57 (1), 1-22. https://doi.org/10.17763/haer.57.1.j463w79r56455411

Vaughan, N. & Denny, P. (2019). Promoting active learning in the online environment. Springer. https://acortar.link/9KCeVb

Yoon, J. S. (2002). Teacher Characteristics as Predictors of Teacher-Student Relationships: Stress, Negative Affect, and Self-Efficacy. Social Behavior and Personality, 30, 485-493. https://doi.org/10.2224/sbp.2002.30.5.485

DOI: https://doi.org/10.34069/AI/2023.63.03.14
How to Cite:
Stoika, O., Butenko, N., Miziuk, V., Zinchenko, O., & Snikhovska, I. (2023). Information technologies in the educational process of higher educational institutions. *Amazonia Investiga*, *12*(63), 156-163. https://doi.org/10.34069/AI/2023.63.03.14

Information technologies in the educational process of higher educational institutions

Інформаційні Технології в Освітньому Процесі Закладів Вищої Освіти

Received: January 18, 2023 Accepted: March 30, 2023

Written by:
Olesia Stoika[1]
https://orcid.org/0000-0002-7695-6100
Nataliia Butenko[2]
https://orcid.org/0000-0001-8498-6441
Viktoriia Miziuk[3]
https://orcid.org/0000-0001-8291-6597
Oksana Zinchenko[4]
https://orcid.org/0009-0000-0029-5628
Irena Snikhovska[5]
https://orcid.org/0000-0001-6775-274X

Abstract

Informatization of the educational process, in general, and the educational system of the higher educational establishments, in particular, is one of the most significant tasks of restructuring and shaping the education system in accordance with society requirements. Educational institutions nowadays have an opportunity to disseminate new material in a way that responds to the unique needs of each student thanks to using computer networks and online technologies. The purpose of the academic paper is to identify and provide a brief assessment of the primary trends in implementing information technologies in higher educational institutions (HEIs) in terms of the specifics of their application in the educational process. Methodology. In the course of the research, analytical and bibliographic methods. At the same time, induction, deduction, analysis, synthesis of information, system-structural, comparative, logical-linguistic methods, abstraction, and idealization were applied to study and process data. By the way, the research authors also conducted a questionnaire in online

Анотоція

Інформатизація навчального процесу в цілому та учбової системи вищої школи зокрема є одним із найважливіших завдань перебудови та формування системи освіти відповідно до потреб суспільства. Завдяки використанню комп’ютерних мереж і онлайн-інструментів заклади освіти тепер мають можливість подавати нову інформацію у спосіб, який відповідає індивідуальним потребам кожного здобувача освіти. Мета статті – виокремити та надати коротку оцінку основних тенденцій реалізації інформаційних технологій у вищій школі з точки зору особливості їх застосування у навчально-виховному процесі. Методологія. Під час здійснення дослідження застосовано аналітико-бібліографічний метод, а також індукцію, дедукцію, аналіз, синтез інформації, системно-структурний, порівняльний, логіко-лінгвістичний методи, абстрагування, ідеалізацію для вивчення та обробки даних, та анкетне опитування, що було проведено авторами дослідження в онлайн-режимі. Результати. За результатами дослідження

[1] Candidate of Pedagogical Sciences, Associate Professor, Foreign Languages Department, Faculty of Foreign Philology, Uzhhorod National University, Uzhhorod, Ukraine.
[2] Doctor of Economics, Professor, Department of Finance, Banking and Insurance, Taras Shevchenko National University of Kyiv, Kyiv, Ukraine.
[3] PhD in Pedagogical Sciences, Associate Professor, Department of Mathematics, Informatics and Information Activity, Izmail State University of Humanities, Izmail, Ukraine.
[4] Candidate of Philological Sciences, Associate professor, Faculty of Germanic Philology and Translation, Kyiv National Linguistic University Kyiv, Ukraine.
[5] Candidate of Philological Sciences, Associate Professor, Faculty of Pedagogical Technologies and Lifelong Learning, Department of Theoretical and Applied Linguistics, Zhytomyr Polytechnic State University, Zhytomyr, Ukraine.

mode. Results. Based on the research results, the primary and most significant theoretical aspects of using information tools in higher educational institutions, as well as the standpoints of scientists and heads of departments of higher educational institutions on key aspects of the issue outlined.

Keywords: information technologies, information and communication technologies, informatization of the educational process, information support, information educational resources.

встановлено основні найбільш важливі теоретичні аспекти питання використання інформаційних засобів у ЗВО, а також досліджено точку зору науковців та керівників кафедр закладів вищої освіти щодо ключових аспектів даного питання.

Ключові слова: інформаційні технології, інформаційно-комунікаційні технології, інформатизація освітнього процесу, інформаційне забезпечення, інформаційні освітні ресурси.

Introduction

The current level of development in the field of information technology requires the introduction of information tools in the educational process at various education levels. Information technologies make it possible for a HEI's teacher to conduct classes, lectures, and control activities in an effective, engaging, and understandable way.

The theoretical part of the present research substantiates the concept, components and key aspects of using information technologies in higher education.

The practical part of the research includes assessing the components of the content provision of the educational process in higher educational institutions that have been most developed in recent years. It comprises the main stages of ICT introduction in the educational process of higher educational institutions that are most in need of scientific and methodological refinement, the primary aspects of successful methodological work of higher educational institutions on introducing relevant ICTs in the educational process. Along with this, it determines key training directions that have been particularly successfully developed due to the active use of ICT in higher education, as well as the main ways to most effectively eliminate the shortcomings of ICT use in the educational process in HEIs.

Based on the research results, conclusions were made regarding the issues raised. In particular, it has been found that in recent years, information technologies have developed especially significantly the following components of the educational process in higher education institutions: structuring of educational material, development of particular educational and methodological modules, information support on the topic, tests for summarizing intermediate and final survey results, structured materials for distance learning courses. At the same time, the principal stages of ICT implementation in the educational process of higher educational institutions that currently require the most scientific and methodological refinement are the knowledge and conviction of the participants of the educational process on using ICT in learning. The primary aspects of the successful methodological work of a higher educational institution on introducing particular ICTs in the educational process of a higher educational institution are as follows: focus and subordination of ICTs to general educational tasks, the established training priorities, effective selection of information methods, forms and means of training, provision of participants of the educational process with relevant pedagogical and methodological literature, information resources and training workshops. According to the survey results, it was established that the key areas of learning that have been particularly successful due to the active use of ICT in recent years in higher education are collaborative and practical learning, achieving personal results by each student, and as a powerful tool for effective independent study. The research has shown that the principal ways to eliminate the problems arising from using information technologies in higher education are familiarization with the theoretical fundamentals of ICT and the exchange of pedagogical experience through participation in specially organized workshops by ICT developers and scholars.

Literature Review

Currently, it is necessary to teach each pupil or student to master, transform and use huge amounts of information in practical activities in a short time. It is very important to shape the learning process in such a way that the student actively, with interest and enthusiasm, works in the classroom, sees and appreciates the fruits of his labor (Ates, 2020; Lim et al., 2022).

A combination of traditional teaching methods and modern information technologies can help teachers solve this difficult task, as their use in the classroom provides mobile, strictly differentiated, and individualized learning (Ridkodubska et al., 2022).

The application of the internet and other technological advances allows citizens to gain information, skills, and abilities in a variety of other fields. Digitalization and multi-formatting are currently the primary trends in the overall labor market. The ability to use digital technologies at work is gradually becoming a requirement for most disciplines and professions. The educational process nowadays faces fundamentally new challenges due to the peculiarities of developing the information society and the computerization of the management of planning the educational process of higher education. Their implementation is possible only through the rational use of technical achievements, creating conditions for free access to information resources. Only in this case will it be possible to increase the intensity of social-economic processes in general, enhance the role and importance of information technologies, continuously develop information and communication systems, technologies and services, and form a national scientific and educational information system (Moscardini, Strachan & Vlasova, 2022; Taroc & Paculba, 2018).

Currently, it is common to define information technology as a set of methods, production processes, and software and hardware tools integrated into a technological chain that ensures the collection, processing, storage, distribution, and display of information. The better a person knows and uses the latest information technologies, the more secure his position in the labor market is (Tracey, Wang, Trimble & Mainsbridge, Douglas, 2022).

Information technologies have a double impact on the education sector. On the one hand, ICTs initiate the creation of new approaches to learning, opening up additional opportunities in the field of training and knowledge management. On the other hand, the introduction of IT in the educational process contributes to developing a future specialist's important qualities (thinking, memory, attention, observation). ICTs contribute to acquiring professional knowledge, skills and abilities, creating conditions for developing talents, skills and abilities for optimal decision-making, and the ability to self-assess, systematize and summarize the information received (Zhanga & Aslan, 2021; Fuertes-Camacho et al., 2019).

The leading vector of our modern times is the search for integrated solutions that allow creation a unified educational environment with the help of information technologies. As the experience of developed foreign countries shows, an excellent solution to this problem is the introduction of the latest information tools into the educational process (Starko et al., 2022; Ratheeswari, 2018).

The introduction and use of modern software tools and information technologies in the educational process of higher educational institutions radically change the conditions of activity of all participants in the educational process (Cherkasov et al., 2023).

The purpose of the research is to determine the standpoints of scientists and heads of departments of higher educational institutions on the features of using information technologies in higher education.

Materials and Methods

A practical study of the modern trends of using information technologies in higher educational institutions was conducted by interviewing 217 scientists and 233 heads of departments of higher educational institutions conducting scientific activities and teaching in 11 higher educational institutions in Odesa, Cherkasy, Ivano-Frankivsk and Khmelnytsky regions of Ukraine. The research was conducted using the Google Forms service.

Results

According to the survey participants' viewpoint, currently, in the conditions of special attention to the trends of education informatization, information technologies have gained the greatest development in recent years in relation to the following components of content provision of the educational process in higher educational institutions (Figure 1):

– structuring of educational material – development of separate educational and methodological modules;
– information support on the topic;
– tests to summarize the intermediate and final results of the survey;
– structured materials for distance learning courses.

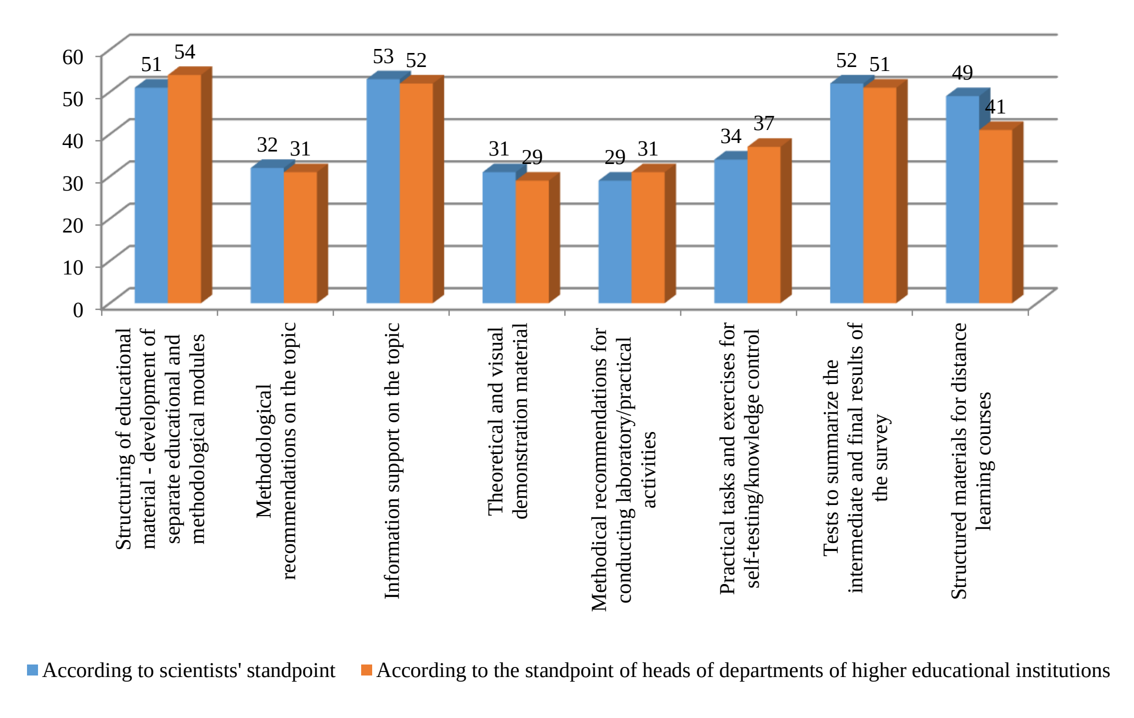


Figure 1. Components of the content provision of the educational process in higher educational institutions that have gained the greatest development in recent years, %.
Source: compiled by the authors.

In the course of the survey, respondents identified the stages of ICT implementation in the educational process of higher educational institutions that currently require the most scientific and methodological refinement (Figure 2).

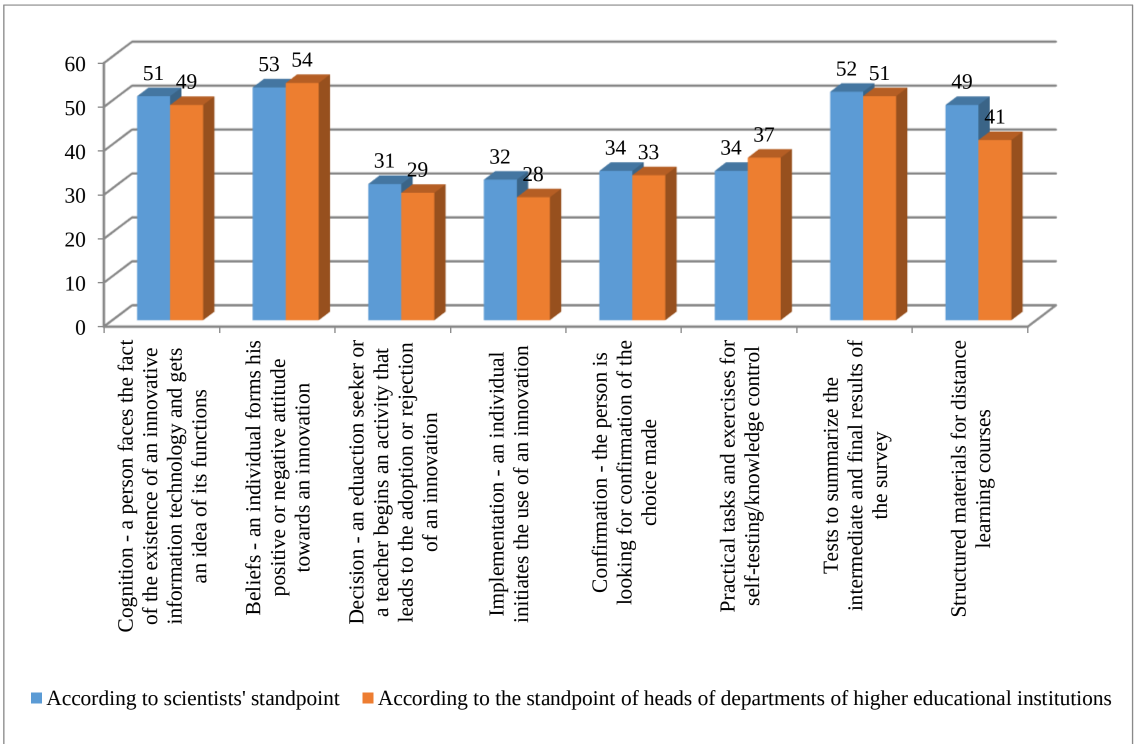


Figure 2. Stages of ICT implementation in the educational process of higher educational institutions that currently require the most scientific and methodological refinement, %.
Source: compiled by the authors.

As can be observed from Figure 2, according to the respondents' standpoint, special attention in terms of scientific and methodological support nowadays is needed to educate and convince the participants of the educational process to use ICT in the learning process.

An important survey result is the identification of the successful methodological work's principal aspects in introducing certain ICTs into the educational process of higher educational institutions (Figure 3).

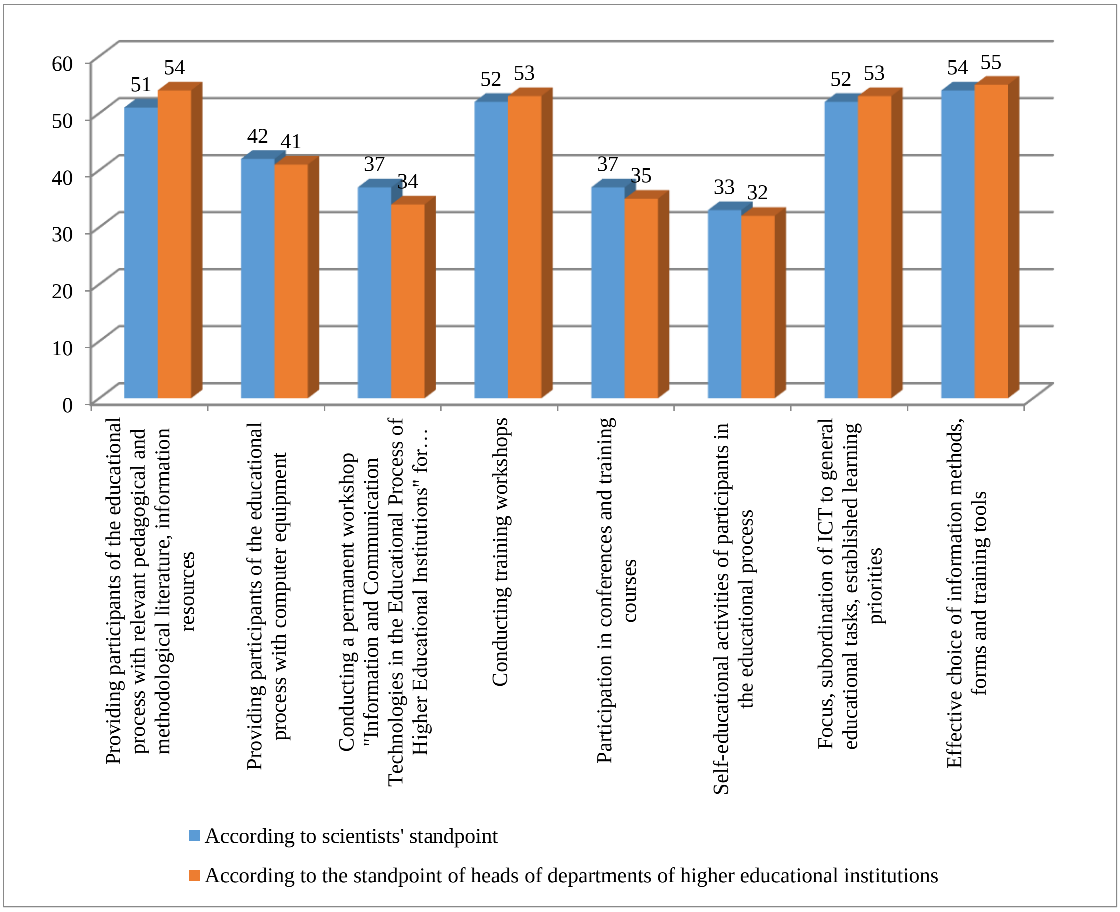


Figure 3. The primary aspects of the successful methodological work on introducing certain ICTs in the educational process of a higher educational institution, %.
Source: compiled by the authors.

As can be seen from Figure 3, according to the survey participants' standpoint, the quality of using information technologies in higher education is determined by the content of the methodical work of the higher educational institution in the following directions: the orientation, subordination of ICT to general educational tasks, established learning priorities, effective selection of information methods, forms and means of education, provision of participants in the educational process with relevant pedagogical and methodical literature, information resources and conducting educational workshops.

In the course of the research, the respondents were asked to identify the key areas of study that have been particularly successful due to the active use of ICT in recent years in higher education (Figure 4):

- learning in cooperation and through practical activities;
- achievement of results by each education seeker;
- a powerful tool for effective independent research.

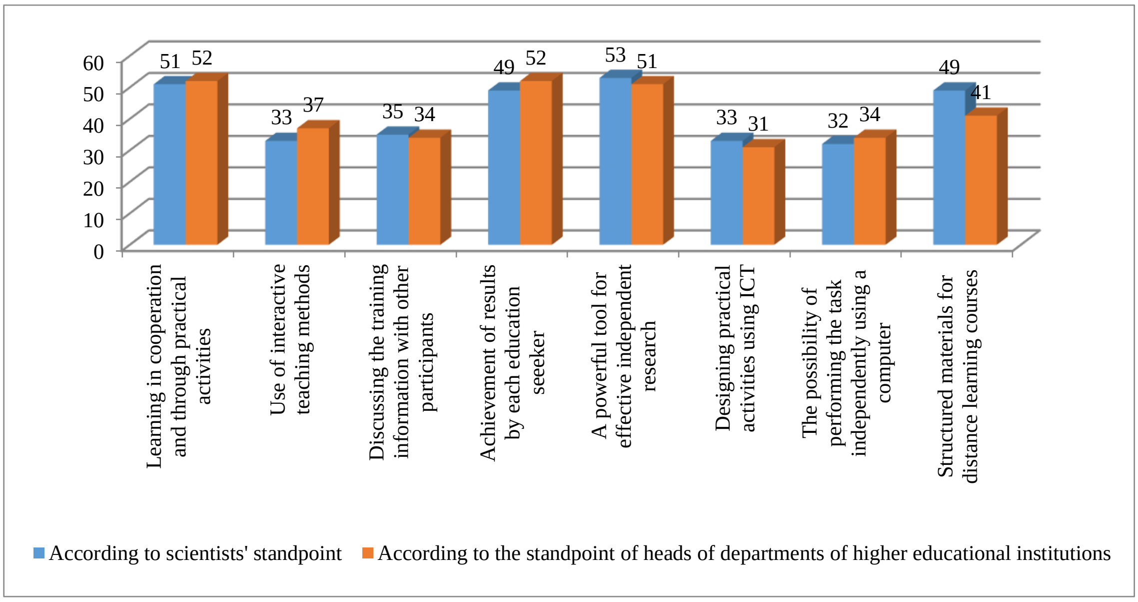


Figure 4. Key areas of study that have been particularly successful due to the active use of ICT in higher education, %.
Source: compiled by the authors.

By the way, the research participants consider it expedient to eliminate the difficulties of using ICT in the educational process in several ways (Figure 5).

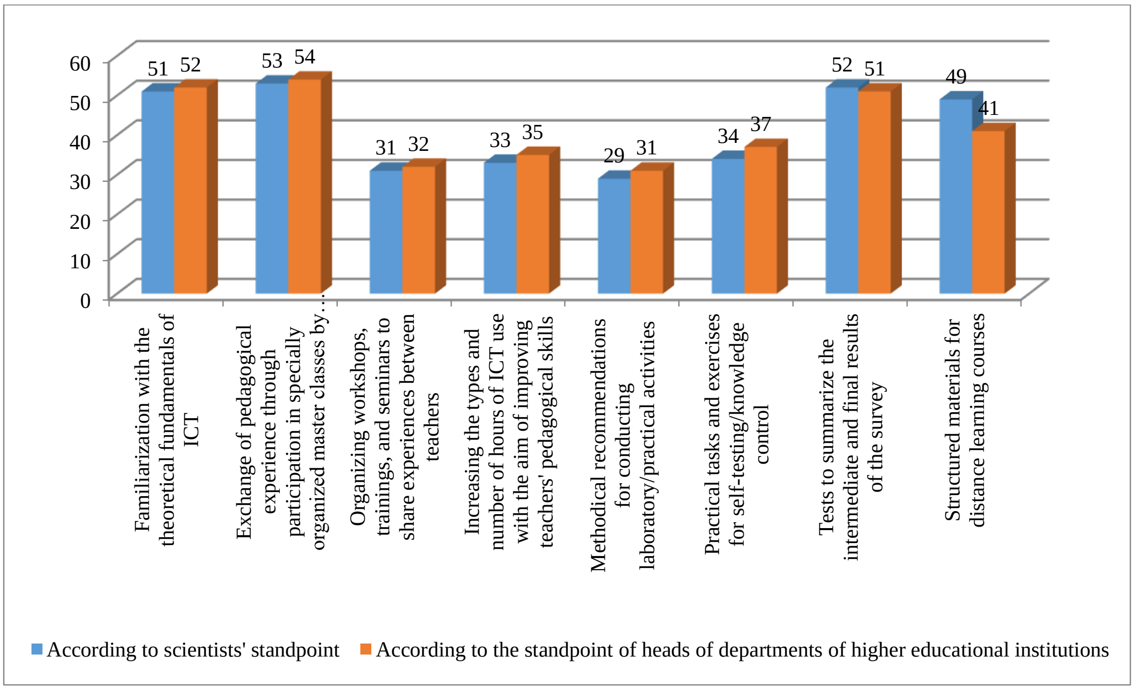


Figure 5. The basic ways to eliminate the shortcomings of using ICT in the educational process in higher education, %.
Source: compiled by the authors.

The survey revealed that the primary ways to eliminate the shortcomings arising in relation to using information technologies in higher education are familiarization with the theoretical fundamentals of ICT and the exchange of pedagogical experience through participating in specially organized workshops of ICT developers and researchers.

Discussion

Informatization of society is a promising way of its economic, social and educational development. Computerization of education is aimed at forming and developing the intellectual potential of the nation, improving the forms and content of the educational process, introducing computer-based teaching and testing methods, which will make it possible to solve educational problems at the highest level, taking into account international requirements. The interactivity of the learning process and feedback are significant advantages of these technologies, which has led to the need for their use in various fields of activity, especially in the education sphere (Fuertes-Camacho et al., 2019; Lubicz-Nawrocka & Owen, 2022).

The degree of society's informatization as a global social process is directly related to the informatization degree of education, which directly depends on the relevant provision of educational institutions with the necessary equipment and software, as well as the effectiveness of their use. Achieving a high level of education informatization depends on mass computer literacy and the formation of information culture, that is, the ability to use information technology tools, the most common software products, knowledge of the specifics of data and information flows on the Internet (Fraser et al., 2021; Stathopoulou et al., 2019).

Information and communication technologies are a crucial component of contemporary education since high-quality discipline teaching is no longer feasible without using computer technologies and the Internet. In our opinion, a modern teacher should be professionally competent in information technologies, technically educated, and aware of the importance of mobility of their own professional functions in the context of scientific and technological progress and competition (Lee et al., 2021; Røe, Wojniusz & Bjerke, 2022).

Competence and preparation for using information technologies in professional activities is a special type of activity. It requires not only mastery of teaching methods in the higher educational institution, pedagogical skills, knowledge of the basics of pedagogy, psychology, etc. but also skills that make it possible to practically interact with information (Martin & Padula, 2018; Okoye, 2022).

An important practical task of reforming and modernizing science and education is to inform the processes of pedagogical and scientific activity as a technological component of the organization of higher education institutions (Knoche, 2022; Lai, Saab & Admiraal, 2022).

Conclusions

Thus, the analysis of scientific literature on the research topic and the survey results showed that using and applying modern information technologies in education is one of the most significant and sustainable trends in the development of the world's educational process. In recent years, computer equipment and other means of information technology have been increasingly used in mastering most subjects in higher educational institutions. Informatization has had a significant impact on the process of learning. New information and communication technologies make it possible to intensify the learning process, and increase the speed of perception, understanding and depth of assimilation of huge amounts of information.

Bibliographic references

Ates, H. (2020). Using information systems and technologies in higer educational institutions. International Journal of Research, 7(10), 222–232. https://doi.org/10.29121/granthaalayah.v7.i10.2019.390

Cherkasov, V., Maslov, V., Telep, O., Oseredchuk, O., & Hasniuk, V. (2023). Peculiarities of the use of distance learning information technologies in higher education institutions of Ukraine. Revista Eduweb, 17(1), 52–61. https://doi.org/10.46502/issn.1856-7576/2023.17.01.6

Fraser, D., Menzies, C., Mc Cormick, M., Muria, J. H., O'Hagan, S., Collins, F., McEwan, J., … & Trimble, N. A. (2021). Test and vaccinate or remove: Methodology and preliminary results from a badger intervention research project. VetRecord, 18(9), 5. https://doi.org/10.1002/vetr.248

Fuertes-Camacho, M.T., Graell-Martín, M., Fuentes-Loss, M., & Balaguer-Fàbregas, M.C. (2019). Integrating Sustainability into Higher Education Curricula through the Project Method, a Global Learning Strategy. Sustainability, 11(3), 767. https://doi.org/10.3389/feduc.2021.784701

Knoche, H. (2022). Thinking about cooperative learning: The impacts of epistemic motives and social structure on cooperative learning environments. The International Journal of Management Education, 20(2), 100643. https://doi.org/10.1016/j.ijme.2022.100643

Lai, Y., Saab, N., & Admiraal, W. (2022). University students' use of mobile technology in self-directed language learning: Using the integrative model of behavior prediction. Computers and Education, 179, 2022, 104413. https://doi.org/10.1016/j.compedu.2021.104413

Lee, S., Kim, H., Jeong, B., & Yoon, J. (2021). A Training Method for Low Rank Convolutional Neural Networks Based on Alternating Tensor Compose-Decompose Method. Applied Sciences, 11(2), 643. http://dx.doi.org/10.3390/app11020643

Lim, C. K., Haufiku, M. S., Tan, K. L., Farid Ahmed, M., & Ng, T. F. (2022). Systematic Review of Education Sustainable Development in Higher Education Institutions. Sustainability, 14, 13241. https://doi.org/10.3390/su142013241

Lubicz-Nawrocka, T., & Owen, J. (2022). Curriculum Co-creation in a Postdigital World: Advancing Networked Learning and Engagement. Postdigital Science and Education, 4, 793–813. https://link.springer.com/article/10.1007/s42438-022-00304-5

Martin, P., & Padula, P. (2018). Educational innovation at the university: comparison between problem-based learning and traditional lessons. International Journal of Higher Education Pedagogy, 34(3), 34-43. https://doi.org/10.4000/ripes.1574

Moscardini, A. O., Strachan, R., & Vlasova, T. (2022). The role of universities in modern society. Studies in Higher Education, 47(4), 812-830. https://doi.org/10.1080/03075079.2020.1807493

Okoye, K., Hussein, H., Arrona-Palacios, A., Quintero, H. N., Ortega, L. O. P., Sanchez, A. L., ... & Hosseini, S. (2022). Impact of digital technologies upon teaching and learning in higher education in Latin America: an outlook on the reach, barriers, and bottlenecks. Education and Information Technologies, 4. https://link.springer.com/article/10.1007/s10639-022-11214-1

Ratheeswari, K. (2018). Information communication technology in education. Journal of Applied and Advanced Research, 3(1), 45-47. https://doi.org/10.21839/jaar.2018.v3iS1.169

Ridkodubska, H., Vyhovskyi, L., Vyhovska, T., Yakubova, L., Humenyuk, O., & Oliinyk, I. (2022). Application of information technologies in the educational process of higher educational institutions under the martial law. Journal for Educators, Teachers and Trainers, 13(3), 274-287. https://doi.org/10.47750/jett.2022.13.03.026

Røe, Y., Wojniusz, S., & Bjerke, A. H. (2022). The Digital Transformation of Higher Education Teaching: Four Pedagogical Prescriptions to Move Active Learning Pedagogy Forward. Frontiers in Education, 14 January 2022. https://www.frontiersin.org/articles/10.3389/feduc.2021.784701/full?s=09

Starko, V., Azhnov, V., Dzhevaha, H., Hurbanska, A., & Mykhaliuk, A. (2022). Information Technologies in Education: Current Realities and Development Trends. International Journal of Computer Science and Network Security, 22(3). https://doi.org/10.22937/IJCSNS.2022.22.3.70

Stathopoulou, A., Siamagka, N. T., & Christodoulides, G. (2019). A multi-stakeholder view of social media as a supporting tool in higher education: An educator-student perspective. European Management Journal, 37(4), 421-431. https://doi.org/10.1016/j.emj.2019.01.008

Taroc, R., & Paculba, H. L. (2018). International Journal of Science and Management Studies (IJSMS) Blended Learning with Online Assessment in Higher Education: Its Global Environmental Dimensions of Sustainability. International Journal of Scientific Research & Management Studies, 1. https://doi.org/10.51386/25815946/IJSMS-V1I3P104

Tracey, M., Wang, I., Trimble, A., Mainsbridge, C., & Douglas, T. (2022). Using Interactive Online Pedagogical Approaches to Promote Student Engagement. Pedagogical Approaches to Promote Student Engagement. Education Sciences, 12, 415. https://doi.org/10.3390/educsci12060415

Zhanga, K., & Aslan, A. (2021). AI technologies for education: Recent research & future directions. Computers and Education: Artificial Intelligence, 2, 100025. https://doi.org/10.1016/j.caeai.2021.100025

DOI: https://doi.org/10.34069/AI/2023.63.03.15
How to Cite:
Skriabin, O.M., Kurakin, O.M., Slinko, D.S., Rybalkin, A.O., & Shapar, A.O. (2023). Prospects for the transformation of the domestic law enforcement system in the conditions of russian aggression. *Amazonia Investiga*, *12*(63), 164-174. https://doi.org/10.34069/AI/2023.63.03.15

Prospects for the transformation of the domestic law enforcement system in the conditions of russian aggression

ПЕРСПЕКТИВИ ТРАНСФОРМАЦІЇ ВІТЧИЗНЯНОЇ ПРАВООХОРОННОЇ СИСТЕМИ В УМОВАХ РОСІЙСЬКОЇ АГРЕСІЇ

Received: March 10, 2023 Accepted: April 20, 2023

Written by:
Oleksii M. Skriabin[1]
https://orcid.org/0000-0002-8915-5943
Researcher ID: ADX-2439-2022
Oleksandr M. Kurakin[2]
https://orcid.org/0000-0002-0274-6530
Researcher ID Web of Science: AAZ-5861-2021
Dmytro S. Slinko[3]
https://orcid.org/0000-0001-7793-3667
Web of Science Researcher ID: ABD-1351-2021
Andrii O. Rybalkin[4]
https://orcid.org/0009-0004-2865-3158
Researcher ID Web of Science: HZJ-9093-2023
Artem O. Shapar[5]
https://orcid.org/0000-0001-5327-701X
Web of Science Researcher ID: ABD-1484-2021

Abstract

Russian aggression has a direct impact on the Ukrainian law enforcement system, because it is a direct threat to the security and integrity of the state. The paper aims to determine effective means of transformation of the law enforcement system of Ukraine in the conditions of russian aggression. On the basis of a systematic analysis of theoretical information, the main threats to the law enforcement system of Ukraine were determined: direct, caused by russian aggression, hybrid and internal. At the current stage, some reforms of the law enforcement system have been implemented: creation of the National Police, an anti-corruption body, the SOCTA methodology for combating organized crime has been implemented, the "PRAVO-Police" program has been implemented, as well as martial law has been implemented. The following issues require

Аннотація

Російська агресія завдає безпосереднього впливу на українську правоохоронну систему, тому що є прямою загрозою безпеці та цілісності держави. Метою статті є визначення ефективних засобів трансформації правоохоронної системи України в умовах російської агресії. На основі системного аналізу теоретичних відомостей визначені основні загрози правоохоронній системі України: прямі, викликані російською агресією, гібридні, серед яких(організована злочинність та економічні злочини і внутрішні, до яких належать корупція, відмивання незаконних коштів серед співробітників правоохоронних органів та недостатній рівень довіри співробітникам правоохоронних органів. На сучасному етапі реалізовані деякі реформи правоохоронної системи: створення

[1] Professor, Doctor of legal sciences, Professor of the department of civil and economic law of the Kryvyi Rih Educational and Scientific Institute of the Donetsk State University of Internal Affairs, Kryvyi Rih, Ukraine.
[2] Professor, Doctor of legal sciences, Dean of the Faculty Donetsk State University of Internal Affairs, Kropyvnytskyi, Ukraine.
[3] Associate Professor, Doctor of Law, Professor Lviv University of Business and Law, Lviv, Ukraine.
[4] Associate Professor, Candidate of legal sciences, Director of the Luhansk Educational and Scientific Institute named after E.O. Dydorenko of the Donetsk State University of Internal Affairs, Ivano-Frankivsk, Ukraine.
[5] PhD of Law, Associate Professor Deputy Director for Educational and Research Activities of the Kryvyi Rih Educational and Scientific Institute Donetsk State University of Internal Affairs, Kryvyi Rih, Ukraine.

further resolution: ineffective personnel policy and low level of trust in law enforcement officers, use of outdated work methods in the law enforcement system. The solution of these issues is possible through the following measures: the introduction of modern technologies, the use of artificial intelligence and extensive data in the law enforcement sphere. This will increase the level of security of the state, citizens and civil society institutions.

Keywords: law enforcement system, reforms, threats, russian aggression, state institutions, Ukraine.

Національної поліції, антикорупційного органу, впроваджена методологія SOCTA для боротьби з організованою злочинністю, реалізована програма «ПРАВО-Поліція», введений в дію режим воєнного стану. Подальшого вирішення потребують наступні проблеми: неефективна кадрова політика та низький рівень довіри до співробітників правоохоронних органів, застосування застарілих методів роботи в правоохоронній системі. Вирішення вказаних проблем можливе за допомогою наступних заходів: створення ефективної моделі взаємодії правоохоронних органів з організаціями громадянського суспільства, впровадження сучасних технологій, використання штучного інтелекту та великих даних в правоохоронній сфері. Це дозволить підвищити рівень безпеки держави, громадян та інститутів громадянського суспільства.

Ключові слова: правоохоронна система, реформи, загрози, російська агресія, державні інститути, Україна.

Introduction

Russian aggression against Ukraine began in 2014, but until 2022 it took place in the form of a "hybrid war". This situation was unexpected for the Ukrainian law enforcement system, as a result, imperfections were revealed in it that threatened the internal security of the state. Starting from February 2022, Russia's full-scale war against Ukraine began, which caused the appearance of new threats and the identification of imperfections in the law enforcement system.

Changes in the Ukrainian state in the context of Russian aggression are associated with the need to combat open aggression, violation of foreign territorial supremacy and state sovereignty. In addition, information, economic and political changes are taking place in parallel, which can act as hybrid threats. These threats can destroy government, society, economy, and sociocultural ties, contributing to the aggressor's goals.

Among the hybrid threats, the most serious are:

- militant activity - 56%;
- illicit trafficking of firearms, ammunition, explosives - 54%;
- the emergence of new criminal schemes in the economic sphere - 42%;
- activities of criminal groups aimed at deepening the criminal situation and destabilizing the internal socio-political situation in Ukraine - 41%;
- export to the territory of Ukraine by the aggressor of representatives of the criminal world - 41% (Council of the European Union, 2010; Kovalchuk, Korystin & Sviridyuk, 2019).

All this necessitates the transformation of the law enforcement system of Ukraine, in accordance with modern realities and taking into account all threats that may harm the security of the state and citizens. It should also be noted that in addition to the emergence of new threats as a result of Russian aggression, changes are taking place in society due to technological and informational development, which cause the need to improve the law enforcement system - its structure, methods and principles of public administration. Digitalization is taking place in Ukraine, which has affected all spheres of life in general, and the law enforcement system in particular. Modern information technologies make it possible to improve the activities of the law enforcement system and solve some of the existing imperfections.

In the context of the rapid development and implementation of information technologies in all spheres of human activity, which significantly change the principles, order, content and forms of interaction in the virtual environment of legal entities and individuals in the process of both economic activity and personal (interpersonal) communications, the issues of developing legislative norms and modernizing the law enforcement system at the present stage of digital transformation and the development of the information society are of particular relevance.

That is, the threats caused by Russian aggression, hybrid threats, as well as changes caused by information and technological development, make it necessary to transform the law enforcement system of Ukraine in accordance with modern realities.

The paper aims to identify the effective means of transformation of the law enforcement system of Ukraine in the conditions of Russian aggression based on the analysis of the current state, existing problems in the law enforcement sphere and foreign experience of optimizing the law enforcement system.

Metodology

To achieve the goals set in the article, a comprehensive review of the transformation of the law enforcement system of Ukraine in the conditions of Russian aggression was carried out, involving the use of special and general-theoretical scientific approaches and methods. The methodological basis of the article is general scientific and special methods of cognition, in particular:

– the dialectical method, with the help of which the development of the law enforcement system in Ukraine and the relationship between the individual elements of the law enforcement system and external factors of influence on it are determined;
– system analysis made it possible to determine the causes, conditions and consequences of implementing changes in the law enforcement system;
– the logical-legal method was used to analyze the peculiarities of the Ukrainian law enforcement system;
– the method of comparative law is applied to compare the legislative measures used in different countries in the conditions of hostilities;
– the method of comparative analysis is used to study methodological approaches, concepts of leading domestic and foreign scientists on the issue under consideration;
– abstract-logical method and method of generalization were used for summarizing theoretical propositions, establishing cause-and-effect relationships and forming conclusions.

Literature review

An effective law enforcement system is the goal of every state. The effectiveness and efficiency of the law enforcement system becomes especially important during a full-scale war, during which there is a direct danger to the integrity of the state in general, and to citizens in particular. The modern Ukrainian law enforcement system is gradually moving away from the model of the Soviet period, thanks to the implemented reforms, and is also approaching European standards. In the scientific literature, the issue of defining the essence of the concept of "law enforcement system" and its relationship with the concept of "law enforcement agencies" is debatable. The analysis shows that the concept of "law enforcement system" is more voluminous in nature than the concept of "system of law enforcement agencies". The law enforcement system includes not only specialized law enforcement structures, but also separate law enforcement state authorities, legal institutions, norms, legal methods and means.

Classifying scientific approaches to defining the law enforcement system, Dudchenko O.O. claims that there is a "conditional division of them into two groups: the first should include the views of researchers who consider the law enforcement system as a set of bodies that carry out law enforcement activities, to the second - researchers who consider the law enforcement system as a complex phenomenon that structurally includes other elements along with law enforcement agencies" (Dudchenko, 2019a: 145).

The essence of the law enforcement system is revealed by O.H. Bratko, by which he understands "a complex of state-legal means, methods and guarantees, which ensure the protection of public relations from unlawful encroachments and indicates that the law enforcement system includes not only special law enforcement agencies, but also other law enforcement agencies of the state, as well as legal means and methods of legal protection and legal norms" (Bratko, 2004: 65).

Determining the leading institutions in the law enforcement system, first of all, legal institutions should be noted, and secondly, state institutions. This necessitates consideration of the relationship between legal and state institutions in the law enforcement system. In this aspect, the definition of the law enforcement system proposed by S.H. Bratel is reasonable: "the law enforcement system is a set of state legal means, methods and guarantees that ensure the protection of a person from illegal violations" (Bratel, 2015: 64).

An interesting approach to defining the essence and specificity of the law enforcement system is to view it as a social system: the law enforcement system is a social system that reflects the unity and interconnectedness of normative and legal regulation in the law enforcement sphere, "the organization of the system of law enforcement agencies and other subjects of law enforcement activity, as well as the law enforcement activity itself, aimed at protecting and defending the foundations of the constitutional order, including the rights, freedoms, and lawful interests of individuals and citizens, legality and law and order" (Sokolenko, 2013: 92). The emphasis in this definition is on the fact that the system of law enforcement agencies is a subsystem of the law enforcement system, which is a subsystem of the legal system.

Scientists identify the main components of the law enforcement system, which include: "protective legal norms, goals, principles, functions, tasks, subjects, objects of law enforcement, law enforcement activities, as well as law enforcement relations" (Pluhatar, 2014: 25).

O.O. Dudchenko emphasizes the multi-level nature of the law enforcement system, stating that "the law enforcement system is a multi-level social system that exists in the state and unites bodies and institutions that, based on and within legal norms, carry out law enforcement and protective activities to ensure legality in the state." (Dudchenko, 2019a: 147).

A.M. Kulish (2009) defines the law enforcement system as a "multi-level social system, consisting of legal means, methods, and guarantees that ensure the protection of social relations from unlawful encroachments, and state bodies that perform law enforcement functions." Scientists also define the system of law enforcement agencies as a "holistic complex, the system-forming factor of which is not a structural but a functional criterion - direct law enforcement activities, which is determined by their common functional purpose, primarily the protection and defense of rights" (Zahumenna, 2020).

All these approaches reflect the essence of the concept of the law enforcement system, but they do not specify the specifics of law enforcement structures. "The law enforcement system can be viewed as a complex composite formation that represents a set of law enforcement structures, state and municipal legal means" (Kubaienko, 2022: 124). The main goal of the law enforcement system is to protect human values, rights, and freedoms. The nature of the law enforcement structures' duties is public and legal.

In summary, based on the above definitions, the concept of a law enforcement system can be defined as the structures of a state and municipal nature that implement law enforcement functions with the aim of ensuring the safety and legality of society, protecting the rights and freedoms of citizens, state institutions from various violations of the law.

The aim of law enforcement activity is "safety, protection of human and citizen rights and freedoms; ensuring public order and public safety; maintenance of law and order; implementation of the principle of the rule of law" (Kuchuk, 2005: 68). As noted by D. Mishchenko et al., (2019), among various types of security of social objects, a special place belongs to the national security of the country. This is the state of the country when external and internal threats to national values and the national way of life are absent or eliminated, and the realization of its important interests is ensured. Therefore, national security involves protecting the vital interests of citizens, society, as well as national values and way of life, from a wide range of external and internal threats of various natures (political, economic, military, environmental, etc.).

When considering the structure of the law enforcement system, M.A. Buhanova distinguishes two components:

1. The normative subsystem, which consists of safety standards.
2. The institutional subsystem, which includes the law enforcement activities of relevant organizations and agencies (Buhanova, 2002: 18).

The identification of these components is typical when considering the law enforcement system as an element of the legal system. However, such an approach excludes law enforcement agencies as an element of the law enforcement system, which must be an integral part of it.

The legal system, in turn, can be considered as a complex of coordinated and interdependent legal means designed to regulate social relations and legal phenomena that arise as a result of regulation (legal principles, legal norms, legal relations, legal culture, legislation, legal consciousness, legal technique, legal institutions, law and order, the state of legality, etc.) (Skakun, 2001: 237).

The law enforcement system, like any system, can be considered as a set of other systems. According to this approach, the structure of the law enforcement system, as a unity of its elements, as well as their interrelationships, contains the following subsystems:

a) the normative-legal subsystem is a set of various legal norms and other means of regulating relations (morality, customs, historical and national traditions, laws, constitution);
b) the institutional subsystem consists of law enforcement bodies, specially created and authorized by the state to carry out law enforcement activities;
c) the functional and practical subsystem combines the methods of implementing the law, law enforcement activities to ensure the observance of the freedoms and rights of citizens, their implementation;
d) the communication subsystem is a set of principles of interaction and relations formed within the law enforcement system.

Also, the structure of the law enforcement system can be presented in the form of interaction of the following elements:

1. Law enforcement ideology. This phenomenon is the ideological basis of the law enforcement system and concentrates dominant ideas, thoughts, theories, doctrines about the essence, goals, principles, ideals, means of protecting human rights, evaluating the effectiveness of law enforcement, prospects for its development, etc.
2. Law enforcement policy. Law enforcement policy determines the official course of the state in the sphere of protection of individual rights and freedoms, forms its strategy and tactics, setting the general orientation in the activities of the entire state.
3. Law enforcement institutions (organizations) are a system of state and non-state bodies, institutions, and organizations that perform the functions of protecting individual freedoms and rights.
4. Law enforcement norms and legislation, which are the normative basis of the law enforcement system.
5. Law enforcement relations, which are social relations regulated by law.
6. Legal practice, as a type of legal activity, is the activity of subjects of law enforcement relations that is carried out in unity with accumulated social and legal experience (Dudchenko, 2019b: 45).

Reform of the law enforcement system is a prerequisite for any other reforms in Ukraine; law enforcement reforms should be coordinated and integrated with departmental plans and programs; the task of reforming is to ensure that there is a correspondence between tasks and functions, structure and people and resource provision (Chumak, 2015).

As a result of the transformation of the law enforcement system of Ukraine, new law enforcement bodies appeared - the National Police; anti-corruption bodies. Changes are also planned in the judicial system, as noted in the Strategy for the Development of the Judiciary and Constitutional Justice System for 2021-2023 (Decree № 231/2021, 2021).

However, there are still issues that require further resolution. Such issues include inefficient personnel policy, the need to optimize the structure of law enforcement agencies. Today, the institutional construction of the law enforcement system is in a state of permanent formation (Ivanets, 2018: 62).

Another problem in the law enforcement system in Ukraine is corruption in law enforcement agencies. Statistical data indicate a high level of corruption in law enforcement agencies. "In order to prevent corruption, it is proposed to develop a general code of conduct for a law enforcement officer and relevant disciplinary codes with the definition of a procedure for bringing them to disciplinary responsibility, the types and limits of penalties for official offenses and the conditions for encouraging moral official conduct" (Nikolenko, 2013: 92).

The problem of money laundering is interconnected with corruption, as corrupt public officials seek to conceal illegally obtained funds that they have misappropriated. "Such actions have negative social consequences and require joint international efforts to combat them" (Graycar, 2019: 299). "Preventing corruption is possible if all employees in the law enforcement sector start feeling responsible for achieving the common goal of creating a corruption-free state body" (Nakonechna, 2019: 135). "The main way for law enforcement agencies to cooperate with other national and international agencies is through the exchange of information" (Steblianko, 2020).

As a result of implementing such changes, it is possible to achieve more effective interaction between society and law enforcement agencies. "Due to delayed notification, information regarding the preparation or commission of actions aimed at money laundering may be missed, while insignificant notification will be taken into account."

There is a need to create a system for filtering messages received by law enforcement agencies" (Motuzna, Reznik, 2022). In developed countries, special programs are being developed to improve the management of law enforcement officers and improve personnel policy in this area. Special attention is paid to "reducing the pay gap between the public and private (civil) sectors and optimizing the police structure, developing indicators of job performance by officials, and forming a new work ethic among law enforcement officers" (Rizvi, 2005: 13).

Law enforcement agencies in many countries are undergoing qualitative changes. Thus, police reform is being implemented in order to change the state-oriented priorities of activities to socially-oriented priorities. "Most police agencies experience an information deficit and are unable to accurately identify issues. They often lack the administrative and cultural flexibility to respond instantaneously to a rapidly changing environment" (Greene, 1998).

Increasing the effectiveness of the law enforcement system is also a preventive measure in the fight against threats and crime. Thus, criminals often notice when the fight against crime is improving in a particular country, and they redirect their activities to more vulnerable countries (Steblianko, 2020). This is one of the reasons to work on the transformation of the law enforcement system in Ukraine - to make it safer and less attractive to criminals.

Results and discussion

In the context of Russian aggression, it is important to reform Ukraine's law enforcement system in line with the new conditions and challenges to ensure security for the state and the rights and freedoms of people and citizens.

Scientists Rover and Bienert (2017), Ahl (2019) identify the importance of the role of the police in terms of ensuring human and civil rights. They emphasize the need for cooperation between law enforcement agencies, civil society institutions and citizens to increase the level of ensuring democratic rights and freedoms in the state. "Police activity based on cooperation with the population, communities, and citizens aimed at preventing offenses and crimes is an urgent need of today. One of the ways to solve this task is to improve the interaction of the police with the population, which is a guarantee of the population's trust in the police" (Maiorov, 2020: 189).

Empowering civil society to participate in decision-making in the law enforcement sphere can improve public perception of law enforcement agencies, including the police. Research shows that public satisfaction with the police is not only dependent on the level of crime, but also on how the police interact with citizens ((Lorraine et al, 2013; Ben, 2014; William, 2007).

The interaction of the state and civil society in the process of monitoring the activities of state bodies is possible thanks to the development of forms of public control, public expertise, public discussions, and public hearings (Kovaliv, 2021; 82). "The main element of the mechanism of partnership relations between the above-mentioned subjects are social technologies of long-term design" (Hurkovskyi & Yesimov, 2018: 141-142).

The main goal of such interaction is to ensure the unity of actions, mutual assistance and joint efforts to successfully solve joint tasks. At the same time, "interaction and mutual assistance should be clearly agreed both on the goals (tasks) of actions, and on the place and time of joint events" (Zavalnyi, 2018; 147).

In a study on the effectiveness of law enforcement agencies, researchers Jonathan Chase, Jiali Du, Na Fu, Truc Viet Le, and Huong Chuin Lau found that it becomes more difficult for law enforcement officers to respond to calls and reports of crimes. This is a consequence of inefficient allocation of resources, which leads to inhibition of the work of law enforcement officers. Scientists believe that it is appropriate to "change the principles of forming the staff, distributing finances and generating work schedules for employees" (Chase et al., 2017: 3). Wilson and Weiss (2012) also note the need to develop a more flexible approach to staffing. Optimizing the workforce should focus on addressing personnel allocation and workforce scheduling issues (Cezik & L'Ecuyer, 2008).

The use of modern technological means and artificial intelligence, which can not only make people's lives easier, but also effectively protect them, is also important in terms of the transformation of the law enforcement system (Zhdanov, 2019). In studies of the role of information and communication technologies and systems in ensuring and maintaining public order, combating and preventing crime, "a significant place is occupied by the latest achievements in science and technology, the use of modern information and telecommunication networks" (Tsimbal, 2015: 236), "the effectiveness of the police work and the high level of professionalism of its employees are directly related to the wider implementation of modern technologies" (Strom, 2016).

By using big data, we can timely detect crimes and offenses, and coordinate the activities of law enforcement agencies for a quick and effective case hearing (Wanhua et al., 2018).

In addition, the transformation of the law enforcement system in the conditions of Russian aggression involves the introduction of restrictions on the rights and freedoms of citizens in order to ensure national security.

Kovalchuk et al., (2019) emphasized the need to forcibly limit people's civil rights aimed at achieving a state of public order.

In this aspect, it is important to find a balance in limiting rights and freedoms not only for citizens, but also for representatives of law enforcement agencies. In parallel with the development of modern information and digital technology, law enforcement agencies are getting more and more opportunities to restrict the rights of citizens. It should not cross the boundary of personal freedom and privacy without visible reasons" (Silberglitt, Chow, and Hollywood, 2015). Currently, the development of information technologies significantly expands the analytical capabilities of law enforcement agencies. It is important to limit their influence on the sphere of private interests and civil rights (Sereni-Massinger et al., 2015).

The law enforcement system in Ukraine under the conditions of Russian aggression must be effective in combating hybrid threats (activities of illegal armed groups; illegal trafficking of weapons, ammunition, explosives; emergence of new criminal schemes in the economic sphere; activities of criminal groups, etc.). In this aspect, law enforcement activities concerning organized crime should not focus on individual participants who should be punished for specific offenses, but rather on broader aspects of criminal behavior and the subculture of organized crime. Scientists Dintino and Marten (1983) noted that the intelligence analysis remains the only rational means of solving the problem of organized crime.

Currently, the multi-year cycle of policy on responding to serious crime and organized crime (Picarelli,, 2011), developed by the EU in 2010, is exemplary in its consistent and systematic elimination of the most significant criminal threats through effective cooperation among the relevant agencies of the member countries, institutions, and EU bodies.

This approach was approved by the EU Council in December 2010 (Europol, 2017). The specified EU policy cycle started with the creation of the Serious and Organized Crime Threat Assessment (SOCTA), in which Europol generates analytical findings that are transformed into political priorities, strategic goals, and operational action plans for the EU. It is important to note the link between the SOCTA findings and the identification of goals and plans (Europol, 2021).

The SOCTA methodology will be an adequate response to organized crime, determining the priority areas of law enforcement activities. This will allow the state and its law enforcement agencies to take the highest position in solving the problem of organized crime, more likely to ensure the appropriate level of security in society and increase public trust (Svyrydiuk & Korystin, 2022).

The main basic tasks of law enforcement agencies are the protection of constitutional order, state sovereignty and territorial integrity of the state, combating crime, protection of the rights, freedoms and legitimate interests of citizens, society and the state as a whole. A.P. Zahorulko (2018) suggests new important challenges in countering hybrid threats:

1. Ensuring the internal security of the state by strengthening the effectiveness of the fight against the interference of the special services of the aggressor country in the internal affairs of Ukraine.
2. Achieving unwavering positions in protecting national interests in the information and cyber space, constant monitoring of the situation, effective prevention of conflict situations in inter-ethnic, inter-confessional, inter-regional,

and other areas of national and social relations, and promoting their stabilization.
3. Protection of national interests of the state at the international level by diplomatic, political, economic, energy, judicial and other methods.

Over the past five years, the Ukrainian law enforcement system has gradually approached European standards thanks to international cooperation. Thanks to the support of the European Union, Ukraine has significantly brought the work of the law enforcement system closer to advanced European and international models. The country greatly benefited from the assistance provided by the "PRAVO-Police" program, which was implemented by UNOPS in close cooperation with the EU Advisory Mission in Ukraine from 2017 to 2022. The Program's budget provided Ukrainian law enforcement agencies with expert consulting support, training events on a number of issues, forensic equipment, personal protective equipment, computing equipment, and professional software. The Ukrainian law enforcement system has become more stable, better equipped, more oriented to the needs of citizens (Akopian, 2022).

Table 1.
Possibilities of transformation of the law enforcement system in Ukraine in the conditions of Russian aggression

№	Type of issue	The essence of issue	Possible measures to solve the issue	Status of measures implementation
1	Direct threats due to russian aggression	The need for a large number of law enforcement officers to ensure the security of the state	- restriction of the rights and freedoms of citizens by introducing a martial law regime; - limiting the influence of law enforcement agencies on the sphere of private interests and civil rights of citizens.	Implemented
2	Hybrid threats	Organized crime Economic crimes	– use of the SOCTA methodology; – international cooperation in the fight against organized crime.	Implemented
		Corruption, money laundering	– creation of the Anti-corruption body; – development of a general code of conduct for law enforcement officers; – increasing the responsibility of law enforcement officers for committing such crimes.	Implemented
3	Internal threats	Inefficient use of human resources in the sphere of law enforcement activities	– use of big data, modern technologies and artificial intelligence in the field of law enforcement activities; – personnel distribution and planning of the work schedule of employees.	Not implemented
		Low level of trust in law enforcement officials	– cooperation of law enforcement agencies with public organizations and citizens; – the opportunity for citizens to participate in decision-making in the field of law enforcement.	In the implementation phase

(developed by the authors)

Thus, the law enforcement system in Ukraine is undergoing changes, in accordance with modern conditions and existing threats caused by russian aggression, hybrid threats and issues of an internal nature. This transformation brings Ukraine's law enforcement system closer to

European standards and helps reduce the negative impact of Russian aggression. As a result of reforming the law enforcement system, it is possible to increase the level of security of the state, civil society institutions, and citizens.

Conclusion

The russian aggression that began in 2014 and escalated to a full-scale conflict in 2022 is a direct threat to the security and territorial integrity of the Ukrainian state. This necessitates the need for the transformation of Ukraine's law enforcement system in accordance with modern realities. The purpose of the article is to identify effective means of transforming the law enforcement system of Ukraine in the context of russian aggression.

It is determined that the concept of "law enforcement system" is broader than the concept of "law enforcement agencies" and includes the following elements: law enforcement ideology, law enforcement policy, law enforcement institutions, legal norms and legislation, law enforcement relations, and legal practice.

The threats to the modern Ukrainian law enforcement system include:

– Direct threats (directly related to russian aggression);
– Hybrid threats (organized crime, economic crimes);
– Internal threats (corruption and money laundering among law enforcement officers, insufficient level of trust in law enforcement officers).

The result of the transformation of the law enforcement system of Ukraine is the creation of the National Police, anti-corruption bodies, changes in the judicial system, implementation of the SOCTA methodology to combat organized crime, implementation of the "PRAVO-Police" program to increase the effectiveness of police work.

The current issues in the law enforcement system include the need to increase the effectiveness of personnel policies, increase trust in law enforcement officers and address the use of outdated methods in the law enforcement system. To address these issues, it would be advisable to implement the following measures: the interaction of law enforcement agencies with civil society organizations, the introduction of modern technologies, the use of artificial intelligence and big data in the law enforcement field.

Implementation of these measures will allow to increase the effectiveness of the law enforcement system and ensure the necessary level of security for the state, citizens and civil society institutions.

Bibliographic references

Ahl, A. (2019). United Nations issues human rights guidance for law enforcement. Lawfare. Retrieved from https://www.lawfareblog.com/united-nations-issues-human-rights-guidance-law-enforcement

Akopian, M. (2022). The EU is one of Ukraine's key allies in the matter of asserting the principle of the rule of law. Euam Ukraine. (In Ukrainian). Retrieved from https://acortar.link/IspHuA

Ben, B. (2014). Policing and Social Identity: Procedural Justice, Inclusion and Cooperation between Police and Public. Policing and Society, 24(1), 22-43. Retrieved from https://doi.org/10.1080/10439463.2012.724068

Bratel, S.H. (2015). Law enforcement functions. Law and society, 4, 63–66. (In Ukrainian).

Bratko, A.H. (2004). Law enforcement system. Questions of theory. Spartak, 208 p. (In Russian).

Buhanova, M.A. (2002). Law enforcement system of the subject of the Russian Federation: dissertation. ... candidate law of science Moscow. Moscow Academy, 202 p. (In Russian).

Cezik, M.T., & L'Ecuyer, P. (2008). Staffing multiskill call centers via linear programming and simulation, Management Science, 54(2), 310-323.

Chase J., Du, J., Fu, N., Le, T.V., & Lau, H.C. (2017). Law enforcement resource optimization with response time guarantees. 2017 IEEE Symposium Series on Computational Intelligence SSCI: Honolulu, November 27 – December 1: Proceedings. Research Collection School Of Information Systems. Retrieved from https://ink.library.smu.edu.sg/sis_research/4530.

Chumak, V. (2015). European experience of reforming police bodies (on the example of the Republic of Estonia). Bulletin of the Luhansk State University of Internal Affairs named after E.O. Didorenko, 4, 153-158. (In Ukrainian).

Council of the European Union (2010). Council of the European Union 15358/10. [File PDF]. Retrieved from https://data.consilium.europa.eu/doc/document/ST-15358-2010-INIT/en/pdf

Decree № 231/2021. On the Strategy for the Development of the Justice System and Constitutional Judiciary for 2021–2023, dated

June 11, 2021 (In Ukrainian). Retrieved from https://zakon.rada.gov.ua/laws/show/231/2021#Text
Dintino, J., & Frederick, T-M. (1983). Police Intelligence Systems in Crime Control. Springfield, IL.
Dudchenko, O. (2019a). The essence of the law enforcement system. Entrepreneurship, economy and law, 8, 144-149. (In Ukrainian).
Dudchenko, O. (2019b). Definition of the essence and structure of the law enforcement system. Law and Life. 9/2(333), 43-46. ISSN 2587-4365.
Europol. (2011). Serious and Organized Crime Threat Assessment 2017. Retrieved from https://www.europol.europa.eu/sites/default/files/documents/socta2017_0.pdf
Europol. (2021). Serious and Organised Crime Threat Assessment (SOCTA). Retrieved from https://www.europol.europa.eu/publications-events/main-reports/socta-report
Graycar, A. (2019). International Cooperation to Combat Money Laundering. International and Transnational Crime and Justice. Cambridge University Press, 299-304. Retrieved from https://doi.org/10.1017/9781108597296.050
Greene, J. (1998). Evaluating Planned Change Strategies in Modern Law Enforcement: Implementing Community-Based Policing. Brodeur J. P, 146 p.
Hurkovskyi, M.P., & Yesimov, S.S. (2018). Content and methodology of working with the personnel reserve in the system of the Ministry of Internal Affairs of Ukraine. Scientific Bulletin of the Lviv State University of Internal Affairs. Legal series, 1, 134-145. (In Ukrainian).
Ivanets, M. (2018). Corruption as a negative factor in the activity of law enforcement agencies. Actual problems of jurisprudence, 3(15), 59-63. (In Ukrainian).
Kovalchuk, T.I., Korystin, O.Y., & Sviridyuk, N.P. (2019). Hybrid threats in the civil security sector in Ukraine, Legality issues, 147, 163-175. (In Ukrainian). DOI: 10.21564/2414-990x.147.180550
Kovaliv, M.V. (2021). Interaction between the police and civil society institutions. Social and legal studies, 2(12), 79-85. (In Ukrainian).
Kubaienko, A.V. (2022). Modern approaches to the modernization of the law enforcement system in the conditions of digital transformation. Scientific Bulletin of the International Humanitarian University. Ser.: Jurisprudence, 56, 122-126. (In Ukrainian). Retrieved from https://vestnik-pravo.mgu.od.ua/archive/juspradenc56/juspradenc56.pdf#page=122
Kuchuk, A. (2005). Law enforcement activity: the state of scientific development of the problem. Economy, entrepreneurship and law, 72, 68-72. (In Ukrainian).
Kulish, A.M. (2009). Law enforcement system of Ukraine: administrative and legal principles of organization and functioning: autoref. (thesis doctor of law Sciences) Kharkiv National University of Internal Affairs, Kharkiv, 31 p. (In Ukrainian).
Lorraine, M., Bennett, S., Davis, J., Sargeant E., & Manning, M. (2013). Legitimacy in Policing: A Systematic Review. Campbell Systematic Reviews, 9(1), 1-147. Retrieved from https://doi.org/10.4073/csr.2013.1.
Maiorov, V.V. (2020). Ways of improving the administrative and legal regulation of police interaction with the population on the basis of partnership. Law and society, 2(2), 185-191. (In Ukrainian). DOI https://doi.org/10.32842/2078-3736/2020.2-2.28
Mishchenko, D. A., Bilozubenko, V. S., Brus, T. M., & Krushelnytska, T. A. (2019). Challenges and prospects for the development of the system of public andmunicipal administration. Lviv-Toruń: Liha-Press, 96 p.
Motuzna, A.V., & Reznik, O.M. (2022). Ways to optimize the cooperation of law enforcement agencies with the aim of countering the legalization of criminal proceeds. Legal Scientific Electronic Journal, 7, 259-262. (In Ukrainian). Retrieved from https://doi.org/10.32782/2524-0374/2022-7/60
Nakonechna, I. (2019). Interaction of law enforcement bodies (subunits) with state authorities, local self-government bodies, public organizations and legal entities during verification of statements and reports regarding violations of anti-corruption legislation. Entrepreneurship, economy and law, 4, 130–135. (In Ukrainian).
Nikolenko, O.V. (2013). Corruption in law enforcement agencies as a component of organized crime. Scientific Bulletin of Kherson State University, 5(2), 91-93. (In Ukrainian). Retrieved from http://www.lj.kherson.ua/pravo05/part_2/26.pdf
Picarelli, J.T. (2011). The evolving challenge of transnational organized crime. Trends in Crime and Justice, 25-54. Retrieved from https://nij.ojp.gov/topics/articles/evolution-transnational-organized-crime
Pluhatar, T.A. (2014). Definition of the essence and content of the concept of "law enforcement system". Science and law enforcement, 2(24), 21-28. (In Ukrainian).
Rizvi, G. (2005). Reinventing Government: Putting democracy and social justice back into discourse / Discussion Paper for 6th Global Forum on Reinventing Government Towards Participatory and Transparent Governance, 24-27 May 2005, Seoul (Republic of Korea), 38 p.
Rodríguez Fonseca, R., Garcés Castillo, W., Vargas Batis, B., & González Amita, R. (2021). Aporte de la vegetación existente en

agroecosistemas suburbanos de Santiago de Cuba a la alimentación. Revista Científica Del Amazonas, 4(7), 13-28. https://doi.org/10.34069/RA/2021.7.02

Rover, C., & Bienert, A. (2017). To serve and to protect: human rights and humanitarian law for police and security forces. Geneva, Switzerland: International Committee of the Red Cross.

Sereni-Massinger, C., Bawden, J., & Rowe, W. (2015). Policy point – counterpoint: mandating law enforcement to receive annual certification in cultural diversity through critical thinking. International Social Science Review, 91(2), 1-7.

Silberglitt, R., Chow, B.G., & Hollywood, J.S. (2015). Future law enforcement scenarios. Visions of law enforcement technology in the period 2024-2034:report of the law enforcement futuring workshop. Santa Monica, CA: RAND Corporation, 21-34.

Skakun, O.F. (2001). Theory of the state and law: textbook. Kharkiv: Consum, 656 p. (In Ukrainian).

Sokolenko, O.L. (2013). The concept and structure of the law enforcement system. Actual problems of domestic jurisprudence, 4, 91–96. (In Ukrainian).

Steblianko, A. V., Chernadchuk, T. O., Kravchenko, I. O., Andriichenko, N. S., & Rudanetska, O. S. (2020). International Law Enforcement Cooperation against Money Laundering. Cuestiones Políticas, 65, 2017–229.

Strom, K. (2016). Research on the Impact of Technology on Policing Strategy in the 21st Century, 7. RTI International Police Executive Research Forum RTI International. [File PDF]. Retrieved from https://www.ncjrs.gov/pdffiles1/nij/grants/251140.pdf

Svyrydiuk, N.P., & Korystin, O.Ie. (2022). Regarding the implementation of the Europol SOCTA methodology in Ukraine. The relevance and peculiarities of scientific research in the conditions of martial law: a collection of theses of the International Scientific and Practical Internet Conference on the occasion of the Science Day - 2022 in Ukraine (Kyiv, May 24, 2022). Kyiv: DNDI of the Ministry of Internal Affairs of Ukraine, 125-128. (In Ukrainian).

Tsimbal, V.N. (2015). Some issues of using information technologies by police officers. Society and Law, 1(51), 233-237. (In Russian)

Wanhua, L., Quan, L., & Ying J. (2018). Research and application of data cage of traffic administrative law enforcement based on big data technology. Transportation Research, 19(01), 10-17.

William, W. (2007). Type of Contact and Evaluations of Police Officers: The Effects of Procedural Justice across Three Types of Police-Citizen Contacts. Journal of Criminal Justice, 35(3), 612-21. Retrieved from https://doi.org/10.1016/j.jcrimjus.2007.09.006.

Wilson, J.M., & Weiss, A. (2012). A performance-based approach to police staffing and allocation, US Department of Justice Office of Community Oriented Policing Services.

Zahorulko, A.P. (2018). Improving state management of law enforcement agencies as a factor in increasing their efficiency in the conditions of hybrid warfare. Bulletin of the national university of civil defense of Ukraine, 2(9). Retrieved from http://repositsc.nuczu.edu.ua/bitstream/123456789/7741/1/ilovepdf_com-14-23.pdf

Zahumenna, Yu.O. (2020). Law enforcement agencies: principles, features, functions, peculiarities of activity. Law and security, 35, 145-150. (In Ukrainian).

Zavalnyi, M. (2018). The essence and tasks of the interaction of the National Police with the bodies of executive power and local self-government bodies to ensure public safety and order. Scientific bulletin of public and private law, 3(1), 146–150. (In Ukrainian).

Zhdanov, Yu.N. (2019). Patrol goes online. Rossiyskaya Gazeta. Retrieved from https://rg.ru/2019/11/07/chem-budet-otlichatsia-policiia-budushchego.html

DOI: https://doi.org/10.34069/AI/2023.63.03.16
How to Cite:
Tarasiuk, N., Podplota, S., Kaluzhska, L., & Osets'ka, N. (2023). Civil engineering students' English language lexico-grammatical competence formation in reading. *Amazonia Investiga*, *12*(63), 175-187. https://doi.org/10.34069/AI/2023.63.03.16

Civil engineering students' English language lexico-grammatical competence formation in reading

Формування англомовної лексико-граматичної компетентності студентів будівельних спеціальностей в читанні

Received: March 3, 2023 Accepted: April 29, 2023

Written by:
Nataliia Tarasiuk[1]
https://orcid.org/0000-0003-4514-6911
Svitlana Podplota[2]
https://orcid.org/0000-0002-5184-9907
Liliia Kaluzhska[3]
https://orcid.org/0000-0002-5833-7779
Nataliia Osets'ka[4]
https://orcid.org/0000-0002-9568-7225

Abstract

The current study compared two instructional approaches to supporting reading comprehension and lexico-grammatical competence in instruction of English for Specific Purposes for Civil Engineering students. The first instructional approach was structured according to students' content domain knowledge, using sketch construction technical drawings and information, and included simultaneous learning of different language structures in each content topic. The second instructional approach was systematically structured according to language domains and included step by step mastering of various language topics. Both instructional approaches incorporated principles of a communicative-cognitive approach, such as informational transfer and reflection as a metacognitive strategy. The samples of reflection tasks exemplify the reflection principle to showcase students' robust metacognitive awareness. Over 6 months, students completed assignments which embedded the use of one of the instructional approaches in the spotlight of above mentioned principles. Results demonstrated the efficiency of the content domain approach over that of the language domain approach. Thus, the content domain

Анотація

У поточному дослідженні порівнювалися два навчальні підходи до підтримки розуміння прочитаного та лексико-граматичної компетентності під час навчання англійської мови професійного спрямування для студентів будівельних спеціальностей. Перший навчальний підхід був структурований відповідно до знань студентів з фаху або контенту спеціальності, з використанням ескізних будівельних технічних креслень та інформації, і включав одночасне вивчення різних мовних структур у кожній темі змісту. Другий навчальний підхід був систематично структурований відповідно до мовних структур і включав поетапне оволодіння різними мовними темами. Обидва підходи до навчання включали принципи комунікативно-когнітивного підходу, такі як передача інформації та рефлексія як метакогнітивна стратегія. Зразки завдань на рефлексію є прикладом принципу рефлексії, щоб продемонструвати надійну метакогнітивну обізнаність студентів. Протягом 6 місяців студенти виконували завдання, які включали використання одного з навчальних підходів у центрі уваги вищезгаданих принципів. Результати продемонстрували ефективність

[1] Ph.D (Pedagogy), Associate Professor of the Foreign Languages Department, National University of Water and Environmental Engineering, Rivne (Ukraine).
[2] PhD (Pedagogy), Senior Lecturer of the Department of Methodology of Teaching Germanic Languages, Bogdan Khmelnitsky Melitopol state pedagogical university, Melitopol (Ukraine).
[3] PhD (Philology), Associate Professor of the Department of Germanic Philology at Bogdan Khmelnytsky Melitopol State Pedagogical University, Melitopol (Ukraine).
[4] Senior lecturer, National University of Water and Environmental Engineering, Rivne, (Ukraine).

approach, which is conceptually similar to interleaved practice, fosters lexico-grammatical competence acquisition in reading on the basis of the sketch construction project.

Keywords: lexico-grammatical competence, civil engineers, the sketch construction project, content domain , language domain.

контетного підходу порівняно з підходом мовних форм. Таким чином, контентний підхід, який концептуально подібний до практики інтерліву, сприяє набуттю лексико-граматичної компетенції в читанні на основі ескізного будівельного проекту.

Ключові слова: лексико-граматична компетентність, інженери-будівельники, ескізний проект будівництва, контентна сфера, мовна сфера.

Introduction

The problem of forming foreign language lexical and grammatical competencies, taking into account the profession of students, has long been in the center of attention of researchers studying the process of learning foreign language vocabulary by students of non-language institutions of higher education (Bolton & Jenks, 2022; Bhatia, 2022; Cigan & Kordic, 2013; Tarnopolsky, 1993). Thus, Tarnopolsky, O. (Tarnopolsky,1993) explained that whereas students in language departments focus on understanding the English language as a linguistic system, students studying English for specific purposes in non-language departments rely on their existing knowledge of their content domain, and have a more instrumental approach, seeing English as a tool for achieving their professional goals. Bolton, K. (Bolton & Jenks, 2022) and Bhatia, V. (Bhatia, 2022) further emphasized the importance of developing a deep understanding of English for specific purposes to allow students to better understand nuances in professional settings. Relatedly, Cigan, V. (Cigan & Kordic, 2013) investigated gains in proficiency of students enrolled in English for specific purposes classes, and found that students' level of performance showed more substantial improvement in lexical as compared to grammatical competence.

An additional issue is the instructional approach, and specifically, the communicative-cognitive approach has been found to be effective in promoting lexico-grammatical competence for students of non-language higher educational establishment. For example, Shamov, A. (Shamov, 2008) found that using cognitive-communicative strategies, such as memory, attention, imagination and cognitive thinking improved achievement in vocabulary acquisition of students of German as a foreign language. Another advantage of the communicative-cognitive approach is that it fosters self-regulated learning, as described within the theory of constructivism (Ruofei & Di, 2022; Xu & Luo, 2022). Self-regulated learning refers to the learner's own understanding of educational activity. To achieve self-regulated learning, the communicative-cognitive instructional approach highlights several important principles, including integrated learning, systemacity, functionality, information transfer, unity of learning, education and development, authenticity, problematicity, reflection, improvement of educational process by the engagement of students into the usage of metacognitive and cognitive strategies.

The current study focused on 2 main principles of the communicative-cognitive approach, namely information transfer, and using reflection as a metacognitive strategy. From the viewpoint of Nation, I. and Meng, Z. information transfer means students' ability to transition from verbal to visual information and vice versa (Nation & Newton, 2009; Meng & Zhao, 2015). Such information transfer is especially important for civil engineering students, because they are constantly required to combine verbal information in the form of general notes with technical drawings and floor plans. Topanata, J. and Li, M. distinguish that the metacognitive strategy of reflection is when students analyze and assess their own learning and monitor their progress (Toapanta, 2022; Li & Yuan, 2022).

These instructional principles were implemented here within the context of actual construction projects. Construction plans consist of detailed images, which include commonly used symbols and terms, accompanied by explanatory text. The participants in the study had gained experience during their civil engineering training in comprehending, correcting and creating such plans in their native language, Ukrainian. The English training described here was anchored to develop students' ability to similarly comprehend, correct and create such construction plans in English.

The present study was designed to make a contribution to better understand optimal instruction approached, by presenting findings on how different instructional approaches can support the developing reading comprehension of the sketch construction project with principles of a communicative-cognitive approach in English by future civil engineers.

We address the following research questions:

1. How is English language lexico-grammatical competence formed within the context of a sketch construction project within two instructional approaches in the light of such communicative-cognitive principles as information transfer and reflection as metacognitive strategies
2. Which instructional approach leads to larger gains in learning?

The rest of the paper is organized as follows: The introduction presents and discusses findings of the English language lexico-grammatical competence content formation' stages and groups of exercises with the usage of informational transfer and reflection as a metacognitive strategy. The Literature reviews highlights two instructional approaches for supporting the formation of the English language lexico-grammatical competence of future civil engineers. Methodology includes information about participants and research instruments. Results and Discussion present and discuss the outcomes of the experiment and it is defined if content domain or language domain approach is better; highlight controversial issues about the results of lexico-grammatical competence for future civil engineers in reading. Conclusion and limitations present summaries of the research paper.

Theoretical Framework or Literature review

Several theoretical concepts of English language lexico-grammatical competence including lexical and grammatical knowledge, skills and language awareness have been suggested in the literature (Almarshedi, 2022; Palangan 2021). I share the same English language lexico-grammatical concept but point to the sketch construction project as the context of its formation and regarding civil engineers' professional activity which demands understanding of construction drawings.

Stages of developing competence have been outlined by Shatilov, S. (Shatilov, 1986). He has defined an oriented-preparatory stage, where students get acquainted with new language phenomena, followed by a stereotype-situated stage, where the language skill is repeated by multiple repetition. The final stage is the variative-situated stage, when language skills become more flexible in variable speech situations. In the current project, we have adopted this framework and implemented it in the context of a sketch construction project: The oriented-preparatory stage is directed at acquaintance with new language material of the sketch construction project; The stereotype-situated stage is aimed at formation of receptive lexico-grammatical skills on the level of word, word combination, sentence in small and big texts of the sketch construction project; The variative-situated stage is directed at the formation of lexico-grammatical skills on the level of unity (the whole texts); In this final stage, the goal is that students accomplish integrated speech and reading skills.

In the current study, language exercises were designed based on the stages outlined above. Accordingly, four groups of exercises were developed: 1) Oriented-preparatory stage exercises focused on building acquaintance with new language material, by using visual and verbal supports, including marks of architectural-constructive elements on the layouts of the sketch construction project; 2) Exercises for the stereotype-situated stage were designed to foster receptive lexico-grammatical skills on the level of word, word combination and sentence. To this end, students were now presented with more elaborate layouts with notes of the sketch construction project and with linguistically richer tables and descriptions of the construction project 3) At the variative-situated stage, exercises required students to comprehend even larger text units, including descriptions of the construction project and stages of implementation 4) At the final integrative stage, students practiced different levels of involvement with the text, including skimming, scanning and deep reading, based on the specific requirements of the task at hand.

The suggested groups of exercises correlate with the stages, which include subgroups of exercises. A distinguishing feature in the construct of lexico-grammatical competence for future civil engineers is that they constantly refer to drawings while doing tasks with notes for them and vice versa. This means that the information transfer principle is constantly evident in each stage. In addition, reflection was also included after each exercise and at the end of the group of tasks at each stage. Thus, reflection tasks, in which students analyze and assess the results of study, followed each exercise when.these reflective exercises included instructions such as – “Analyse how well you know the words. Write down those you don’t know well. Learn them”. “Compare your words with your partner’s. Which ones did you miss, which mistakes did you make? Learn the words”. What grammar structures are difficult for you to understand?

Another reflection task is repsented in the table 1 after the group of tasks where students monitor their progress in studying.

Table 1.
Reflection task

	Well	Badly
I know …	How to continue progress effectively by the end of the term	How to improve knowledge step by step by the end of the term
I can …	How to continue progress after the end of the term.	How to improve knowledge after the end of the term.

Designed as compiled by the authors

Therefore, in the present study the construct of lexico-grammatical competence is viewed in the light of such communicative-cognitive principles as information transfer and reflection as metacognitive strategies geared towards students gaining more metacognitive awareness of their learning and in accord with the stages of skills formation.

In the current study, we compared two instructional approaches in order to investigate which one is the best for civil engineering students.

When introducing students to language situated within an actual construction project, there are at least two approaches to ordering and introducing topics for study.

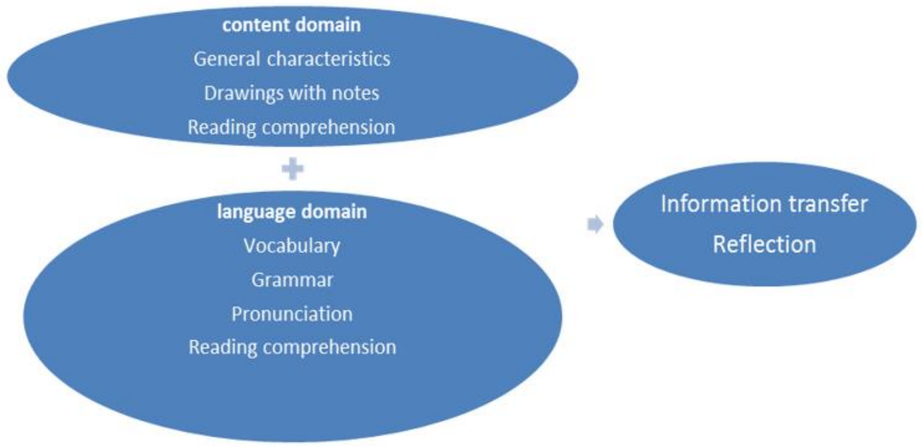


Figure 1. Content and language domain instructional approaches with information transfer principles of communicative-cognitive approach
Designed as compiled by the authors

When introducing students to language situated within an actual construction project, there are at least two approaches to ordering and introducing topics for study. One approach, the content domain approach, follows the logic of the construction project, and follows the instructional stages outlined above within each content domain. Each construction project content domain encompasses two main topics: general characteristics which includes information about contractor’s duties, zoning chart (address, numbers of lot, block, zone, information about bulk and yard, principal use of the building), building characteristics, design load schedule (load on roof, attic and floors) and drawings with notes (plot plan, floor plan, elevation).

The language domain approach completes each of the instructional stages across all content domains, before moving on to a more advanced instructional stage. In the language domain approach, learning is ordered by language structures (for example, first vocabulary and then grammatical structures), such that linguistic content relating to different stages of construction (for example, floor plan and elevation), are introduced simultaneously.

Let's review each of the instructional approaches. Figure 3 shows the content domain approach. The same color in the first column shows that all lexical and grammar information is studied step by step within one stage. Only then there is transfer to the next topic. After all topics are studied, there is consolidation which is aimed at development of reading comprehension, particularly vocabulary and grammar in skimmed reading, scanning and deep reading.

The content domain approach is focused on a consistent organization of training, which involves step by step mastering the material of the first topic 1. «General characteristics of the sketch construction project» in the oriented-preparatory, stereotypically-situational and variant-situational stages, then topics 2. «Drawings with notes» with the corresponding sub-themes at the same stages, and then topic 3. «Sketch construction project» is studied at the final step. There is successive transfer in the form of progress check from one topic to another.

General characteristics	Plot plan	Floor plan	Elevation
Oriented-preparatory	Oriented-preparatory	Oriented-preparatory	Oriented-preparatory
Stereotype-situated	Stereotype-situated	Stereotype-situated	Stereotype-situated
Variative-situated	Variative-situated	Variative-situated	Variative-situated

Consolidation (Sketch construction project)
Vocabulary , grammar skimmed reading
Vocabulary , grammar scanning
Vocabulary , grammar deep reading

Figure 2. Content domain approach
Designed as compiled by the authors

Figure 3 shows the language domain approach. The same color in the row of the table demonstrates that vocabulary and grammar information from 4 topics in each stage are learned simultaneously. For example, vocabulary and pronunciation tasks at the oriented-preparatory stage are done within the topic "General characteristics' ", then within themes "Plot plan", "Floor plan", "Elevation". Only then another language domain, such as grammar, is addressed again across the 4 content topics. Parallel organization of training here means that material at each stage (orientational-preparatory, stereotypical-situational and variant-situational) is studied simultaneously. But there is no grammar vocabulary balance (1 or 2 grammar forms to 6 lexical units) due to high concentration of vocabulary within topics at the same time. At the same time, such dynamic changes of topics within each stage fosters analytic-synthetic activity and might facilitate memorization. After all language domains in topics are studied, this approach also includes a consolidation stage which is aimed at development of reading comprehension, particularly vocabulary and grammar in skimmed reading, scanning and deep reading.

General characteristics	Plot plan	Floor plan	Elevation
Oriented-preparatory	Oriented-preparatory	Oriented-preparatory	Oriented-preparatory
Stereotype-situated	Stereotype-situated	Stereotype-situated	Stereotype-situated
Variative-situated	Variative-situated	Variative-situated	Variative-situated

Consolidation (Sketch construction project)
Vocabulary , grammar skimmed reading
Vocabulary , grammar scanning
Vocabulary , grammar deep reading

Figure 3. Language domain approach
Designed as compliled by the authors.

Our hypothesis is that the content domain approach will be more effective, for three reasons. First, this approach preserves the grammar-vocabulary balance suggested by Byrkun, L. (Byrkun, 1993), according to which the optimal balance is 1 or 2 grammar forms to 6 lexical units . Second, the content domain approach allows the learners to rely on the logic of their existing civil engineering knowledge of the stages of project construction, which they are familiar with in their native language. Therefore, it might be easier for learners to easily engage with the language material by integrating it with familiar topics. Finally, the current content domain approach is conceptually similar to interleaving practice, because grammar and vocabulary are practiced at the same time. For example, Nakata, T. demonstrated that within grammar learning, interleaving practice of various grammatical structures, has shown benefits for long-term retention (Nakata, 2019). So when learners are introduced to the “General characteristics” section, they study both vocabulary patterns (for example, N+N, Adj+N) and grammar patterns (for example, sentences with “shall” in the meaning of have to). These patterns are then repeated within the following topics of the sketch construction project , “Plot plan”, “Floor plan”, “Elevation”. In contrast, in the language domain approach, item orders are more analogous to blocked practice, where learners practice one skill at a time. Students are first exposed to vocabulary, with focus on pronunciation, across the four topics of the sketch construction project, and only then they proceed to the next “language block”, namely grammar patterns, which are introduced in the framework of these themes.

The main goal of the current study is to examine which instructional approach, the content domain approach or the language domain approach, leads to higher gains in English language lexico-grammatical competence.

Methodology

Participants

The participants of the experiment were 72 2nd year civil engineering students enrolled in the optional course "English language for specific purposes" . The course included 30 hours of classroom instruction delivered through English, and 42 hours of individual work, over 6 months.

Participants were assigned to two experimental groups, which differed in the instructional approach used in their classes. Participants were recruited through announcement to receive course-credit in the discipline "English language for specific purposes" for participation. They gave informed consent to take part in the study.

Research instruments

Participants’ level of English lexico-grammatical competence was measured using a multiple choice test. Tai, H. (Tai et al., 2022) stated that this kind of test has a number of advantages in testing; for instance, providing scoring reliability in crowded groups is easier with these tests and the ability to accommodate a large number of items allows it to cover critical content in the subject area along with high content validity. Similar multiple choice tests were also used during the course to assess students' interim knowledge and progress check.

The experimental test was conducted in the form of testing, which was carried out on two topics: "General characteristics of the sketch construction project" and "Drawings with notes". The test included items requiring different levels of comprehension: single word or sentence, superficial text reading, detailed reading comprehension and inference. Each level accounted for 25% of the final score on the test. The maximum score on the text was 40 points, and it included 43 items. Table 2 provides a full description of test tasks (see also Appendix A for example test items).

Table 2.
Test tasks

Comprehension Level	Tasks types	Maximum points
Vocabulary: single words, word in sentence Grammar: isolated structure; single sentence	TT (test task) 1–20: (20 test tasks x 0,25 points) TT 21–25: (5 test tasks x 1point)	10
Vocabulary and grammar in text, requiring skimmed reading	T3 26–27: (2 test tasks x 5 points)	10
Vocabulary and grammar requiring deep reading	T3 28: (1 task x5 points); T3 29–33: (5 test tasks x1 point)	10
Contextual conjecture and inference	T3 34–43: (10 test tasks x1point)	10
Total 40		

Designed as compiled by the authors.

The purpose of the experiment was to test the effectiveness of our methodology for the formation of future civil engineers English lexical and grammatical competence in reading, which is implemented in four stages and the use of a specially designed subsystem of exercises. Raw scores on the text were converted to percent correct. According to Bespalko, V. (Bespalko, 1968), a satisfactory level of achievement, indicating that students have internalized the learning, is a minimum 0,7 or 70% accuracy.

Learners' lexico-grammatical results were examined at two data collection times corresponding to two terms of study: at the beginning of the study year and at the end of it. In order to ensure reliability, tests were piloted and marked consistently. The horizontal nature of the experiment allowed to test the which instructional approach (content domain or language domain) elaborated methodology is more effective.

The unvariated conditions of the experiment were: 1) the number of the participants in the experimental training; 2) the use of the same subsystem of exercises; 3) duration of experimental training; 4) tasks of pre- and post-experimental tests; 6) criteria for assessing the level of lexical and grammatical knowledge and skill

The varied condition of the experiment was the type of instructional approach, as detailed in the method section.

Results are presented in Table 3. In order to determine the adequacy of the level of formation of English lexical and grammatical competence in reading, we calculated the coefficient of learning according to the above mentioned formula of Bespalko, V. (Bespalko, 1968).

Results are presented in table 3. In order to determine the adequacy of the level of formation of English lexical and grammatical competence in reading, we calculated the coefficient of learning according to the above mentioned formula of Bespalko, V. (Bespalko, 1968).

Table 3.
Average indicators of the level of the English language lexico-grammatical competence formation in reading for students of content domain approach and language domain approach (pre-experimental test/ post-experimental test)

Approaches	Indicators by criteria								Total test score
	Vocabulary: single words, word in sentence Grammar: Isolated structure; single sentence		Vocabulary and grammar in text, requiring skimmed reading		Vocabulary and grammar requiring deep reading		Contextual conjecture and inference		
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post test	Pre-test	Post -test	Pre-test/ Post-test
Language Domain approach	3.58	7.42	3.58	7.3	3.75	7.03	3.39	6.5	14.3 (36%) / 28.3 (71%)
Content Domain approach	3.42	8.33	3.4	7.78	3.67	7.8	3.42	7.03	13.92 (35%) / 30.9 (77%)

Designed as compiled by the authors.

The table 3 demonstrates better yielded results after the study within both instructional approaches (content domain and language domain). The learning coefficient in both groups is above minimum 0,7 (71% in language domain approach and 77% in content domain approach). Students who attended classes structured according to the content domain approach show better results after all four tasks have been done. The analysis of individual test results shows that 24 out of 36 students from the group with language domain approach have reached the minimum learning whereas 32 students out of 36 in content domain have attained this coefficient.

The horizontal nature of the experiment has allowed to test which instructional approach (content domain or language domain) is more effective. To do this, we use the multifunctional statistical criterion ϕ * - Fisher's angular transformation, which is designed to compare two samples by frequency of the effect to ϕ researcher. It identifies if there is or there is no effect of the elaborated methodology. The essence of Fisher's angular transformation is the transformation of percentages into the value of the central angle, which is measured in radians. A larger percentage corresponds to a larger angle ϕ, and a smaller percentage corresponds to a smaller angle ϕ disntiguished by Sidorenko, E. (Sidorenko, 2002). The effectiveness of each domain separately has been verified by the multifunctional statistical criterion ϕ. Having used the table XII of Supplement 1 elaborated by Sidorenko, E. (Sidorenko, 2002), we have identified φ, which correlate with percentage rate in the language domain and in the content domain instructional groups.

Table 4.
Comparison of performance on the final test for students in the language domain and the content domain instructional approaches

Approaches	«There is an effect» Number of students	Percentage rate	φ	«There is no effect» Number of students	Percentage rate	φ	Total amount of student
Language Domain approach	24	66,7 %	1,911	12	33,3 %	1,230	36
Content domain approach	32	88,9 %	2,462	4	11,1 %	0,679	36
In general	56			16			72

Designed as compiled by the authors.

Thus, the findings of the current study demonstrate that a higher percent of students in the content domain approach have reached the threshold of 70% accurate performance. A Mann-Whitney rank order analysis of independent samples indicated that this difference was significant (U=522, p=.044).

Results and Discussion

The current study examined how different instructional approaches (content domain and language domain) can support students' developing reading comprehension in studying English for specific purposes. Both instructional approaches used here included communicative-cognitive approach principles, such as informational transfer and reflection. Students made significant learning gains in both instructional approaches with the above mentioned principles.

As we hypothesized, the content domain approach turned out to be more effective than the language domain approach. The experimental verification has been introduced.

The present results, demonstrating the effectiveness of the content domain approach implemented here, serve as a proof-of-concept for grammar-vocabulary balance suggested by Byrkun, L. (Byrkun, 1993). Specifically, in the content domain approach implemented here, students were exposed to approximately 1 or 2 grammar forms for each 6 lexical units, similar to Byrkun's study, and indeed this balance led to greater gains in performance.

The current finding of the efficiency of the content domain domain approach aligns with previous research demonstrating that interleaving practice yields sizeable learning benefits for long-term retention. For example, Nakata, T. (Nakata, 2019) established the benefits of interleaving practice in grammar learning, and showed that it was more effective than blocked practice. In the current content domain approach, interleaving was more extensive, as students had ample opportunities to practice grammar and vocabulary simultaneously. Once again, this interleaving approach was found to be more effective than the language domain approach implemented here, in which students practiced grammar and vocabulary separately, and only combined these types of knowledge towards the end of their course of studies.

The common feature is that in both the current research, and in and Nakata's work, students had a relatively high level of prior knowledge, in spite of different learning types. The difference is that in Nakata's paper students had prior exposure to target language structures whereas in our research students had previous knowledge of the structure and some background information about the sketch construction project in Ukrainian.

In addition to the positive impact of balance and interleaving practice, we propose that a likely explanation for the efficiency of the content domain approach is that it can rely on students' background knowledge of the sketch construction project. Students' previous experience with the sketch construction project in their native language is complemented with new knowledge and skills in English. The familiarity with the content domain can act as a scaffold for new forms and representations introduced and English, which can then more easily be linked to existing conceptual and structural knowledge. The theoretical underpinning of the content domain's coincidence with interleaving practice is its way of usage (multiple skills at once) notwithstanding the way of learning.

The current study included a limited range of topics (General Characteristics; Floor plan; Plot plan; Elevation) within the sketch construction project. Future research can extend inquiry into other topics which align with civil engineering. Further, the current study focused mainly on reading comprehension. Future work can examine whether the same principles of instruction are also effective when examining students' development of speaking and writing skills. Finally, the current approach can be extended by including additional specific features related with activities for students following different courses of study, beyond civil engineering. By examining these methodological considerations, research papers could be expanded further and thus potentially result in a more in-depth discussion and application of the English language lexico-grammatical competence in writing, reading, speaking on ESP courses.

Conclusion

Our findings suggest that language acquisition can be more efficient across the same number of lessons and tasks when English instruction is tailored to the existing content knowledge of the future student's profession with a view to yielding significant lexico-grammatical gains in reading comprehension in the English-speaking professional environment.

Bibliographic references

Almarshedi, R. (2022). Linguistic awareness or grammatical competence. What dominates the Saudi undergraduate EFL classroom? Theory and Practice in Language Studies, 12(10), pp. 1979-1988. https://doi.org/10.17507/tpls.1210.04

Bespalko, V. (1968) Experience in the development and use of quality criteria for the assimilation of knowledge. Soviet Pedagogy, 4, 52–69. (In Russian)

Bolton, K., & Jenks, C. (2022). World Englishes and English for specific purposes (ESP). World Englishes, 41, 495-511. https://doi.org/10.1111/weng.12604

Bhatia,V. (2022). World Englishes for specific purposes: A multi-perspective view. World Englishes, 41, 584-595. https://doi.org/10.1111/weng.12602

Byrkun L., (1993). Syllabus design for adult beginners at Ukrainian universities (Unpublished dissertation). Cambridge university.

Cigan, V., & Kordic, L. (2013) The role of ESP courses in general English proficiency. Linguistica, 53(2), 153-172. https://doi.org/10.4312/linguistica.53.2.153-172

Meng, Z., & Zhao, J. (2015). Information Transfer Technique in Classroom Interaction. US-China Foreign Language, 13(5), 357-362. https://doi.org/10.17265/1539-8080/2015.05.005

Nation, I. S. P., & Newton, J. (2009). Teaching ESL/ EFL Listening and Speaking. New York, NY: Routledge.

Nakata, T. (2019) Mixing grammar exercises facilitates long-term retention: Effects of blocking, interleaving and increasing practice. Modern Language Journal, 103, 629-647. https://doi.org/10.1111/modl.12581

Palangan, B. (2021) The Initial lexicogrammatical competence of the English Education Freshmen. English language and Education Spectrum, 1(1), 1-13. https://doi.org/10.53416/electrum.v1i1.1

Rodríguez Fonseca, R., Garcés Castillo, W., Vargas Batis, B., & González Amita, R. (2021). Aporte de la vegetación existente en agroecosistemas suburbanos de Santiago de Cuba a la alimentación. Revista Científica Del Amazonas, 4(7), 13-28. https://doi.org/10.34069/RA/2021.7.02

Ruofei Z., & Di Z. (2022) Self-regulated second language learning: a review of types and benefits of strategies, modes of teacher support, and pedagogical implications, Computer Assisted Language Learning, DOI: 10.1080/09588221.2022.2055081

Shamov, A. (2008) Communicative-cognitive approach for teaching lexical part of speech on Greman classes. FLS. 4, 21-27. https://naukarus.com/kommunikativno-kognitivnyy-podhod-v-obuchenii-leksicheskoy-storone-rechi-na-urokah-nemetskogo-yazyka(In Russian)

Shatilov, S. (1986) Methods of teaching German in high school. M: Enlightenment. (in Russian)

Sidorenko, E. (2002) Methods of mathematical processing in psychology. St. Petersburg: Rech'. (in Russian)

Tarnopolsky, O. (1993) Methods of teaching English at the 2nd year of technical higher educational establishment. High school. (In Ukranian)

Tai, H., Liu, C., & Chen, Y. (2022). Validation of a multiple-choice implicature test: insights from Chinese EFL learners' cognitive processes. International Review of Applied Linguistics in Language Teaching. https://doi.org/10.1515/iral-2021-0190

Toapanta, J. (2022). L2 listening: An intervention study of instructional approaches. Foreign Language Annals, 55, 914–935. https://doi.org/10.1111/flan.12632

Li M., Yuan R., (2022). Enhancing students' metacognitive development in higher education: A classroom-based inquiry. International Journal of Educational Research, 112. https://doi.org/10.1016/j.ijer.2022.101947

Xu, J., & Luo, K. (2022). Immersing learners in English listening classroom: does self-regulated learning instruction make a difference? Applied Linguistics Review. https://doi.org/10.1515/applirev-2021-0171

Appendix 1

I. **Assessment criteria** Correctness of understanding lexical units on the word/ word combination/ sentence level

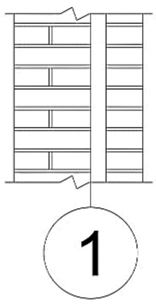
Task type word meaning skills formation

Task 1ª

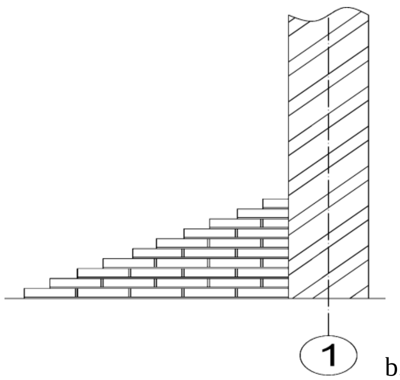
1. Which of the following words doesn't mean подвійні двері**?** ***(0-0,25 points)***
a. sliding door b. bifold door c. double door

Task 1 b

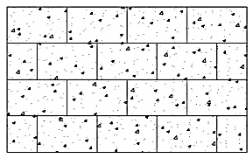
Which of the drawings do this sentence correspond to? (***0-1 points)***
Provide minimum air space between sheathing and brick veneer.



a.



b.



c.

II. **Assessment criteria** Correctness of understanding lexical units and grammar structures on the level of text (skimmed reading)

Task type word meaning, grammar *structure* and sentence concept skills formation in the text (skimmed reading)

Which list of words belongs to the description of interior, exterior and CMU walls in the wall schedule (from the construction project «Two family residence») ? (***0-5 points)***

a. Below grade, sheathing, brick veneer, gypsum wallboard, wall type C, brick shelf, siding color, gypsum board inside.
b. Point of beginning, wind rose, double door, bifold door, brick shelf, siding color, gypsum board inside.
c. Elevation indication, exterior wall, contractor, design load, garage, storage, laundry.

III. **Assessment criteria** Correctness of understanding lexical units and grammar structures on the level of text (deep reading)

Task type word meaning, grammar *structure* and sentence concept skills formation in the text(deep reading)

Which of the four concepts (a, b, c) to save costs are relevant for the floor plan below and the demands of the owner? (***0-5 points)***

Demands of the owner: 1. The first floor should be smaller than the second floor; 2 There must be more living spaces; 3. Fireproof building materials should be chosen.

a. **Planning concept 1**

The location of rooms should be changed. Additional rooms should be added. Two leaves opening doors should be changed into one leaves opening doors.

Constructive concept 1
Internal walls should be changed in gypsum walls. Floor tile can be changed in parquet.

b. **Planning concept 2**

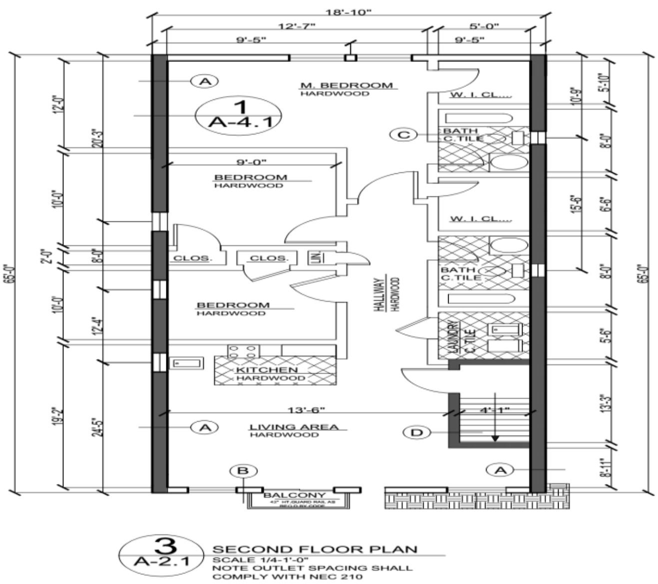
One bathroom should be taken away. Two bedrooms should be combined into one. More space-saving construction of staircase should be made.

Constructive concept 2
Exterior wooden walls in a wall veneered with natural material should be changed in stone and artificial brick or siding with insulating material and gypsum. For this purpose the first floor plan should be changed into the plan of framed type.

c. **Planning concept 3**

Rooms should be relocated.

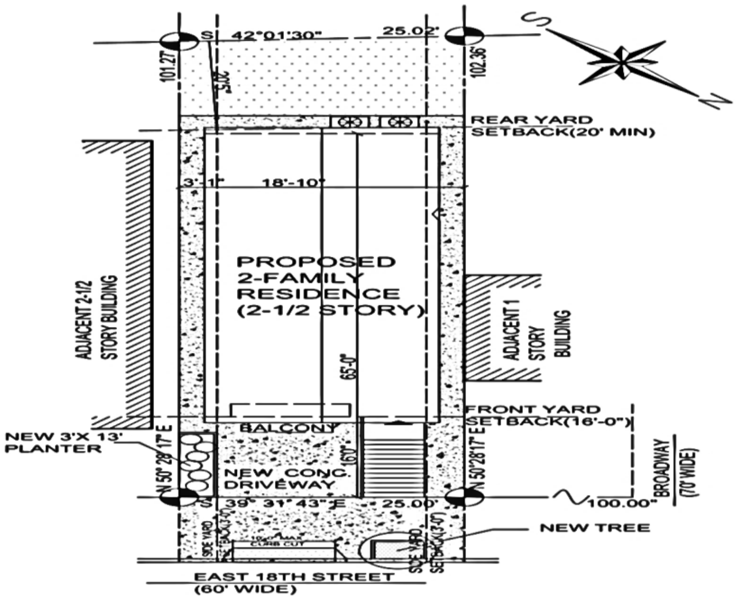
Constructive concept 3
Exterior wooden walls in a wall veneered with natural material should be changed in reinforced concrete.



IV. **Assessment criteria** Correctness of contextual conjecture and forecast

Task type contextual conjecture and forecast skills formation

Fill in the gaps with appropriate words and grammar constructions for the plot plan below. (***0-10 points)***
The purpose of my presentation is to introduce our new 34. ____ of lake cabin. To start with I will describe layouts of a construction project. Secondly I 35. _____. If you look at this layout, you will see that the draft of buildings and personal plots of land are plotted on this plan. Both plot plans have basic lines: property line, 36. _____ natural gas line, property sanitary line. Elevation part is located to the south for better lightning in comparison with the lowering of the second plot plan which 37 _____ to the south. Left to the house is a garage with 38. ____. There is no attached garage on the second plot plan and it is located not far from the house. Residential building is situated on the plain part of the plot plan on both layouts. Elevation and lowering are observed on this plot plan. There are new 39 ______ in front of the house while there are new planters in front of and behind the house on the second plot plan. There is a 40 ____ in front of the house on the first plot plan in comparison with landscaped areas in front of and behind the house on the second plot plan. There 41 ____ and rear yards on both plot plans. There is a property shrub in front of the house on the first plot plan 42 _____ concrete driveway on the second plot plan. In conclusion, there are the following civil engineering concepts of mine for layouts 43 _____ :



 ISSN 2322- 6307

DOI: https://doi.org/10.34069/AI/2023.63.03.17
How to Cite:
Overchuk, V., Smulson, M., Vdovichenko, O., Maliar, O., & Vasuk, K. (2023). Psychological assistance to the individual in situations of life crises using narrative practices. *Amazonia Investiga*, *12*(63), 188-197. https://doi.org/10.34069/AI/2023.63.03.17

Psychological assistance to the individual in situations of life crises using narrative practices

Психологічна допомога особистості в ситуаціях життєвих криз з використанням наративних практик

Received: March 4, 2023 Accepted: April 28, 2023

Written by:
Victoriia Overchuk[1]
https://orcid.org/0000-0002-7744-9346
Web of Science Researcher ID: AAY-4666-2020
Maryna Smulson[2]
https://orcid.org/0000-0002-9563-3390
Web of Science Researcher ID: HNF-8368-2023
Oksana Vdovichenko[3]
https://orcid.org/0000-0003-0430-2295
Web of Science Researcher ID: AFA-4299-2022
Olena Maliar[4]
https://orcid.org/0000-0001-5924-4120
Web of Science Researcher ID: GSN-9537-2022
Katerina Vasuk[5]
https://orcid.org/0000-0002-6734-4612
Web of Science ResearcherID: HZL-2354-2023

Abstract

This article examines the theory and practice of using narrative techniques to provide psychological support to people facing life's obstacles and crises. Researchers are studying the key aspects of the narrative approach, its effectiveness, and ways to combine it with classical methods of psychological assistance. The article aims to discuss an alternative perception of social reality based on the ideas of postmodernism about psychological support and to reveal in more detail the narrative practice as an innovative counseling technique. The research methodology is based on the analysis of narrative practice and its fundamental principles, such as separating the problem from the individual, recognizing the patient as an authority in his life, and concentrating on considering the context of

Анотація

У цій статті розглядається теорія та практика використання наративних методик для надання психологічної підтримки особам, які стикаються з життєвими перешкодами та кризами. Дослідники вивчають ключові аспекти наративного підходу, його результативність, а також шляхи поєднання з класичними методами психологічної допомоги. Метою роботи є обговорення альтернативного сприйняття соціальної дійсності, засноване на ідеях постмодернізму про психологічний супровід та докладніше розкриття наративної практики як інноваційної техніки консультування. Методика дослідження заснована на аналізі наративної практики та таких її основоположних принципів, як відокремлення проблеми від

[1] Doctor of Economics, Candidate of Psychological Sciences, Professor, Head of the Department of Psychology, Vasyl' Stus Donetsk National University, Vinnytsia, Ukraine.
[2] Doctor of Psychological Sciences, Professor, Academician of NAES of Ukraine, Department of Modern Information Technologies of Education, G.S. Kostiuk Institute of Psychology of the National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine.
[3] Doctor of Psychological Sciences, Professor, Dean of the Faculty of Social and Humanities, Department of Theories and Methods of Practical Psychology, The State Institution "South Ukrainian National Pedagogical University named after K. D. Ushynsky," Odesa, Ukraine.
[4] PhD in Psychology, Associate Professor, Department of Pedagogical Sciences, Professional and Primary Education, Vinnytsia Academy of Continuing Education.
[5] PhD in Psychology, Assistant Professor of the Department of Psychology, Vasyl' Stus Donetsk National Unsversity, Vinnytsia, Ukraine.

communication, where speech plays a central role. The main conclusions demonstrate the effectiveness of the narrative approach as a tool for psychological support in crises. This technique ensures that each case's characteristics and specifics are considered, contributing to the successful solution of problems and restoring the psychological balance of individuals. A more detailed analysis of narrative methods may contribute to their further integration with traditional approaches and lead to the creation of new models of psychological assistance.

Keywords: social reality, psychological assistance, internal resources, crisis situations, narrative practice.

індивіда, визнання пацієнта авторитетом свого життя та концентрується на обліку контексту комунікації, де мова відіграє центральну роль. Головні висновки демонструють ефективність наративного підходу як інструменту психологічної підтримки в кризових обставинах. Ця методика забезпечує облік індивідуальних особливостей та специфіки кожного випадку, що сприяє успішному вирішенню проблем та відновленню психологічної рівноваги індивідів. Детальніший аналіз наративних методів може сприяти їхній подальшій інтеграції з традиційними підходами та призвести до створення нових моделей психологічної допомоги.

Ключові слова: соціальна реальність, психологічна допомога, внутрішні ресурси, кризові ситуації, наративна практика.

Introduction

Life crises are integral to personality development and can occur when overcoming difficult life situations, adapting to changes, and moving from one stage to another (Mirvis, 2023). Providing psychological assistance in crises requires an approach that considers the specifics of the individual, traditions, and the context of his life. In this shape, narrative practices provide an excellent opportunity to help people gain the resources to overcome crises, make sense of difficulties, and find new ways to solve problems.

In recent decades, there has been an increasing interest in ideas and approaches that differ significantly from the classical psychological line in the field of psychological science and practice. These ideas develop through the influence of the postmodern direction, offering an alternative view of social reality and ways of providing psychological assistance (McCaie, 2020). The narrative approach is one of the most expressive and significant approaches that stand out in this context.

The purpose of this article is to study the theoretical foundations and practical significance of narrative approaches in providing psychological assistance in situations of life crises. The article is supposed to consider the following scientific issues:

1. Definition of the concept of "life crisis" and the specifics of its manifestation.
2. Postmodern concept of narrative practices, their main provisions, and tools.
3. Experience in the use of narrative practices in dealing with crises and their effectiveness.

As a result of these studies, the authors intend to develop recommendations for specialists in the field of psychological assistance, allowing them to successfully use narrative practices in working with a person in situations of life crises. In addition, the implementation of narrative approaches into professional practice contributes to the understanding of the characteristics and capabilities of the individual, the activation of internal resources, and the development of strategies for coping with crisis periods.

Literature Review

The narrative approach has developed and becomes an independent direction in modern psychological practice (Kawai, 2022). Essential components of this current are "narrative psychotherapy" and "narrative counseling," which have already established well-established areas of expertise and application (Maree, 2020). The introduction and application of a narrative approach in psychology is evidence of expanding horizons and new opportunities for working with patients, taking into account their unique life stories and experiences (Rolland & Walsh, 2022). In addition, emphasis on narratives – narratives of events and beliefs through which individuals acquire and maintain their self-identity – allows for a deeper understanding and coping with the complex life crises individuals face (Stebleton & Franklin, 2022). Thus, the narrative approach offers a more flexible, comprehensive, and personalized form of psychological assistance, recognizing and respecting each person's individuality.

Sarbin (1986), the founder of the narrative approach, saw narrative as a fundamental principle underlying human actions and deeds. He pointed out that through storytelling, individuals can better know themselves and their actions (Sarbin, 1986). Hermans and Hermans-Konopka (2010) developed the concept of the *Dialogical self theory*, according to which self-consciousness is presented as a polyphonic novel owned by numerous authors. This implies that our identity comprises many voices interacting with each other in a "dialogue."

McAdams (2001) introduced the model of identity as a personal story. We create our past, perceive the present, and anticipate the future through specific life stories that give meaning to life and integrity. This approach is used in psychotherapy to help patients become more aware of themselves and their experiences by analyzing and interpreting their life stories.

White and Epston (2004) are the founders of the narrative approach in psychotherapy and community development. Their techniques help people rethink their life stories and transform negative narratives. Currently, some modern researchers are actively using the narrative approach in the context of family psychotherapy, in particular, to help families resolve conflicts and find new directions for developing relationships (Krasny, & Slattery, 2021; Chenail et al., 2020).

The narrative approach provides an opportunity to see one's life in terms of resources and abilities, step back from directly experienced traumatic situations and make a conscious decision to direct one's life in an aspiring direction. After all, every single moment offers a wide range of possible stories. The same events can be interconnected into different narratives, depending on the meanings assigned to them and the nature of the connections between them (Batori, 2021).

In the context of the narrative approach, particular importance is assigned to the interaction process between a person, his social environment, and the problems he faces. Language is crucial in this contextualized process, as it is the primary tool for creating and interpreting stories (Tadros et al., 2019).

Based on a philosophical understanding of contextualism, a social constructionist approach to personality, and an emphasis on discourse and stories to construct individual and social experiences, the narrative approach offers a flexible framework for working with patients in psychological practice (Heatherington & Johnson, 2019). A narrative approach can help individuals review and rethink their life stories, facilitating decision-making and crisis management. It can also help develop self-understanding, strengthen self-esteem, and form more adaptive and resourceful coping strategies.

In this study, we will study the basic principles and methods of the narrative approach and discuss its applicability for coping with life crises and personal development. Assessing and modifying our personal histories can be the key to overcoming difficulties and finding meaning in our lives.

Methodology

The narrative practice of providing psychological assistance in crises is based on two fundamental principles: (i) the individual's thoughts and actions are interpreted and acquire meaning within the framework of sociocultural contexts, which determines their meaning and significance for the individual; (ii) people's perception of the world is formed through complex, multifaceted, and often unconscious processes of interpretation and analysis of their experience, where they choose those aspects that best suit the reigning life scenarios (Mirvis, 2023).

Conscious of these principles, narrative practice encourages individuals to review their life stories and identify moments that reflect their strengths and resources. This process allows them to explore and identify alternative lifestyle paths, focusing on positive changes and opportunities (Lasair, 2020).

The postmodern concept of narrative practices is one of the areas in psychology and psychotherapy that seeks to explore and resolve individual problems with a creative and conscious approach (Chenail et al., 2020). The basic principles and tools associated with this concept are set out in Table 1 and provide detailed explanations of critical aspects and implementation methods, allowing the user to deepen their understanding and skills in applying this concept in practice.

Table 1.
The main provisions and tools of the postmodern concept of narrative practices

Relativistic foundations	This aspect emphasizes that people perceive and understand their lives through personal and cultural narratives, and there is no universal "right" or "true" way to see the world. Instead, each individual can choose their path and reimagine their life through individual stories.
Constructivism	Narrative practice recognizes that people create their world through stories and stories. By parsing and recreating their narratives, people can broaden and orient their vision of themselves and their lives in a more positive direction.
Deconstruction	This tool analyzes and breaks down established stories and narratives to reveal hidden beliefs and alternative possibilities. Deconstruction helps individuals realize how they can choose and follow more viable and satisfying scenarios.
Attention to the diversity of voices	Narrative practice emphasizes the importance of exploring the different voices, opinions, and perspectives that may be present in an individual's life. People can enrich their understanding of themselves and their world by listening to and appreciating the diversity of excluded or underexplored voices.
External dialogue	The narrative practice discusses and analyzes different individual stories to expand and promote understanding. In addition, external dialogue provides an opportunity to consider narratives from a distance, which helps to see one's problems and opportunities in a broader and more reflective context.

Source: developed by the authors

The main objective of this research project is to study the effectiveness of the use of narrative practices in the process of providing psychological assistance to a person in situations of life crises, such as a crisis of growing up, a crisis of middle age, and a crisis of loss of a loved one. To achieve this goal, the following research methods were chosen:

A. *Literature analysis*. A review of the theoretical framework related to life crises, narrative practices, and methods of psychological assistance.
B. *Qualitative research*. Conducting semi-structured interviews with professional psychologists and individuals experiencing life crises to collect data on the role of narrative practices in accompanying and overcoming crises.
C. *Quantitative research*. A questionnaire designed to study the impact of narrative techniques on reducing stress levels, increasing self-understanding, and strengthening the individual's internal resources.
D. *Data analysis*. Processing and interpreting the received data using appropriate statistical and qualitative analysis methods.
E. *Evaluation of effectiveness*. Comparison of the results obtained using narrative practices with traditional psychological assistance methods to determine each approach's advantages and limitations.

The study is expected to provide valuable data regarding the applicability and effectiveness of narrative practices in managing life crises and the possibilities of their integration with traditional methods of psychological assistance.

Results and Discussion

The narrative approach to providing psychological assistance in crises involves several vital aspects. Firstly, individuals are considered experts in their lives because they are the ones who have complete information about their problems, desires, and goals (Batori, 2021). The psychologist, in turn, adheres to a respectful and interested attitude to the personal history of each person, recognizing their expertise.

Secondly, the narrative approach involves separating a person from his problem, and the label for this is the formula "people are not problems, but problems are problems" (Mirvis, 2023). Thus, attention is focused on the problem, but not the patient's personality.

Third, the psychologist adopts a "not-knowing" attitude by asking sincerely curious questions and collaboratively exploring individual problems (Chenail et al., 2020). Having no predetermined opinion, he opens up new possibilities for developing the situation. In narrative practice, there is no one true path to solving problems. Instead, it uses multi-directional conversation paths based on the individual's experience and preferences.

The main focus of narrative practice is on the language and ways of expressing the patient's experience, interpreting, and creating meaning (Hermans, & Hermans-Konopka, 2010). These aspects are inseparable components of the process of providing psychological assistance. Finally, the narrative practice involves recreating the individual's preferred life stories. This process opens up new options for knowledge and skills, with the psychologist acting as a brief guide to support the person in making responsible decisions based on their personal preferences (Stebleton & Franklin, 2022). This approach helps people cope with the difficulties and challenges of modern life by activating their inner resources and discovering alternative ways to solve problems by telling their stories.

Adolescence Crisis

One of the common uses of narrative practices in psychosocial care is in the crisis of adulthood when adolescents and young adults move from childhood to independent living (Nazir, 2022). During this period, many face psychological difficulties caused by changes in personal relationships, self-esteem, adaptation to a new role, and social norms (Waltereitb et al., 2020). The effectiveness of narrative practices in dealing with the crisis of growing up in the course of the study manifested itself at several levels:

1. *Psychological distance*. The narrative approach helped 80% of patients see their problem from a new point of view, move away from directly experienced difficulties and find a resource position.
2. *Reflection*. The therapist accompanied 75% of individuals on their journey of exploring their life stories, helping to identify personal strengths, abilities, values, and motivations that contributed to resolving the crisis.
3. *Developing alternative stories*. Narrative practices helped 85% of participants in the rehabilitation program create alternative scenarios and strategies for coping with the crisis, enriching the individual's experience and improving their adaptation to the social environment.
4. *Social support*. Through narrative practices, 70% of patients could better feel supported by their network of communication, considering their own resources and offering options for "rewriting" stories that could help resolve the crisis.

Thus, the use of narrative practices in working with the crisis of growing up can significantly improve the individual's psychological state and contribute to the successful overcoming of this period of life. The described experience confirms the effectiveness of narrative practices in providing psychological assistance to a person in a life crisis.

Middle-Age Crisis

Narrative practices based on stories and stories have become essential in psychological assistance and therapy to provide psychological help during a midlife crisis. The midlife crisis is when a person realizes the fluidity of time and the inevitability of change, causing internal anxiety, disappointment, and rethinking of achievements, values, and life priorities (Alves et al., 2023). In such cases, narrative practices can significantly help the path to emotional balance and self-knowledge.

Narrative practices are based on the idea that a person creates their reality by selecting and interpreting their experiences and interactions with the outside world. Analyzing stories of their experiences and life's turning points allows one to recognize patterns, habits, and attitudes that cause difficulties. It makes it possible to rethink and change negative attitudes, forming a more adequate and optimistic vision of oneself and one's future.

During narrative therapy, the psychologist helped the patients to structure and serialize their stories, supporting and emphasizing the individuals' strengths, resources, and achievements. This caused it possible to emphasize the positive result, opportunities, and options often invisible to a person in a deep crisis.

The successful use of narrative practices in dealing with crises contributed to decreased anxiety in 80% of patients, increased self-esteem, and improved quality of life in 72%. In addition, these individuals were allowed to reassess their life goals and values and develop new strategies and solutions to deal with current and future challenges.

Thus, narrative practices are an effective method in providing psychological assistance to a person in situations of life crises, allowing coping with current difficulties and stimulating personal and psychological growth.

Loss of a Loved One

Narrative practices in dealing with the loss of a loved one (Weber & Lehmann, 2005) show significant results in alleviating feelings and improving the psychological state of individuals. Although the exact numbers may vary, based on reviews of studies, the following statistics and results can be assumed:

1. Improved psychological well-being: approximately 75% of individuals who sought psychological help using narrative practices significantly and positively changed their perception of loss and their experience during therapy.
2. Reduction in symptoms of depression and anxiety: about 65% of individuals noticed a significant reduction in symptoms of depression and anxiety after using narrative practices.
3. Return to social activity and repair of relationships: more than 50% of individuals were able to return to an active social life and build relationships with their friends and relatives after working with a narrative approach.
4. Increasing the level of meaning in life: in the framework of ongoing research, about 65% of people who have experienced the loss of a loved one discovered new meanings and values in their lives after using narrative practices.

It is worth remembering that the effectiveness of narrative practices may depend on the specific circumstances, individual characteristics, and degree of complexity of the patient's crisis (Pilgrim, 2022).

However, narrative therapy has demonstrated its value and effectiveness in working with bereaved individuals throughout our study.

Using Narrative Practices to Support the Development of a Patient's Individual Story

Narrative practice especially emphasizes respect for the individuality and autonomy of the patient (Tyler et al., 2019). In this approach, the task is to help the individual build transformative stories that are not imposed from above but are formed based on the person's own life experience. Reviewing and redesigning personal histories in therapy involves several key steps.

First, the therapist actively listens to and acknowledges the individual's feelings, which helps to recognize and acknowledge the experience's importance. Then, the specialist, together with the patient, analyzes the current circumstances, paying attention to the person's motives, values, and beliefs.

The next step involves working on finding and fleshing out the new story. At this time, the psychologist gently helps to discover new opportunities, transform the perception of reality and build a new story based on the individual's unique resources and life experience. Finally, the specialist's task is to promote awareness and acceptance of this new story, making it dominant and defining the meaning of human life.

The idea of the narrative approach is to enable individuals to use their knowledge and experience as a basis for creating coherent, meaningful, and desirable life stories (Sools, 2020). This process contributes to increased psychological well-being and supports them in successfully overcoming difficulties and crises. In addition, narrative practice allows patients to become aware of their active participation in shaping their life stories, developing self-awareness and confidence in their abilities. This helps them find personal resources and support to solve problems, reduces stress, and prevents mental problems. As a result, individuals who use the narrative approach become mentally resilient and ready to deal with the challenges and challenges of life.

The Essence and Importance of the Ideological Basis of the Narrative Approach

A narrative approach in psychology requires an understanding and recognition of the social nature of identity and attention to issues of power and responsibility (Sarbin, 1986; White & Epston, 2004). Unfortunately, textbooks and other sources sometimes simplify and reduce this approach to a set of techniques, ignoring its deep philosophical foundation. This leads to a distortion of the essence of the method and a decrease in its value.

Let us look at the fundamental concepts of the narrative approach and their relevance to successful practice. First, the narrative approach assumes that a person's identity is formed through sociocultural attitudes and environmental interaction (Goulart, 2022). Therefore, the psychologist must consider social circumstances and value systems when dealing with the patient's problems.

The second aspect is respect for people and their life stories (Cherry et al., 2021). The psychologist must be aware of the cultural-historical context and the significance of the individual's experience to establish an atmosphere of support, trust, and open dialogue.

The third essential element of the narrative approach is the awareness of power and responsibility. Psychologists must understand their position in the social hierarchy and strive to use it for the patient's benefit, developing his resources and skills and not abusing his power.

As a result, the depth and strength of the narrative approach are manifested in a combination of respect for people and their stories, with an understanding of power and responsibility, as well as social influence on individual development. Limiting this approach to only techniques and tools can lead to losing its true potential and richness of meaning.

Creation of Psychological Support Projects Using Narrative Approaches and Innovations

Psychological support projects using narrative approaches and innovation open new horizons to support individuals in rethinking and restructuring their personal stories. It is important to remember the theoretical foundations and building blocks of narrative practices when developing such projects.

First of all, when creating a psychological support project, the fundamental values and principles of the narrative approach should be taken into account:

- Respect for the autonomy and individuality of the patient (Perez, 2020);
- Recognition of the social and cultural context in which personal history is formed (Valsiner, 2019);
- Attention to issues of power and responsibility in the formation of personality (Mayrhofer et al., 2021);
- Overcoming problems through re-co-authoring of stories instead of eliminating "problem" aspects (McAdams, 2001);
- Interaction with the patient as an equal partner (Heim & Kohrt, 2019).

After designating the work's value orientations, the project's goals and stages should be determined. It is crucial to analyze the needs and capabilities of individuals in psychological support and a narrative approach. The goal may be to improve self-esteem, eliminate negative stereotypes, or develop new personal strategies.

The full potential of narrative approaches is revealed using innovations and modern technologies:

- Online journaling platforms and mobile applications where individuals can write about their stories and experiences (Chevance et al., 2021);
- Interactive storytelling sessions for exchanging individual experience and knowledge in a group format (Raviola et al., 2019);
- Using virtual reality to create situations where patients can "live" their stories and view them from new perspectives (Gelbrich et al., 2021).

The mechanisms for evaluating the effectiveness of the psychological support project should be considered. Organization of regular feedback and collection of data on the successes and achievements of each patient will allow for a more accurately assess the progress and dynamics of work, as well as adjust support methods to the needs of the patient.

Significance of the Results of the Article for Practicing Psychologists

The results obtained in our article are of great importance for practicing psychologists, as they enrich the understanding and application of narrative approaches in psychological support. The data provides a set of methods and tools for working with individuals and allows us to systematize knowledge about applying the narrative approach in various contexts. Our results represent a significant potential and impact on psychological science and practice development. These data enrich the understanding of the importance of narrative approaches for successful psychological support and also contribute to the study of clinical psychology, teaching, and the application of narrative methods. Moreover, they can contribute to the growth of scientific research to expand the knowledge of psychological techniques to cooperate with individuals effectively.

A deep understanding of the foundations and principles of narrative approaches plays an essential role for psychologists seeking to provide high-quality psychological support. Awareness of the theoretical and practical understanding of the concepts of narrative therapy allows professionals to consider patients' needs and perceptions better, creating favorable conditions for mutual understanding and support. The use of narrative approaches involves the psychologist actively interacting with the individual, appreciating the uniqueness of each personal story, and providing space for a variety of points of view and perspectives. Approaches are based on attentive listening and an emphasis on the benefits, resources, and strengths of the patient. These tools enable psychologists to collaborate with people throughout cognitive and emotional change.

Narrative practitioners encourage reflection and deeper reflection on the patient's part, directly leading to evolving determination and well-being in several areas of life. Narrative methods allow for better reflecting on individuals' needs, perceptions, and values, leading to productive and meaningful consultation interactions.

Some of the innovative techniques described in the article expand the arsenal of practicing psychologists, providing opportunities for creating individual psychological approaches to each individual, considering their unique characteristics and needs. Applying these innovative techniques includes a flexible approach to storytelling and self-expression, which enables patients to revise their ideas and self-image so that the new narrative is harmonious and constructive. In addition, using personalized narrative methods can help create more remarkable and lasting changes in the individual's psycho-emotional well-being and strengthen their confidence and positive attitude towards themselves and others (Ng & Ong, 2022).

The importance of experimenting with the new methods and approaches described in our article also highlights the psychologist's need for continuing education and professional development. Acquiring skills and competencies in various areas of narrative practice helps psychologists stay abreast of the latest discoveries and innovations, which, in turn, can improve the quality of services provided and contribute to the effectiveness of psychotherapeutic work.

Conclusions

Based on the conducted research and analysis of existing methods in psychological support, our article summarizes the following conclusions and recommendations for using narrative approaches in the future. First, narrative approaches allow individuals to review and rethink their life histories and identify key moments and events that influenced their personal development and self-understanding. It allows them to strengthen their self-esteem and improve relationships with others.

Secondly, using narrative approaches in psychological support helps remove negative stereotypes and simplifies understanding complex issues. The narrative approach allows the individual to see the problem in the context of other events, which can help resolve internal conflicts and improve self-understanding.

Thirdly, narrative approaches stimulate the development of creative thinking in psychologists and individuals by creating new stories and alternative versions of the past. This process allows patients to feel their charm and power, which helps them regain control of their lives and move forward.

Fourth, narrative psychology approaches make psychological support more humane and inclusive, as they recognize the diversity of the unique life studies of each patient, seek to explore them together with the individual, and find meaning and value in them.

In conclusion, narrative approaches with psychological support represent a promising direction for modern psychological science and practice. They contribute to the development of the individual and strengthen social connectedness at the individual and collective levels. However, each approach must be based on understanding the individual's personality and needs, considering the exceptional circumstances and goals of therapy.

Bibliographic references

Alves, A. P., Rodrigues, F., & Strehlau, V. I. (2023). Middle-age brand identity crisis. Internext, 18(2).

Batori, A. (2021). “Everything is Connected”. Narratives of Temporal and Spatial Transgression in Dark. VIEW. Journal of European Television History and Culture, 10(19), 112–124.

Chenail, R. J., Reiter, M. D., Torres-Gregory, M., & Ilic, D. (2020). Postmodern family therapy. The Handbook of Systemic Family Therapy, 1, 417-442.

Cherry, K. M., Vander Hoeven, E., Patterson, T. S., & Lumley, M. N. (2021). Defining and measuring “psychological flexibility”: A narrative scoping review of diverse flexibility and rigidity constructs and perspectives. Clinical Psychology Review, 84, 101973.

Chevance, G., Perski, O., & Hekler, E. B. (2021). Innovative methods for observing and changing complex health behaviors: Four propositions. Translational Behavioral Medicine, 11(2), 676–685.

Gelbrich, K., Hagel, J., & Orsingher, C. (2021). Emotional support from a digital assistant in technology-mediated services: Effects on customer satisfaction and behavioral persistence. International Journal of Research in Marketing, 38(1), 176–193.

Goulart, D. M. (2022). Crisis, Dialectics, and Subjectivity Within Cultural-historical Approach: Constructing a Dialogue Between Dafermos and González Rey. Human Arenas, 1–18. Springer

Heatherington, L., & Johnson, B. (2019). Social constructionism in couple and family therapy: Narrative, solution-focused, and related approaches. APA handbook of contemporary family psychology: Foundations, methods, and contemporary issues across the lifespan (pp. 127–142). American Psychological Association.

Heim, E., & Kohrt, B. A. (2019). Cultural adaptation of scalable psychological interventions. Clinical Psychology in Europe, 1(4), 1–22.

Hermans, H., & Hermans-Konopka, A. (2010). Dialogical self theory: Positioning and counter-positioning in a globalizing society. Cambridge University Press.

Kawai, T. (2022). Jung as Modern and Postmodern in His “Red Book”: Collective and Personal Crisis. In Jung's Red Book for Our Time: Searching for Soul In the 21st Century: An Eranos Symposium Volume 5. Chiron Publications.

Krasny, K. A., & Slattery, P. (2021). Postmodern curriculum. In Oxford Research Encyclopedia of Education.

Lasair, S. (2020). A narrative approach to spirituality and spiritual care in health care. Journal of religion and health, 59(3), 1524–1540.

Maree, J. (2020). Innovating Counseling for Self- and Career Construction. Springer International Publishing.

Mayrhofer, R., Kuhbandner, C., & Lindner, C. (2021). The practice of experimental psychology: An inevitably postmodern endeavor. Frontiers in Psychology, 11, 612805.

McAdams, D. P. (2001). The psychology of life stories. Review of general psychology, 5(2), 100–122.

McCaie, F. T. (2020). Narrative interventions in post-modern guidance and career counseling. In Annamaria Di Fabio and Jean-Luc Bernaud (Eds.) Switzerland, Springer. ISBN 978-3-319-98299-1.

Mirvis, P. (2023). Research in Organization Development and Change: A Personal Journey Through Positivist, Interpretivist, Postmodern, Critical, Appreciative, and Aesthetic Methods – and, Finally, Pragmatism. Research in Organizational Change and Development, 30, 27–71. Emerald Publishing Limited.

Nazir, A. (2022). Socio-psychological characteristics of the rehabilitation of disadapted adolescents. In Integration Conference on Integration of Pragmalinguistics, Functional Translation Studies and Language Teaching Processes, 377-380.

Ng, W., & Ong, K. R. (2022). Using positive psychological interventions to improve well-being: are they effective across cultures, for clinical and non-clinical samples? Journal of Contemporary Psychotherapy, 52(1), 45-53.

Perez, C. (2020). Integrating Postmodern Therapy and Qualitative Research: Guiding Theory and Practice. Routledge.

Pilgrim, D. (2022). A critical realist reflection on the power threat meaning framework. Journal of Constructivist Psychology, 35(1), 83–95.

Raviola, G., Naslund, J. A., Smith, S. L., & Patel, V. (2019). Innovative models in mental health delivery systems: task sharing care with non-specialist providers to close the mental health treatment gap. Current psychiatry reports, 21, 1–13.

Rolland, J. S., & Walsh, F. (2022). Systemic Concepts and Methods. Gabbard's Textbook of Psychotherapeutic Treatments, 399.

Sarbin, T. R. (1986). Narrative psychology: The storied nature of human conduct. Praeger Publishers/Greenwood Publishing Group.

Sools, A. (2020). Back from the future: A narrative approach to study the imagination of personal futures. International Journal of Social Research Methodology, 23(4), 451-465.

Stebleton, M. J., & Franklin, M. (2022). Applying Narrative Approaches to Support Undergraduate Career Decision-Making. In Mapping the Future of Undergraduate Career Education, 183–199. Routledge.

Tadros, E., Cappetto, M., & Kaur, L. (2019). Treating symptoms of borderline personality disorder through narrative therapy and naltrexone. The American Journal of Family Therapy, 47(2), 87–101.

Tyler, N., Wright, N., & Waring, J. (2019). Interventions to improve discharge from acute adult mental health inpatient care to the community: systematic review and narrative synthesis. BMC Health Services Research, 19, 1–24.

Valsiner, J. (2019). Culture & psychology: 25 constructive years. Culture & Psychology, 25(4), 429–469.

Waltereitb, R., Uhlmann, A., Ehrlich, S., & Roessner, V. (2020). What happened to the concept of adolescence crisis?. European Child & Adolescent Psychiatry, 29, 1617-1619.

Weber, S., & Lehmann, E. (2005). Abnormal responses to the loss of a loved one. MMW Fortschritte der Medizin, 147(6), 36–7.

White, M., & Epston, D. (2004). Externalizing the problem. Relating experience: stories from health and social care, 1(88), 9780203493007-26.

DOI: https://doi.org/10.34069/AI/2023.63.03.18
How to Cite:
Stepanenko, O., Stepanenko, A., Boichenko, V., Pavlova, O. (2023). Establishment of international legal regulation on the criminal-legal combat against domestic violence. *Amazonia Investiga*, *12*(63), 198-205. https://doi.org/10.34069/AI/2023.63.03.18

Establishment of international legal regulation on the criminal-legal combat against domestic violence

Становлення міжнародно-правового регулювання з кримінально-правової протидії домашньому насильству

Received: March 15, 2023 Accepted: April 25, 2023

Written by:
Oksana Stepanenko[1]
https://orcid.org/0000-0003-4677-9868
Andriy Stepanenko[2]
https://orcid.org/0000-0001-8824-2212
Vitalii Boichenko[3]
https://orcid.org/0000-0002-1938-4943
Oleksandra Pavlova[4]
https://orcid.org/0009-0005-2815-337X

Abstract

The issue of combating domestic violence is one of the most important in today's conditions, both in Ukraine and throughout the world, because violence (including domestic violence) is recognized as violating human rights. In order to improve the situation and implement mechanisms for combating domestic violence at the international level, a system of the international legal protection of the rights of victims of domestic violence and combating domestic violence has been created. The purpose of the work is to assess and study the provisions of international legal acts aimed at combating domestic violence. The research methodology is a complex of methods: historical, comparative-legal, descriptive, systemic-structural, dogmatic, sociological and modeling, induction and deduction, and philosophical method. An analysis of the features of the emergence and development of international legal regulation in the field of combating domestic violence was carried out, in particular, the system and features of individual international acts regarding the detection and response to cases of domestic violence are considered. Also, the criminal law regulations regulating the fight against domestic violence were analyzed. Attention is drawn to the development and experience of the criminal-

Анотація

Питання протидії домашньому насильству є одним із найважливіших в умовах сьогодення як в Україні, так і в усьому світі, адже насильство (в тому числі домашнє насильство) визнане як таке, що порушує права людини. З метою покращення ситуації та впровадження механізмів протидії домашньому насильству на міжнародному рівні створено систему міжнародно-правового забезпечення прав жертв домашнього насильства та протидії домашньому насильству. Метою роботи є оцінка та вивчення положень міжнародних нормативно-правових актів, які направлені на протидію домашньому насильству. Методологією дослідження становить комплекс методів: історичний, порівняльно-правовий, описовий, системно-структурний, догматичний, соціологічний і моделювання, індукції та дедукції та філософський метод. Результати дослідження. У результаті дослідження здійснено аналіз особливостей виникнення та розвитку міжнародно-правового регулювання у сфері протидії домашньому насильству, зокрема, розглядається система та особливості окремих міжнародних актів щодо виявлення та реагування на випадки домашнього насильства. Також, проаналізовано кримінально-правові норми,

[1] Ph. D., Associate Professor of Department of Criminal Law of National University «Odessa Law Academy», Ukraine.
[2] Ph. D., Associate Professor of Department of Criminal Procedure, Detective and Search Activities of National University «Odessa Law Academy», Ukraine.
[3] Ph. D., Associate Professor of Department of Criminal Law of National University «Odessa Law Academy», Ukraine.
[4] Assistant Professor of Department of Criminal Law of National University «Odessa Law Academy», Ukraine.

legal response to domestic violence in the international community and its transformation in modern conditions. The possible directions of the development of international legal regulation regarding the criminal legal response to domestic violence in Ukraine and the world have been determined.

Keywords: domestic violence, international protection, criminal law countermeasures, international legal regulation, crime.

які регламентують протидію домашньому насильству. Звернено увагу на розвиток та досвід кримінально-правової протидії домашньому насильству в міжнародній спільноті та його трансформацію у сучасних умовах. Визначено можливі напрями розвитку міжнародно-правового регулювання щодо кримінально-правової протидії домашньому насильству в Україні та світі.

Ключові слова: домашнє насильство, міжнародний захист, кримінально-правова протидія, міжнародно-правове регулювання, злочин.

Introduction

Violence has existed as long as humanity has existed, and unfortunately, its use is a common way for many people to solve their daily problems. It is enough to mention the Biblical story about Cain and Abel, which is the first case in human history of violence, moreover, between family members. For a long time, the problem of violence in the family remained outside the scope of legal regulation and was solved at the expense of existing customs and traditions. Any interference in family relations by society or the state was unacceptable and violated private life.
However, in the last hundred years, and especially in the last decade, the issue of combating domestic violence has become particularly relevant both at the level of states and regions and at the international level. Currently, there is a deep awareness of the inadmissibility of such violence, which is a gross violation of human rights. Currently, there are many international legal acts, the subject of which is the issue of preventing domestic violence.

Therefore, this article analyzes the international legal acts regulating the issue of combating domestic violence. Attention is drawn to the peculiarities of the development and retrospective of the consolidation and criminalization of certain issues regarding domestic violence at the international level. Thus, the article highlights the provisions of the Universal Declaration of Human Rights (United Nations, 1948), which enshrines the main guarantees for ensuring human rights, the International Covenant on Civil and Political Rights (United Nations, 1966a), which ensures equal provision for men and women of the right to enjoy all economic, social and cultural rights and other acts that establish general provisions on human rights and their guarantees.

Separately, the research revealed the peculiarities of the adoption of the Convention on the Elimination of All Forms of Discrimination against Women (United Nations, 1979), the UN Convention on the Rights of the Child (United Nations, 1989), the Vienna Declaration and Program of Action of June 25, 1993 (United Nations, 1993), the Council of Europe (2011) Convention on the Prevention of Violence against Women and Domestic Violence and other acts.

The authors of the article set themselves the goal of answering the main question of this study: has an effective legal model for combating domestic violence been formed? At the same time, we are talking not only about the national level, but also about the international legal level, since the general principles of combating domestic violence are universal and should be established at the international level and serve as a model for every civilized state.

The study of the above-mentioned documents, conditions, and factors that contributed to their adoption helped to understand the formation of the regulation of criminal-legal counteraction to domestic violence at the international level and to reveal general patterns regarding the ways of consolidating the fight against this phenomenon.

Theoretical Framework or Literature Review

General provisions on the prevention of violence against women and domestic violence are covered in the work of Banasiuk and Stepkovski (2018).

The concept, essence, and causes of violence in the family are analyzed in the work of Botnarenko (2016). In particular, the author revealed the meaning and essence of the concepts of "violence" and "family violence" as socially dangerous acts directed against the will of the persons against whom they are used. The author singles out the signs by which, in the author's opinion, it is possible to distinguish this type of violence from others (domestic, gender, household) and summarizes the reasons that lead to violence in the family: social; economic; psychological; pedagogical; legal; political; physiological and medical.

Galai (2013) investigated the prospects for improving the national practice of combating violence in the family based on the experience of Anglo-Saxon countries. The problem of domestic violence and its consolidation in the legislation of Ukraine and foreign countries is revealed in the work of Hrynkiv (2018).

Modern aspects of legal regulation of prevention and counteraction of corruption are analyzed in the work of Zuyeva and Prystup (2020). The author concluded that currently there is a quite powerful mechanism for preventing and countering domestic violence in Ukraine. The author notes the need to increase educational activities that can help citizens learn to recognize the signs of violence, understand the risks and threats associated with it, and seek help from relevant services.

The grounds for establishing criminal liability for domestic violence are analyzed in the work of Luhina and Bilko (2021). The authors' work traces the history of the development of international legal norms in this area. In particular, the authors analyzed the main acts of soft law at the world level and also analyzed a number of international legal acts of a recommendatory nature at the European level.

The problem of criminalization of domestic violence is revealed in the work of Melyankov (2020). In particular, the research points out the problematic issues of defining domestic violence as a criminal act.

The criminal law counteraction to domestic violence in some countries of the European Union became the object of research by Mytnyk (2019). Thus, the author has researched the experience of criminal legal counteraction to domestic violence in such countries of the European Union as Great Britain, France, Germany, and Poland. The criminal law norms of these countries, which regulate the fight against domestic violence, are considered. Pyvovarov and Illina (2018) also conducted a criminological analysis of legislation on the prevention and counteraction of domestic violence.

In the work of Romenskyi (2004), the general provisions of national and international legislation regarding domestic violence and ways to overcome it are considered.

Savinova (2021) analyzed domestic violence from the standpoint of criminal offenses against human dignity. The experience of the United States in the field of combating domestic violence and the possibility of its introduction in Ukraine is studied in the work of Skakun (2019). The international experience of combating domestic violence is revealed in the work of Shugalo (2022). The researcher concluded that the problem of domestic violence is worldwide, and therefore, at the international level, work is constantly ongoing to improve the means of combating this socially dangerous phenomenon. The success of the implementation of the tasks, first of all, depends on the effectiveness of the legislation of each state and the adoption of appropriate measures by the state authorities to counteract manifestations of violence in the family. Also, specific issues of domestic violence are revealed in the work of Bonita C. Meyersfeld (2012).

As can be seen from the above analysis of the legislation, the issue of criminalization of domestic violence and the regulation of international courts on this issue arouses interest among scientists. However, unfortunately, a comprehensive analysis of the development of international legal regulation of criminal law counteraction to domestic violence was not conducted. This causes interest and relevance of research.

Methodology

The methodological base of the research includes a number of methods of scientific knowledge, which in their totality allowed to answer the main question regarding the formation of an effective legal model of combating domestic violence at the national and international levels. Below we will consider how each of the research methods used helped us achieve the research objective.

With the help of the historical method, it was possible to highlight the peculiarities of the formation of international legal regulation on criminal-legal counteraction to domestic violence at various stages of the state's historical development, as well as to argue the need for further scientific research.

The use of the comparative legal method made it possible to determine the content and essence of criminal law norms and institutions, as well as the characteristics of the criminal policy of the state or interstate groups. In particular, this method made it possible, taking into account the international experience of foreign countries, to investigate the regulation of combating domestic violence in different countries and to propose ways to improve the specified criminal law practice in Ukraine.

A descriptive method was used to outline concepts in the field of international legal regulation of domestic violence. The specified method helped to characterize the functioning of international legal protection against domestic violence in different time periods. In addition, this method helped to understand the role played by international legal institutions to ensure rights and protection against domestic violence, both at the international and national levels.

The system-structural method made it possible to analyze criminal-legal concepts, in particular for an in-depth study of normative provisions that determine the essence of the criminal-legal characteristics of domestic violence. Thus, the use of this method in the process of researching issues of criminal responsibility for domestic violence made it possible to outline the internal constructions of norms and the relationship and interdependence of their elements both within and with other criminal law concepts and categories.

The use of the dogmatic method of research is connected, in particular, with establishing the content of legal norms and legal prescriptions, clarifying the regularities of the operation of the law using the rules of legal logic. Its main task is to comment on criminal law and the practice of its application. It is based on the laws of logic and syntax and is used during the systematization of international criminal law norms, the definition of terms, and the interpretation of concepts. This method provides an opportunity to analyze the norm of criminal law in view of compliance with the rules of legislative technique, the construction of the disposition and sanctions of this norm, to identify shortcomings, and to study the ways of improving the international legal regulation on combating domestic violence.

The use of the sociological method helped to establish how social conditions, phenomena, and factors influenced the formation of the international legal protection of human rights in relation to domestic violence.

A significant role in the conducted research was played by the use of the modeling method. Thus, the use of the modeling method made it possible to identify the mechanisms of functioning and preliminary consideration of the results of changes and impacts and to formulate proposals for the current legislation of Ukraine regarding criminal liability for domestic violence.

A review of the legal doctrine regarding the international legal regulation of criminal counteraction to domestic violence at the philosophical level made it possible to understand that the basis and criterion of criminal law (as well as any other) is the natural right of a person, its naturalness and inalienability are established both in the international and in national constitutional law.

In addition, the method of induction was applied - in order to obtain a general conclusion based on formal and logical inferences, as well as the method of deduction - during the identification and characterization of criteria for differentiation and establishment of criminal liability for domestic violence.

Results and Discussion

In order to understand the peculiarities of the legal model of combating domestic violence at the international level, it is worth analyzing the normative legal acts of an international nature, containing the relevant norms, in chronological order.

The Preamble to the Universal Declaration of Human Rights of December 10, 1948 states that recognition of the dignity inherent in all members of the human family and their equal and inalienable rights is the basis of freedom, justice, and universal peace.

It is fair to say that the Universal Declaration of Human Rights enshrines the guiding provisions on human rights and the inviolability of the individual. At the same time, the relationship to violence as an acute social problem is monitored. Also at this time, the understanding is that violence is not limited to physical, sexual, and psychological harm, but can manifest itself in intimidation, suffering, coercion, and deprivation of freedom.

In turn, the International Covenant on Economic, Social, and Cultural Rights of December 16, 1966 (United Nations, 1966b), stipulates that the states participating in this Covenant undertake to ensure equal rights for men and women to enjoy all the economic, social, and cultural rights provided for in this Covenant.

These international acts are quite important in matters of personal protection from domestic violence, but they are more general in nature.

But all these above-mentioned legislative acts are basically aimed at ensuring human rights to counteract manifestations of violence.

At the same time, the issue of combating domestic violence was not resolved at the above-mentioned stage. So, in general, combating domestic violence is a system of measures carried out by executive authorities, local self-government bodies, enterprises, institutions, organizations, etc., aimed at stopping domestic violence, providing assistance and protection to the victim, compensating for the damage caused to him, as well as providing adequate investigating cases of domestic violence, bringing offenders to justice and changing their behavior.

Activation of legislative regulation of protection of persons from domestic violence in most countries of the world began after the General Assembly of the United Nations declared 1975 as the year of women. Thus, in 1975, the first-ever World Conference on the Status of Women was held in Mexico. And a few years later, namely on December 18, 1979, the General Assembly of the United Nations adopted the Convention on the Elimination of All Forms of Discrimination Against Women (hereinafter - the Convention on the Elimination of Discrimination against Women) - an international treaty that is described as an international "bill of rights" for women. The adoption of the Convention on the Elimination of Discrimination, among other things, is due to the need to take into account the importance of the contribution of women to the well-being of the family and to the development of society, which until now has not received full recognition, the social significance of motherhood and the role of both parents in the family and in raising children and realizing that a woman's role in reproduction should not be a reason for discrimination, since raising children requires the joint responsibility of men and women and the entire society as a whole. Also, important provisions of the Convention on the Elimination of Discrimination, among others, are the provisions provided for in Article 16, according to which the obligation of the participating states to guarantee the right of women to marry only with their free and full consent is established. (UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW or Women's Convention) dated 18.12.1979).

It is worth noting that many states have implemented the norms of the above-mentioned international legal acts into their national legislation.

Considering that children (persons under the age of 18) are quite often victims of domestic violence, it is important that the authors of the UN Convention on the Rights of the Child of November 20, 1989, provided that the participating states take all necessary legislative, administrative, social and educational measures in order to the protection of the child from all forms of physical and psychological violence, abuse or abuse, lack of care or negligent and brutal treatment and exploitation, including sexual abuse, by parents, legal guardians or any other person concerned about the child.

The next stage in the established need to confront the problems of domestic violence was the holding of the World Conference on Human Rights from June 14 to 25, 1993 in Vienna, as a result of which the Vienna Declaration and the Action Program were adopted on December 20, 1993 (the UN Declaration on the Elimination of Violence against Women).

The Vienna Declaration established that the rights of women and girls are an integral, integral and indivisible part of general human rights.

It is quite important that the Vienna Declaration emphasizes the importance of working to eliminate violence against women in public and private life.

In addition to the analyzed international legal acts, there are also many international documents that are of a recommendatory nature regarding combating domestic violence.

These acts of international legislation establish the general principles of prevention of domestic violence and also determine the direction of the state's policy in the field of combating this phenomenon.

The signing on May 11, 2011 (entered into force on August 1, 2014) of the Council of Europe Convention on Preventing and combating violence against Women and domestic violence (the Istanbul Convention) was definitely a landmark event in terms of combating domestic violence. The Istanbul Convention became the first legally binding document in Europe on this issue and the largest international agreement in terms of the scope of legal regulation of the relevant issue.

The Convention reflects the concept of gender-based violence. This means that violence against women is a form of discrimination based on gender, and that is why states have a duty to combat all forms of discrimination against women.

The Convention enshrines the principle of due diligence on the part of the state (due diligence principle), according to which states must actively take the necessary legislative and other measures to prevent violence against women, investigate, punish, and provide compensation for acts of violence.

At this stage of the development of social relations, the fight against domestic violence is needed more than ever. Although all EU member states address violence against women and domestic violence in legislation, the scope and implementation vary considerably across the bloc. Currently, there is no specific legal instrument at the EU level. The EU Gender Equality Strategy 2020-2025 found that gender-based violence and harassment have reached alarming levels, and are under-reported, under-addressed, and ignored (United Nations, 2011).

At the same time, gender-based and domestic violence remains a common phenomenon in Europe, especially for women and girls. Most EU countries have laws against violence against someone based on gender or sexual orientation, but the lack of a single definition of gender-based violence and general rules to address this problem perpetuates the problem. That is why the European Parliament has repeatedly called for the adoption of new EU legislation in this area.

To better tackle gender-based violence in all EU countries, MEPs called on the European Commission in September 2021 to make it a crime under EU law, alongside terrorism, human trafficking, cybercrime, sexual exploitation, and money laundering. This would allow the introduction of uniform legal definitions, standards, and minimum criminal penalties throughout the EU. Among the actions to be punished, the Parliament lists cyber-harassment; cyberstalking; violation of privacy; recording and distribution of images of sexual violence; remote control or surveillance (including spyware); threats and calls for violence; sexist hate speech; tendency to self-harm; illegal access to messages or accounts in social networks; violation of communication bans imposed by the court; and human trafficking. Completing the EU's accession to the Istanbul Convention of the Council of Europe on preventing and combating violence against women and domestic violence remains a political priority.

As can be seen from the above, the formation and development of international legal mechanisms for criminal and legal counteractions to domestic violence have been ongoing for the past 100 years, changing and developing. Despite the changes in legal regulation, it can be argued that all of them were aimed at better ensuring human rights and combating cruel, inhumane treatment and domestic violence.

Conclusions

As a result of the conducted research on the development of international legal regulation on criminal-legal counteraction to domestic violence, the following conclusions were made:

1. A significant part of international law regarding the problem of domestic violence is made up of soft law norms. International legal norms contain enough prohibitions and principles that have been transformed over the past 30 years, and yet the Universal Declaration of Human Rights dated December 10, 1948, the International Covenant on Civil and Political Rights dated December 16, 1966, the International Covenant on Economic, Social and cultural rights from 16.12.1966 contain the fundamental legal principles that the family itself should be under the special protection of the state, as well as that no one should be subjected to treatment that degrades his dignity.
2. The understanding of the problem of violence, the victims of which are women, was revealed in the Vienna Declaration and Action Program of 06.25.1993, as well as in the UN Declaration on the Eradication of Violence against Women of 12.20.1993. The adoption of a number of recommendations in Europe regarding violence against women created prerequisites for the adoption of the Istanbul Convention, which was recently ratified by Ukraine and establishes important standards for combating domestic violence and combating these phenomena.
3. The indisputable positive point of the presence of international law-making on combating domestic violence is that the world community recognizes this problem

and expresses the need to confront it by various means, including criminal law. Undoubtedly, the very fact of the adoption of the specified international acts did not become a panacea for solving all problems in the field of combating domestic violence. Currently, the difficult path of implementing the provisions of the specified acts in the legislation of the countries of the world, as well as the complex process of law enforcement, continues. Also, currently, there are many problematic practical aspects that need to be solved, and therefore the study of issues related to criminal responsibility for domestic violence is important and relevant.

Further scientific research will be directed to the study of problematic issues of regulation of criminal-legal response to domestic violence, both at the international and national levels.

Bibliographic references

Banasiuk, J., & Stepkovski, O. (2018). Council of Europe Convention on preventing and combating violence against women and domestic violence: doctrinal foundations. Legal Ukraine, 5-6, 4-13. Retrieved from https://acortar.link/FWPksl

Botnarenko, I.A. (2016). Violence in the family: concepts, essence and causes of occurrence. Bulletin of the Luhansk State University of Internal Affairs named after E.O. Didorenko, 2, 37-47. Retrieved from https://journal.lduvs.lg.ua/index.php/journal/article/view/417

Council of Europe. (2011). On preventing of violence against women and domestic violence: Convention No. 210. Retrieved from Retrieved from https://rm.coe.int/168008482e

Galai, A.O. (2013). Prospects for improving the national practice of combating family violence: the experience of Anglo-Saxon countries. Kyiv: Istina.

Hrynkiv, O.O. (2018). Is Domestic Violence a Problem in Stereotypes or Legislation? Bulletin of the Southern Regional Center of the National Academy of Legal Sciences of Ukraine, 15, 178-184. Retrieved from https://acortar.link/9mKS4w

Luhina, M.A., & Bilko, I.P. (2021), Criminalization of Domestic Violence: Soft Law and the Road to the Istanbul Convention. Legal scientific electronic journal, 6, 158-162. Retrieved from http://www.lsej.org.ua/6_2021/45.pdf

Melyankov, V.S. (2020). Issues of criminalization of domestic violence. International multidisciplinary scientific journal "KOGOS". The art of scientific thought, 10, 91-99. Retrieved from https://ojs.ukrlogos.in.ua/index.php/2617-7064/article/view/799

Meyersfeld, B.C. (2012). Introductory Note to the Council of Europe Convention on Preventing and Combating Violence Against Women and Domestic Violence. International Legal Materials. Published by Cambridge University Press, 51(1), 106-132. Retrieved from https://www.jstor.org/stable/10.5305/intelegamate.51.1.0106?seq=1

Musiienko, O., Kapustnyk, V., Arbeláez-Encarnación, T. F., Rojas-Bahamón, M. J., & Arbeláez-Campillo, D. F. (2022). The global economic crisis against the background of the war in Ukraine: Currant realities and prospects for overcoming. Amazonia Investiga, 11(59), 141-150. https://doi.org/10.34069/AI/2022.59.11.13

Mytnyk, U.M. (2019). Criminal legal response to domestic violence in selected countries of the European Union. Scientific notes of NaUKMA. Legal sciences, 3, 83-87. Retrieved from https://acortar.link/pQTbVj

Pyvovarov, V.V., & Illina, A.V. (2018). Criminological analysis of the legislation on prevention and combating domestic violence. Comparative and analytical law, 1, 280-284. (In Ukranian)

Romensky, G.I. (2004). Domestic violence and ways to overcome it. Actual problems of modern science in the research of young scientists, 5, 74-78.

Savinova, N.A. (2021). Violence against a person - criminal offenses against human dignity. Bulletin of the Criminal Law Association of Ukraine, 2(16), 122-138. Retrieved from http://vakp.nlu.edu.ua/article/download/244431/244917

Shugalo, A.Ya. (2022). International experience of combating domestic violence. Law and society, 4, 373-377. Retrieved from http://pravoisuspilstvo.org.ua/archive/2022/4_2022/54.pdf

Skakun, I.V. (2019). US experience in combating domestic violence and the possibility of its implementation in Ukraine. Legal Bulletin, 11(2), 220-226. Retrieved from http://www.lawbulletin.oduvs.od.ua/archive/2019/11/part_2/30.pdf

United Nations. (1948). General Declaration of Human Rights. Retrieved from Retrieved from

https://www.un.org/en/udhrbook/pdf/udhr_booklet_en_web.pdf
United Nations. (1966a). International Covenant on Civil and Political Rights. Retrieved from https://acortar.link/uDLicX
United Nations. (1966b). International Covenant on Economic, Social, and Cultural Rights. Retrieved from https://acortar.link/EkQotB
United Nations. (1979). Convention on the Elimination of All Forms of Discrimination against Women (CEDAW or Women's Convention). Retrieved from https://www.un.org/womenwatch/daw/cedaw/cedaw.htm
United Nations. (1989). Convention on the Rights of the Child dated November 20, 1989. Retrieved from https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child
United Nations. (1993). Declaration on the Elimination of Violence against Women. Retrieved from https://www.arraid.org/en/node/2796
United Nations. (2011). Standards of providing social services to persons who have suffered from family violence: international experience and recommendations for Ukraine. Kyiv: Friendly World. Retrieved from https://gender.org.ua/images/lib/standarty_soc_poslug.pdf
Zuyeva, I.I., & Prystup, V.M. (2020). Modern aspects of legal regulation of prevention and countermeasures against domestic violence in Ukraine. Legal Scientific Electronic Journal, 3, 229-233. Retrieved from http://www.lsej.org.ua/3_2020/57.pdf

DOI: https://doi.org/10.34069/AI/2023.63.03.19
How to Cite:
Tarasiuk, N., Podplota, S., Kaluzhska, L., & Osets'ka, N. (2023). The problem of the cultural crisis in today's information-digital society. *Amazonia Investiga*, *12*(63), 206-213. https://doi.org/10.34069/AI/2023.63.03.19

The problem of the cultural crisis in today's information-digital society

El problema de la crisis cultural en la actual sociedad digital de la información

Received: March 5, 2023 Accepted: April 20, 2023

Written by:
Liudmyla Obukh[1]
https://orcid.org/0000-0003-3556-7587
https://www.webofscience.com/wos/author/record/2427369
Kateryna Bannikova[2]
https://orcid.org/0000-0002-5696-1033
https://www.webofscience.com/wos/author/record/33315638
Ihor Tsurkan[3]
https://orcid.org/0000-0002-8200-5299
https://www.webofscience.com/wos/author/record/IAQ-0384-2023
Anastasiia Khudiakova[4]
https://orcid.org/0000-0002-3648-4401
https://www.webofscience.com/wos/author/record/IAQ-0286-2023
Stanislav Kotorobai[5]
https://orcid.org/0000-0001-8205-4448
https://www.webofscience.com/wos/author/record/IAQ-1005-2023

Abstract

The purpose of the paper is to highlight the crisis phenomena that are an integral part of the socio-cultural space and, together with elements of progress towards well-being, form civilizational progress. The crisis of culture has several manifestations, determining its existential and axiological dimensions. The purpose of scientific exploration is to characterize the crisis phenomena in modern culture in the information and digital section. The methodology that most fully reveals the content of the cultural crisis is scientific-philosophical dialectical and synergetic in nature. Consequently, man and society use informatization and digitalization of socio-cultural space as principles, revealing the problematic aspects of cultural development. The formation of innovative sociocultural development strategies, the main task of which is to promptly identify the crisis aspects of culture, should be considered as a novelty. It is the

Resumen

El propósito del documento es poner de relieve los fenómenos de crisis que forman parte integrante del espacio sociocultural y que, junto con los elementos de progreso hacia el bienestar, conforman el progreso civilizatorio. El propósito de la exploración científica es caracterizar los fenómenos de crisis de la cultura moderna en el apartado informativo y digital. La metodología que revela más plenamente el contenido de la crisis cultural es de naturaleza científico-filosófica dialéctica y sinérgica. La formación de estrategias innovadoras de desarrollo sociocultural, cuya principal tarea es identificar con prontitud los aspectos de crisis de la cultura, debe considerarse una novedad. El dinamismo es el principal criterio de orientación práctica en el análisis científico y filosófico moderno de la crisis cultural. Así, la sociedad de la información y digital ha desarrollado las constantes de valor reales de su desarrollo, que permiten reconocer con prontitud

[1] 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.
[2] Director of Talent Acquisition and Human Resources, (PhD). Scientific degree: Candidate Specialty: Sociological sciences, Special and sectoral sociology, Kharkiv University of Humanities "People's Ukrainian Academy", Ukraine.
[3] Doctor of Philological Sciences, Associate Professor, Professor Mykolaiv Branch of Kyiv National University of Culture and Arts Event Management and Social Communications, Ukraine.
[4] Graduate student, Department of Theory and History of Art, Faculty of Fine Arts, Kharkiv State Academy of Design and Fine Arts, Ukraine.
[5] Ph.D, Doctor of Philosophy, Docent, Department of Theater Organization, Faculty of Theater Arts, Kyiv National I. K. Karpenko-Karyi University of Theatre, Ukraine.

dynamism that is the main practically oriented criterion in the modern scientific and philosophical analysis of the cultural crisis. Conclusion. Thus, the information and digital society has developed the actual value constants of its development, which allow promptly recognizing the cultural processes that are potentially or presently in crisis.

Keywords: culture, cultural crisis, information society, digitalization, sociocultural space.

los procesos culturales que están potencial o actualmente en crisis. Conclusiones. Así pues, la sociedad de la información y digital ha desarrollado las constantes de valor reales de su desarrollo, que permiten reconocer con prontitud los procesos culturales que están potencial o actualmente en crisis.

Palabras clave: cultura, crisis cultural, sociedad de la información, digitalización, espacio sociocultural.

Introduction

The history of human civilization, from the ancient world to the present day, has been permeated by cultural crises. The last largest crisis was associated with the industrialization of social development. Currently, humanity is on the threshold of a new global crisis, which will develop and spread in the information and digital environment.

The nature of the cultural crisis is existential in nature. At the same time, all the socio-cultural components, which are accompanying elements of the crisis, form its axiological dimensions. Informatization, digitalization, communication are all factors of the new technological era of the XXI century. All these aspects have axiological orientations, defining material and spiritual values, which are actualized in the conditions of cultural crisis.

The crisis of culture has its own organizational and methodological features, among which there are two most common models (see Fig. 1).

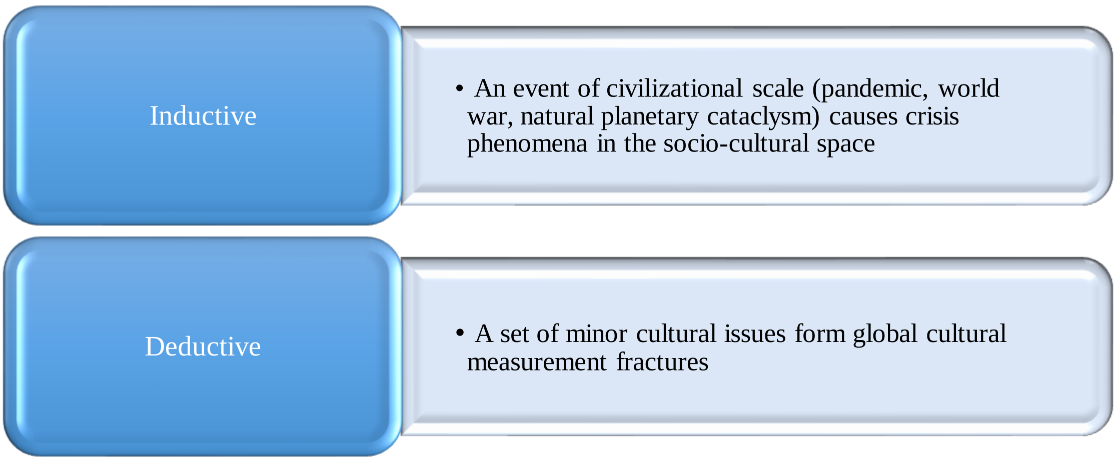


Fig. 1. Methodological Dimensions of the Cultural Crisis
Source: authors' own development

The second half of the 20th century was a period of rapid development of technological and information resources. Consequently, quite a few theories were formed, according to which information and communication technologies would be the civilizational factor that would lead to the decline of civilization. However, technological progress and the information space continued to advance without exposing society to planetary danger. Automation and digitalization successfully performed their functions, helping man in all areas of social activity. But neither machines, nor jobs, nor artificial intelligence create real existential threats to man or society. Therefore, apocalyptic ideas associated with information and communication technologies (ICTs) have gradually receded into the background in the worldview paradigm.

At the same time, the information and digital society is characterized by many factors indicative of the problems that mature in the contemporary cultural environment. First of all, the problematic aspects of the functioning of ICTs in relation to the cultural component of social or individual existence are actualized. Material and especially spiritual culture are significantly influenced by information and technology, which leads to crisis phenomena.

Informatization and digitalization of culture have dramatically changed the positioning of cultural values in the public consciousness. Thanks to the technologically improved functionality, digital culture is more likely to win the attention of users and connoisseurs. Digital communication provides new and improved opportunities for the target audience to reach the content and format of culture without the time and place limitations (Taşkıran, 2019). In this way, human access to the cultural commons, which is a fundamental constant of sociocultural progress, is being shaped. An individual, "armed" with the achievements of culture and having unimpeded access to culture, can independently form his beliefs and worldview. This becomes a reliable pledge for the formation of a protective anti-crisis model of worldview. Informatization and digitalization of the socio-cultural space under such conditions, in addition to its basic functions, also fulfills a protective mission.

The purpose of the paper is to characterize the development of the civilization space in the context of individual, local and global socio-cultural crises. The article analyzes the balance of tradition and innovation in modern society, which creates the preconditions for further social progress.

Methods

Among the general scientific methods, it is necessary to single out those that are relevant to the culturological methodology. The systemic method provides a general understanding of the crisis of culture and allows the grouping the information and digital elements into a general cluster of problematic issues. However, the structural-functional method allows analyzing the content of problems, which are actualized in the sphere of culture by informatization and digitalization. Thanks to the semiotic method, it is possible to interpret the format of the expression of information and digital threats to the socio-cultural space. The comparative-historical method illuminates the peculiarities of the cultural crisis through the prism of historical experience, modeling the integration of the information and digital component into the cultural and historical reality.

The general scientific cultural methodology is assisted by philosophical and synergetic methods, which provide an understanding of the ICT organization and its impact on cultural processes in the modern world. The notion of self-organization as an effective protective response to the aggressive influence of information and the digital environment is actualized. Consequently, the methodology of synergetics is in demand in the modern scientific and cultural discourse.

Literature review

The source base on the problem of the cultural crisis in the modern information and digital society is divided into two fundamental clusters: scientific works on the cultural component of ICTs and scientific research on the relationship of information and communication technologies with the cultural development of society. It should be noted that in the modern world, the development of the information and digital cluster has acquired an extremely rapid pace.

The issues of the positioning of information and digital space in the socio-cultural environment are raised in the works of Dahlgren (2018), Fenwick, McCahery & Vermeulen (2021), Gidlund & Sundberg (2021), Sarnavska et al. (2021). Concretized theoretical-methodological and practically oriented aspects of using information and digital potential in cultural promotion Veil & Waymer (2021), Marsen (2020), Taşkıran (2019), Panico & Vidal (2019).

The axiological aspects of information and digital content in the cultural dimension have been explored by Boisnard, Tchéhouali & Rioux (2019), Hoe (2019).

The direct impact of information, communication, and digital technology on the cultural development of society was highlighted by Tian et al., (2018), Yun et al., (2020).

Innovative information and technological components that are resources for cultural development (as generators of crisis, catalysts of crisis phenomenon, or fuse of crisis) are found in scientific studies by Kiefer, van Dinther & Spitzmüller (2021), Moussa, McMurray & Muenjohn (2018), Ma, Zhang, Wang & Zhang (2021).

Results

If we put aside fantastic apocalyptic scenarios in which artificial intelligence destroys human civilization, we can argue that the information and digital space does not form existential risks for general cultural development. Of course, some moments have a negative impact of information and the digital world on the development of culture. However, these aspects have rather value dimensions.

Information in the modern world has systemic significance for the value cultural-historical paradigm. Information resources are of different nature and affect the cultural-creative potential in different ways. The scale of volumes of information and the speed of information (both creation and transmission) determine the format of cultural achievements. If we add the innovation element, which provides the target component of the information-digital environment, we can assert the fundamentality of these processes for culture. Hence, we obtain a dichotomy associated with two trends, which are formed simultaneously, but characterized by opposite target dimensions:

Globalization of culture, which aims to bring the value (and in the long term - and existential) dimensions to a common denominator;

- Cultural identification, which consists in preserving the authenticity of the cultural component in the folk, national, regional, religious, and professional dimensions.
- One of the key questions in this dichotomy is the place and role of the information and digital factor in these trends. And this is where the main questions of our study arise:
- Do information and digital elements cause the crisis of culture?
- Which clusters of culture are negatively influenced by information and digital factors?

Let us try to answer these problematic questions. First of all, let us note that almost all moments characteristic of the crisis of culture are interconnected with the information or digital dimension. However, a fair clarification arises - does this interconnectedness mean causal moments?

The main problem is that any manifestation of crisis in contemporary culture will have an information and digital accompaniment. However, this does not indicate that ICT or digital space is a cause or a factor of crisis phenomena. Now we observe a stereotypical and distorted worldview belief that the moral crisis of modern society is a consequence of aggressive information influence. Such a statement is only partially true. The nature of information implies the formation of certain beliefs and perceptions in human beings. When we talk about the information society, we understand not just the nature of information, but also its epistemological, axiological, and methodological dimensions. It is here that the contradiction in the relationship between ICTs and cultural issues is understood.

A separate issue is a regulatory and normative aspect aimed at streamlining the information and digital environment. As Dahlgren (2018) notes, we are witnessing a crisis in the public sphere of the cultural dimension that threatens to explode the political authority to control cultural development. Democratic principles are crumbling because of excessive populism and distrust of information resources. If we add to this process the emotional aspect, which comes to life in the information and digital space, we get a threat to the regulation of processes affecting cultural promotion.

"*The social appropriation of digital technology can lead to an expansion of public and private freedoms, in particular freedom of expression. Digital control should be understood as a kind of control for the purpose of controlling behavior. Controlled digital use is linked to cultural practices in the context of the social appropriation of networked technologies ubiquitous in society. In concerted refusal, the structuring and semantization of data emphasize flows controlled by economic and cultural actors to enable access to resources*" (Panico & Vidal, 2019).

The convergence between telecommunications networks and the content they broadcast determines the policy and regulatory framework for the operation of the digital space (Boisnard Tchéhouali & Rioux, 2019). Currently, there is a trend towards the neutrality of information and digital capacity. Thus, there is a process of delimiting the information-digital environment from assessments of cultural realities.

The information and digital cluster cannot be completely limited to crisis phenomena in culture. Theoretical-methodological and practically-oriented models are proposed, thanks to which information, communication, technology, and the digital world will not become a source and favorable environment for the development of crisis phenomena.

In particular, the relevance of systems thinking is quite actively discussed. This approach allows us to see not only the consequences of the cultural crisis on the example of individuals or communities but also to comprehend the overall picture of what is happening. Approaches of personal mastery, mental models, and teamwork in the context of the megatrend of digitalization are proposed (Hoe, 2019). As an example, we can observe a separate negative manifestation of culture, which has spread in the media or in the digital information space. However, this does not mean that the essence and format of the crisis phenomenon has been shaped precisely by the information and digital environment. However, the broadcasting of content associated with the crisis leads to the formation of false stereotypes about ICTs as a factor of cultural contradictions.

Another methodological feature that points to the need to distinguish the information and digital space separately from the cultural content disseminated in it is the transition from dialectical to synergetic worldview approaches.

The only reality of personality in the virtual space of communication is the reality of self-presentation (Sarnavska et al., 2021). This fact conditions the potential danger of personal development in the information-digital environment. This, in turn, leads to the risk of failure to respond to cultural crises. Focusing on the crisis of the individual, vigilance about the crisis of socio-cultural nature is lost. Such individualization inherent in the information and digital environment has a negative impact on the strategic assessment of the state of cultural development.

Proceeding from the realities of human positioning in the modern information and digital society, there is an urgent need for new worldview attitudes, relevant for the information era of civilization development.

The synergetic model in this regard is characterized by both the self-organization of human potential and the systematic ordering of the functioning of ICT. Consequently, the discrepancy in the capabilities of the information-digital space and the human ability to use them in a positive dimension disappears.

Discussion

Usually, in the period of formation and development of a cultural-historical epoch, social crises precede crisis phenomena in culture. The return process, when culture already provokes negative shifts in society, is typical for the period of disintegration or transformation of the cultural-historical epoch. So far, it is possible to state that the information and digital society has just begun to establish itself in the worldview paradigm of modern civilization. Consequently, we can state that society is now the dominant element in the mutual influence between social and cultural development.

The crises of the social structure determine the changes and transformations in the information and digital space. Coronavirus was the first global crisis of the digital era and created uncertainty in all dimensions of civilizational existence (Fenwick, McCahery & Vermeulen, 2021). Any moment of instability generates a large number of interpretations of different nature. Therefore, the information and digital space is quite actively reoriented to the interpretive model of its functioning. This forms a negative influence on the development of the information-digital environment itself.

New formats for positioning the information and digital potential in the cultural promotion are being developed in the modern world. In particular, the moderating role of innovation culture is being explored (Ma et al., 2021). Moderating in this case is a methodological principle, according to which information and the digital world are both mechanisms for the generation and translation of ideas, principles, and attitudes. Consequently, the flexibility of the worldview system is formed due to the immediacy achieved by the means of ICT.

One of the elements that have been actualized in the modern information and digital field is the principle of "culture of cancellation" (Veil & Waymer, 2021). This approach involves the use of information and digitalization to erase the negative manifestations of cultural activity in society. The crisis in society generates tensions and contradictions. ICTs are used as theoretical-methodological and practically oriented possibilities, through which a civilizational picture of the world is formed. When a certain irritant arises that predetermines a crisis phenomenon, the information and digital environment is activated to neutralize it in the worldview dimension.

It is obvious that the information and digital space cannot exist autonomously from the realities of social development. Under such conditions, ICTs become translators of crisis elements that are characteristic of society. However, this does not mean that technology or information is the cause of the crisis. In this context, one of the progressive variants of the relationship between ICTs and social processes is mediation (Þ Gunnþórsson, 2020).

In this context, information and technology play the role of translator rather than a generator of ideas and principles.

Science has made a successful attempt to methodologically justify the structure and functioning of the information and communication space according to the needs of society. At present, a theory of crisis communication has been formed, which has in its arsenal the following precepts:

- Image restoration;
- The theory of situational crisis communication;
- Rhetorical arena theory;
- Narrative and integrated crisis structuring (Marsen, 2020).

The practical significance lies in the organization of the principle of crisis management. The information and digital space is an effective tool, through which you can respond to crisis phenomena.

A promising direction of research in this regard is the development of settings for information and digital resources, which will prevent the occurrence of crisis phenomena in culture. Already now scientific and technological progress offers algorithms, thanks to which forecasting in economics, politics, and technological development is carried out. Consequently, risks are calculated, and preventive measures are taken to prevent crisis manifestations. Of course, when it comes to the material component of social life, such simulations have a higher reliability than in the matter of spiritual development. However, the information and digital space of recent decades is gradually replacing other elements of the spiritual formation of man. Consequently, all prerequisites are formed to regulate the worldview-spiritual development of society through information and communication resources.

It is clear that in this case, we face risks for society. History has already repeatedly proved that attempts to conquer the spiritual and ideological component of society lead not just to crises, but to real catastrophes (wars, totalitarian regimes).

The dichotomy of the role and place of ICTs in socio-cultural development is currently relevant. Innovation contributes to the progress of culture, providing new horizons and centers for the realization of cultural dimensions. On the one hand, the information and digital field is the environment where culture develops and changes. On the other hand, ICTs, with all their popularization in recent years, are still unable to dictate the conditions for the dominant cultural trends of modern society. Therefore, an interpretative model of information and digital space in the context of the development of modern culture is noted. When the issue of cultural crisis is actualized, information becomes an important tool in the dissemination and justification of crisis narratives.

“The chosen analytical framework stretches from technological culture (i.e., how and where myths and symbolic narratives are constructed) and a focus on the process of interpretation (i.e., flexibility in how digitalization can be translated and tied to different political goals and values) to the dimension of primacy (looking to education, professional experience, and geographic location to explore aspects of dominance and power)” (Gidlund & Sundberg, 2021).

Currently, methodologically in relation to innovation models, there is a division between global, national, and organizational culture (Tian et al, 2018). Culture in its various variations has always been the most important driver of innovation (Yun et al., 2020). One characteristic aspect of cultural development is dynamism. This process is fundamental to progress and crisis in culture. Accordingly, the information and digital space is a factor that ensures the dynamics in culture. This process has both positive and negative meaning. If the information and digital potential is used to assert scientific and technological progress, it is an example of a positive influence on cultural dynamics. When the information and digital space becomes a platform for the dissemination of elements that cause crisis in culture, it is a negative manifestation of the dynamics of cultural development.

The development of new ideas and innovations is a primary and inevitable process. This is due to intense global competition and rapid technological development (Moussa et al., 2018).

Digitalization increases the pressure on culture, forcing innovation in all areas of public life. The following characteristics of organizational culture are currently relevant: corporate entrepreneurship, digital awareness, need for innovation, digital skills and resources, ecosystem orientation, participation and self-organization of actors, agility and organizational structures, the culture of error and risk-taking, internal knowledge sharing and collaboration, results orientation (pragmatism), openness and desire for progress. Note that there is a term "digital innovation culture" in scholarly discourse that emphasizes the importance of an approach to digital transformation and innovation (Kiefer et al., 2021). Consequently, information and digital innovation becomes a relevant mechanism in cultural crises.

A promising direction for further research is to differentiate the role of ICTs in the cultural crises of the modern world (see Fig. 2).

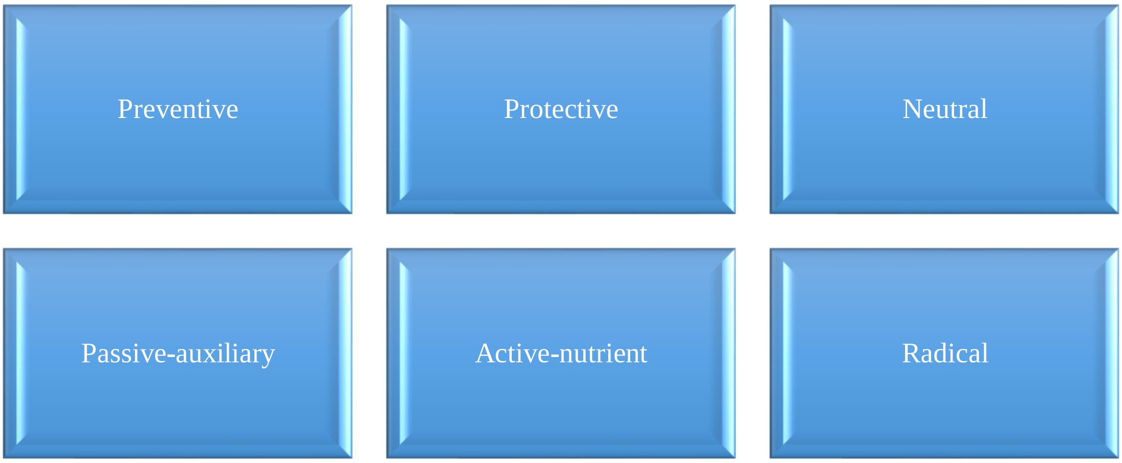


Fig. 2. Information and Digital Models in the Cultural Crisis.
Source: Own development by the authors

Consequently, informatization and digitalization can play an active as well as a passive role in the process of cultural development. In a cultural crisis, ICTs can be a deterrent and an element in overcoming it. At the same time, information and digital resources are a source of feeding the crisis processes.

Conclusion

Information and digital space has become substantially entrenched in the theoretical and attitudinal and practical commonplace paradigms of contemporary socio-cultural space. Consequently, all information and digital resources have become fundamental to human life or society. Under such conditions, ICTs are both carriers of positive achievements in the sphere of culture and elements causing crisis phenomena in culture.

The cultural crisis of modern civilization has two key dimensions, fully or indirectly related to the information and digital space:

- the global-existential dimension, characterizing the information-digital space as one of the components with destructive consequences for civilization as a whole (artificial intelligence, dependence of critical infrastructure on ICT);
- practically axiological dimension, reflecting the negative impact of the information and digital component on material and spiritual culture (virtualization of social relations, devaluation of moral norms).

The global-existential dimension preserves the potential destructiveness of the socio-cultural development of civilization, but so far these manifestations have not been observed. Now we can state the actualization of the axiological dimension of the cultural crisis associated with information and digital technologies. Consequently, it is necessary to form value constants which will become reference points for the use and development of the information and digital space. Thus, the normative function will become practically effective and will form protective mechanisms against the negative influence of technologization, informatization, and digitalization of the modern socio-cultural space.

Bibliographic references

Boisnard, M., Tchéhouali, D., & Rioux, M. (2019). Cultural policies 2.0: Rebuilding the intervention of public authorities. In Digitalization of Society and Socio-political Issues 1 (pp. 139–147). Wiley. https://doi.org/10.1002/9781119687177.ch13

Dahlgren, P. (2018). Media, knowledge and trust: The deepening epistemic crisis of democracy. Javnost - The Public, 25(1–2), 20–27. https://doi.org/10.1080/13183222.2018.1418819

Fenwick, M., McCahery, J. A., & Vermeulen, E. P. M. (2021). Will the world ever be the same after COVID-19? Two lessons from the first global crisis of a digital age. European Business Organization Law Review, 22(1), 125–145. https://doi.org/10.1007/s40804-020-00194-9

Gidlund, K. L., & Sundberg, L. (2021). Undisclosed creators of digitalization: A critical analysis of representational practices. Information Polity, 26(1), 3–20. https://doi.org/10.3233/ip-200230

Þ. Gunnþórsson, F. (2020). Mediation: Crisis, postmodern culture and decision making. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3713233

Hoe, S. L. (2019). Digitalization in practice: the fifth discipline advantage. Learning Organization, 27(1), 54–64. https://doi.org/10.1108/tlo-09-2019-0137

Kiefer, D., van Dinther, C., & Spitzmüller, J. (2021). Digital innovation culture: A systematic literature review. In Lecture Notes in Information Systems and Organisation (pp. 305–320). Springer International Publishing. https://doi.org/10.1007/978-3-030-86800-0_22

Ma, L., Zhang, X., Wang, G., & Zhang, G. (2021). How to build employees' relationship capital through different enterprise social media platform use: the moderating role of innovation culture. Internet Research, 31(5), 1823-1848. https://doi.org/10.1108/intr-01-2020-0022

Marsen, S. (2020). Navigating crisis: The role of communication in organizational crisis. International Journal of Business Communication, 57(2), 163–175. https://doi.org/10.1177/2329488419882981

Moussa, M., McMurray, A., & Muenjohn, N. (2018). Innovation in public sector organisations. Cogent Business & Management, 5(1), 1475047. https://doi.org/10.1080/23311975.2018.1475047

Panico, R., & Vidal, G. (2019). Digital practices, cultural practices, under surveillance. In Digitalization of Society and Socio-political Issues 1 (pp. 51–59). Wiley. https://doi.org/10.1002/9781119687177.ch5

Sarnavska, O., Yakovyshyna, T., Kachmar, O., Sherman, M., Shadiuk, T., & Koberska, T. (2021). The influence of the culture of the third information revolution on the formation of personality in the M. serres philosophical discourse. Postmodern Openings, 12(1), 241–253. https://doi.org/10.18662/po/12.1/257

Taşkıran, H. B. (2019). Digitalization of Culture and Arts Communication: A Study on Digital Databases and Digital Publics. In Handbook of Research on Examining Cultural Policies Through Digital Communication (pp. 144–160). IGI Global. https://doi.org/10.4018/978-1-5225-6998-5.ch007

Tian, M., Deng, P., Zhang, Y., & Salmador, M. P. (2018). How does culture influence innovation? A systematic literature review. Management Decision, 56(5), 1088-1107. https://doi.org/10.1108/md-05-2017-0462

Veil, S. R., & Waymer, D. (2021). Crisis narrative and the paradox of erasure: Making room for dialectic tension in a cancel culture. Public Relations Review, 47(3), 102046. https://doi.org/10.1016/j.pubrev.2021.102046

Yun, J. J., Zhao, X., Jung, K., & Yigitcanlar, T. (2020). The culture for open innovation dynamics. Sustainability, 12(12), 5076. https://doi.org/10.3390/su12125076

DOI: https://doi.org/10.34069/AI/2023.63.03.20
How to Cite:
Medvedieva, M., Oneshko, S., Roik, O., Yaremko, I., & Khudaverdiyeva, V. (2023). Efficiency of managing regional economic development in wartime (Ukrainian experience). *Amazonia Investiga*, *12*(63), 214-223. https://doi.org/10.34069/AI/2023.63.03.20

Efficiency of managing regional economic development in wartime (Ukrainian experience)

Eficacia de la gestión del desarrollo económico regional en tiempos de guerra (experiencia ucraniana)

Received: March 4, 2023 Accepted: April 15, 2023

Written by:
Maryna Medvedieva[1]
https://orcid.org/0000-0002-1886-2720
https://www.webofscience.com/wos/author/record/34485048
Svitlana Oneshko[2]
https://orcid.org/0000-0003-2313-3984
Oksana Roik[3]
https://orcid.org/0000-0002-3617-8068
Ihor Yaremko[4]
https://orcid.org/0000-0003-3556-0609
https://www.webofscience.com/wos/author/record/859612
Viкtoriya Khudaverdiyeva[5]
https://orcid.org/0000-0002-0100-5079
https://www.webofscience.com/wos/author/record/2780654

Abstract

Each state has its own regional peculiarities, just as each state should take all possible measures to ensure the uniform and efficient economic development of each of its regions, in accordance with the existing potential and the infrastructure already in place. In order to develop measures for effective management of the economic development of regions, it is necessary to conduct a retrospective analysis of statistical data, which will allow to identify the peculiarities of their current financial condition and group them by the degree of development. Accordingly, the purpose of the study is to determine the optimal approaches to ensuring the effectiveness of regional economic development management, taking into account the martial law in Ukraine.
The performance of regional enterprises, investment volumes and output are largely

Resumen

Cada estado tiene sus propias peculiaridades regionales, del mismo modo que cada estado debe tomar todas las medidas posibles para garantizar el desarrollo económico uniforme y eficaz de cada una de sus regiones, de acuerdo con el potencial existente y la infraestructura ya creada. Con el fin de elaborar medidas para una gestión eficaz del desarrollo económico de las regiones, es necesario realizar un análisis retrospectivo de los datos estadísticos, que permita identificar las peculiaridades de su situación financiera actual y agruparlas según su grado de desarrollo. En consecuencia, el propósito del estudio es determinar los enfoques óptimos para garantizar la eficacia de la gestión del desarrollo económico regional, teniendo en cuenta la ley marcial en Ucrania.
El rendimiento de las empresas regionales, los volúmenes de inversión y la producción están

[1] Ph.D. in Physical and Mathematical Sciences, Associate Professor, Doctoral Candidate Department of Economics, Accounting and Taxation, State Higher Education Establishment "Donetsk National Technical University", Ukraine.
[2] PhD of Economics, Associate Professor, Professor Department of Economics and Finance, Institute of Marine Business, Odessa National Maritime University, Ukraine.
[3] Doctor of Philosophy, Associate Professor of the Department of Tourism, Associate professor Viacheslav Chornovil Institute of Sustainable Development "Lviv Polytechnic" National University, Ukraine.
[4] DSe(Econ.), Professor, Head of Department of Accounting and Analysis Institute of Economics and Management Lviv Polytechnic National University, Ukraine.
[5] Ph.D. in Economic Sciences, Docent Department of Tourism, Faculty of management of trade, business and customs activities, State Biotechnological University (SBTU), Ukraine.

determined by market mechanisms and incentives that support concentration processes and lead to the growth of spatial disparities within Ukraine. The uneven development of regions, especially under martial law, may exacerbate social and demographic problems, which will complicate economic recovery after the end of hostilities.
The study identified the main directions of regional development, according to their belonging to a particular cluster, and formulated recommendations aimed at improving the economic efficiency of the regions.

Keywords: regional development, capital investments, regional economy, gross regional product, development potential.

determinados en gran medida por los mecanismos e incentivos del mercado que apoyan los procesos de concentración y conducen al crecimiento de las disparidades espaciales dentro de Ucrania. El desarrollo desigual de las regiones, especialmente bajo la ley marcial, puede agravar los problemas sociales y demográficos, lo que complicará la recuperación económica tras el fin de las hostilidades.
El estudio identificó las principales direcciones del desarrollo regional, según su pertenencia a un determinado cluster, y formuló recomendaciones encaminadas a mejorar la eficiencia económica de las regiones.

Palabras clave: desarrollo regional, inversiones de capital, economía regional, producto regional bruto, potencial de desarrollo.

Introduction

Uniform development of the country's regions is the key to the effective realization of the potential of the entire country. Accordingly, the state faces an important task of ensuring sustainable development of the regions, considering their geographical, financial and production specifics. Since the outbreak of a full-scale war in Ukraine, none of the regions has been spared from fighting or destruction because of missile attacks, energy infrastructure has been significantly damaged, and in some regions entire cities have been destroyed and production has been halted. Nevertheless, the State continues to function and ensure the development of the regions, and accordingly, there is a need to determine the optimal approaches to ensuring the effectiveness of regional economic development management in wartime, which can be defined as the **purpose of the** article. In the process of researching the areas of effective management of regional development, it is necessary to take into account the peculiarities of development of each region at the present stage, and for this purpose it is quite logical to use approaches to clustering of Ukrainian regions, according to their financial condition, and to develop specific recommendations for each particular cluster, taking into account its specifics.

Literature Review

The current stage of Ukraine's socio-economic development, which depends on the challenges of military operations and is subordinated to the results of the Ukrainian army at the front, requires a deep understanding of the role of regional development in shaping a unified approach to ensuring the country's sustainable development. Today in Ukraine, the issue of uneven regional development is particularly acute, which has become more urgent with the outbreak of full-scale hostilities on the territory of Ukraine. The eastern, southern, and northern regions have suffered significant destruction, the central and western parts of the country have received a significant number of internally displaced persons and have also suffered destruction of infrastructure facilities, and these features should be considered when formulating a development program for each individual region. However, the uneven development of Ukraine's regions was also evident in the pre-war period and was due to the geographical, demographic and social specifics of each of them. Therefore, it is worth focusing on the review of scientific sources that are specifically devoted to the peculiarities of ensuring effective regional development in countries with a heterogeneous structure.

In the scientific literature, the authors mostly emphasize that regional development is the basis for the economic success of the state (Calero & Turner, 2020; Mustafin et al., 2022). At the same time, the government should strive to ensure maximum uniformity of regional development. Of course, this is quite difficult to achieve, especially for large states located on vast territories, but the uniform development of regions should become one of the priorities of state policy in ensuring the sustainable development of administrative units (Rantala & Ukko, 2019).

According to leading scientists (Hendri et al., 2020; Feißt et al., 2019), the first step towards diagnosing and further reforming the state of regional development is to conduct an in-depth analysis of statistical data and, if necessary, cluster regions according to the state of their economic and financial development, the amount of investment attracted, and the potential for the development of certain industries. The issues of regional clustering are also described in some detail in the literature (Lin, 2020; Michálková et al., 2023) and allow for the selection of initial data for analysis, as well as the use of the results to develop measures specific to each unique group of regions.

Recommendations for the development of regional activities can be focused primarily on developing a plan to attract investment from private and institutional investors (Kibik et al., 2022; De Propris & Bailey, 2021), as well as on creating favorable conditions for the development of innovation activity in the regions (Kruszelnicki et al., 2020; Tödtling & Trippl., 2018). Innovation activity should not be concentrated in a particular sector or industry, it can be implemented in any area, but is a prerequisite for the timely and comprehensive development of regions.

A separate area of research (Alzyadat & Al-Nsour, 2021; Zhou et al., 2021) is the development of financial management tools at the regional level, as the quality of management decisions made at the local government level determines the region's ability to create favorable conditions for business development and the flow of investment into the region.

The issue of defining indicators of regional development performance and efficiency remains controversial in the literature. Representatives of one group of researchers (Eriksson et al., 2017; Govindarajan, 2019; Saputra et al., 2019) primarily propose to focus on indicators of budget revenues and financial performance of public authorities; others (Henning, 2019; Michálková et al., 2023) focus on the inflow of labor to the region and the availability of tourist flows. It is worth noting that a universal methodological approach to determining the effectiveness of regional development has not yet been presented in the literature and this may be an area for further research.

Methodology

The problem of uneven economic activity in the regions is relevant not only for Ukraine, but also for the leadership of many countries, as the ability to ensure the effective functioning of the state as a whole largely depends on the well-planned development of the regions. Ukraine has a total area of 603,700 km² and is located in several climatic zones, and the regions have different historical backgrounds and levels of development, resulting in disparities in the development of different regions, which necessitates understanding the specifics of each region's development and the formation of unique areas of economic growth in each of them.

To assess the current development of regions, it is necessary to take into account statistical data in the dynamics, so it is advisable to use the method of statistical analysis (Ahmad et al., 2018; Rauhut et al., 2020). The use of this method will allow to diagnose the problems and potential of each region.

After the statistical analysis, it is logical to move on to grouping the regions by the criterion of their economic status and the volume of GNP generated by a particular region, which can be done using cluster analysis. The use of clustering will allow to develop recommendations for each individual group of regions for their further development.

The study used general scientific methods of analysis, synthesis, generalization, systematization, graphical presentation of material, induction, deduction, comparison and specification, as well as specific methods of statistical and cluster analysis.

Results and Discussion

One of the main indicators that helps to determine the effectiveness of the regional economy is the gross regional product (GRP), which reflects the total value of all goods and services produced in the region. The GRP indicator can be used to assess the development potential of regions and identify leaders in terms of production, since the total value of manufactured products and services can indirectly indicate the availability of jobs and total tax revenues to the state budget from a particular region (Medeiros & Rauhut, 2020; Saputra et al., 2020).

Data on GRP volumes are published by the State Statistics Service of Ukraine (State Statistics Service of Ukraine, 2023), and are illustrated in Fig. 1.

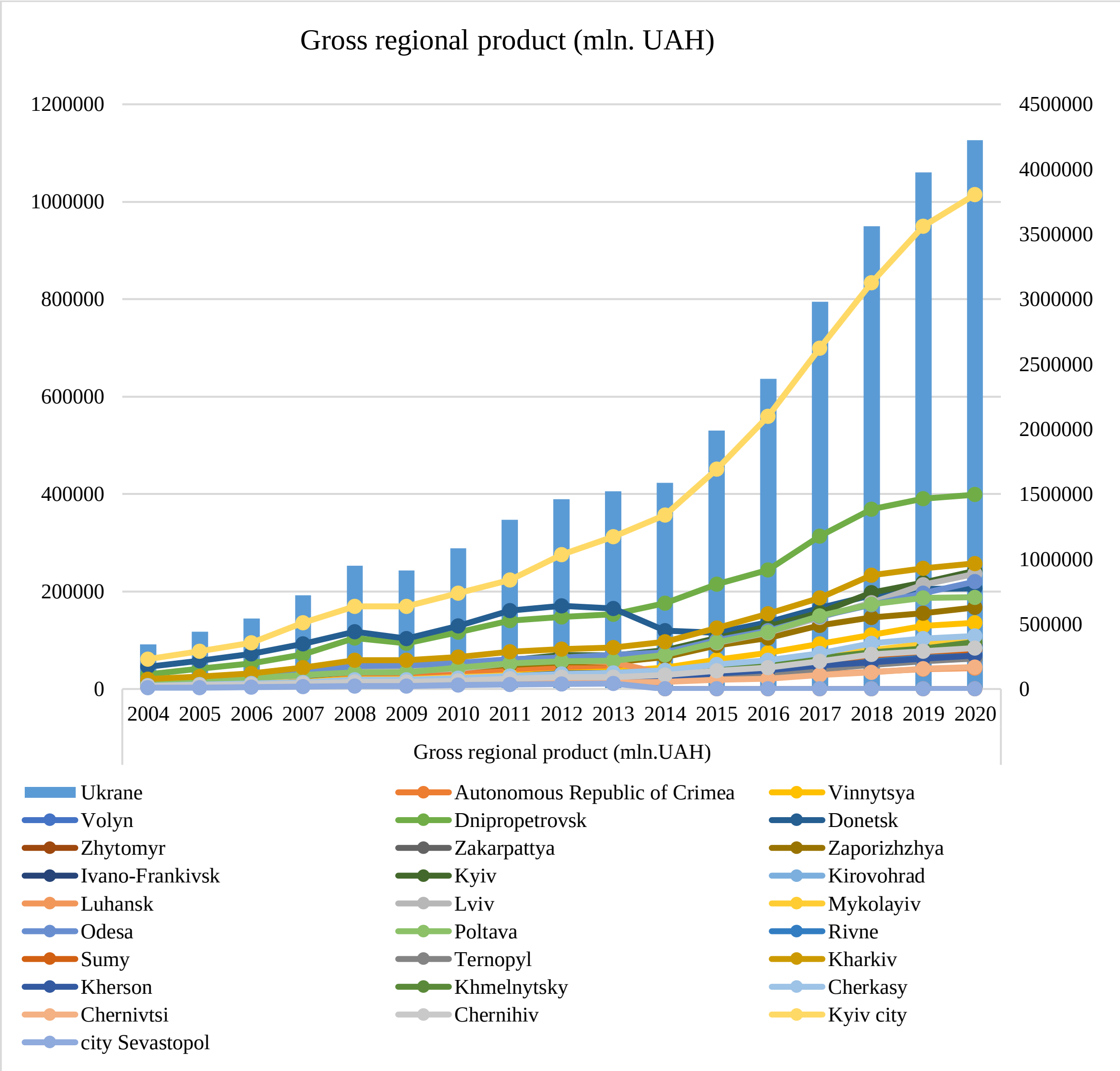


Fig. 1. Gross regional product (mln. UAH)
(Source: State Statistics Service of Ukraine, 2023)

In national currency terms, the GRP is growing steadily, and the inflationary nature of this growth should certainly be taken into account, but inflation is not the only driver of the growth in the value of products manufactured in the regions. Ukraine has been developing international trade and strengthening its position in economic development in the pre-war period, so this growth is an absolute positive characteristic of the entire country. However, it is worth noting that the leader in GRP formation is the city of Kyiv, as the capital, where a significant number of large companies are registered. Concentration of large companies and production facilities in the capital region is a typical situation for a rich country and can be regulated by applying mechanisms of industrial, financial, and economic decentralization. Dnipropetrovs'k and Donetsk (until 2014) regions also generated significant GRP indicators due to the industrial production concentrated in these areas processing, metallurgical and machine-building plants.

After analyzing the GRP, it is logical to move on to the index of production output (Iammarino et al., 2019), which will allow us to estimate in relative terms the contribution of each region to the total production of goods and services in the entire country - Fig. 2. According to Table 1, it is possible to note that the largest fluctuations in the indices of manufactured products relate to those regions, some of which were occupied in 2014-2015, and, accordingly, production facilities were in the territory not controlled by Ukraine.

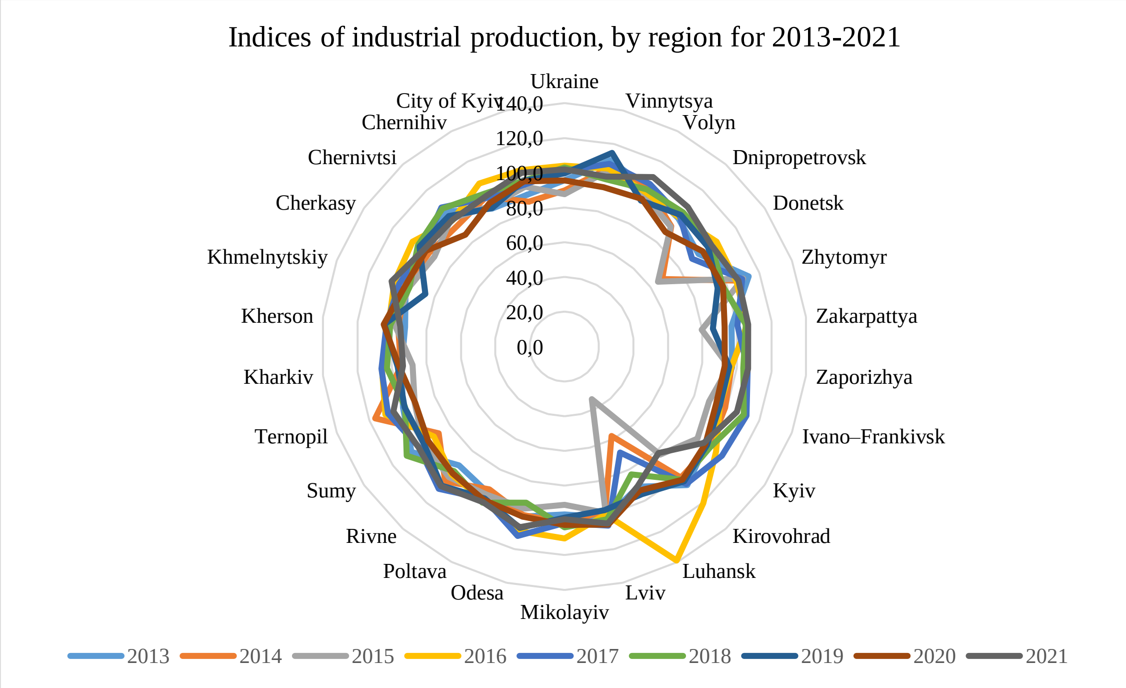


Fig. 2. Indices of industrial production, by region for 2013-2021 (Source: State Statistics Service of Ukraine, 2023)

If we focus on the effectiveness of regional development, we should emphasize the financial performance of those enterprises (Fang et al., 2023; Balland et al., 2019) that are concentrated in the regions. Information on the positive and negative financial results of Ukrainian business entities by region is presented in Fig. 3. According to regional statistics, we see that the highest financial performance indicators are generated by enterprises in Kyiv, Dnipropetrovs'k, Donetsk, Zaporizhzhia, Kyiv, Lviv, Poltava, and Kharkiv regions. Accordingly, the leaders in terms of financial performance are also those regions where, as previously shown, the largest number of industrial enterprises is concentrated.

Unfortunately, there are no official statistics on this indicator with information for 2022-2023, so it is impossible to determine how the full-scale hostilities on the territory of Ukraine affected regional development.

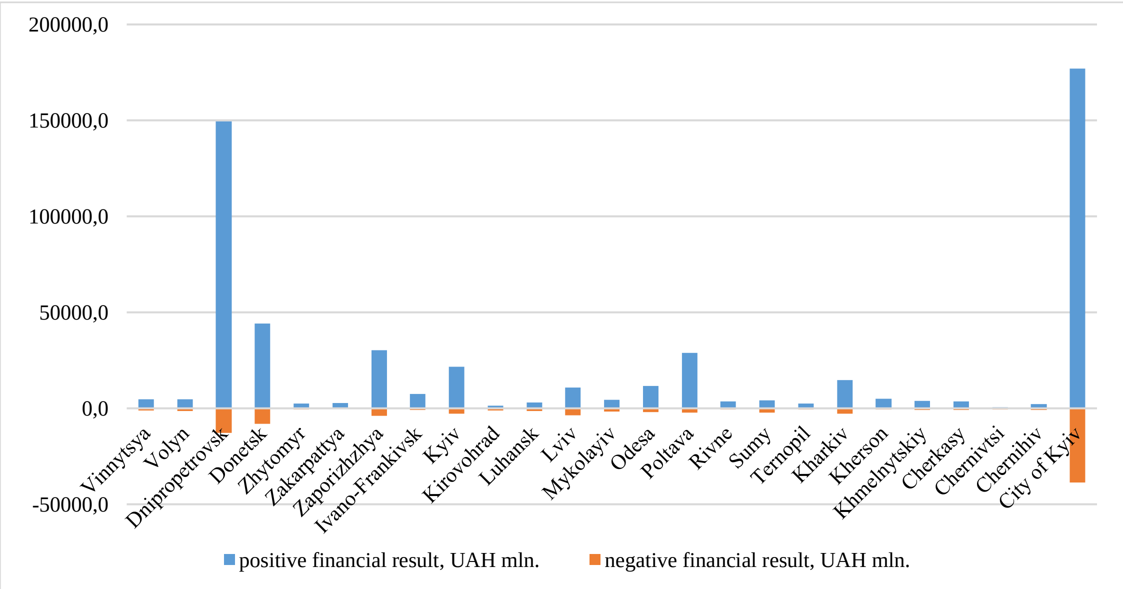


Fig. 3. Net profit (loss) of large and medium-sized enterprises by regions, January-September 2021 (source: State Statistics Service of Ukraine, 2023)

In addition to the financial performance of enterprises concentrated in the region, an important reflection of the effectiveness of their economic development is the amount of capital investment (Bezverkhyi et al., 2019; Elvekrok et al., 2022) attracted to each region (Fig. 4).

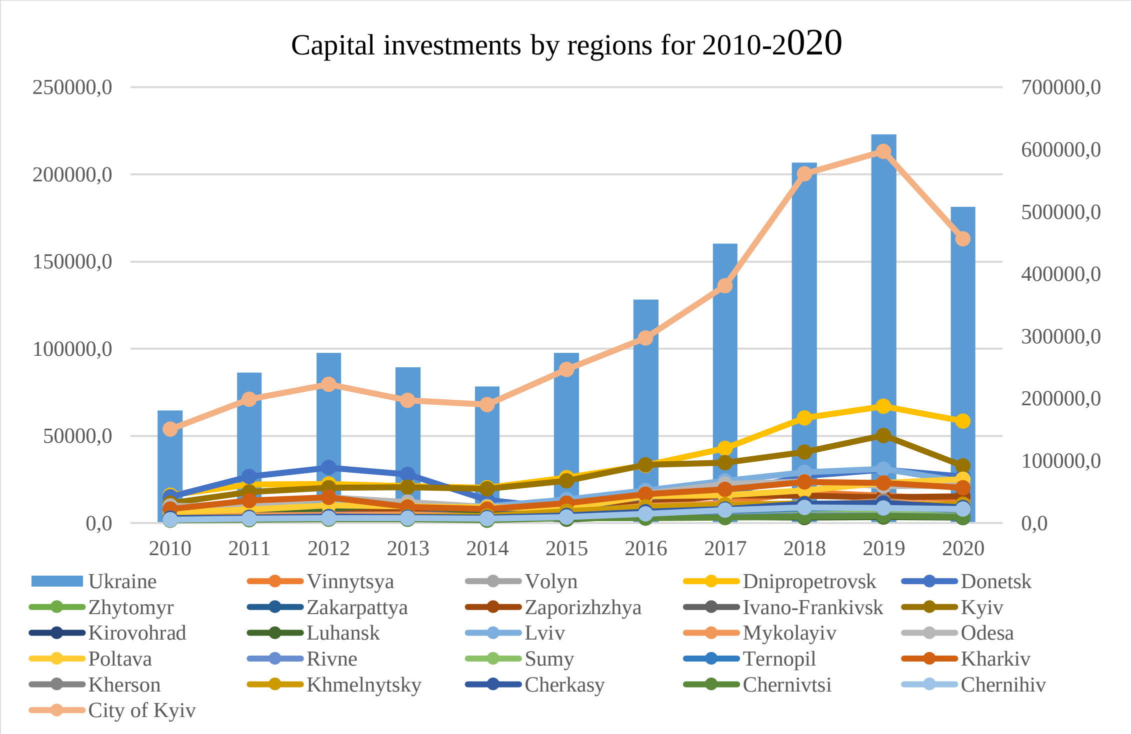


Fig. 4. Capital investments by regions for 2010-2020, mln. UAH
(Source: State Statistics Service of Ukraine, 2023)

Official statistics on the volume of capital investment in the regions also ends with data for 2020, but it is indicative in the context that the COVID-19 pandemic has significantly affected investment processes in all regions. In analyzing the dynamics, it is worth noting that after the change in Ukraine's political course in 2014, the volume of capital investment in all regions increased, with Kyiv, Dnipro, Kyiv, Lviv, Poltava, and Kharkiv regions acting as leaders, as well as other indicators.

In general, based on the analysis of statistics, it can be argued that there is a certain shift in the vector of development and efficiency of the regions to the east of Ukraine, while the western regions function less efficiently as a result of their historical and climatic predisposition to agriculture and population outflow.

Given the uneven development of Ukraine's regions, which is substantiated by the analysis of statistical data, it is worth noting that it is impossible to develop a universal approach to the effective development of any region, it is necessary to take into account their specifics and features, which can be done by clustering the regions of Ukraine by indicators of their development efficiency. It is optimal to use two indicators of the effectiveness of economic development of Ukrainian regions, namely: gross regional product and the volume of capital investment in the region (Diebolt & Hippe, 2019; MacKinnon et al., 2019; Wu & Dong, 2022).

The results of the cluster analysis are shown in Fig. 5. The results of the cluster analysis show that Kyiv and Dnipro region form two separate clusters. This is quite expected, since the statistical data analyzed in the article also confirmed the existence of significant differences between these regions. The results of the cluster analysis and recommendations for ensuring the effectiveness of regional economic development management are presented in Table 1.

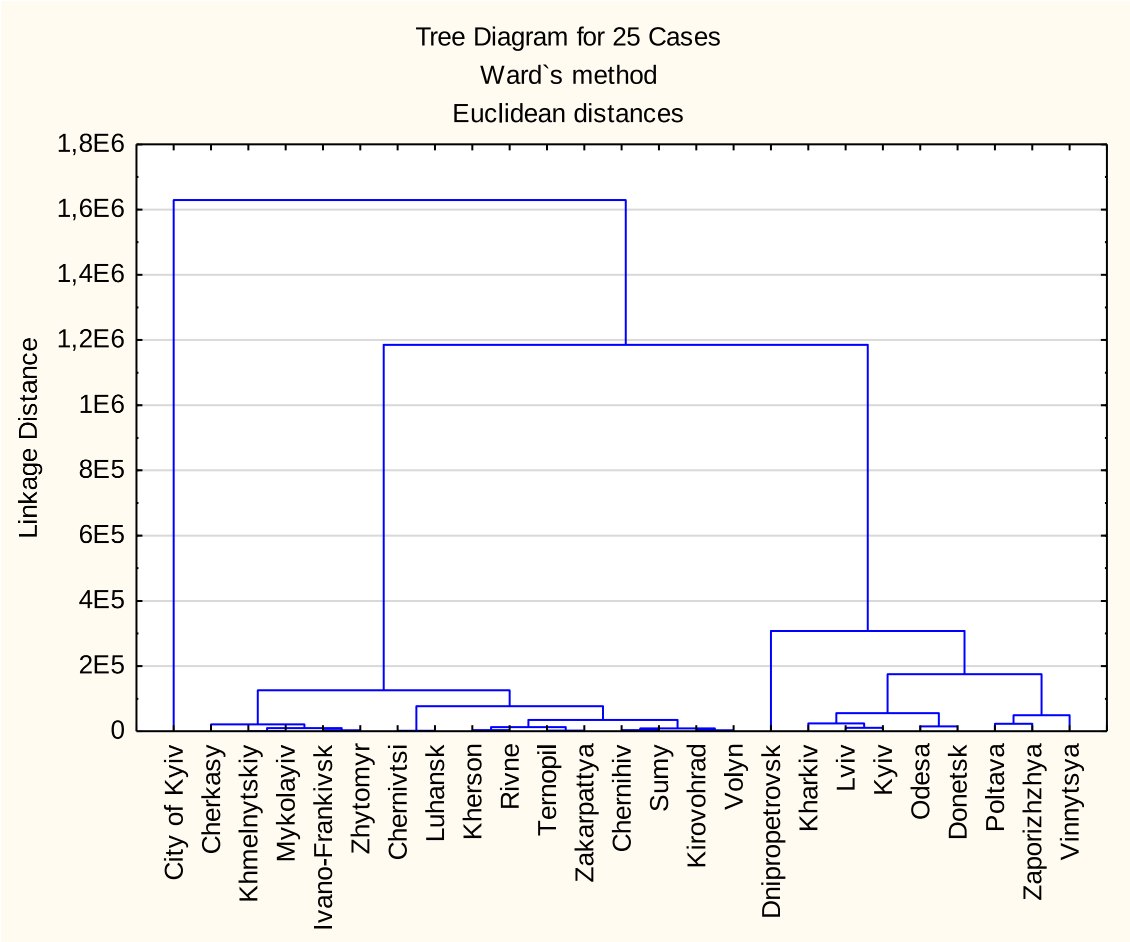


Fig. 5. Results of clustering of Ukrainian regions by capital investment and GRP in 2021 (Source: compiled by the author)

Table 1.
Results of the cluster analysis and recommendations for ensuring the effectiveness of regional economic development management

Name of the cluster and its characteristics	Composition of the cluster	Recommendations for ensuring the effectiveness of economic development management in the cluster regions
Capital cluster. It is represented exclusively by Kyiv and has the specifics of development inherent in the capital. It has the greatest development potential and has already achieved high performance indicators in the region's economic development	Kyiv	The development of the region should focus on financing innovative projects, investing in ambitious projects that can improve Ukraine's international rankings and increase investment flows. Intensive technology development is recommended for the cluster
Trade and production cluster. Dnipro region, which makes up the cluster, combines high trade and production potential due to its favorable geographical location. The region is home to large manufacturing enterprises and is also home to innovative and investment-oriented companies	Dnipro region	The economic development of the cluster should focus on supporting the existing business infrastructure and encouraging its renewal and improvement. It is important for manufacturing enterprises to attract investment in the introduction of innovative production technologies and resource conservation. The renewal of fixed assets of manufacturing enterprises remains relevant, as most of them were created in Soviet times

Industrial and scientific cluster. It has high development potential and resources available for this purpose	Kharkiv, Lviv, Kyiv, Odesa, Donetsk regions	Most of the cluster's regions are characterized by a combination of research centers, strong educational institutions, and production of various types of products and services. The cluster can be characterized as having an above-average development potential and requiring state support to develop its existing potential
A cluster with an average level of development. Has development potential, but without strong innovative production	Poltava, Zaporizhzhia, Vinnytsia regions	The cluster's regions can be called satellites of more developed regions, but they also have their own production facilities and intellectual potential. The cluster needs more attention from the government and programs aimed at industrial and economic development.
A cluster with a below-average level of development. It has potential, but it is underdeveloped, with no significant production centers or infrastructure facilities concentrated in the cluster's regions	Luhansk, Kherson, Rivne, Ternopil, Zakarpattia, Chernihiv, Sumy, Kirovohrad, Volyn regions	The cluster regions can be characterized as requiring increased attention from the state, in particular, a program should be developed to find optimal development vectors for the regions that will take into account the strengths of each region
A cluster with a low level of development. Due to geographical features, the cluster's regions have low economic potential, but significant tourism potential.	Cherkasy, Khmelnitsky, Mykolaiv, Ivano-Frankivsk, Zhytomyr, Chernivtsi regions	There is no large-scale production in the cluster areas, but there are opportunities for infrastructure and tourism development

(Source: compiled by the author)

The cluster analysis showed that the regions of Ukraine are significantly different and have their own specifics, which should be considered when planning effective economic development measures. It is important to take into account the degree of destruction caused by the hostilities in each region, which will help identify those areas that require the most attention and the most significant inflow of investment, including from outside the country.

Of course, it is impossible to ensure absolutely uniform development of each region, but taking into account the specifics of each region, it is possible to determine the priorities for realizing economic potential and efficient use of available financial, human, energy, material, intellectual, and investment resources.

Conclusions

In the course of the study, the goal was achieved, namely, to determine the optimal approaches to ensuring the effectiveness of regional economic development management, taking into account their current state and prospects for post-war recovery. This was achieved by analyzing statistical data and key indicators of the development of Ukrainian regions. The analysis showed that the most economically powerful administrative-territorial unit is Kyiv. Kyiv, where the majority of legal entities are concentrated, and therefore most investments are attracted here. The importance and significant impact of Dnipropetrovs'k, Poltava, and Kharkiv regions on the economic situation in the country is also highlighted. Further, as a result of the cluster analysis, a group of regions was identified, characterized, and recommendations for their economic development were formulated. The following clusters were identified because of the cluster analysis:

the capital clusters. It is represented exclusively by Kyiv and has the specifics of development inherent in the capital. It has the greatest development potential and has already achieved high performance indicators in the region's economic development trade and production cluster. Dnipro region which makes up the cluster, combines high trade and production potential due to its favorable geographical location. The region is home to large manufacturing enterprises and is also home to innovative and investment-oriented companies industrial and scientific cluster. It has high development potential and resources available for this purpose a cluster with an average level of development. It has development potential, but without strong innovative production a cluster with a below-average level of development. It has potential, but it is underdeveloped, with no significant production centers or infrastructure facilities concentrated in the cluster's regions a cluster with a low level of development. Due to geographical features, the cluster's regions have low economic potential, but a significant tourist.

It is worth emphasizing that the task of the state is not to provide funding for each individual region, but rather to identify the strengths of each region and make efforts to ensure that these strengths are developed.

Bibliographic references

Ahmad, Z., Ibrahim, H., & Tuyon, J. (2018). Governance of behavioral biases in the asset management industry: Insights from fund managers in Malaysia. Asian Academy of Management Journal of Accounting and Finance, 14(2), 65-102. https://doi.org/10.21315/aamjaf2018.14.2.4

Alzyadat, J. A., & Al-Nsour, I. A. (2021). The Fiscal Policy Instruments and the Economic Prosperity in Jordan. Journal of Asian Finance, Economics, and Business, 8(1), 113–122. https://doi.org/10.13106/jafeb.2021.vol8.no1.113

Balland, P. A., Boschma, R., Crespo, J., & Rigby, D. (2019) Smart specialization policy in the European Union: relatedness, knowledge complexity and regional diversification. Regional Studies, 53(9), 1252-1268. https://doi.org/10.1080/00343404.2018.1437900

Bezverkhyi, K., Kovach, S., & Zolkover, A. (2019) Integrated reporting: econometric model of quality assessment. Economic Studies, 28(5), p. 120-133

Calero, C., & Turner, L. W. (2020). Regional economic development and tourism: A literature review to highlight future directions for regional tourism research. Tourism Economics, 26(1), 3-26. https://doi.org/10.1177/1354816619881244

De Propris, L., & Bailey, D. (2021). Pathways of regional transformation and Industry 4.0. Regional Studies, 55 (10-11), 1617-1629. https://doi.org/10.1080/00343404.2021.1960962

Diebolt, C., & Hippe, R. (2019). The long-run impact of human capital on innovation and economic development in the regions of Europe. Applied Economics, 51(5), 542-563. DOI: https://doi.org/10.1080/00036846.2018.1495820

Elvekrok, I., Veflen, N., Scholderer, J., & Sørensen, B. T. (2022). Effects of network relations on destination development and business results. Tourism Management, 88, 104402. https://doi.org/10.1016/j.tourman.2021.104402

Eriksson, R., Hansen, H., & Winther, L. (2017). Employment growth and regional development: industrial change and contextual differences between Denmark and Sweden. European Planning Studies, 25(10), 1756-1778. https://doi.org/10.1080/09654313.2017.1338673

Fang, R., Liao, H., Xu, Z., & Herrera-Viedma, E. (2023). Risk assessment in project management by a graph-theory-based group decision making method with comprehensive linguistic preference information. Economic Research-Ekonomska Istraživanja, 36(1), 86-115. https://doi.org/10.1080/1331677X.2022.2070772

Feißt, M., Hennigs, A., Heil, J. Moosbrugger, H., Kelava, A., Stolpner, I., Kieser, M., & Rauch, G. (2019). Refining scores based on patient reported outcomes – statistical and medical perspectives. BMC Medical Research Methodology, 19(1). https://doi.org/10.1186/s12874-019-0806-9

Govindarajan, V. (2019). Impact of participation in the budgetary process on managerial attitudes and performance: Universalistic and contingency perspectives. Management Control Theory, 17(4), 321–341. https://doi.org/10.1111/j.1540-5915.1986.tb00240.x

Hendri, H., Yuliantoro, & Ama, M. K. (2020). Determinants of fraud prevention and financial performance as an intervening variable. International Journal of Economics and Financial Issues, 10(1), 19–26. https://doi.org/10.32479/ijefi.8955

Henning, M. (2019) Time should tell (more): evolutionary economic geography and the challenge of history. Regional Studies, 53(4), 602-613. https://doi.org/10.1080/00343404.2018.1515481

Iammarino, S, Rodríguez-Pose, A, & Storper, M (2019) Regional inequality in Europe: evidence, theory and policy implications. J Econ Geogr 19(2), 273-298. https://doi.org/10.1093/jeg/lby021

Kibik, O., Taran-Lala, O., Saienko, V., Metil, T., Umanets, T., & Maksymchuk, I. (2022). Strategic vectors for enterprise development in the context of the digitalization of the economy. Postmodern Openings, 13(2), 384-395. https://doi.org/10.18662/po/13.2/460

Kruszelnicki, J., Gołuński, M., Ciochoń, P., Noya, M., Pelayo, E., & Z˙yra, J. (2020). SME segmentation and regional development agencies' innovation support measures. Regional Studies, Regional Science, 7(1), 511-531. https://doi.org/10.1080/21681376.2020.1811753

Lin, B. (2020). Sustainable Growth: A Circular Economy Perspective. Journal of Economic Issues, 54(2), 465-471. https://doi.org/10.1080/00213624.2020.1752542

MacKinnon, D., Dawley, S., Pike, A., & Cumbers, A. (2019) Rethinking Path Creation: A Geographical Political Economy Approach. Economic Geography, 95(2), 113-135. https://doi.org/10.1080/00130095.2018.1498294

Medeiros, E., & Rauhut, D. (2020). Territorial Cohesion Cities: a policy recipe for achieving Territorial Cohesion? Regional Studies, 54(1), 120-128. https://doi.org/10.1080/00343404.2018.1548764

Michálková, A., Krošláková, M.N., & Čvirik, M. (2023). Analysis of management on the development of regional tourism in Europe. Int Entrep Manag J, 1-22. https://doi.org/10.1007/s11365-023-00840-x

Mustafin, A.N., Kotenkova, S.N., Vozárová, I.K., & Kotuliˇc, R. (2022). Impact of Import Substitution Policy on Economic Growth. Economies, 10, 324. https://doi.org/10.3390/economies10120324

Rantala, T., & Ukko, J. (2019). Performance evaluation to support European regional development – A university–industry perspective. European Planning Studies, 27(5), 974-994. https://doi.org/10.1080/09654313.2019.1581728

Rauhut, D., & Humer. A. (2020). EU Cohesion Policy and spatial economic growth: trajectories in economic thought. European Planning Studies, 28(11), 2116-2133. https://doi.org/10.1080/09654313.2019.1709416

Saputra, K. A. K., Jayawarsa, A. A. K., & Atmadja, A. T. (2019). Resurrection as a fading implication of accountability in financial management for a village credit institution. International Journal of Business, Economics, and Law, 19(5), 258–268. https://www.ijbel.com/wp-content/uploads/2019/11/ K19_263.pdf

Saputra, K. A. K., Subroto, B., Rahman, A. F., & Saraswati, E. (2020). Issues of morality and whistleblowing in short prevention accounting. International Journal of Innovation, Creativity, and Change, 12(3), 77-88. https://ijicc.net/images/vol12/iss3/12314_Saputra_2020_E_R.pdf

State Statistics Service of Ukraine (2023). Multi-sectoral statistical information. Regional statistics. https://www.ukrstat.gov.ua/

Tödtling, F., & Trippl, M. (2018). Regional innovation policies for new path development – beyond neo-liberal and traditional systemic views. European Planning Studies, 26(9), 1779-1795. https://doi.org/10.1080/09654313.2018.1457140

Wu, D., & Dong, W. (2022) Does Local Government's Competitive Behavior to Attract Foreign Investment Affect Ecological Welfare Performance? Evidence from China. Sustainability, 14, 12903. https://doi.org/10.3390/su141912903

Zhou, J., Raza, A., & Sui, H. (2021) Infrastructure investment and economic growth quality: empirical analysis of China's regional development. Applied Economics, 53(23), 2615-2630. https://doi.org/10.1080/00036846.2020.1863325

DOI: https://doi.org/10.34069/AI/2023.63.03.21

How to Cite:

Filimonova-Zlatohurska, Y., Poperechna, G., Nikolenko, K., Poliuha, V., & Shevel, I. (2023). Transformation of the cultural development of the Ukrainian people in the context of military realities: philosophical reflections on dilemmas. *Amazonia Investiga*, *12*(63), 224-232. https://doi.org/10.34069/AI/2023.63.03.21

Transformation of the cultural development of the Ukrainian people in the context of military realities: philosophical reflections on dilemmas

Transformación del desarrollo cultural del pueblo ucraniano en el contexto de las realidades militares: reflexiones filosóficas sobre los dilemas

Received: March 20, 2023 Accepted: April 25, 2023

Written by:

Yevheniia Filimonova-Zlatohurska[1]

https://orcid.org/0000-0001-7588-8209

https://www.webofscience.com/wos/author/record/2878195

Galyna Poperechna[2]

https://orcid.org/0000-0003-2191-9908

https://www.webofscience.com/wos/author/record/I-7302-2018

Kseniia Nikolenko[3]

https://orcid.org/0000-0002-2091-7823

https://www.webofscience.com/wos/author/record/2391240

Viktoriia Poliuha[4]

https://orcid.org/0000-0001-8778-2380

https://www.webofscience.com/wos/author/record/2250637

Inna Shevel[5]

https://orcid.org/0000-0002-6387-2506

https://www.webofscience.com/wos/author/record/34260281

Abstract

For modern Ukraine, cultural transformations are extremely relevant, because in the conditions of confrontation with Russian aggression, it turned out that the use of films, books, music and other cultural aspects can become the tools of hybrid warfare. The purpose of this article is to understand certain aspects of the transformation of the culture of the Ukrainian people in the context of wartime realities. During the processing of this material, general scientific methods and specialized research methods were used. The results of the work highlighted the topical issues: the alleged institutional crisis of Ukrainian cultural institutions, the destruction of cultural monuments by Russian troops, the transformation of cultural values. Russian aggression only accelerated the development vector of Ukrainian culture in the 21st

Resumen

Para la Ucrania moderna, las transformaciones culturales son extremadamente relevantes, porque en las condiciones del enfrentamiento con la agresión rusa, resultó que el uso de películas, libros, música y otros aspectos culturales pueden convertirse en herramientas de la guerra híbrida. El propósito de este artículo es comprender ciertos aspectos de la transformación de la cultura del pueblo ucraniano en el contexto de las realidades bélicas. Durante el tratamiento de este material se utilizaron métodos científicos generales y métodos de investigación especializados. Los resultados del trabajo pusieron de relieve los temas de actualidad: la supuesta crisis institucional de las instituciones culturales ucranianas, la destrucción de monumentos culturales por las tropas rusas, la transformación de los valores culturales. La agresión rusa no hizo sino acelerar el

[1] Postgraduate Student at the Department of Directing and Choreography of the Faculty of Culture and Arts Ivan Franko National University, Lviv, Ukraine.

[2] PhD in Philosophy, Associate Professor of the Department of Philosophy and Social Sciences, Faculty of History, Ternopil Volodymyr Hnatiuk National Pedagogical University, Ternopil, Ukraine.

[3] PhD in Philosophy, Associate Professor Department of Social Humanities and Legal Disciplines, Donetsk State University of Internal Affairs, Kryvy Rih Educational and Scientific Institute, faculty №1, Kryvyy Rih, Ukraine.

[4] Ph.D. in Philosophy, Associate Professor of Vocal and Choral, Choreographic and Fine Arts, Faculty of Primary Education and Arts, Drohobych State Pedagogical Ivan Franko University, Drohobych, Ukraine.

[5] PhD in Sociological Sciences, Associate Professor, Associate Professor of the Department of International Relations Faculty of PR, Journalism and Cybersecurity, Kyiv National University of Culture and Arts, Kyiv, Ukraine.

century, which replaced the old Soviet paradigms that functioned during the 1990s. From a gradual attachment to Russian-Soviet landmarks, modern Ukrainian culture has moved on to producing its own primarily Ukrainian-language cultural product. Note that this movement will only intensify in the future, and from 2022 all attempts to impose Russian paradigms of development in the cultural sector will be possible only under the conditions of Ukraine's capitulation, i.e., its defeat in the war.

Keywords: culture, Ukraine, society, transformation, Russian-Ukrainian war.

vector de desarrollo de la cultura ucraniana en el siglo XXI, que sustituyó a los viejos paradigmas soviéticos que funcionaron durante la década de 1990. De un apego gradual a los hitos ruso-soviéticos, la cultura ucraniana moderna ha pasado a producir su propio producto cultural principalmente en ucraniano. Obsérvese que este movimiento no hará sino intensificarse en el futuro, y a partir de 2022 todos los intentos de imponer paradigmas rusos de desarrollo en el sector cultural sólo serán posibles en condiciones de capitulación de Ucrania, es decir, de su derrota en la guerra.

Palabras clave: cultura, Ucrania, sociedad, transformación, guerra ruso-ucraniana.

Introduction

Culture in the twenty-first century has acquired a new meaning. The information society and globalization have made it a kind of marker, as strong as ethnicity or political preferences. On this basis, engaging in cultural projects is a contribution to the development of a multicultural present. No nation or culture should be forgotten in such an information world as long as its culture is known in the world and as long as there is an opportunity to represent it. Russian aggression toward Ukraine back in 2014 (the seizure of Crimea and support for separatists in the Donbas) demonstrated a crushing significance. The “many nationalities” declared by the Russian authorities among the occupied territories led in practice to the elevation of all things Russian and an actual tacit ban on all things Ukrainian. The slogans of “denazification” promoted by Russia in 2022 were also intended to “abolish” everything Ukrainian (Aladekomo, 2022). However, the implementation of this “project” was only partially successful. The Ukrainian side, on the contrary, turned to supporting the local intellectual product and since 2014 has launched many initiatives to develop the cultural sphere. Not all of them have been implemented, but after 2022 they will definitely become relevant mechanisms for the restoration of the cultural sphere.

The article aims to analyze the transformation of the culture of the Ukrainian people in the context of military realities and based on philosophical comprehension of the dilemma. The task of the work is to study the possible institutional crisis of the development of the cultural sector, the problem of the destruction of cultural monuments. The relevance of this problem is extremely high because considering such problems will allow comprehending the Russian-Ukrainian war in another dimension – as a confrontation of two cultural matrices. The realization of the research objective involves the following research questions:

1. The problem of the existence of an institutional crisis in the development of Ukrainian culture.
2. The damage caused to Ukrainian culture in general as a result of Russian aggression.
3. Transformations of cultural values in the environment of modern Ukrainians.
4. Prospects for the development of Ukrainian culture in the postwar period.

Materials and methods

The work uses both general scientific and special historical methods of research. In particular, analysis, synthesis, induction, and deduction are used in the work. On the basis of the analysis, it was possible to realize the first stage - to divide the subject of research into smaller parts (development of Ukrainian culture, transformation of the attitude of the Ukrainian people to cultural values, the problem of destruction of cultural monuments of Ukraine during the Russian-Ukrainian war). At the same time, based on the synthesis it was possible to rethink the previously highlighted parts and form specific conclusions, which became the next part of the work. In the work, the historic-corporativistic method of research was also used. Based on this method, the problem of theft of the Ukrainian cultural values by Russians in the XX and XXI centuries was traced. The Russians have been systematically exporting Ukrainian historical values since the 1900s. They continue to do this in the modern Russian-Ukrainian war. Since 1917 the Russians regularly took Ukrainian valuables out of the museums or other valuable things. The article also uses the axiomatic method of research, which involves ascending from the accepted theoretical statements (axioms) to the formation of their own specific conclusions. Consequently, the axiomatic method is a way of creating a scientific theory in which there are formed starting points from which one's own judgments are formed by logical paths. Using the hypothetico-deductive method it was possible to create orders of hypotheses, deductively connected with each other, from which their own statements about empirical facts are formed. The method of abstraction has also been applied, involving the transition from the abstract (general theory) to the formation of concrete judgments. Because of the method of concretization, it was possible to study the problem of the destruction of Ukrainian cultural monuments. Because of the systematic method of research, it was possible to consider the phenomenon of Ukrainian culture as a complex system consisting of many interrelated elements. In addition, special cultural studies' methods were used in the study. In particular, the morphological methods of culture are used, based on which the structure and organizational structure of culture is investigated. In the organizational structure of the paradox of culture: public, collective, personal, informational, and the rest of the culture. The work divides culture into several levels: cumulative, every day, translational (described in Table 1).

Table 1.
Functional levels of culture

Functional levels of culture	
Cumulative level	The process of accumulation of all values and experience of the Ukrainian people
Household-level	The application by the society of the results of cultural thought
Broadcast level	There is a mutual penetration of the two previous levels.

Adapted from "The Culture and Development Manifesto" by Klitgaard (2020)

In addition, the work was built on the principles of consistency, scientificity, and objectivity.

Literature review

The work was based on the works of contemporary researchers. In particular, Klitgaard (2020) characterized the importance of culture for the development of society. He believes that culture is a particularly important variable to promote various forms of development (p. 123). In addition, he believes that culture is a key aspect in the politics of development and management (p. 124). Meade & Shaw (2021) characterized the contemporary challenges facing the development of culture and the arts. At the same time, these experts characterized the various ways in which societies manage to collectively make sense of, redefine, and transform the economic, cultural, personal, political, social, or territorial conditions of their lives by applying principles of culture and the arts. Schubert (2022) explored the role of culture in various management processes. From the Ukrainian specialists let us highlight the work of Sarnavska et al. (2021), where the problem of the influence of the Third Information Revolution on culture is considered through a philosophical prism. Also valuable for this article are works that examine the development of the Russian-Ukrainian war and its impact on various social spheres. Kuzio (2021) explored the phenomenon of Russian nationalism and its impact on the development of the Russian-Ukrainian confrontation. Also, many foreign authors have studied the Russian-Ukrainian war through a social, economic, political, and historical prism. This is explained by the relevance of this topic. For example, Martz (2022) characterized the crimes of the Russian army against Ukraine. Ghilès (2022) investigated the war in Ukraine and its impact on international politics. Manolea (2021) characterized the conceptual bases for the study of modern hybrid warfare. So, the literary basis of this study is quite thorough, first, considering the relevance of this topic. The question of the development of Ukrainian culture against the background of military realities remains understudied. The topic of the destruction of Ukrainian cultural monuments, which was covered only in passing in the Ukrainian mass media, remains unexplored.

Results

The Development of Ukrainian Culture: A Modern Crisis of Institutions?

Culture includes not only the traditions of the people or historical and literary monuments but also the people who worked on the creation of a cultural product (Kuzio, 2021). Custody of such people fell into the hands of the Ministry of Culture and Tourism of Ukraine and other institutions (e.g., the Ukrainian Cultural Foundation). The latter organization launched an initiative in early April 2022 to support cultural workers, artists, and media workers. At the same time, the Ukrainian Cultural Foundation actively joined the creation of the “Map of Cultural Losses”. The purpose of this project is to record all, or part of the Ukrainian cultural monuments destroyed by the Russians. It is difficult to answer in what way the damage will be compensated because during military operations the priority in financing is given to the military sector (Kuzio, 2021; Filipova & Usheva, 2021). Note that before 2014 and the beginning of Russian aggression in Crimea and Donbas, the institutional development of Ukrainian cultural projects was of secondary importance in the policy of Ukrainian authorities (Kuzio, 2021). In the field of culture, as a rule, budgetary funds were saved. The creative industry lacked funds and relevant institutions. The formation of the Ukrainian Cultural Foundation began to play the role of a kind of mediator in contacts between artists of different levels and state funding. Thanks to this, it was possible to accumulate funds for relevant and important (including entertainment) projects. Thus, the number of Ukrainian films has increased several times. A successful pitching campaign by the Ministry of Culture and Tourism and the Ukrainian Cultural Foundation allowed some films to reach reasonable distribution results and even cover all expenses. As a result, a portion of the money spent on Ukrainian films was returned to the budget and could then be used in culture. Some productions also attracted extra-budgetary funds, which made the process much cheaper.

Collaboration with the Foundation was also organized by artists from other industries. We are talking primarily about broad grant projects that attracted talented creative young people to compete fairly and work accordingly. In fact, since 2018 there has been a fair distribution of funding and the use of state grants has become an effective element in the capitalization of culture along with its development.

At the same time, after 2019 there was a certain scaling down of the Foundation's activities and its resources were redirected to other spheres of state administration. After the beginning of Russia's open military aggression in February 2022, all grant activities were curtailed and the work of cultural institutions was suspended (Ghilès, 2022). Undoubtedly, the invasion and the barbaric policies of the Russians were a test for Ukraine's economy and society. Artists have been active on the pro-Ukrainian side, not so many have left the state (primarily for charity concerts, exhibitions, etc.). The lack of institutional organization indeed makes itself felt - ministerial workers cannot cope with this challenge (Sarnavska et al., 2021). We believe that the post-war resumption of the Ukrainian Cultural Fund will be an important tool for the restoration of cultural projects and the work of the relevant institutions. At the same time, extra-budgetary (patronage of arts) support for the restoration of cultural monuments will be an important element. Unfortunately, the budget of Ukraine will no longer be able to cover the costs of this article. Obviously, if the war becomes protracted, the military defense needs will require more and more expenses. Thus, the contemporary Ukrainian art scene has the institutional capacity to overcome the crisis, but the lack of funding will remain an important problem that will require additional discussion and solution.

Military Realities of the Russian-Ukrainian War: The Problem of Destruction of Ukrainian Cultural Monuments

The Russian-Ukrainian war has demonstrated that Ukraine's cultural-historical monuments are also experiencing great destruction (Ghilès, 2022). The Ukrainian Ministry of Culture estimates from February 2022 (the beginning of the full-scale invasion) that by early June 2022, Russian troops had committed over 400 war crimes against Ukrainian cultural heritage. Such crimes continue to be carried out by the Russians. Why are the Russians doing this? The main purpose of their crimes - no Ukrainian cultural monuments (indeed, no Ukrainian history) - no Ukrainian memory and national identity. Note that when a people's memory disappears, the results can be catastrophic for that people (Meade & Shaw, 2021). Russian troops have destroyed several types of Ukrainian heritage since the beginning of the large-scale invasion. The first type includes cultural sites that may not legally have monument status, but they are important historical buildings. The second directly includes monuments, which have the status of a monument. Also affected by the war are various kinds of cultural institutions, educational buildings it is said about art schools, buildings of universities. Note that the most ancient are the monuments of archaeology, and they are also very much affected by the war (Aladekomo, 2022). Indeed, during the war, archaeological monuments are destroyed not only as a result of shelling and bombing but also because military units are engaged in creating trenches, arrangement of positions. For this reason, the archaeological layer can be destroyed, so the monuments will suffer. Unfortunately, this type of destruction is still difficult to see because it occurs purely on the front lines, that is, in hot spots, so it is almost impossible to conduct scientific surveys at such sites. Note that the website of the Ministry of Culture of Ukraine posts up-to-date information about the affected monuments, which are easily identifiable. Archaeological monuments are almost not included here, but Ukrainian scientists together with the military begin to monitor and survey those monuments that are located in the de-occupied territories. Russian missiles destroyed the building of the museum of Ukrainian philosopher HryhoriiSkovoroda, which was located in the Kharkiv region. This building was created in the 18th century, where the philosopher lived the last years of his life, and where he was buried nearby.

Experts note that as of the beginning of June, there were 407 cultural sites affected by the Russian troops (Aladekomo, 2022). First, we are talking about those objects that it was possible to document. Many such objects are not included because of the development of the Russian-Ukrainian war. The real figure is much larger, however, by how much is now unknown. In addition, Russia is exporting Ukrainian valuables, which is essentially a theft of Ukrainian cultural heritage. For example, many items of state museum funds from the museums of Melitopol and Mariupol were exported to the DNR (Donetsk People's Republic). At the same time, the occupation authorities in the DNR introduce their own approaches and procedures in the management of cultural values. Note that this practice (hijacking Ukrainian values) is not new to Russians (Klitgaard, 2020). It existed throughout the twentieth century. Since 1917. Russia systematically removed Ukrainian valuables from museums and precious metals from churches. At the present time, they can be found in Russian museums in the Hermitage. It should be noted that the Ukrainian Cultural Foundation organized a project called “Map of Cultural losses”, where you can see where exactly Ukrainian historical monuments are taken out.

Despite this, since February 24, Ukraine has still managed to secure a large number of valuables. The Russian-Ukrainian war demonstrated how Ukrainians' attitudes toward their own historical cultural monuments have changed. Yes, since the beginning of Russia's full-scale invasion, ordinary citizens of Ukraine have joined every resource to save cultural values. So, when people participate in the processes of saving culture, it means that for society cultural objects as carriers of history are important (Sarnavska et al., 2021). The Russian-Ukrainian war demonstrated that for the Ukrainian people the social value began to manifest itself in a very different way, first, it is observed in the attitude of people to cultural values (Stryjek&Konieczna-Sałamatin, 2021).

Transformation of cultural values of modern Ukrainians

New times have set new benchmarks in the cultural development of Ukrainians. The old Soviet heritage, associated with the dominance of the Russian language, since the beginning of the XXI century. began to lose old positions - the absolute dominance of the Russian-language product in the information and cultural spaces no longer existed. At the same time, the military actions that began in Ukraine after 2014 opened other role models. In particular, the volunteer movement became widespread - individual citizens or organizations, if they could not engage in free assistance to the army on their own, financially supported those who could provide such assistance. Even today, experts agree that without volunteer support, the Ukrainian armed forces could not withstand the onslaught of pro-Russian collaborators and Russian regular forces who unofficially participated in the conflict in 2014. Trust in volunteers and a general belief in the possibility of unselfish assistance has changed those around us. Old developmental paradigms associated with distrust of strangers took a hard hit (Danziger, 2012). Also, thanks to the volunteer movement many Ukrainians felt not as residents of individual cities or villages, or regions, but as citizens of one country. This powerful unification process, long hindered by pro-Russian politicians who speculated on linguistic, historical, and other issues, became an important element of cultural development (Schubert, 2022).

The outbreak of hostilities in 2014 led to an explosion of Ukrainian-language content. It was not only traditional media but also the Internet (Kuzio, 2021). A large part of the old “pro-Russian audience” was taken over by bloggers of the new Ukrainian format, who due to their own creativity were able to compete with promoted Russian columnists. However, in 2014, the main content remained Russian language.

It should be noted that an important role was played by the appeal of Ukrainians to their history and the emergence of new information channels that focused on old Russian historical and cultural myths, debunked them, and presented the Ukrainian vision of events (Parshyn & Mereniuk, 2022). Such educational work was culturally useful because it pointed to the multidirectional development of Ukrainian culture, not just its Moscow-centricity (Mereniuk, 2021; Martyniuk et al., 2022).

At the same time, the military theme did not become dominant in the cultural field. Although support for the Ukrainian army was unconditional, since 2014. Ukraine continued to live its cultural life (Mereniuk, 2021). The same situation is repeated in 2022. There are few books, musical compositions, or other works of art devoted to militaristic culture. It should be noted, however, that the reference to military themes in 2022 is much more pronounced, which can be explained by the scale of the Russian-Ukrainian war.

Prospects for the development of Ukrainian culture in the postwar period

Let us define the peculiarity of the development of Ukrainian culture since 1991. Forecasts of Russian and many other foreign experts about the explosion of "nationalism" in Ukraine immediately after the fall of the Soviet Union did not come true (Danziger, 2012). Tolerant attitudes toward the Russian language, literature, and, consequently, Russian and Russian-speaking culture in general, did not change throughout the 1990s. Since Soviet times, Russian, as the official language of "international" communication within the former communist state, has prevailed over all others. The free and democratic development of cultural processes during the first decade of Ukrainian independence did not break this trend: television, music, cinema, literature, and other spheres of intellectual life and entertainment were controlled either directly by Russians or Russian-speaking artists or performers. Note that this state of affairs did not reflect the ethnic composition of the population (Morska & Davydova, 2021). According to the only census conducted in 2001. Almost 48.5 million people lived in the country, of which 77.8% were Ukrainians, 17.3% - Russians, 4.9% - other nationalities. It should be noted that the number of Ukrainians in comparison to the last Soviet census of 1989 increased by 5%, while the number of Russians decreased by 4.8%. At the same time, 67.5% of citizens called Ukrainian their native language, and 29.6% called Russian their native language. A characteristic feature was the fact that in the East of Ukraine and Crimea there were relatively fewer ethnic Ukrainians who spoke mostly Russian.

A noticeable tendency was when the number of Russian-speaking cultural product was noticeably greater than its demand in Ukrainian society. The beginning of the 21st century was marked by a gradual change of trends, the introduction of administrative decisions on obligatory dubbing of films in Ukrainian (and not in Russian), a celebration of national Ukrainian heroes, rehabilitation of victims of totalitarian regimes, etc. However, there were no cardinal changes in the cultural sense - the privileged attitude towards everything Russian continued to exist. A certain revision of this paradigm took place in 2014 when after the revolution of dignity Russian troops occupied Crimea and began to support the collaborators in Donbas. Scaring the local population with the specter of "Ukrainian nationalism" and even "Nazism," the Kremlin authoritarian regime used propaganda to impose its view of events not only on Ukrainians but also on democratic observers in the West.

After 2014, it became clear that culture could be used as a weapon in a hybrid confrontation. The formation of the Ukrainian Cultural Foundation and increased attention to the Ukrainianization of culture led to positive developments. The emergence of a large number of Ukrainian films, literary works, music, etc. entailed that Ukrainian culture was becoming Ukrainian language. The markers regarding the independent development of Ukraine since at least the times of Kievan Rus' (Middle Ages) were clearly defined (Parshyn & Mereniuk, 2022). Obviously, the mentioned events of 2014 accelerated an already obvious tendency - the gradual "Ukrainianization" of Ukrainian culture. Despite considerable Russian influence, the modern generation of artists belonged to the modern cultural circle, so they were not going to recognize the old authorities, especially since Russian media and cultural policy was aimed at reviving and honoring the old Soviet (imperial), rather than at forming something new. Not surprisingly, after February 2022, many Russian cultural and educational figures publicly supported it. Ukrainian cultural figures came out on the pro-Ukrainian side. Only a small fraction on both sides used the slogan "culture outside politics" (above all, quite a few Russians appealed to it). For this reason, we believe that the beginning of open armed aggression of Russia against Ukraine will be of fateful importance for the further development of Ukrainian culture. The gradual turning to own history and own roots, specific Ukrainian cultural circle, and modern markers of the development of democratic societies will give new guidelines for the development of Ukrainian-language culture (Dahalan & Ahmad, 2018). It has become evident that belonging to the old paradigms of post-Soviet and pro-Russian development is outmoded. We also predict similar development trends for the entire post-Soviet region, which the Russian leadership for a long time considered its own. This opinion is confirmed by the transformation of the Ukrainian people's attitude towards the Ukrainian language. Based on the analysis of sociological research it was found out that the level of support for the Ukrainian language as a single state language after the large-scale Russian invasion reached the maximum level for all time of Independence of Ukraine - 83% of Ukrainians believe that the only state language should be Ukrainian (Figure. 1).

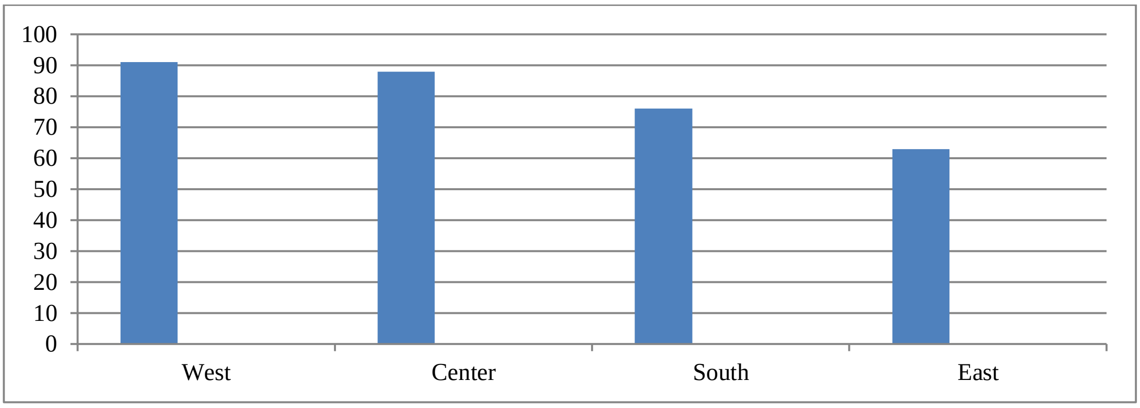


Figure 1. The level of support by Ukrainians for the Ukrainian language as a single state language Adaptive from Rating. "*The sixth national poll: the language issue in Ukraine" (March 19th, 2022)*. (Group rating, 2022)

At the same time, over the past decade, there has been a steady increase in the number of those who consider Ukrainian their native language. For example, in 2012 - 57%, respectively in 2022 -76%. We believe that vivid changes in language self-identification took place between 2013-2016. One of the main reasons were such events as the reaction of society to the language experiments of the authorities in 2013, the events of the Revolution of Dignity (2013-2014), and Russia's aggression against Ukraine. Later, positive dynamics in the process of self-identification took place based on the transformation of attitudes towards the Ukrainian language in the center, east, and south of Ukraine. These transformations are reflected in Table 2.

Table 2.
Self-identification of Ukrainians based on the analysis of attitudes towards the Ukrainian language from 2013 – 2022

The process of self-identification of Ukrainians based on changes in attitudes toward the Ukrainian language	
2013	Society's reaction to the language experiments of the then pro-Russian authorities
2013-2014	The Revolution of Dignity, which popularized the Ukrainian language, Ukrainian folklore (as well as modern), dragged the Ukrainian cultural product on a peculiar trend
2014	Russia's aggression against Ukraine and occupation of Crimea and certain regions of Donetsk and Luhansk regions. Introduction of quotas on the use of the Russian language in broadcast television, radio stations, the press, etc. In some places, particularly in western Ukraine, condemnation of the Russian-speaking population.
2022	February 24 - full-scale Russian invasion of Ukraine. Transformation of attitudes toward the Ukrainian language in the center, east, and south of Ukraine. Mass support for the idea of a single state language - Ukrainian.

Compiled based on the author's analysis

We believe that a return to the old state of cultural development is possible only in the event of a military defeat for Ukraine or a diplomatic defeat for the Ukrainian government, which may lead to a change in the status of Russian culture in Ukraine. However, even this possibility would be only a temporary prerequisite on the way to a new military conflict.

Discussion

For further discussion we offer the thesis: the Russian language is a hybrid weapon of the Russian Federation. The vast majority of Ukrainians who used the Russian language in their everyday lives did not want a war to break out and did not want the Kremlin regime to resort to protecting their “interests”. However, their conservatism and unwillingness to step out of their own “comfort zone” still gave a formal reason for such a “burnout” by the Russians. In fact, there are no Russian-speaking Ukrainians, but Russians are Russified. Russian is not a native language for Ukrainians, and all attempts to create a “Ukrainian Russian language” (like there is Australian English, American English, etc.) have failed. After 2022 the imitation of Russian samples and the use of the achievements of Russian culture of the Soviet variety will have no moral justification. Already now, many Ukrainian scholars consciously refuse to cooperate with the Russians and, if possible, try not to cite them in their publications. A similar “oblivion” will surely await other spheres. It is difficult to determine the consequences of these processes, but they will become an indispensable part of the next policy.

We believe that the conducted research has demonstrated the main direction of the development of Ukrainian culture for the coming years. Undoubtedly, the specified problems remain debatable, because it is impossible to take into account the influence of many factors on the course of the war and its consequences.

Conclusions

Thus, Ukrainian culture during the independent development of Ukraine has undergone profound transformations:

1. From the privileged importance of the Russian language and culture, Ukrainians in the beginning of the XXI century began to move to the creation of their own Ukrainian-language cultural product.
2. The attitude of Ukrainians to their own national values has changed, and the Ukrainian language has begun to assume a leading role. There have been changes in the Internet environment, Ukrainian music, cinema, literature, etc. According to Ukrainian officials, Russian culture in Ukraine has become an element of hybrid warfare, so the introduction of quotas on the use of the Russian language has accelerated the transition of quite a few artists to the Ukrainian-language medium. Gradually, the situation when the ethnic majority of Ukrainians in Ukraine were adherents of Russian or Russian-speaking culture began to change more actively. Note that in 2022 and beyond, this movement will only intensify and embrace the majority of artists and cultural figures who will finally turn their backs on Russian culture (as a tool used by the official Kremlin).
3. The attitude of Ukrainians to their own history and culture has changed: The Russian-Ukrainian war demonstrated how the attitude of Ukrainians to their own historical and cultural monuments has changed. Thus, since the beginning of the full-scale invasion of Russia, ordinary citizens of Ukraine have been using all their resources to save cultural values.
4. There are tangible changes in the scientific environment. Even now, many Ukrainian scientists deliberately refuse to cooperate with the Russians and, if possible, try not to cite them in their publications. We believe that this process will have positive consequences, especially for the development of Ukrainian humanitarian science, since the old concepts of understanding Ukrainian culture developed in a pro-Russian direction. Liberation from the “old authorities” will make it possible to rethink the scientific and cultural tradition of Ukraine.

We also predict similar development trends for the entire post-Soviet region, which the Russian leadership considered “its”for a long time.

Bibliographic references

Aladekomo, A. (2022). Russian Aggression against Ukraine, Sovereignty and International Law. SSRN Electronic Journal, 1-38. https://doi.org/10.2139/ssrn.4064020

Dahalan, S. C., & Ahmad, A. R. (2018). Aims of History Education in Developed Countries: A Systematic Literature Review. International Journal of Academic Research in Business and Social Sciences, 8(12). https://doi.org/10.6007/ijarbss/v8-i12/5625

Danziger, K. (2012). Does memory have a history? In Marking the Mind (pp. 1–23). Cambridge University Press. https://doi.org/10.1017/cbo9780511810626.001

Filipova, M., & Usheva, M. (2021). Social and labor relations of the digital age: to the question of future education development. Futurity Education, 1(2), 14-22. https://doi.org/10.57125/FED/2022.10.11.15

Ghilès, F. (2022). War in Ukraine and the gas crisis force a rethink of EU foreign policy. Notes Internacionals CIDOB, 268, 1-5. https://doi.org/10.24241/notesint.2022/268/en

Group rating (2022). The sixth national poll: The language issue in Ukraine (March 19th, 2022). Retrieved March 30, 2023, from https://ratinggroup.ua/en/research/ukraine/language_issue_in_ukraine_march_19th_2022.html

Klitgaard, R. (2020). The Culture and Development Manifesto. Oxford University Press. https://doi.org/10.1093/oso/9780197517734.001.0001

Kuzio, T. (2021). Russian nationalism and Ukraine. In Russian Nationalism and the Russian-Ukrainian War (pp. 99–128). Routledge. https://doi.org/10.4324/9781003191438-4

Manolea, A. (2021). The transpersonal war – Constituent of the hybrid war. Land Forces Academy Review, 26(4), 372-376. https://doi.org/10.2478/raft-2021-0048

Martyniuk, M., Kyrylenko, K., Krymets, L., Makhometa, T., & Madi, H. (2022). The relationship of the philosophy of education and the history of philosophy: A forecast of educational trends 2022-2024. Wisdom, 4(3), 83-91. https://doi.org/10.24234/wisdom.v4i3.835

Martz, C. (2022). Russian warcrimes against Ukraine: The breach of international humanitarian law by the Russian Federation. SSRN Electronic Journal, 276. https://doi.org/10.2139/ssrn.4106901

Meade, R. R., & Shaw, M. (2021). Arts, culture and community development: In Arts, Culture and Community Development (pp. 1–20). Policy Press. https://doi.org/10.2307/j.ctv1rnpj8m.7

Mereniuk, K. (2021). “Tournaments” and “games” in Rus’: tradition or single mentions? Problems of the history of wars and martial arts, 3, 57-69. https://acortar.link/bmkK4j

Morska, N., & O. Davydova, N. (2021). Philosophy and the future of human rights: peculiarities of the relationship between recent science and technology. Futurity Economics & Law, 1(3), 16–25. https://doi.org/10.57125/FEL.2021.09.25.02

Parshyn, I., & Mereniuk, K., (2022) The Muslims in Medieval Lviv: linguistic, historical contexts. Journal of Narrative and Language Studies, 10(19), 138–149. Retrieved from: https://nalans.com/index.php/nalans/article/view/498

Sarnavska, O., Yakovyshyna, T., Kachmar, O., Sherman, M., Shadiuk, T., & Koberska, T. (2021). The Influence of the Culture of the Third Information Revolution on the Formation of Personality in the M. Serres Philosophical Discourse. Postmodern Openings, 12(1), 241-253. https://doi.org/10.18662/po/12.1/257

Schubert, V. (2022). Leadership and organisational culture indevelopment: Challenging exceptionalism. London: Routledge. https://doi.org/10.4324/9780367822996

Stryjek, T., & Konieczna-Sałamatin, J. (2021). The politics of memory in Poland and Ukraine: From reconciliation to de-conciliation. Routledge. https://doi.org/10.4324/9781003017349

DOI: https://doi.org/10.34069/AI/2023.63.03.22
How to Cite:
Budko, H., Ivakhniuk, T., Ivakhniuk, Y., Plakhtiienko, I., & Tsekhmister, Y. (2023). Digital education hubs in medical higher education: Ukraine and the EU perspectives. *Amazonia Investiga*, *12*(63), 233-242. https://doi.org/10.34069/AI/2023.63.03.22

Digital education hubs in medical higher education: Ukraine and the EU perspectives

Centros de educación digital en educación médica superior: Perspectivas de Ucrania y la UE

Received: March 12, 2023 Accepted: April 25, 2023

Written by:
Hanna Budko[1]
https://orcid.org/0000-0002-3567-2996
Web of Science: IAQ-4775-2023
Tetyana Ivakhniuk[2]
https://orcid.org/0000-0001-5851-2218
Web of Science: ABS-0183-2022
Yurii Ivakhniuk[3]
https://orcid.org/0000-0003-2700-5832
Web of Science: GLT-9695-2022
Inna Plakhtiienko[4]
https://orcid.org/0000-0002-4200-8997
Web of Science: IAN-7198-2023
Yaroslav Tsekhmister[5]
https://orcid.org/0000-0002-7959-3691
Web of Science: ABB-9506-2021
https://www.scopus.com/authid/detail.uri?authorId=3574716590

Abstract

The digital hub for the medical university is the embodiment of a synergetic model of the educational system. It is an educational and methodical arsenal forms the content of the digital hubs. It is also an organiza-tional model that focuses on the use of information and communication technologies. The purpose of this scientific research is to examine two fun-damental elements of the digital hub in medical education: logistics and teaching. The methodology of comparative analysis that is used is closely re-lated to the synergetic principles of the modern scientific paradigm. This way we can see different levels of effectiveness of digital educational hubs in Ukraine and Europe in the training of future medical professionals. The reason is significantly higher rates of integrative

Resumen

El hub digital de la universidad médica es la encarnación de un modelo sinérgico del sistema educativo. Es un arsenal educativo y metódico que forma el contenido de los hubs digitales. También es un modelo organizativo centrado en el uso de las tecnologías de la información y la comunicación. El propósito de esta investigación científica es examinar dos elementos fun-damentales del hub digital en la educación médica: la logística y la enseñanza. La metodología de análisis comparativo que se utiliza está estrechamente relacionada con los principios sinérgicos del paradigma científico moderno. De este modo, podemos observar diferentes niveles de eficacia de los centros educativos digitales de Ucrania y Europa en la formación de los futuros profesionales de la medicina. La razón es que los

[1] MD, Ph.D., associate professor Sumy State University, Ac-ademic and Research Medical Institute, Department of Pathology, Ukraine.
[2] BD, Ph.D., associate professor Sumy State University, Academic and Research Medical Institute, Department of Public Health, Ukraine.
[3] MD, Ph.D., associate professor Sumy State University, Academic and Research Medical Institute, Department of Oncology and Radiology, Ukraine.
[4] MD, Ph.D., associate professor Sumy State University, Academic and Research Medical Institute, Department of Public Health, Ukraine.
[5] Doctor of pedagogical sciences Professor, Ed.D, PhD National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine.

factors in European educational hubs, compared to Ukrainian counterparts. Thus, filing hubs make up the in-formation and digital space of Ukrainian higher medical education. European counterparts have already integrated the potential of the digital hub not only in the educational space but also in the clinical environment.

Keywords: digitalization of education, medical education, digital education hub, educa-tional content.

hubs educativos europeos presentan índices significativamente más altos de factores integradores que sus homólogos ucranianos. Así pues, los centros de archivo constituyen el espacio digital y de formación de la educación médica superior ucraniana. Los homólogos europeos ya han integrado el potencial del hub digital no sólo en el espacio educativo, sino también en el entorno clínico.

Palabras clave: digitalización de la educación, educación médica, hub educativo digital, contenido educa-cional.

Introduction

Prior to digitization, people were responsible for accumulation, organization, and integration of medical knowledge. This personal element has also allowed people to gain both theoretical knowledge and practical skills. The globalization has accelerated digitization and now digital education hubs accumulate educational content, organizational structural elements, and elements of integration of medical education into clinical work. As a result of the change, radical changes to education strategies are needed. Rather, it is about ways to optimize the use of human intellectual and organizational resources through digital technologies. Currently, the question arises about building a conceptual definition of digital transformation (Vial, 2019). The concept of the hub has long been effectively implemented in other areas of social activity. The need for synergetic coherence is relevant for all clusters of modern socio-cultural space. In medical education, the hub is implemented exclusively in the interaction of educational and clinical clusters. In addition, digitalization processes currently permeate virtually all elements of educational, therapeutic or organizational elements. As a result, higher medical education institutions have begun active work on the creation and filling of digital educational centers. The effectiveness of integrating digital educational hubs into the existing higher education infrastructure and their impact on educational processes remain pertinent questions. Establishing a successful implementation of hub concepts within the European educational landscape while addressing the challenges faced in the Ukrainian context could provide a synergistic approach to creating a new center of knowledge in the higher education information network.

The aim of this study is to examine the logistical and pedagogical aspects of digital educational hubs in medical higher education while focusing on their effectiveness in preparing future medical professionals in Ukraine and Europe. This investigation is guided by the synergetic principles of the contemporary scientific paradigm. In alignment with this objective, the following research questions have been formulated:

RQ_1: What are the underlying principles for designing digital hubs as knowledge centers, based on the concept of educational synergy?
RQ_2: Can digital educational hubs provide a solution for addressing the organizational and logistical challenges faced in medical higher education?
RQ_3: To what extent are participants in the educational process prepared and willing to adopt the technologies associated with digital educational hubs?

In order to address the research questions, this study adopts synergetics as its methodological paradigm, emphasizing the investigation of self-organization principles within complex systems, particularly in educational settings. This research methodology enables an in-depth analysis of digital educational hubs and their potential applications in medical education. Considering the transdisciplinary nature of medicine and the growing importance of information and communication technologies, the study highlights the utilization of digital scientific methods. These methods have become increasingly significant within the methodological framework of the current scientific and ideological paradigm, ensuring that the research findings are anchored in the latest advances in this field. Consequently, this research methodology facilitates the examination of how the incorporation of digital scientific methods can augment the methodological cluster of the contemporary scientific and ideological paradigm, ultimately fostering the continued development of medical education.

Theoretical Framework or Literature Review

The issues arising with the use of digital educational hubs are covered in the scientific literature are split into two areas: organizational & logistical and information & training. The purpose and strategic aspects of the functioning of the digital educational hub in higher medical education institutions are found in the study de Villiers, et al., (2017). The features of the digital educational hub in the context of digitalization are of great historiographical importance (Brunetti et al., 2020). The practical elements of the implementation of information and communication centers were studied by Fritz (2018) in the online of libraries as bulk science hubs (Sassanelli et al., 2021). General characteristics and significance of the process of digitalization of the higher medical education system can be found in Tan, et al., (2021); Rampton, Mittelman & Goldhahn (2020); Chehade et al., (2020). The European experience of using the digital hub in the system of higher medical education is described in the research of (Kalpaka et al., 2020); Gulson & Sellar (2019). Korniichuk, et al., (2021) studied the use of digital hubs in Ukrainian higher education institutions; Tsekhmister, et al., (2021). Upon reviewing the literature sources, it becomes evident that in previous research process was extensively analyzed various aspects of digital educational hubs in higher medical education. These studies have provided valuable insights into the strategic and practical expediency of digitalization, and regional experiences in both Europe and Ukraine. However, there is still room for further investigation, particularly concerning the effectiveness of digital educational hubs in training future medical professionals and the readiness of participants to adopt the associated technologies. By addressing these gaps, the proposed research aims to contribute to a more comprehensive understanding of digital educational hubs in medical higher education.

Methodology

Synergetics is the most acceptable methodological paradigm for the study of digital space in higher medical education. It has a multi-vector nature and involves the use of different types of empirical and rationalist methods. The principles of self-organization of complex systems are relevant for the analysis of the digital educational hub and ways to use it in medical education. In the modern scientific picture of the world, medicine is an area in which the ideas of transdisciplinary are actively implemented. Given that we consider information and communication technologies, much attention should be paid to the so-called digital scientific methods, which are beginning to occupy an important niche in the methodological cluster of the modern scientific and ideological paradigm.

Results and Discussion

RQ_1: What are the underlying principles for designing digital hubs as knowledge centers, based on the concept of educational synergy?

Digital education hubs decentralize learning. As a result, the process becomes more dynamic. Learning modes shift from administrative management to focusing on the student needs and experience.

Digital transformation is based on three key concepts: “culture and skills”; “infrastructure and technology”; “ecosystems” (Brunetti et al., 2020). When we talk about the concept of “culture and skills”, we mean the general processes of digitalization of the education sector. Information and communication technologies, which have flooded our present in all its manifestations, are becoming part of the socio-cultural space. For a future medical professional, the fundamental aspects of professionalism are the skills acquired during training. Digitization is becoming an integral and important part of the process of acquiring these skills.

Considering the concept of “infrastructure and technology”, we note the technological aspects that ensure the functioning of the digital hub. Software, content access channels, cybersecurity systems - all these are routine technological elements that ensure the operation of the digital hub.

Digital hubs used by medical universities are not only educational and strategic. With the help of a digital hub, an educational institution has a good opportunity to organize educational and information resources. First of all, it is about the work of libraries and scientific repositories of higher education institutions. In particular, for the successful formation of digital content centers, academic libraries combine the potential of their funds and archives (Fritz, 2018). The synergistic effect is achieved through joint activity. The academics drop their work into the repository, where it becomes accessible to other academics and students. As a result, additional interaction is created at the level of: teacher-teacher, scientist-scientist, teacher-student.

The library system has also undergone significant changes in recent years and is gradually moving away from the use of paper copies of educational and scientific literature and physical visits to this institution. The digitalization of the library automatically turns it into a digital hub, which is relevant and popular among students. The role of the library remains as providing access to resources, now the student can access literature on their electronic device instantly. The digitation of the library as a hub ensures that students' educational needs are met.

In addition to digital hubs being created within universities, inter-university networks are becoming more common. In fact, a single network of digital information resources for medical universities is being created, which, accordingly, consists of a large number of participants. Such level of integration has previously been impossible before digitization.

The latest technologies of modern times allow us to use the digital hub not only as an information source, but also as a clinical space. Carrying out video support of surgical interventions actually transports the viewer to the operating room. Thanks to the digital hub, such content becomes educational, as it unites interested viewers and provides appropriate information support for such sessions.

Of course, personal assistance in a medical institution is the most effective teaching method. However, the COVID-19 pandemic has restricted personal contact. One of the ways to solve this problem was virtual practice. Under such conditions, the digital hub has become an important platform for the implementation of such educational and methodological innovations.

Modern production is irrevocably entering the era of digital technology. Under such conditions, the training of specialists in any field should be provided using digital technologies. In today's dynamic world, it is impossible to allow situations where a doctor will have less technological equipment or information and communication support than an employee in any other field. Such guidelines pave the way for the final consolidation, application and adoption of the future reference model: business ecosystems-skills-technologies (Sassanelli et al., 2021). Modern researchers emphasize the need to harmonize the educational environment with the process of creation and functioning of knowledge. A key factor in this alignment is digitalisation, which is an effective tool in integrating the concept of knowledge into educational strategies. The model from the following key components is offered:

- worldview awareness of knowledge and highlighting its positive aspects;
- modern educational competencies designed to provide training for highly qualified specialists;
- justice, which is manifested in equality and access to knowledge;
- integration of the latest information and communication technologies into educational models;
- cooperation and interaction of all stakeholders in the education system (applicants, teachers, educational institutions, employers, civil society);
- the process of continuous self-improvement of all subjects of the educational process;
- focusing on strategic and concrete learning outcomes (Tan et al., 2021).

Guidelines for the harmonization of knowledge and education are fundamental to the effective functioning of the digital education hub. If we compare the classical model of education with the innovative one, we will get virtually identical results for the target component. At the same time, we have significant changes in the clusters of subjects of the education system and the educational and methodological arsenal of the educational process (see Table 1).

Table 1.
Sources of knowledge acquisition in educational strategies

Sources of knowledge	
Traditional model	**Innovative model**
Educational and methodological arsenal	Information and communication technologies
Educator's pedagogical mastery	Student's self-organization

Source: authors 'own development

RQ_2: Can digital educational hubs provide a solution for addressing the organizational and logistical challenges faced in medical higher education?

Analyzing the innovative model of educational strategy, we can conclude that this format is most favorable for the use of digital hubs. The classic educational model, which is based on the personal skills of the teacher, actually eliminates the key purpose of the hub. When it comes to an innovative model based on the principles of self-organization, the hub is an ideal environment for learning and acquisition of necessary skills.

Digital educational hub is important for the formation of so-called soft-skills, which for the future doctor are the defining qualities for the level of his professionalism. In particular, along with analytical and critical thinking, digitalization promotes the development of creative thinking, as it often becomes a catalyst for innovative solutions. Online platforms, digital hubs, interactive video conferencing, distance educational and medical sessions, virtual modeling and technological learning are potential elements of the development of medical education (Thakur et al., 2021).

It is important to understand the practical significance of the functioning of educational digital hubs for medical universities. Reducing the gap between the professional opportunities of medical school graduates and the needs of patients is a priority of medical education. The introduction of interactive methods, in particular the case method, can help solve this problem (Korniichuk et al., 2021). The use of the case method is quite effective in the digital educational space, because the student in such conditions has not only access to the necessary information, but also has the opportunity to choose the most acceptable educational content.

Digital educational hubs for European medical universities have been operating for a long time. This allows some analytical research on their effectiveness in the context of the acquisition of professional skills by future medical professionals. Studies focus on the question of the benefits of the surge of artificial intelligence technologies for the health care system (Rampton et al., 2020). It is noted that new approaches in medical education that improve the digital literacy of physicians and allow better integration of patients' views form an effective format of medical education. Note that the digital hub is a kind of embodiment of synergistic interaction of all actors in the health care system. Therefore, the use of such digital centers in the educational process for medical universities is relevant and in demand. In Ukraine, it is still quite difficult to draw such conclusions, as digital hubs at medical universities are in their infancy. There is currently a period of filling these e-learning centers with the necessary resources. Digital hubs are popular among students. Particularly in demand during the COVID-19 pandemic, when the training format involved the active use of distance and electronic means.

Ukraine is currently in the process of conducting research to assess virtual reality technology and online teaching systems. In particular, similar scientific investigations were carried out among medical students of the Bogomolets National Medical University. The results of the survey show that most students accepted and agreed to virtual reality technology and online teaching and recognized that these technologies are the best alternative to physical education. However, it should be noted that the surveys and further research were conducted solely on the basis of the basic model of the educational process. That is, digitalization still serves as an alternative, rather than an independent full-fledged educational format. The conclusion of such studies is that digital learning environments are extremely effective in terms of satisfaction of medical students and staff, achievements, and growth of technical learning skills (Tsekhmister et al., 2021). But the transition from the traditional model of educational space to innovative still has many obstacles at the moment.

RQ_3: To what extent are participants in the educational process prepared and willing to adopt the technologies associated with digital educational hubs?

In order to understand the relevance of the digital educational hub, we should turn to the opinion of those for whom it is created and functions. A survey was conducted among the students of the Sumy State University, Academic and Research Medical Institute. 300 respondents from the Departments of Public Health, Oncology, and Radiology took part in the study. They were interviewed on the relevance of using a digital hub in the institution of higher medical education. Here is a list of questions that were offered to respondents (see Table 2).

Table 2.
The digital learning hub through the eyes of medical students

Has your institution offered you the use of an innovative learning format using a digital hub?
Have you used the resources of the digital hub in the learning process?
Do you consider the innovative resources of the educational digital hub as an alternative to traditional forms of learning?
What educational digital hubs do you prefer (Ukrainian or foreign)?
Which learning cluster is more relevant for the digital educational hub (theoretical knowledge or practical skills)?

Source: authors 'own development

1) Among the questions of importance to our academic exploration are the following:
2) Do you consider the innovative resources of the educational digital hub as an alternative to traditional forms of learning? (Fig. 1).

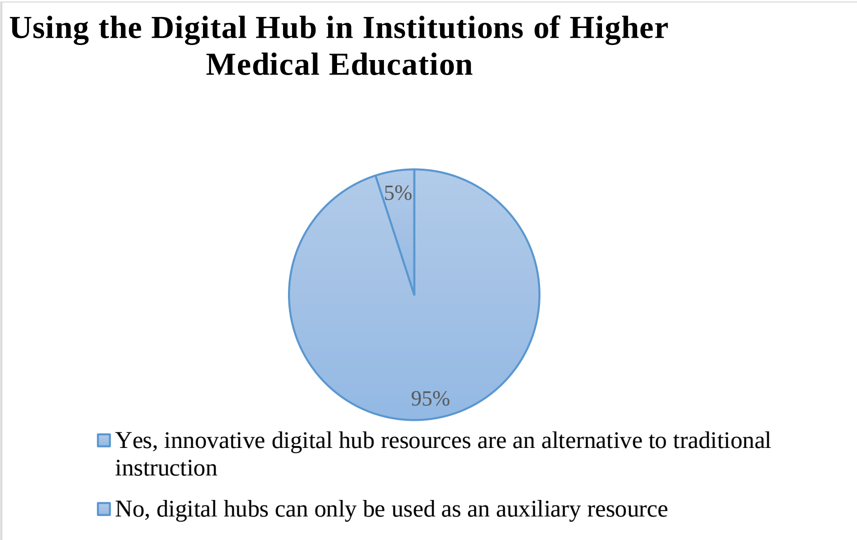


Figure 1. Use of the digital hub in institutions of higher medical education
Source: authors 'own development

We can state that the vast majority of students consider the digital hub as a full-fledged resource for knowledge and skills. Consequently, the presence of a digital hub is an important factor in the competitiveness of higher education (Fig. 2.).

1) What educational digital hubs do you prefer (Ukrainian or foreign)?

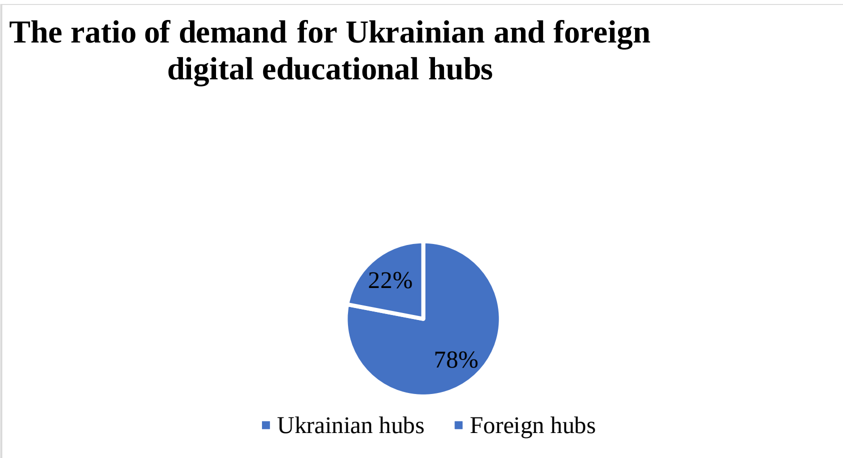


Figure 2. Ratio of demand for Ukrainian and foreign digital educational hubs.
Source: authors 'own development

The results indicate that Ukrainian medical students mainly focus on the use of domestic digital resources. One of the reasons for this ratio is the lack of proficiency in foreign languages and the inability to fully receive the information presented in foreign resources.

Among foreign platforms, the most popular among Ukrainian medical students were English-language educational spaces of leading European and American medical universities.

The use of digital hubs in the educational process requires a thorough methodological study. In particular, conceptual resources from the culture of typology and infrastructure research are used to provide a basis for analyzing the spatial relationships between educational data, discourses, policies and practices in new governance configurations (Gulson & Sellar, 2019). The importance of digitalization and the benefits it can bring to the EU's socio-economic landscape have also been analyzed in detail and emphasized in the light of the forthcoming financial period. The rapid transition to digital alternatives has helped to restore many important social and economic clusters: distance work, online education, e-commerce, administrative processes (Kalpaka et al., 2020). If we analyze these benefits in detail we see beneficial impacts of the education space. Moreover, advanced digital technologies are used for public health. It is expected that in the future (especially after the experience of COVID-19) the spread of digital technologies will expand even more (Housni et al., 2021). Today's progressive health care system recognizes the growing importance of supporting patients in a variety of ways. One such component, along with the direct treatment process, is the concept of a web-based digital health center for integrated patient care (Chehade et al., 2020). Cooperation between doctors, patients, medical institutions forms a specific powerful digital hub, which aims to meet the needs of all actors. Thus, the idea of a digital hub is becoming a popular format in all clusters of the healthcare system. The digital revolution is opening up opportunities for institutions, organizations and companies across Europe, but for many, it is still difficult to get the most out of it. The countries of the European Union are still characterized by significant differences between regions in the use of ICT technologies (Lopes et al., 2019; Kucirkova & Littleton, 2017). This gap is even bigger in comparison with Ukrainian educational centers. The solution to this imbalance is the need to identify the strengths of a particular region and use them to create a network of digital education centers.

Prospects For Further Research

It is worth noting that many studies of the functioning of digital educational hubs are reduced to the analysis of three key components (see Fig. 3).

Figure 3. Clusters of research on the functioning of educational and digital hub

Information-communicative and organizational clusters deal with the problems of logistical aspects of filling and using digital content. When it comes to the educational component, it is worth updating such research (see Fig. 4).

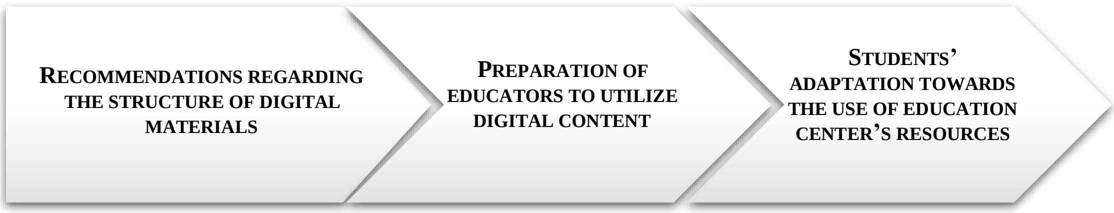


Figure 4. Educational component using digital content
Source: authors 'own development

The key problem of the digital hub in the system of higher medical education is the understanding of its strategic purpose and practical use. The European higher education system has already gone through a transition period of uncertainty due to conflicts of interest between human intellectual and organizational resources along with the digitalization processes. Signs of this transitional period are currently being observed in Ukrainian higher medical education. Based on the European experience of implementing the principles of digitalization in general and the use of digital educational hubs in particular, we can identify several suggestions that will serve as guidelines for Ukrainian institutions of higher medical education in the development of innovative strategies.

First of all, we note the synergetic principles that are relevant for the organization of digital educational hubs and their further operation in the field of medical education. With the theoretical component of medical education, everything is more or less clear and organized. Educational digital environments created at universities allow to fully provide informational content for the training of future physicians. Several clusters of digital hubs of theoretical nature have proven to be effective (see Fig. 5).

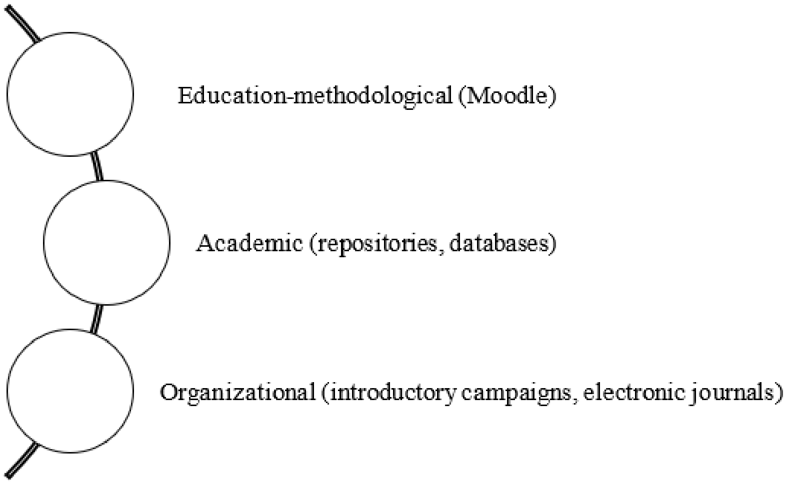


Figure 5. Digital hubs for acquiring theoretical knowledge in medical university
Source: authors ‘own development

The importance of synergetic is that the future medical professional is not limited to theoretical knowledge and requires the acquisition of practical skills directly during training. In medical universities, the practice involves primarily gaining experience through direct learning in the clinical space. That is, the student, along with the mentor has the opportunity to analyze all stages of the process of diagnosis, treatment and rehabilitation. Therefore, the medical institution itself, where such an educational process is conducted, becomes a kind of organizational hub. However, here we see the difference between European and Ukrainian realities. If in Europe such concepts as university clinics are widely developed, in Ukraine they only exist in medical institutions. Hence the contradiction in the efficiency of the digital hub. In the university clinic, the digital educational hub covers both the educational and theoretical cluster of the educational institution and the medical element. When practical training takes place in medical institutions, the effectiveness of the digital educational hub is significantly reduced.

As an alternative, the possibilities of the simulation center are actively used in Ukrainian medical universities. The simulation center operates in the format of a kind of hub where models for providing medical services of various types are collected. The applicant has the opportunity to use the potential of the center to develop their own practical skills. This type of organization of practical training eliminates the contradictions associated with the conflict of pedagogical and artificial intelligence, as the mentor acts as a consultant, which organically fits into the format of the digital practice-oriented hub of medical education.

Secondly, it is important to clearly distinguish between organizational and logistical and educational and methodological functions of the digital educational hub. Quite often, digital educational hubs are organized by analogy with economic and business models. This approach is unjustified and is no longer used in Europe's leading medical institutions. The point is that a digital education hub could potentially cover several fundamental clusters of social activity specific to the medical education space. Educational and learning strategies accumulate in the digital educational hub. Educational strategies provide the medical professional with organizational information. Learning strategies accumulate educational and methodological and practical tools for acquiring the necessary hard-skills, soft-skills and digital-skills. The combination of practical and theoretical components is especially relevant for digital hubs in medical education (Wu & Plakhtii, 2021).

Conclusion

The digital educational hub for higher medical education is currently not an ancillary or related element, but a basic center in which the necessary training and logistics potential is accumulated. In the European Union, there are currently processes of creating unified digital educational hubs that will be relevant for use by various educational institutions. In addition, European institutions of higher medical education have self-sufficient and powerful educational and digital hubs. In Ukraine, the stage of formation of digital educational hubs at medical universities is currently underway. At the same time, Ukrainian educational realities do not yet allow us to talk about a holistic digital hub, as there is a certain diversity of educational and methodological, scientific and organizational information centers.

The digital educational hub has two purposes for higher medical education institutions:

educational and strategic, which is the need to organize and effectively operate the digital space in the education system;
educational and practical, which is reduced to the use of the hub as a source of knowledge to develop student's medical skills and abilities.

Bibliographic references

Brunetti, F., Matt, D. T., Bonfanti, A., De Longhi, A., Pedrini, G., & Orzes, G. (2020). Digital transformation challenges: strategies emerging from a multi-stakeholder approach. The TQM Journal, 32(4), 697–724. https://doi.org/10.1108/tqm-12-2019-0309

Chehade, M. J., Yadav, L., Jayatilaka, A., Gill, T. K., & Palmer, E. (2020). Personal digital health hubs for multiple conditions. Bulletin of the World Health Organization, 98(8), 569–575. https://doi.org/10.2471/BLT.19.249136

de Villiers, M., van Schalkwyk, S., Blitz, J., Couper, I., Moodley, K., Talib, Z., & Young, T. (2017). Decentralised training for medical students: a scoping review. BMC Medical Education, 17(1), 196. https://doi.org/10.1186/s12909-017-1050-9

Fritz, A. (2018). From collection silos to digital content hubs: Digital project management in special collections and university archives. In Advances in Library Administration and Organization (pp. 187–198). Emerald Publishing Limited. https://doi.org/10.1108/s0732-067120180000038014

Gulson, K. N., & Sellar, S. (2019). Emerging data infrastructures and the new topologies of education policy. Environment and Planning. D, Society & Space, 37(2), 350–366. https://doi.org/10.1177/0263775818813144

Housni, M., Talbi, M., & Namir, A. (2021). Simple technology is an improved solution for a post-pandemic informative system: A reference model. International Journal of Emerging Technologies in Learning (IJET), 16(16), 35. https://doi.org/10.3991/ijet.v16i16.23211

Kalpaka, A., Sörvik, J., & Tasigiorgou, A. (2020). Digital Innovation Hubs as policy instruments to boost digitalisation of SMEs. Publications Office of the European Union. https://publications.jrc.ec.europa.eu/repository/handle/JRC121604

Korniichuk, O. Y., Bambyzov, L. M., Kosenko, V. M., Spaska, A. M., & Tsekhmister, Y. V. (2021). Application of the case study method in medical education. International Journal of Learning Teaching and Educational Research, 20(7), 175–191. https://doi.org/10.26803/ijlter.20.7.10

Kucirkova, N., & Littleton, K. (2017). Digital learning hubs: theoretical and practical ideas for innovating massive open online courses. Learning, Media and Technology, 42(3), 324–330. https://doi.org/10.1080/17439884.2015.1054835

Lopes, J., Ferreira, J. J., & Farinha, L. (2019). Innovation strategies for smart specialisation (RIS3): Past, present and future research: XXXX. Growth and Change, 50(1), 38–68. https://doi.org/10.1111/grow.12268

Rampton, V., Mittelman, M., & Goldhahn, J. (2020). Implications of artificial intelligence for medical education. The Lancet. Digital Health, 2(3), e111–e112. https://doi.org/10.1016/S2589-7500(20)30023-6

Sassanelli, C., Terzi, S., Panetto, H., & Doumeingts, G. (2021). Digital Innovation Hubs supporting SMEs digital transformation. 2021 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC).

https://ieeexplore.ieee.org/abstract/document/9570273

Tan, S. C., Chan, C., Bielaczyc, K., Ma, L., Scardamalia, M., & Bereiter, C. (2021). Knowledge building: aligning education with needs for knowledge creation in the digital age. Educational Technology Research and Development: ETR & D, 69(4), 2243–2266. https://link.springer.com/article/10.1007/s11423-020-09914-x

Thakur, A., Soklaridis, S., Crawford, A., Mulsant, B., & Sockalingam, S. (2021). Using rapid design thinking to overcome COVID-19 challenges in medical education. Academic Medicine: Journal of the Association of American Medical Colleges, 96(1), 56–61. https://doi.org/10.1097/ACM.0000000000003718

Tsekhmister, Y. V., Konovalova, T., Tsekhmister, B. Y., Agrawal, A., & Ghosh, D. (2021). Evaluation of virtual reality technology and online teaching system for medical students in Ukraine during COVID-19 pandemic. International Journal of Emerging Technologies in Learning (IJET), 16(23), 127–139. https://doi.org/10.3991/ijet.v16i23.26099

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. Journal of Strategic Information Systems, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

Wu, W., & Plakhtii, A. (2021). E-learning based on cloud computing. International Journal of Emerging Technologies in Learning (IJET), 16(10), 4. https://doi.org/10.3991/ijet.v16i10.18579

DOI: https://doi.org/10.34069/AI/2023.63.03.23
How to Cite:
Petkov, S., Barikova, A., Kopotun, I., Bulhakova, O., & Gubariev, S. (2023). The mechanism for the prevention of military administrative offences under martial law. *Amazonia Investiga*, *12*(63), 243-253. https://doi.org/10.34069/AI/2023.63.03.23

The mechanism for the prevention of military administrative offences under martial law

Механізм запобігання військовим адміністративним правопорушенням в умовах воєнного стану

Received: March 15, 2023 Accepted: April 18, 2023

Written by:
Sergey Petkov[1]
https://orcid.org/0000-0003-4160-767X
Anna Barikova[2]
https://orcid.org/0000-0002-9707-0106
Igor Kopotun[3]
https://orcid.org/0000-0002-2947-8599
Olena Bulhakova[4]
https://orcid.org/0000-0002-0893-3732
Sergii Gubariev[5]
https://orcid.org/0000-0003-0340-8514

Abstract

Observance of military discipline under martial law is one of the pre-conditions for making the country's defence and ensuring national security as a whole more effective. That is why the current legislation in the field of military administrative offences needs to be revised and brought into line with the requirements imposed by the wartime. The aim of the study is to analyse the current state and promising directions for improving the mechanism for the prevention of military administrative offences under martial law. The methods of analysis of the legislative framework, formal logic, case studies, comparative law were used in the course of the research. The article was built using international experience. The study found a number of contradictions in the changes introduced in the legislation on military administrative offences after the beginning of a large-scale military invasion. Such changes as increased punishment and no right to commutation, etc. intended to improve discipline can have the opposite effect,

Анотація

Дотримання військової дисципліни в умовах воєнного стану є однією з передумов підвищення ефективності обороноздатності країни та забезпечення національної безпеки в цілому. Тому чинне законодавство у сфері військових адміністративних правопорушень потребує доопрацювання та приведення у відповідність до вимог воєнного часу. Метою дослідження є аналіз сучасного стану та перспективних напрямків удосконалення механізму профілактики військових адміністративних правопорушень в умовах воєнного стану. У ході дослідження використовувалися методи аналізу законодавчої бази, формальної логіки, кейс-стаді, порівняльного правознавства. Стаття побудована з використанням міжнародного досвіду. Дослідження виявило низку суперечностей у змінах, внесених до законодавства про військові адміністративні правопорушення після початку широкомасштабного військового вторгнення.

[1] Doctor of Legal Sciences, Professor at the Department of Public and Private Law, V.I. Vernadsky Taurida National University, Kyiv, Ukraine.
[2] PhD in Law, Educator of the Department of Public Management and Administration, National Academy of Internal Affairs, Kyiv, Ukraine.
[3] Doctor of Legal Sciences, Professor, Chief researcher of the research laboratory on problems of prevention of criminal offences, Donetsk State University of Internal Affairs, Kropyvnytskyi, Ukraine.
[4] PhD in Economics, Associate Professor, Head of the Department of State and Legal Disciplines, Donetsk State University of internal affairs, Kryvyi Rih, Ukraine.
[5] PhD in Law, Associate Professor, Head of the Department of Private and Public Law, V.I. Vernadsky Taurida National University, Kyiv, Ukraine.

reducing the motivation and confidence of servicemen. Special attention should be paid to entitling one person to draw up a report on an administrative military offence and collect evidence — most often, battalion commanders, which makes servicemen vulnerable to the commanders, whatever decision they make, and also increases corruption risks. Therefore, further research should focus on the development of directions for amending Article 172-13 “Abuse of power or official position by a military official”.

Keywords: military administrative offences, martial law, discipline, corruption, responsibility.

Такі зміни, як посилення покарання та відсутність права на пом'якшення покарання тощо, спрямовані на підвищення дисципліни, можуть мати протилежний ефект, зменшуючи мотивацію та впевненість військовослужбовців. Окремо слід звернути увагу на надання права складати протокол про адміністративне військове правопорушення та збирати докази одній особі — найчастіше командиру батальйону, що робить військовослужбовців незахищеними перед командирами, яке б рішення вони не прийняли, а також підвищує корупційні ризики. Тому подальші дослідження слід зосередити на розробці напрямів внесення змін до статті 172-13 «Зловживання військовою службовою особою владою або службовим становищем».

Ключові слова: військові адміністративні правопорушення, воєнний стан, дисципліна, корупція, відповідальність.

Introduction

The martial law introduced on February 24, 2022 in Ukraine changes the usual realities in all spheres of life of Ukrainians. The legal sphere was one of the first to introduce changes, because the lawmakers faced an objective need to change the legislation in accordance with the requirements imposed by the wartime. Issues of providing national security and defence, which depend not least on the appropriate military discipline, took priority (Chow & Yeh, 2021; Simmons, 2021).

Since 2014, the number of military administrative offences has increased significantly. The analysis of aspects of military discipline in 2020-2021 indicates the highest frequency of violations of the rules banning the consumption of alcoholic beverages by servicemen. Besides, frequent cases of arbitrary abandonment of military units and negligent treatment of military service were also observed (Ostapenko, 2021). Since the beginning of the full-scale invasion, the courts of the first instance have made more than 30,000 decisions in cases of bringing to administrative responsibility under Part 3 of Art. 172-20 of the Code of Ukraine on Administrative Offences only as of mid-December of the same year (Durnopianova, 2022). Therefore, the research into the directions for improving the mechanism for the prevention of military administrative offences under martial law is an urgent issue.

The aim of the study was to analyse the current state and promising directions for improvement of the mechanism for the prevention of military administrative offences under martial law. The aim involved the fulfilment of a number of research objectives, in particular:

- Analyse the innovations in the legislative framework regulating military administrative offences related to the introduction of martial law, in particular, aspects of the legality of increasing the responsibility of servicemen introduced by the Law of Ukraine “On Amendments to the Code of Ukraine on Administrative Offences, the Criminal Code of Ukraine and Other Legislative Acts of Ukraine Regarding the Peculiarities of Military Service under Martial Law or in a Combat Situation” (Verkhovna Rada of Ukraine, 2022; Kopotun, 2023);
- Conduct a case study on determining the effectiveness of Law No. 8271 by comparing real examples from the life of servicemen testifying both in favour of the adoption of the Law and against it;
- Outline the directions for improvement of the mechanism for the prevention of military administrative offences under martial law based on the results obtained during the analysis of the legislative framework and international experience.

The research objectives set in the article imply the following main research questions:

- What are the main innovations in the legislative framework related to military administrative offences?
- What advantages and disadvantages can be noted in Law No. 8271 when applied to real situations?
- What are the directions for improving the mechanism for preventing military administrative offences under martial law?
- What aspects of international experience should be adapted to Ukrainian practice in order to improve the mechanism for preventing military administrative offences under martial law?

Literature Review

In most studies on military administrative offences the leading specialists in law focus on a number of existing shortcomings in the legislation. This is especially relevant in the context of martial law, because ensuring national security depends on a balanced approach to law-making during wartime. The adoption of the Law of Ukraine "On Amendments to the Code of Ukraine on Administrative Offences, the Criminal Code of Ukraine and Other Legislative Acts of Ukraine Regarding the Peculiarities of Military Service under Martial Law or in a Combat Situation" (hereinafter referred to as Law No. 8271), which increases responsibility of servicemen for committing offences, caused a great wave of criticism. Most researchers note that the adoption of this law will not contribute to the improvement of discipline, but will only limit the rights of servicemen (Verkhovna Rada of Ukraine, 2022; Pietkov, 2020).

Bobrovska (2023) harshly criticizes the adoption of the Law — from the procedural violations to the inflated punishment for servicemen without the right of commutation. In their article, Opryshchenko (2023) and Nekrasov (2023) refer to the opinions of experts who consider the adoption of the specified law illegal, in particular in view of the insecurity of servicemen compared to the command.

Pavlovska (2022) deals with the content and structure of administrative offences under martial law. The researcher focuses on the consideration of Chapter 13-B of the Code of Ukraine on Administrative Offences. She identifies the shortcomings of the current legislation, the main of which is the violation of the principle of separation of powers. Merdova (2022) considers the commission of an administrative offence under martial law as a circumstance that aggravates responsibility for such an offence.

Some works are focused on an in-depth analysis of some articles of Chapter 13-B of the Criminal Procedure Code. Ostapenko (2021) examines gaps in the legislative framework regarding military administrative offences, in particular, inaccuracies in Article 172-15 of the Code of Ukraine on Administrative Offences "Negligent treatment of military service." Ivashkovskyi (2021) focuses on Article 172-11 "Arbitrary abandonment of a military unit or place of service".

Podoliaka & Domin (2020) examine the drafting of protocols on military administrative offences by military prosecutors. The researchers described this procedure in detail, defining the specifics and powers of military prosecutors.

Fesenko et al., (2022) revealed the aspects of legal responsibility for military offences. The researchers noted the objective need to revise the existing legislation in the military sphere because of the increased number of war crimes after 2014, and to develop an effective mechanism for combating crime in the military sphere.

Riabenko and Zoria (2019) are among the researchers who consider corruption-related administrative offences. They also cover the activities of the military prosecutor's office in combating such offences.

A number of foreign authors studied such areas of combating war crimes as the use of a cascade strategy, and the development of interaction between the community and law enforcement agencies (McGarrell, 2020), the ratification of international treaties and conventions (Beigbeder, 2018), strengthening the national and international legal framework (Bothe et al., 2013), the introduction of appropriate programmes in education and training (Weissbrodt & De La Vega, 2007), the application of an early warning and response system (Stahn, 2008), support and peace building (De Greiff, 2014).

Methods and Materials

Research design

Outlining the directions for improvement of the mechanism for the prevention of military administrative offences under martial law requires the division of research into stages. In particular, it is necessary to examine the legislative framework regarding administrative military offences before the introduction of changes caused by the introduction of martial law, as well as after the introduction of changes. It is appropriate to consider the effects of making such changes in practice and, ultimately, to outline the directions for improving the mechanism for the prevention of military administrative offences under martial law based on the results of the analysis.

So, the first stage of the research provided for the analysis of the legislative framework, in particular, Chapter 13-B of the Code of Ukraine on Administrative Offences. The method of comparative law was used to determine the changes that occurred in relation to this Chapter after the adoption of Law of Ukraine No. 8271 "On Amendments to the Code of Ukraine on Administrative Offences, the Criminal Code of Ukraine and Other Legislative Acts of Ukraine Regarding the Peculiarities of Military Service under Martial Law or in a Combat Situation." In particular, the level of responsibility for servicemen for committing military administrative offences before and after the adoption of Law of Ukraine No. 8271 was compared (Verkhovna Rada of Ukraine, 2023; Kopotun, 2023).

The second stage of the research provided for the analysis of two examples using the case study method. The first of the mentioned examples testifies in favour of the adoption of Law No. 8271 (the information is taken from a journalistic investigation (Steshenko, 2022). The second example testifies against the adoption of the specified law (the data used are taken from a journalistic investigation (Opryshchenko, 2023). The case study method was used to assess the actual advantages and disadvantages of the adopted Law without assumptions and theory, and further helps to identify directions for its improvement.

The third stage provided for outlining the directions for the improvement of the mechanism for the prevention of military administrative offences under martial law based on the results of the analysis conducted during the study. The method of formal logic was used to propose a number of improvements related to the legislative provision of proceedings in cases of administrative offences, the procedure for the examination of the state of alcohol, drug, etc. types of intoxication, reduction of corruption, etc.

The fourth stage of the study involved identification of a number of provisions in the legislation of the USA and the EU using the method of comparative law, which can be adapted and used in Ukrainian practice to increase efficiency of prevention of military administrative offences.

Information background

The information background of the study is academic periodicals of Ukraine, journalistic investigations, as well as separate documents of the legislative framework of Ukraine, in particular the Criminal Code of Ukraine, as well as Law of Ukraine No. 8271 "On Amendments to the Code of Ukraine on Administrative Offences, the Criminal Code of Ukraine and Other Legislative Acts of Ukraine Regarding the Peculiarities of Military Service under Martial Law or in a Combat Situation".

Results

Increasing responsibility for military administrative offences

What are the main innovations in the legislative framework related to military administrative offences?

Martial law is a special regime introduced in the country in the event of a threat to national security or territorial integrity. During martial law, special regulations are introduced, which provide for an increased level of discipline and order of military personnel. In such conditions, a special system of military administration and justice operates, which provides for proceedings in cases of military administrative offenses.

Martial law is a special regime introduced in the country in the event of a threat to national security or territorial integrity. Special regulations, which provide for an increased discipline and order of servicemen, are introduced during martial law. A special system of military administration and justice applies in these conditions, which provides for proceedings in cases of military administrative offences.

A military offence is an offence committed by a serviceman (a person on a military service) and entails administrative responsibility provided in Chapter 13-B of the Code of Ukraine on Administrative Offences. A study of the changes proposed for the introduction to Chapter 13-B of the Administrative Code of Administrative Offences after the adoption of Law No. 8271 gives grounds to conclude that responsibility for military administrative offences was increased under all articles of the said Chapter (Verkhovna Rada of Ukraine, 2023a). Moreover, an article on the examination of servicemen for the condition of alcohol, drug, and other types of intoxication that can be carried out forcibly was added. In addition to increasing responsibility for military administrative offences, Law No. 8271 provides for amendments to the Criminal Code of Ukraine. Under martial law, judges were also forbidden to mitigate the punishment for certain war crimes, as well as to change the punishment for them.

It should be noted that even before its signing, Law No. 8271 caused a wave of discontent and resulted in a petition to veto this law, which gathered the necessary number of signatures for consideration by the President (Office of the President of Ukraine, 2022). Despite this, Law No. 8271 was signed by the President.

Increasing responsibility for military offences during martial law is, on the one hand, justified, given the need to ensure national security, which depends not least on compliance with established rules and discipline. However, numerous critics of Law No. 8271 from among leading lawyers and other specialists encourage us to consider an alternative point of view.

Case studies on determining the effectiveness of Law No. 8271

What advantages and disadvantages can be noted in Law No. 8271 when applied to real situations?

The case study presents two cases, in one of which the result of the application of Law No. 8271 can be defined as unjustified and unlawful. In the second case, the adopted Law could be beneficial for the situation (at the time of the event, the law had not yet been adopted).

Case 1. Against the adoption of Law No. 8271

The unlawfulness of Law No. 8271 can be demonstrated by using the example of 57-year-old M. Voroniak, a veteran of the Anti-Terrorist Operation (ATO) and military operations in Angola. In April 2022, the man's health deteriorated significantly (he could not walk, fainted). A diagnosis of Type II diabetes could lead to gangrene or amputation.

While being treated, the serviceman was transferred to the 102nd separate brigade of the Territorial Defence Forces. Sending him to the combat zone had to be preceded by the Military Medical Board. The hospital informed that the man should be treated at a new place of service. Later, he arrived to the 102nd separate brigade of the Territorial Defence Forces, but he was never sent for treatment and Military Medical Board, which is why no records of his state of health were made in the military file. While the man was waiting for the Military Medical Board, he was given an order to go to the front, in response to which he submitted a report that he could not fulfil such an order because of his health.

Subsequently, the man was suspected under Article 172-10 of refusing to fulfil the command's order. During the investigation, the aforementioned law was adopted, and the administrative case turned into a criminal one.

The aforementioned Law was adopted during the investigation, and the administrative case turned into a criminal one.

After the start of the investigation, M. Voroniak was referred to the Military Medical Board, which determined him to be "limitedly fit", so the case opened against the serviceman was legitimized.

Later, the man, having not received a referral for treatment, treated diabetes himself, and his condition improved. He was ordered to go to the war zone, which he fulfilled, but repeated health deterioration led to hospitalization and amputation of his toes.

The criminal case against the man was not closed, and he faces 5-8 years in prison (Opryshchenko, 2023).

Case 2. For the adoption of Law No. 8271

The example of war veteran M. Dvorianchuk testifies in favour of the adoption of Law No. 8271. The man describes an event related to his arbitrary abandonment of the battlefield. He and two other servicemen arrived at the emplacement near Mostyshche, which turned out to be empty. When the servicemen called and searched for those who were supposed to be in the emplacement, they did not know that there was already a Russian landing party on the street nearby.

Dvorianchuk M. describes another example related to arbitrary abandonment of the emplacement. The servicemen mistakenly decided that Russian tanks were advancing on them, and fled from their emplacement. The fugitives had to be searched for and handed over to the brigade commander, who returned them to their emplacements. At the same time, they were not punished, but several hundred square kilometres were captured by the enemy (Steshenko, 2022).

The considered examples cover only a small part of the problems (advantages) associated with the adoption of Law No. 8271. However, they prove that the existing situation on the front both before and after the adoption of the Law requires a balanced approach to its improvement. In the first example, the problem lies not only in the adoption of the said Law, but also in non-observance of valid legal norms by the command. In the second example with M. Dvorianchuk, the man notes that the adoption of the above-mentioned law entails increased responsibility depending on the command (Steshenko, 2022). It follows that the effectiveness of this law depends not least on the good faith of the command. Such a conclusion contradicts the essence of the legal system as a whole, which should be based on the principles of equal treatment and fair punishment for all its subjects.

Directions for improving the mechanism for the prevention of military administrative offences under martial law

What are the directions for improving the mechanism for preventing military administrative offences under martial law?

The conducted analysis of the legislative framework and case studies gives grounds to determine some areas of improvement of the mechanism for the prevention of military administrative offences under martial law.

The main identified problem with regard to the adopted Law No. 8271 is the limitation of the rights of servicemen, which consists in the significant dependence of the determination of punishment on the command. In this regard, certain provisions of Section IV of the Code of Ukraine on Administrative Offences — “Proceedings in cases of administrative offenses” — need to be revised. According to Article 255, in cases of military administrative offences, the following persons are entitled to draw up the reports:

- authorized persons of the management bodies of the Military Law-Enforcement Service of the Armed Forces of Ukraine;
- commanders (chiefs) of military units (institutions), commanders of units;
- prosecutor.

In fact, official investigations and drafting of protocols are carried out by battalion commanders. In addition to the fact that their views may be subjective, the current procedure increases the risk of corrupt practices. Therefore, it is appropriate to propose an amendment to the legislation in such a way that the duty to draw up protocols is assigned to the officers of the Military Law-Enforcement Service.

It is also important to point out such shortcomings as the “mixing” of violations of military discipline committed by servicemen and illegal (corrupt) actions of officials or abuse of power (Article 172-13 of the Code of Ukraine on Administrative Offences). Therefore, these offences are completely different in nature and purpose, and must be separated. Violation of discipline by a serviceman should entail punishment, which is fair. However, it often happens that the discipline is violated for emotional reasons, for example, fear of death. In contrast, corruption is a deliberate act committed with the aim of obtaining one’s own benefit.

It is also appropriate to note the shortcomings in articles 172-20 on the consumption of alcoholic and low-alcohol beverages or the use of drugs, psychotropic substances or their analogues, and 266-1 on the examination of servicemen for the state of alcohol, drug and other types of intoxication. In order to avoid contradictions regarding the circumstances under which the examination is conducted, it is necessary to simplify the process as much as possible using modern technologies. We can take fines for speeding based on video evidence — speed cameras — as an example. Similarly, if a serviceman is suspected of having the specified conditions, it is appropriate to make a video recording, which is immediately placed in the database, as well as testing with special means while recording the result. The procedure must be carried out in the presence of an officer of the Military Law-Enforcement Service, and in case of refusal of the examination, the serviceman must automatically receive a fine through the Diia platform.

Ukraine still has some manifestations of Soviet approaches to legal relations and responsibility. It is appropriate to adjust the legal framework in order to minimize such manifestations that can cause real damage to national security — not only from the part of servicemen, but also from the part of the command. Establishing responsibility is an effective method, because impunity breeds new crimes. However, an excessively increased responsibility may not achieve the set goal, but only reduce motivation. Therefore, along with the improvement of the legal framework, it is reasonable to work on increasing conscientiousness and motivation among the servicemen, in particular, to revise the system of punishments and rewards, as well as to encourage servicemen to protect the country and its people not through fear, but due to the formation of a conscious attitude.

International experience in the prevention of military offences

What aspects of international experience should be adapted to Ukrainian practice in order to improve the mechanism for preventing military administrative offences under martial law?

It is appropriate to supplement the identified areas of improvement with international experience on the issue under research. The application of international experience in national practice with its preliminary adaptation to Ukrainian realities will help to increase the effectiveness of certain provisions of the Code of Ukraine on Administrative Offences. As an example, it is proposed to consider the United States of America (USA) as a country with the most powerful army in the world. Military discipline and relevant legislation in the field of military administrative offences play not the last role in the country's success in this area. In the USA, compliance with military discipline is ensured through effective solutions in the following areas:

1. Servicemen training programmes. The US Armed Forces have developed a number of training programmes to ensure that servicemen understand the legal and ethical standards to which they must adhere.
2. Strong leadership. The US Armed Forces value leadership and accountability at all levels. This includes establishing clear boundaries of power and responsibility, promoting ethical behaviour, and holding commanders accountable.
3. Strict compliance with legal and ethical standards. The US military has a robust legal system to enforce its standards. This system ensures due process rights for accused servicemen.
4. Regular revisions of policies and procedures. The US Armed Forces regularly revise their policies and procedures to ensure they are current and effective in preventing administrative offences.
5. Strong control and accountability mechanisms. The US Armed Forces have a number of mechanisms to ensure accountability and transparency, including internal audits, inspections and investigations, as well as external monitoring and reporting by independent bodies (Department of Defense, 2015; Department of Defense, 2019).

In addition to considering the practice of preventing military administrative offences in the USA, in the context of Ukraine's integration into the European Union (EU), it is appropriate to determine the main aspects of combating the specified crimes in European countries:

1. Implementation of clear rules and training: EU member states have rules covering military administrative offences, such as the EU Code of Conduct in Military Operations. According to the European Union Agency for Fundamental Rights, training and education are key to preventing misconduct among the servicemen (FRA, 2018).
2. Strengthening accountability mechanisms: The EU has created mechanisms to hold servicemen responsible for their actions. According to the report of the European Defence Agency, accountability mechanisms are crucial to ensure the responsibility of servicemen (European Defence Agency, 2020).
3. Promoting a culture of ethics and integrity: the EU emphasizes the importance of a culture of ethics and integrity in the servicemen. According to a report by the EU Institute for Security Studies, a culture of integrity can help prevent offences by providing a strong foundation for ethical behaviour (EUISS, 2017).
4. Providing support to victims: the EU provides support to victims of administrative offences through military and civilian missions. According to the report of the EU Agency for Law Enforcement Cooperation, providing support to victims is an important aspect of preventing and responding to misconduct among the servicemen (Europol, 2020).

The specified directions, provided their adaptation to Ukrainian realities, can contribute to the improvement of ethics and counteract violations among the servicemen.

Discussion

What are the main innovations in the legislative framework related to military administrative offences? What advantages and disadvantages can be noted in Law No. 8271 when applied to real situations?

The conducted analysis gave grounds to determine that the motivation of the officials for the adoption of Law No. 8271 is the need to increase discipline and national security of Ukraine under martial law. However, a number of shortcomings in the law were identified in the course of the analysis, which may nullify its high goals. It is appropriate to consider the obtained results through the prism of the views of other researchers, lawyers, human rights defenders, and other specialists. Bobrovska (2023) singles out three main problems of the studied Law:

– procedural violations during adoption;
– lack of substantial evidence regarding socially dangerous consequences as a result of committing the specified offences;
– imbalance in the legal system, in particular, lack of the possibility of commutation under a number of articles for servicemen, while the right to commutation is provided for those accused of intentional murder, rape, treason, etc.

Opryshchenko (2023) examines the views of different population groups regarding the legality of the adopted Law No. 8271. For example, Yu. Hudymenko, Junior Sergeant of the Armed Forces of Ukraine, notes that the law contradicts the Constitution of Ukraine in view of the violation of the equality of all citizens before justice. Lawyer and combatant M. Nayem believes that the law will not contribute to the improvement of discipline, it only violates the rights of servicemen. Paramedic Ya. Chornohuz emphasizes that the law gives commanders the possibility to threaten servicemen with punishment for criticizing any of their decisions. Other views of specialists are mostly focused around the insecurity of servicemen compared to the commanders, and the failure to take into account various mitigating circumstances. An important aspect is the clarification in the law that an administrative case is not initiated during the period of martial law, so the responsibility of servicemen under all articles is qualified as criminal, while both options are possible for the commanders.

Nekrasov (2023) also provides some views of journalists and analysts in the field. Journalist Yu. Butusov summarized the main problem associated with the adopted law, noting that the document should have been aimed primarily at the commanders, not at the rank-and-file.

The mentioned conclusions and observations of the researchers are consistent with the results obtained in the course of the author's research and mostly concern controversial points related to the adoption of Law No. 8271. However, there were a number of significant contradictions in the legal framework even before the adoption of this Law.

Pavlovska (2022) notes that one of the main problems is the exercise of executive and judicial power by one person — an official who has the right to draw up protocols on violations. Podoliaka & Domin (2020) proposed the approach to solving this problem. Considering the procedure for drawing up protocols on military administrative offences, they note the positive aspects of the right to draw up such protocols by military prosecutors.

Some studies are focused on individual articles of Chapter 13-B of the Code of Ukraine on Administrative Offences. Ostapenko (2021) focuses on the gaps in Article 172-15 of the Code of Ukraine on Administrative Offences "Negligent treatment of military service". A problematic aspect is the uncertainty as to whether any disciplinary sanctions imposed on a serviceman should be accompanied by a report on a military administrative offence.

Ivashkovskyi (2021) also focuses on only one article of Chapter 13-B of the Code of Ukraine on Administrative Offences — 172-11 "Abandoning a military unit or place of service." However, in contrast to previous works, the researcher proposes to expand sanctions and mechanisms for bringing servicemen to justice in this article.

The work of Fesenko et al., (2022) is another study, which preceded the adoption of Law No. 8271 and in which the established responsibility of servicemen for military administrative offences is considered insufficient. Researchers noted a significant increase in the number of war crimes after 2014, which necessitates the improvement of legislation in the military sphere. What are the directions for improving the mechanism for preventing military administrative offences under martial law?

Merdova (2022) proposes considering the commission of an administrative offence under martial law as a circumstance that aggravates responsibility for this offence. The researcher proposes to define the conditions of martial law as "other extraordinary circumstances" under

Article 35(I)(5) of the Code of Ukraine on Administrative Offences.

Riabenko and Zoria (2019) focus on the commission of corruption-related administrative offences in the military sphere. Therefore, it is necessary to revise not only the articles establishing responsibility for servicemen, but also the articles on abuse of power in order to improve the legislation in the field of military administrative offences.

What aspects of international experience should be adapted to Ukrainian practice in order to improve the mechanism for preventing military administrative offences under martial law?

McGarrell (2020) examines a number of preventive strategies that can help reduce peacetime and wartime crime. The main approaches described by the researcher are the strategy of cascades and the development of interaction between the community and law enforcement agencies.

Beigbeder (2018) considered the ratification of international treaties and conventions, such as the Geneva Conventions and the Rome Statute of the International Criminal Court, as the main way of combating war crimes.

Bothe et al., (2013) emphasize the need to improve the national and international legal framework for the effective prevention of war crimes. This includes ensuring that laws criminalizing war crimes are in place, and that investigative and prosecution mechanisms are independent and impartial.

Weissbrodt & De La Vega. (2007) note the importance of the role of education and training in preventing war crimes. Well-designed educational programmes can help prevent war crimes by fostering students' respect for human rights, the rule of law, and international humanitarian law.

Stahn (2008) identifies early warning and response systems that can help prevent war crimes by identifying potential conflicts and responding to them before they escalate as an effective way to prevent war crimes.

De Greiff (2014) focuses on peacekeeping and peacebuilding: peacekeeping and peacebuilding efforts can help prevent war crimes by addressing the root causes of conflict, promoting dialogue and reconciliation.

Conclusions

As a summary, it is appropriate to note that the aim of the study — analyse the current state and promising directions for improvement of the mechanism for the prevention of military administrative offences under martial law — was achieved. This was implemented by fulfilling the set objectives, in particular, the changes in the legislative framework related to the adoption of Law No. 8271 were analysed in detail. It was noted that the main changes to Chapter 13-B of the Code of Ukraine on Administrative Offences relate to increasing the responsibility of servicemen for committing military administrative offences. It was noted that increasing the punishment cannot always affect the result properly, therefore, first of all, attention should be paid to improving the legislative aspects of proceedings in cases of military administrative offences. The right to draw up a protocol is proposed to be assigned to officers of the Military Law Enforcement Service. It is also proposed to improve the procedure of examination of servicemen for the state of alcohol, drug and other types of intoxication by simplifying this procedure using modern technological means. a case study was also conducted in the article regarding the determination of the effectiveness of Law No. 8271. The advantages and disadvantages of the adopted law were established, so it needs further revision and improvement. The analysis of international experience identified aspects that can be adapted to Ukrainian realities and used to increase the effectiveness of combating military crimes. As a result of the analysis, directions for improving the mechanism for preventing military administrative offences under martial law were outlined.

Bibliographic references

Beigbeder, Y. (2018). Preventing War Crimes: Challenges and Prospects. Routledge.
Bobrovska, S. (2023). Law 8271: Criminal law against the combatant. Censor.NET. https://censor.net/ru/b3397508
Bothe, M., Partsch, K. J., Solf, W. A. & Eaton, M. (2013). New Rules for Victims of Armed Conflicts: Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949. Martinus Nijhoff Publishers. https://doi.org/10.1163/9789004254718
Chow, C.-H. N., & Yeh, I. (2021). Influence Factors in the Effectiveness of National Defense Anti-Corruption Governance. Revista de Cercetare si Interventie Sociala,

73, 262-275. https://doi.org/10.33788/rcis.73.16

De Greiff, P. (2014). The Handbook of Reparations. Oxford University Press.

Department of Defense. (2015). Department of Defense Directive 5100.77: Department of Defense Law of War Program. https://www.esd.whs.mil/

Department of Defense. (2019). Department of Defense Instruction 5505.17: Special Victims' Counsel (SVC) Program. https://www.esd.whs.mil/

Durnopianova, O. (2022). Bringing servicemen to administrative responsibility under Part 3 of Art. 172-20 of the Code of Administrative Offenses. Case processing statistics. Volunteer movement "Lawyers of the ZSU". https://acortar.link/h7Fa0S

EUISS. (2017). EUISS Yearbook of European Security 2017. https://www.iss.europa.eu/content/euiss-yearbook-european-security-2017

European Defence Agency. (2020). Annual Report 2020. https://acortar.link/0HjVAN

Europol. (2020). 2019 Consolidated Annual Activity Report. https://www.statewatch.org/media/1398/eu-europol-annual-activity-report-2019.pdf

Fesenko, O., Kozakova, I., & Shnypko, O. (2022). On the issue of legal liability for war crimes. Scientific Bulletin of the Uzhhorod National University. Series: Law, 2(74), 237-243. https://doi.org/10.24144/2307-3322.2022.74.74

FRA. (2018). Fundamental Rights Report 2018. https://acortar.link/1f0dso

Ivashkovskyi, R. (2021). Essence and system of administrative offenses in the field of military service. Scientific Works of National Aviation University. Series: Law Journal "Air and Space Law", 3(60), 85-89. https://doi.org/10.18372/2307-9061.60.15957

Kopotun, I. (2023). Scientific and practical commentary on the Criminal Code of Ukraine. Publishing house "Professional".

McGarrell, E. F. (2020). Cascades: war, crime, peace, and crime prevention: reaction essay. International Journal of Comparative and Applied Criminal Justice, 44(3), 179-187. https://doi.org/10.1080/01924036.2020.1737952

Merdova, O. (2022). Committing an offense under martial law, as a circumstance aggravating responsibility for an administrative offense. In: Activities of state bodies under martial law: collection of materials of the International Scientific and Practical Online Seminar (pp. 175-177). Donetsk State University of Internal Affairs. https://acortar.link/3d8RHU

Nekrasov, A. (2023). Law project 8271: Zelensky explained his decision to sign the law on strengthening the responsibility of the military. Stopcor. https://acortar.link/U9Frvj

Office of the President of Ukraine. (2022). Veto the law No. 8271 on strengthening the punishment of military personnel. https://petition.president.gov.ua/petition/173526

Opryshchenko, A. (2023). The military is against, Zaluzhnyi - in favor. Finding out why the new law on punishing the military during the invasion is criticized. Zaborona. https://acortar.link/6p2rf7

Ostapenko, I. (2021). Problems of protection of human and citizen rights in the aspect of administrative responsibility for negligent attitude to military service. In: Krasnytskyi I. (ed.) Theoretical and applied problems of legal regulation in Ukraine: Collection of materials of the 5th All-Ukrainian scientific and practical conference (pp. 69-72). Lviv: Lviv State University of Internal Affairs. https://dspace.lvduvs.edu.ua/bitstream/1234567890/4265/1/10_12_2021.pdf#page=69

Pavlovska, N. (2022). Some issues of administrative offenses. Analytical and comparative jurisprudence, 2, 233-236. https://doi.org/10.24144/2788-6018.2022.02.44

Pietkov, S. (2020). Scientific and practical commentary on the Code of Ukraine on administrative offenses. Yurinkom Inter.

Podoliaka, A., & Domin, Y. (2020). Drawing up reports on military y administrative offenses by military prosecutors: specifics and powers. VISEGRAD, 5, 291-296. https://journal-vjhr.sk/wp-content/uploads/2021/11/VJHR-521-Last.pdf

Riabenko, H. M., & Zoria, O. V. (2019). Activities of the military prosecutor's office in combating corruption offenses in the military sphere. In: Implementation of state anti-corruption policy in the international dimension: Materials of the IV International Scientific and Practical Conference (pp. 193-197). Ministry of Internal Affairs of Ukraine. http://elar.naiau.kiev.ua/jspui/handle/123456789/16401

Simmons, C. (2021). The Scope of Military Jurisdiction for Violations of International Humanitarian Law. Israel Law Review, 54(1), 3-23. https://doi.org/10.1017/S0021223720000217

Stahn, C. (2008). The Law and Practice of International Territorial Administration: Versailles to Iraq and Beyond. Cambridge University Press. https://doi.org/10.1017/CBO9780511585937

Steshenko, A. (2022). 8271: Justified harshness or a whip for the military? LB.ua. https://lb.ua/news/2022/12/21/539895_8271_vipravdana_suvorist_chi_batig.html

Verkhovna Rada of Ukraine. (2022). On making changes to the Code of Ukraine on Administrative Offenses, the Criminal Code of Ukraine and other legislative acts of Ukraine regarding the specifics of military service under martial law or combat conditions. https://zakon.rada.gov.ua/laws/show/2839-20#Text

Verkhovna Rada of Ukraine. (2023). Code of Ukraine on Administrative Offenses (Articles 1 - 212-24). https://zakon.rada.gov.ua/laws/show/80731-10#Text

Verkhovna Rada of Ukraine. (2023a). Code of Ukraine on Administrative Offenses (Articles 213 - 330) https://zakon.rada.gov.ua/laws/show/80732-10#Text

Weissbrodt, D. S., & De La Vega, C. (2007). International human rights law: an introduction. University of Pennsylvania Press.

DOI: https://doi.org/10.34069/AI/2023.63.03.24
How to Cite:
Miroshnychenko, O., Nelipa, D., Kotova, V., Lazarenko, A., & Sokorynskyi, I. (2023). Transformation of labour relations in the field of education during military conflicts (International experience). *Amazonia Investiga*, *12*(63), 254-265. https://doi.org/10.34069/AI/2023.63.03.24

Transformation of labour relations in the field of education during military conflicts (International experience)

Трансформація трудових правовідносин у сфері освіти в умовах воєнних конфліктів (Міжнародний досвід)

Received: March 12, 2023 Accepted: April 20, 2023

Written by:
Oksana Miroshnychenko[1]
https://orcid.org/0000-0002-0181-0879
Dmytro Nelipa[2]
https://orcid.org/0000-0002-5363-3990
Victoria Kotova[3]
https://orcid.org/0000-0003-2046-2635
Alla Lazarenko[4]
https://orcid.org/0000-0003-3808-6711
Iurii Sokorynskyi[5]
https://orcid.org/0000-0002-8907-9880

Abstract

Ongoing military conflicts necessitate changes in the regulation of labor relations in the education sector. Normal labor laws are partially disregarded during this period due to special wartime acts. Many education workers and students, who have become refugees, are seeking employment and opportunities to continue their education. Host countries should make effective decisions to improve labor relations in this field. The research employed forecasting, observation, and legal modulation as methodological tools. The EU aims to integrate Ukrainian education workers, including refugees and those seeking legal protection, into the education systems of member states. Efforts are made to simplify employment procedures, recognize professional qualifications, and offer additional educational specializations. Poland's experience demonstrates the possibility of swift development and implementation of legislative initiatives to employ Ukrainian education workers in Polish institutions. The Polish

Анотація

Триваючі військові конфлікти потребують змін у регулюванні трудових відносин у сфері освіти. Звичайні трудові закони частково не дотримуються протягом цього періоду через спеціальні воєнні акти. Багато працівників освіти та студентів, які стали біженцями, шукають роботу та можливості продовження навчання. Країни-господарі повинні приймати ефективні рішення для поліпшення трудових відносин у цій галузі. Дослідження використовували прогнозування, спостереження та правову модуляцію як методологічні інструменти. Європейський Союз має на меті інтеграцію українських працівників освіти, включаючи біженців та тих, хто шукає правовий захист, у системи освіти країн-членів. Здійснюються зусилля спростити процедури працевлаштування, визнавати професійні кваліфікації та надавати додаткові освітні спеціалізації.
Досвід Польщі демонструє можливість швидкого розвитку та впровадження

[1] PhD of Law Science, Associate Professor of the Department of Theory and History of the State and Law, Constitutional Law, Academy of the State Penitentiary Service, Chernigiv, Ukraine.
[2] Doctor of Political Sciences, Deputy Dean for Educational Work, Department of Political Science, Faculty of Philosophy, Taras Shevchenko National University, Kyiv, Ukraine.
[3] PhD of Law Science, Associate Professor of the Department of Criminal Procedure and Criminology, Faculty № 1, Donetsk State University of Internal Affairs, Kropyvnytskyi, Ukraine.
[4] PhD of Law Science, Associate Professor of the Department of Criminal, Criminal-Enforcement Law and Criminology, Academy of the State Penitentiary Service, Chernigiv, Ukraine.
[5] Doctor of Law Science, Professor of the Department of Tactical and Special Training, Academy of the State Penitentiary Service, Chernigiv, Ukraine.

National Agency for Academic Exchange (NAWA), functioning as an ENIC-NARIC center, facilitates recognition and internationalization of higher education, assisting with the recognition of Ukrainian qualifications in Poland. Poland's legislative initiatives in transforming labor relations in the education sector amid the conflict in Ukraine can serve as an example for other nations. Ukraine has developed and implemented necessary components of legal regulation for labor relations in the studied area during martial law.

Keywords: workers' rights, integration of refugees, educational processes, recognition of qualifications, pedagogical innovations, martial law.

законодавчих ініціатив для працевлаштування українських працівників освіти в польських закладах. Польське Національне агентство академічних обмінів (NAWA), яке діє як центр ENIC-NARIC, сприяє визнанню та інтернаціоналізації вищої освіти, надаючи допомогу у визнанні українських кваліфікацій в Польщі. Законодавчі ініціативи Польщі щодо перетворення трудових відносин у сфері освіти в умовах конфлікту в Україні можуть бути прикладом для інших країн. Україна розробила та впровадила необхідні компоненти правового регулювання трудових відносин у вивченій галузі під час воєнного стану.

Ключові слова: права працівників, інтеграція біженців, освітні процеси, визнання кваліфікацій, педагогічні інновації, воєнний стан.

Introduction

Military conflict has serious consequences for the survival of the civilian population, as well as for the future of the country as a whole (Levy & Leaning, 2022). A military invasion causes a huge migration of citizens to other countries (Kopeć, 2022). The number of refugees may increase regardless of the developments on the front line. This poses certain challenges for state services and institutions of countries that host refugees (Duszczyk & Kaczmarczyk, 2022). First of all, host countries need to take care of the basic physiological needs (food and sleep) of refugees. The next step is to ensure safety and security. This implies no poverty or scarcity. A necessary further step is a stable and relatively predictable social environment in which a person or group can achieve their goal without hindrance (Ociepa-Kicińska & Gorzałczyńska-Koczkodaj, 2022). Refugees must be given the opportunity to feel a sense of belonging to the community where they live (Andrade et al., 2021). Priorities include educational opportunities, financial stability, and social connections (Shaw et al., 2021). The level of proficiency in the local language and the degree of integration with the local community are important.

Large numbers of refugees produce significant financial costs for national governments. The stand of living of the citizens that use public services may decline. This may be explained by a significant number of refugees who will also have the right for state support. A similar situation can take place in the labour market with possible adverse consequences, especially on a local scale. This is an incentive for governments to make effective decisions that can help refugees become independent and accelerate their entry into the labour market (Arendt, 2022).

Armed aggression, the threat of attack and the danger of violation of territorial integrity are grounds for introducing martial law in the country (Teremetskyi & Vasyliev, 2022). This situation requires maximum commitment of citizens to their profession and functional duties. Military aggression leads to significant changes and restrictions on labour rights and guarantees, including the field of education. In this difficult period, labour relations have a direct impact on the labour market, determining the lines of decision-making in organizations and governments. Labour relations should be based on a number of forced political measures (Bortnyk, 2022a). Important aspects include changes in terms of employment, establishing wage. Changes may also be introduced regarding the length of working hours and holidays, security and safety requirements, and compliance with contracts. The introduction of teleworking requires special attention in the field of educational labour relations. Access to education for vulnerable groups such as refugees is greatly improved by the prospects of e-learning. Legislating the use of e-learning as an alternative means of learning for students at all levels is necessary for war-affected areas (Rajab, 2018).

Military realities produce a key priority for the field of education in the realization of labour relations — maintaining a balance between guaranteeing the rights of employees and forced restrictions. Russia's attack on Ukraine destroyed a large proportion of infrastructure.

The field of education was no exception. The hostilities resulted in the damage or complete destruction of universities, schools and kindergartens. Many Ukrainian teachers and scientists became refugees or internally displaced persons in Ukraine. Their educational work and research needs serious support (Chhugani et al., 2022).

In view of the foregoing, the aim of the article is to analyse the transformation of labour relations in the field of education during military conflicts.

The aim involved the following research objectives:

1) summarize the main current components and trends of legislative regulation of the transformation of labour relations in the field of education during the military conflict in Ukraine;
2) analyse European legal initiatives and the current state of implementation of changes in labour relations in the field of education in connection with the admission of refugees to EU countries using the example of Poland.

Literature review

The studies of Bortnyk (2022a), Bortnyk (2022b) became the main tools and background for this work. The research was focused on defining and revealing the features of the legal regulation of labour relations, which are established by the labour legislation of Ukraine under martial law. Particular attention is paid to existing problems related to individual labour rights of employees, which are limited by legislation during the period of martial law. The works suggested ways to improve and supplement the current labour legislation, which regulates the issue of labour relations of employees of all forms of ownership and types of activity. It is emphasized that the Labour Code of Ukraine should be the main legal act that comprehensively regulates all aspects of labour relations.

The work of Andrushko (2022) also had an impact on the author's position on the issue under research. The author focused on the search for the optimal model of legal regulation of labour relations, taking into account the martial law and the adaptation of labour legislation to the EU standards. The developments in the field of legal regulation of labour relations under martial law in Ukraine were taken into account in the course of the research (Mashkov et al., 2022). The importance of introducing actual changes in labour legislation was emphasized, the basics of legal support for the activities of persons who were forced to switch to teleworking were determined. It is also emphasized that mobilization has a special influence on the level of employment and work in Ukraine during the war.

A study by Arendt (2022) examines the impact on the labour market of work-oriented policies aimed at accelerating the integration of refugees into the labour market. The authors emphasize that new requirements has been added to refugees in the policy. They should actively seek employment and participate in on-the-job training immediately upon arrival in the host country. Attention should be paid to the findings in the article by Duszczyk and Kaczmarczyk (2022) regarding contextual issues that explain the patterns of population migration during military conflicts and the practice of accepting refugees. The authors considered the most important problems of employment and labour relations in Poland in the context of the influx of refugees from Ukraine.

The issues of distance research and educational work are considered in the studies by Chhugani et al., (2022) and Wu et al., (2022). It is emphasized that short-term and long-term opportunities can be used to help education workers who remain in Ukraine in the current situation, and prevent a potential break with the global scientific and pedagogical community. It was noted that online platforms ensure compliance with labour relations in the field of higher education during the period of military conflicts.

The study by Bird and Amaglobeli (2022) was used when shaping the author's position on the issue. It emphasizes that in response to Russia's invasion of Ukraine, host countries in Europe and beyond took urgent measures to support refugees, including the right to access labour markets and integration policies. The authors consider political measures necessary to provide effective support to refugees leaving Ukraine. The importance of developing innovative approaches in the field of labour relations, such as promoting the employment of Ukrainian citizens as teaching assistants in Poland, was noted.

The article of Brücker et al., (2022) on the work potential of refugees in the field of education from Ukraine is worth noting. The authors emphasized the importance of the fact that a large number of refugees from Ukraine have a higher than average level of education, some of them have academic degrees. The researchers focused on the need to support integration by language programmes and labour market programmes, mediation in the labour market, recognition of professional qualifications and acquisition of additional educational qualifications. Prytyka et al., (2022) analysed the consequences of armed aggression against Ukraine and the introduction of the appropriate legal regime in such areas as the realization of property rights, the administration of justice, the execution of court decisions, and labour relations. The authors outline such relevant vectors as objectivity, subjectivity, implementation in practice. It was noted that the martial law imposes restrictions on certain constitutional rights and freedoms of a person and the introduction of new mechanisms - for example, the suspension of labour relations.

The active study of the issues chosen in the article confirms the fact that special attention must be given to the transformation of labour relations in the field of education during military conflicts. The diversity of studies in this field is also stated. Therefore, it is urgent to carry out research according to the new research criteria.

Methodology

Scientific and methodological tools were widely used in the course of the research, the results were tested and presented in the article. Figure 1 illustrates the research design.

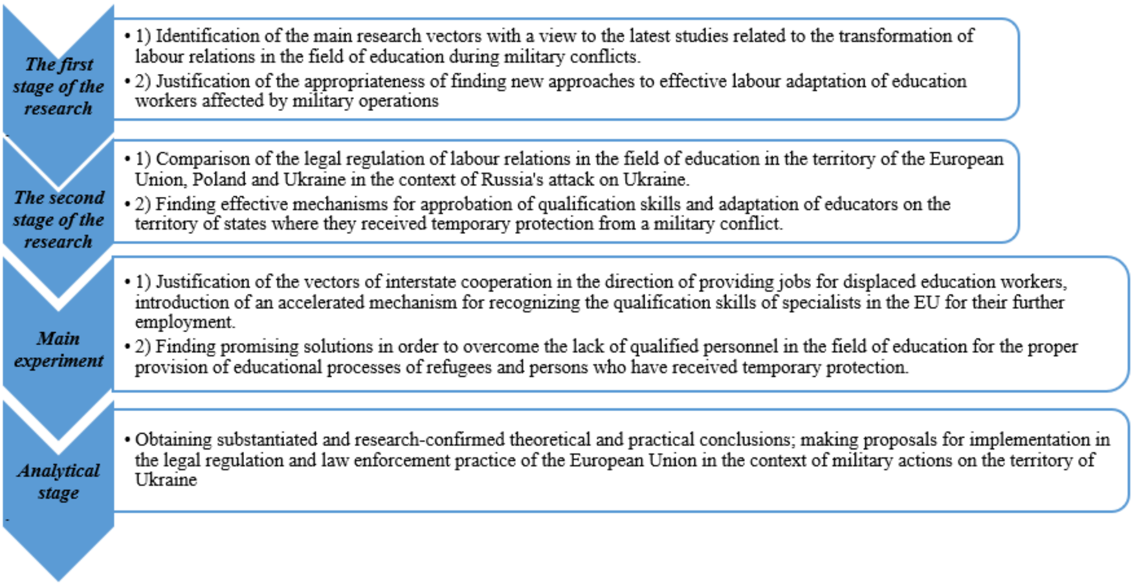


Figure 1. Research design

Induction was used to make an assumption regarding the root cause of the transformations of the legal regulation of labour relations in the field of education in the EU in current realities. In particular, the influence of military operations, intensification of migration processes, the growing demand for educational services and qualified personnel are substantiated with the help of this method.

The forecasting method was applied to justify further transformations in the field of labour relations on the territory of the EU and Ukraine in the context of intensifying military operations and further post-war restoration of the state. This method enabled developing the primary basis for scientific prediction of transformations of labour relations in Ukraine.

The method of comparative law was also used to fulfil the research objectives, which contributed to the comparative analysis of the regulatory framework for the realization of the labour rights of educators who left their permanent place of residence because of the military conflict. Special attention was paid to the comparison of the legislative and practical framework of Ukraine and Poland in the studied area. The specified methodological tools also contributed to the justification of the approbation of the positive experience of Poland.

The methods of statistical and graphic analysis were used to assess the state and results of the introduction of the system of seamless adaptation and confirmation of the qualifications of education workers in the EU. The demand for employment in the field of education on the territory of Ukraine during military operations was studied using the measurement method.

The method of analogy was applied to draw a conclusion about the balance and relevance of the new legal acts adopted by Ukraine in the field of labour relations in education taking into account the EU experience. The normative semantic method, logical methods and the method of legal modelling were used when making proposals for further legislative innovations.

The methods used are determined by the aim of the article and the research objectives, which, in turn, enabled covering the issues outlined in the article comprehensively.

Results

In March 2022, the European Commission prepared political guidance for EU member states. It outlines key principles and practices supporting the inclusion of teachers from among Ukrainian refugees in schools based on previous experience (European Commission, 2022) - Figure 2. Special attention is paid to the integration of Ukrainian teachers and preschool teachers.

Figure 2. Key principles and practices of the EU supporting the inclusion of teachers from among Ukrainian refugees in schools (European Commission, 2022)

The European Commission also published a Recommendation on the recognition of qualifications for people fleeing Russia's invasion of Ukraine (Decree 2022/554, 2022). It provides Member State authorities with guidance and practical advice to ensure a fast, fair and flexible recognition process (Figure 3).

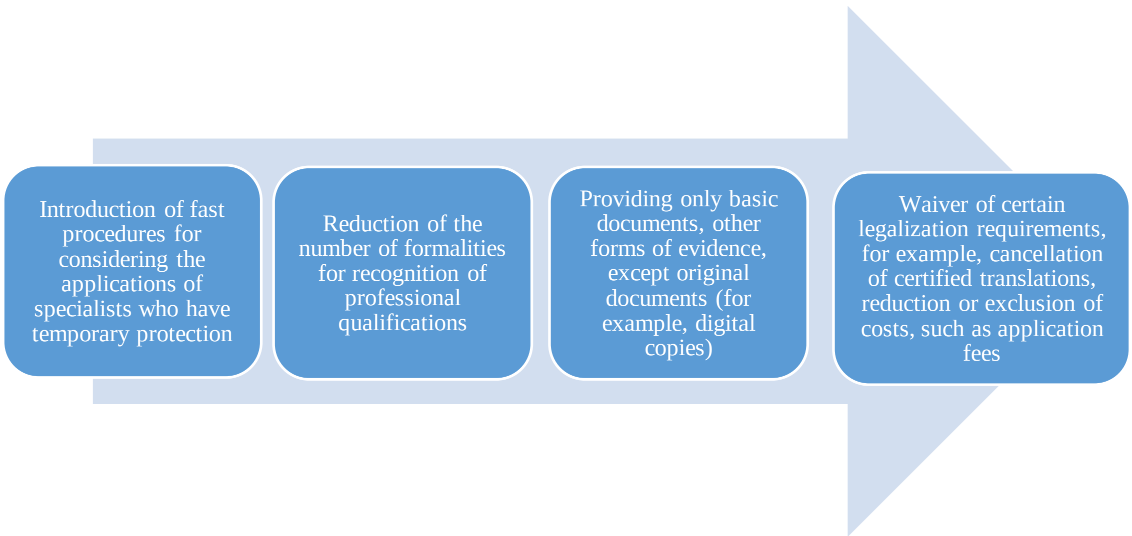


Figure 3. Guidelines for the recognition of qualifications for people fleeing Russia's invasion of Ukraine (generalized by the author)

Important assistance is provided by the ENIC-NARIC network (European Network of Information Centres in the European Region — National Academic Recognition Information Centres in the European Union). ENIC-NARIC is engaged in the development of projects, tools to facilitate recognition, encourage mobility and increase the internationalization of higher education. The web page of the network has collected links to Ukrainian resources that can help specialists in the evaluation of diplomas of higher educational institutions (ENIC-NARIC, 2022). Schools with Ukrainian refugee children are recommended to employ persons benefiting from temporary protection who have received a professional qualification as a teacher in Ukraine (Decree 2022/554, 2022). The need to provide language training for specialist teachers, sending Ukrainian-speaking teachers to schools with additional opportunities and a shortage of teachers is also noted. It is also indicated The need to change the contracts of teachers with professional qualifications obtained in Ukraine was emphasized. If they were temporarily employed as teaching assistants in host countries, they should have obtained qualified teacher contracts immediately after recognition of their professional qualifications.

The labour relations of teachers in Poland are regulated by the Teachers' Charter (Dziennik Ustaw, 1982). Ukrainians in Poland have the right to get a job under a simplified procedure and receive free medical care. No special work permits are required. It is only necessary to confirm the legality of stay in Poland. Since 2022, a person who does not have Polish citizenship can be hired for the position of assistant teacher specified in Art. 165 of the Education Law (Decree OJ, 2017), (ISAP, 2022). Those teachers should be able to speak and write Polish at a level that allows him/her to provide assistance to the student. They may not know Polish or know it only at a level insufficient for its use in science. Citizens of Ukraine may also be employed at the school under Art. 15 of the Education Law. In this case, the working person does not have to meet the qualification requirements. He/she just needs to have the appropriate training, which is evaluated by the school principal. The school principal may consider training appropriate even in the absence of recognized diploma. Citizens of Ukraine may work in public schools or institutions in Poland in accordance with the provisions of the Teacher's Charter (Dziennik Ustaw, 1982). A short-term employment contract (term for 2 years) will be the basis for employment at school. After working at the school for at least 2 years, receiving at least a good evaluation of the teacher's work, the employment contract can be concluded for an indefinite period. From September 1, 2022, a teacher who is qualified as a contract teacher is considered a beginner teacher for the purpose of salary determination. Usually, a novice teacher undergoes 3 years and 9 months of training for the teaching profession with the help of a mentor. Obtaining at least a good grade in the last course of training for the profession is one of the conditions for awarding the degree of appointed teacher. To obtain the degree of a certified teacher, it is necessary to work in a school for at least 5 years and 9 months. The average salary of a teacher who will undergo training for the teaching profession will be 120% of the base amount established for teachers annually in the Budget Law. According to Art. 64 of the Charter (Dziennik Ustaw, 1982), a teacher working in a school is granted annual leave in the amount corresponding to the period and during holidays. Teachers who work in schools that do not have school holidays are entitled to a leave of 35 working days.

Diplomas obtained in Ukraine before June 20, 2006 are considered equivalent to their Polish counterparts. Confirmation of the recognition of diploma equivalence can be obtained by contacting the Polish National Agency for Academic Exchanges for the issuance of a name certificate or a general opinion on the diploma. Diplomas obtained in Ukraine after June 20, 2006 require confirmation of their equivalence to the Polish version through nostrification. The Polish National Agency for Academic Exchange (NAWA) operates as an ENIC-NARIC centre, and is responsible for the recognition of foreign higher education qualifications in Poland. The website of the Polish Ministry of Education offers a questionnaire for Ukrainians who want to work, have work experience in the field of education and speak at least a little Polish. Language courses have been announced for such people so that they can quickly teach in Polish or help Polish teachers in the classroom.

The workload in schools and universities is increasing because of the large number of Ukrainian children and students. According to the ZNP trade union, Poland suffers a shortage of 20,000 teachers (Financial Times, 2022). At the same time, the pressure is increasing due to a sharp increase in the number of students, in particular Ukrainian refugees. This creates an opportunity for employment of Ukrainian teachers. For example, in April 2022, an important agreement was signed between the leaders of Warsaw and the Polish Centre for International Aid. It allowed 200 Ukrainian teachers to be employed in Warsaw schools and kindergartens under the UNICEF Cash for Work programme. The European Commission also suggests that member states promote the recruitment of teaching staff who benefit from temporary protection to work in nurseries and kindergartens (Decree 2022/554, 2022). Also, suitable recruitment can take place in informal structures such as play centres. The

Indestructible Ukraine foundation was also established in Poland. With the support of the foundation, a network of Ukrainian schools began to work, employing Ukrainian refugee teachers in the cities of Warsaw, Wroclaw, and Krakow. Working in Poland, you can join a trade union. The employer is obliged to consult with the trade union about disciplinary dismissal, termination of the employment contract of an employee hired for an indefinite period. Counselling is mandatory regarding the intention to terminate work or offers of remuneration on less favourable terms.

To work as a science teacher in Poland, it is necessary to pass a competition in accordance with Art. 119 of the Law on Higher Education and Science (Decree OJ, 2018). A refugee from Ukraine, who worked as a science teacher at a Ukrainian university, can be admitted to a state university in Poland without a competition. This is allowed under Art. 46 of the Polish Act on Assistance to Ukrainian Citizens in connection with the armed conflict on the territory of this country (ISAP, 2022). The state higher education institution establishes the remuneration procedure in the collective labour agreement or wage regulations. However, as in the school education sector, the autonomy in determining wages is limited. National legislation establishes detailed payment mechanisms. The salary of an employee of a state university consists of standard and variable parts. Standard components are base salary and seniority bonus. The variable components include service allowance and task allowance, payment of additional teaching hours and overtime hours. These components include an allowance for work in harmful, difficult conditions, other allowances, if they are provided for by a collective agreement, as well as wage regulations. Additional components of remuneration for university employees are also defined, such as anniversary bonuses, end-of-year supplement, chancellor’s bonus, and one-time pension bonus (Decree OJ, 2018).

As of December 30, 2022, the Ministry of Education and Science of Ukraine reported more than 2,600 damaged and 406 completely destroyed educational institutions in the country since February 24, 2022 (Ukrinform, 2022). Many education workers became unemployed. Examples of the number of vacancies and unemployed persons as of January 1, 2023 in the field of education in Ukraine indicate a significant number of applicants for one vacancy (State Employment Center of Ukraine, 2023) - Table 1.

Table 1.
The number of vacancies and unemployed persons as of January 1, 2023 in the field of education.

	Number of vacancies, units	Number of unemployed persons	Number of applicants per vacancy, persons
Teacher of general secondary education institution	489	1,128	2.3
Preschool teacher	102	756	7.4
Teacher of primary grades of general secondary education institution	31	470	15
Teacher assistant	60	227	3.7

Source: according to the State Employment Center of Ukraine, 2023

In general, as of January 1, 2023, there were 2,267 vacancies in the field of education in Ukraine, and the number of unemployed persons was 5,760 (State Employment Center of Ukraine, 2023). In other words, the number of applicants per vacancy equals an average of 3 people.

Martial law was introduced in Ukraine in February 2022 as a result of Russian aggression (Decree No. 64/2022, 2023), which led to the transformation of labour relations. Accordingly, it became possible to limit the human and citizen’s constitutional rights and freedom (Decree No. 389-VIII, 2022). Restrictions are imposed on the exercise of the right to work, the right of workers to strike to protect their economic and social interests. The legislation of Ukraine defines the peculiarities of the regulation of labour relations, including the field of education, during the period of martial law (Decree 2136-IX, 2022).

According to Art. 23 of the Law of Ukraine On Mobilization Training and Mobilization (Decree No. 3543-XII, 2022), employees of higher, professional pre-higher, secondary, professional (vocational-technical) education institutions are not subject to conscription. They must work at the main place of work at a rate of at least 0.75. The following changes apply to education workers who were forced to change their place of residence under martial law. According to Art. 57-1 of the Law of Ukraine On Education, they are guaranteed the teleworking, holding a position of employment, average earnings, other payments, provision of a place of residence (Decree No. 2145-VIII, 2023).

The provisions of the Labour Code of Ukraine (Decree No. 322-VIII, 2023), to which the necessary changes have been made (Decree No. 2352-IX, 2022), are applied to the regulation of labour relations. The changes were made to Art. 23 of the Labour Code of Ukraine regarding the mandatory informing of employees who work under a fixed-term employment contract about the availability of vacancies. These vacancies may include the possibility of concluding an indefinite employment contract. In the field of education, special attention in this matter can be paid to employees of retirement age. Art. 29 of the Labour Code of Ukraine contains new provisions on mandatory informing the worker about working conditions before starting work. Attention is paid to the place of work, the availability of the necessary tools for work, the presence of dangerous and harmful production factors at the workplace. Information is also provided regarding the working hours and rest time, and the duration of vacation. It is also necessary to inform about the terms and amount of wage, procedures and terms of notice of termination of the employment contract, and much more. Special attention is paid to the procedure of alternative (remote) provision of the necessary documents.

Changes were also made to Art. 36 of the Labour Code of Ukraine regarding the grounds for termination of an employment contract. The article is supplemented with cases that lead to the termination of the employment contract: the death of the employer, the employee, recognition of such a natural person as missing or declared dead. The reason for termination of the employment contract may also be the employee's absence from work and information about the reasons for such absence for more than four months in a row. This will not be considered a dismissal for absenteeism, as the reasons for the employee's absence have not been established. The relevant article also contains the procedure for remote submission of the necessary documents to specialized services.

Amendments were also made to Art. 41 of the Labour Code of Ukraine. Additional grounds for terminating the employment contract at the employer's initiative in the event of the impossibility of providing the employee with a job as a result of hostilities have been clarified. Attention is also paid to the termination of the employment contract at the employer's initiative without the prior consent of the elected body of the primary trade union organization (trade union representative). The contract may also be terminated in case of impossibility of providing the employee with a job as a result of hostilities (Art. 43-1 of Decree No. 322-VIII, 2023).

According to Art. 47 of the Labour Code of Ukraine, the dismissal procedure currently includes the obligation to issue the necessary copies of orders and salary calculations to the employee on the day of dismissal. The employee must be notified 10 calendar days in advance about the dismissal because of the impossibility of providing him/her with work because of the results of hostilities (Article 49-2 of Decree No. 322-VIII, 2023).

In the Labour Code of Ukraine, the length of service, which gives the right to annual basic leave (Article 82 of Decree No. 322-VIII, 2023), payment of monetary compensation in the event of the death of an employee (Article 83 of Decree No. 322-VIII, 2023), the concept of combining jobs (Article 102-1 of Decree No. 322-VIII, 2023), has been corrected. For example, Art. 82 of the Labour Code of Ukraine emphasizes that the length of service, which gives the right to annual basic leave, includes the time when the employee actually did not work. But in accordance with the legislation, the place of employment (position) and salary were preserved in full or in part. This does not apply to employees called up for term military service, military service by conscription of officers, military service by conscription during mobilization. This rule does not apply to employees called up for a special period, military service upon the conscripting of reservists in a special period. They also include employees accepted for military service under a contract, by concluding a new contract for military service. Wages to employees for the entire vacation period are paid before the vacation starts, unless otherwise stipulated by the labour or collective agreement (Article 115 of of Decree No. 322-VIII, 2023). The terms of payment upon dismissal (Article 116 of of Decree No. 322-VIII, 2023), liability for delay of payment upon dismissal (Article 117 of of Decree No. 322-VIII, 2023), appeal to court for resolution of labour disputes (Article 233 of of Decree No. 322-VIII, 2023) have been adjusted.

Art. 12 of the Law of Ukraine On the Organization of Labour Relations under Martial Law (Decree 2136-IX, 2022) includes possible time limits (24 calendar days) or refusal to grant annual leave. Educational institutions may continue to grant annual leave lasting more than 24 calendar days. The legal duration of vacations for teaching staff is currently 42 or 56 calendar days. Such vacations should be granted automatically, with corresponding recalculations of their duration if necessary. The employer (the head of the educational institution) has the right to limit the duration of the employee's vacation in the current year. But the employer shall issue an appropriate order, justify the limitation of leave in the current year, and familiarize the employee with the order. Unused annual leave days during the period of martial law can be used after the termination or cancellation of martial law. This article contains provisions on the granting of leave without pay for a duration of no more than 90 calendar days. In this case, the time spent on vacation is not included in the length of service, which gives the right to annual basic vacation. This provision applies to workers who have moved outside the territory of Ukraine or acquired the status of internally displaced persons. The provision of Art. 13 (Decree 2136-IX, 2022) regarding the suspension of the employment contract in connection with armed aggression against Ukraine is also important. The main condition for the termination of the employment contract is the absolute impossibility of the employer providing and the employee performing the relevant work. And these two conditions must be met at the same time. If the employee is willing and able to perform work or the employer is able to provide work, it is illegal to suspend the employment contract. Other changes in the legislation concern, for example, the peculiarities of concluding and terminating an employment contract under martial law, personnel record-keeping and archival storage of personnel documents (Decree 2136-IX, 2022).

The implementation of labour relations in the field of education in the conditions of the military conflict in Ukraine depends on the level of awareness. As of December 30, 2022, Ukraine has organized, for example, advanced training for more than 500 vocational education teachers. The issues of implementing a gender approach in the professional education system, conflict management techniques, the basics of e-learning, mine safety and the consequences of war are explained (Ministry of Education and Science of Ukraine, 2022). A lot has been done for distance learning. A total of 50 thousand Chromebooks were delivered to Ukraine under the agreements of the Ministry of Education and Science of Ukraine, the Ministry of Digital Transformation of Ukraine with Google and UNESCO. They were used to meet the needs of Ukrainian teaching staff (Ministry of Education and Science of Ukraine, 2022).

Discussion

It was established that full implementation of the idea of human rights is necessary in the conditions of military conflicts and the introduced martial law. Restrictions on the rights of individuals, legal entities and non-residents should be allowed only within the necessary limits (Prytyka et al., 2022). Human resources, effective communication between the state, business and citizens acquire special value (Mashkov et al., 2022).

The Russian invasion of Ukraine in 2022 demonstrated Europe's ability and willingness to accept the international refugee protection system. This reaction of the European public was influenced by symbolic threat, collective consciousness and ethnicity (De Coninck, 2022). Specific recommendations were offered in the situation with labour relations in the field of education. They can be adapted to real and current circumstances at the local, regional and national levels (Ociepa-Kicińska & Gorzałczyńska-Koczkodaj, 2022).

It can be stated that the integration of refugees into the labour market can be significantly facilitated if legal and planning security is quickly ensured. This can be implemented, among other things, through longer residence permits and permanent residence prospects (Brücker et al., 2022).

It was established that Poland became the main destination of Ukrainian refugees after the beginning of the Russian invasion of Ukraine. The place of residence of educational refugees in Poland is determined by three main factors, which are partly related to each other. These include the aid related to accommodation and employment, the availability and cost of accommodation, employment opportunities in their field (Kopeć, 2022). An innovative approach, such as promoting the employment of Ukrainian citizens as teaching assistants in Poland, can be an economical and pragmatic solution (Bird & Amaglobeli, 2022).

It can be concluded that legislative initiatives regarding labour relations related to the use of teleworking contribute to the development of an effective system of providing educational services during military conflicts. Educators can offer collaborative and supportive learning services to students using online platforms without worrying about their own and students' safety (Rajab, 2018). According to the researcher, this is an important component of complying with the labour protection requirements.

It can be concluded that supporting research and teaching staff who remain in Ukraine can help in the current situation and prevent a potential break with the world scientific community. Appropriate labour cooperation, training and data sharing should be expanded (Chhugani et al., 2022). Many conferences are now held in a hybrid format, allowing both in-person and remote attendance (Wu et al., 2022). Scientific communities of different countries can help by cancelling registration fees for Ukrainians. This will allow them to participate in international scientific life without leaving the country. Organizations that hold scientific and pedagogical conferences can waive the fee for the virtual participation of scientists/researchers who stay in Ukraine (Chhugani et al., 2022).

It can be stated that there are positive components of the legal regulation of labour relations in the field of education under martial law in Ukraine. Current labour legislation is gradually being adapted to modern labour relations through numerous changes and additions (Bortnyk, 2022b). The optimization of labour legislation in Ukraine led to the important formation of a method of cooperation between the employee and the employer under martial law. This situation can contribute to the minimization of the possible occurrence of labour disputes, which may appear due to legislative shortcomings in regulating labour relations (Andrushko, 2022). According to researchers, this optimization provided the necessary degree of flexibility of labour relations, which employers need during martial law.

Conclusions

Each EU country adopts in its legislation changes on labour relations regarding refugee education workers with certain differences. The Polish government has introduced new immigration measures for Ukrainian citizens who are leaving their country because of the Russian invasion. Urgent measures aimed at facilitating Ukrainian refugees to obtain the right to work in the field of education were also introduced. Poland's experience indicates that the countries which hosted the largest number of Ukrainian refugee children may have problems with providing a sufficient number of teachers. Besides, not all teachers may be familiar with teaching methods for children who speak different languages. In this regard, the necessary legislative initiatives are being developed in Poland to implement the labour relations of Ukrainian education workers.

Poland has a bank of job offers for preschool, secondary and higher education workers from Ukraine. People who received qualifications for work in education in Ukraine can work in this field in Poland. They must have their diplomas recognized. NAWA, the Polish National Agency for Academic Exchange, operates as an ENIC-NARIC centre, and is responsible for the recognition of foreign higher education qualifications in Poland. In case of employment as a teacher's assistant or a teacher, the same requirements will apply to citizens of Ukraine and citizens of Poland. The functioning of Ukrainian schools has also started. Teachers of higher educational institutions of Ukraine can get a job in Polish universities as science teachers without holding a competition. Polish legislative initiatives regarding the improvement of labour relations in the field of education during the military conflict in Ukraine are worth noting. They can serve as an example for similar implementation in other refugee-hosting countries.

In Ukraine, legislative changes were made regarding the regulation of labour relations in the field of education under martial law. Changes were introduced regarding the postponement of conscription for military service during mobilization, the terms of the employment contract, the employer's obligations before the employee before the employee's work under the employment contract. Legislative changes were also made regarding the grounds for suspension and termination of the employment contract, the procedure for dismissal of employees and settlement with them. The calculations of length of service, which gives the right to annual leave, payment of part-time work, terms of salary payment were adjusted. Attention is paid to issues of settlement upon dismissal, responsibility for delay of settlement upon dismissal, and other necessary measures. The post-war adaptation of labour relations in the field of education in Ukraine will be the object of further research.

Bibliographic references

Andrade, M., Sato, L., & Hammad, M. (2021). Improving Social Protection for Migrants, Refugees and Asylum Seekers in Egypt: An Overview of International Practices. Research Report No. 57. International Policy Centre for Inclusive Growth (IPC-IG). Brasilia. Recovered from https://acortar.link/JDFEGS

Andrushko, A. (2022). Labor relations during martial law. Scientific Bulletin of the Uzhhorod National University. Series: Law, 1(73). http://dx.doi.org/10.24144/2307-3322.2022.73.24

Arendt, J.N. (2022). Labor market effects of a work-first policy for refugees. Journal of Population Economics, 35, 169–196. https://doi.org/10.1007/s00148-020-00808-z

Bird, N., & Amaglobeli, D. (2022). Policies to Address the Refugee Crisis in Europe Related to Russia's Invasion of Ukraine. International Monetary Fund. Recovered from https://acortar.link/Y98LN7

Bortnyk, S. M. (2022a). The current state of legal regulation of labor relations in Ukraine. Bulletin of Kharkiv National University of Internal Affairs, 98(3), 58-66. https://doi.org/10.32631/v.2022.3.05

Bortnyk, S. M. (2022b). To the question on the peculiarities of the legal regulation of labor relations in the martial law conditions. Bulletin of Kharkiv National University of Internal Affairs, 97(2), 106-117. https://doi.org/10.32631/v.2022.2.09

Brücker, H., Goßner, L., Hauptmann, A., Jaschke, P., Kassam, K., Kosyakova, Y., & Stepanok, I. (2022). The Consequences of the Ukraine War for Migration and Integration: A First Assessment. IAB research report, no. 2/2022, Institute for Labor Market and Vocational Research (IAB), Nuremberg. https://doi.org/10.48720/IAB.FB.2202

Chhugani, K., Frolova, A., Salyha, Y., Fiscutean, A., Zlenko, O., Reinsone, S., ... & Mangul, S. (2022). Remote opportunities for scholars in Ukraine. Science, 378(6626), 1285–1286. https://doi.org/10.1126/science.adg0797

De Coninck, D. (2022). The Refugee Paradox During Wartime in Europe: How Ukrainian and Afghan Refugees are (not) Alike. International Migration Review. https://doi.org/10.1177/01979183221116874

Decree 2022/554. Commission Recommendation (EU) on the recognition of qualifications for people fleeing Russia's invasion of Ukraine. Access to European Union law of 05.04.2022. Recovered from http://data.europa.eu/eli/reco/2022/554/oj

Decree 2136-IX. On the organization of labor relations under martial law. The Verkhovna Rada of Ukraine, from 19.07.2022. Recovered from https://zakon.rada.gov.ua/laws/show/2136-20#Text

Decree No. 2145-VIII. On Education. The Verkhovna Rada of Ukraine, from 01.01.2023. Recovered from https://zakon.rada.gov.ua/laws/show/2145-19#Text

Decree No. 2352-IX. On Amendments to Certain Legislative Acts of Ukraine on Optimizing Labor Relations. The Verkhovna Rada of Ukraine, from 01.07.2022. Recovered from https://zakon.rada.gov.ua/laws/show/2352-IX#Text

Decree No. 322-VIII. The Labour Code of Ukraine. The Verkhovna Rada of Ukraine, from 27.01.2023. Recovered from https://zakon.rada.gov.ua/laws/show/322-08#Textвязковості

Decree No. 3543-XII. About mobilization training and mobilization. The Verkhovna Rada of Ukraine, from 04.12.2022. Recovered from https://zakon.rada.gov.ua/laws/show/3543-12#Text

Decree No. 389-VIII. On the legal regime of martial law. The Verkhovna Rada of Ukraine, from 29.09.2022. Recovered from https://zakon.rada.gov.ua/laws/show/389-19#Text

Decree No. 64/2022. On the introduction of martial law in Ukraine. The Verkhovna Rada of Ukraine, from 14.02.2023. Recovered from https://zakon.rada.gov.ua/laws/show/64/2022#Text

Decree DO, 2017. Education Law. Article 59. Polish Law of December 14, 2016. Retrieved from https://www.prawo.vulcan.edu.pl/przegdok.asp?qdatprz=akt&qplikid=4186

Decree OJ 2018 item 1668. Law on higher education and science. Polish Act of 20.07.2018. Recovered from https://www.dziennikustaw.gov.pl/D2018000166801.pdf

Duszczyk, M., & Kaczmarczyk, P. (2022). The War in Ukraine and Migration to Poland: Outlook and Challenges. Intereconomics, 57, 164–170. https://doi.org/10.1007/s10272-022-1053-6

Dziennik Ustaw. (1982) Act promulgating the Teachers' Charter. Recovered from https://www.ilo.org/dyn/natlex/natlex4.detail?p_isn=10619&p_lang=e

ENIC-NARIC. (2022). Recognition of Ukrainian Qualifications. Recovered from https://www.enic-naric.net/page-ukraine-2022

European Commission (2022) Policy guidance on supporting inclusion of Ukrainian refugees in education. Version 1. Recovered from https://acortar.link/MqWQFu

Financial Times. (2022). Wanted: tens of thousands of teachers to staff Europe's schools. Recovered from https://www.ft.com/content/116d8c88-aa3f-426f-aeb8-c0a0325c43bb

ISAP. (2022). Polish Act of March 12, 2022 on assistance to Ukrainian citizens in connection with the armed conflict on the territory of this state. OJ 2022 pos. 583. Recovered from https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20220000583

Kopeć, K. (2022). Migration of Ukrainian citizens to Poland caused by Russia's invasion of Ukraine in 2022. Journal of Geography, Politics and Society, 12(4), 42–51. https://doi.org/10.26881/jpgs.2022.4.05

Levy, B.S., & Leaning, J. (2022). Russia's War in Ukraine - The Devastation of Health and Human Rights. The New England Journal of Medicine. 387, 102-105. https://doi.org/10.1056/NEJMp2207415

Mashkov, K.E., Gornostay, O.B., & Tovt, T.O. (2022). Peculiarities of employment relations under conditionsof maritime: Regulatory regulation. Actual Problems of Domestic Jurisprudence, 1. https://doi.org/10.32782/392253

Ministry of Education and Science of Ukraine. (2022). 10 key achievements in the field of professional education for 2022. Recovered from https://acortar.link/7zzByD

Ociepa-Kicińska, E., & Gorzałczyńska-Koczkodaj, M. (2022). Forms of aid provided to refugees of the 2022 Russia-Ukraine War: The case of Poland. International journal of environmental research and public health, 19(12), 7085. https://doi.org/10.3390/ijerph19127085

Prytyka, Yu., Izarova, I., Maliarchuk, L., & Terekh, O. (2022). Legal challenges for Ukraine under martial law: Protection of civil, property and labour rights, right to a fair trial, and enforcement of decisions. Access to Justice in Eastern Europe, 3(15), 219–238. Doi: 10.33327/AJEE-18-5.2-n000329

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. http://dx.doi.org/10.1109/ACCESS.2018.2800164

Shaw, S.A., Funk, M., Garlock, E. S., & Arok, A. (2021). Understanding Successful Refugee Resettlement in the US. Journal of Refugee Studies, 34, 4034–4052. https://doi.org/10.1093/jrs/feaa137

State Employment Center of Ukraine. (2023). Analytical and statistical information. The number of vacancies and the number of registered unemployed by type of economic activity in 2022 and on January 1, 2023. Recovered from https://www.dcz.gov.ua/analitics/69

Teremetskyi, V., & Vasyliev, S. (2022). Martial law: Grounds for putting into operation in Ukraine. ScienceRise: Juridical Science, 2(20), 4-7. https://doi.org/10.15587/2523-4153.2022.256829

Ukrinform. (2022). The russians damaged 2,600 educational institutions in Ukraine, and destroyed 406. Recovered from https://acortar.link/lVqYl1

Wu, J., Rajesh, A., Huang, Y.N., Chhugani, K., Acharya, R., Peng, K., Johnson, R. D., Fiscutean, A., Robles-Espinoza, C.D., De La Vega, F.M., Bao, R., & Mangul, S. (2022). Virtual meetings promise to eliminate geographical and administrative barriers and increase accessibility, diversity and inclusivity. Nature Biotechnology, 40(1), 133–137. https://doi.org/10.1038/s41587-021-01176-z

DOI: https://doi.org/10.34069/AI/2023.63.03.25
How to Cite:
Boichuk, O., Lyebyedyeva, Y., Stadnyk, M., Mishchuk, A., & Shcherbin, L. (2023). Effectiveness of virtual space in the socialization process of teenagers (under martial law). *Amazonia Investiga*, *12*(63), 266-276. https://doi.org/10.34069/AI/2023.63.03.25

Effectiveness of virtual space in the socialization process of teenagers (under martial law)

Ефективність віртуального простору у процесі соціалізації підлітків (в умовах воєнного стану)

Received: March 13, 2023 Accepted: April 20, 2023

Written by:
Oleh Boichuk[1]
https://orcid.org/0000-0002-9331-8039
Yuliya Lyebyedyeva[2]
https://orcid.org/0000-0003-0628-0309
Mykola Stadnyk[3]
https://orcid.org/0000-0002-4264-8054
Andrii Mishchuk[4]
https://orcid.org/0000-0002-2585-7110
Liliia Shcherbin[5]
https://orcid.org/0000-0002-4456-6597

Abstract

The aim of the research is to study the impact of virtual space on adolescent socialization during the war by analysing the mechanisms of value formation, attitude to war, national identity and other aspects of socialization. The research involved such methods as expert evaluation, questionnaire survey, sociometry, correlation and regression analysis, as well as factor analysis using the maximum likelihood method. The methods of mathematical statistics were used. It was found that 75% of students use social networks every day, and 25% — several times a week. Instagram is the most popular social network among students, which is used by 65% of respondents, followed by Facebook with 30%, and TikTok with 20%. In general, the results of the study showed that the use of virtual space can have both positive and negative consequences for adolescents. These effects may include increased socialization and life satisfaction, but may also include the risk of developing bad habits and involvement in crime. It is important to conduct further research to understand the mechanisms of influence of virtual worlds on adolescent

Анотація

Мета. Дослідження впливу віртуального простору на соціалізацію підлітків у воєнний період шляхом аналізу механізмів формування цінностей, ставлення до війни, національної ідентичності та інших аспектів соціалізації. У дослідженні використано такі методи як, експертна оцінка, анкетування, соціометрія, кореляційно-регресивний аналіз та факторний аналіз методом максимальних варіантів. Також, було використано методи математичної статистики. Було встановлено, що 75% студентів використовують соціальні мережі щодня, а 25% – кілька разів на тиждень. Найбільш популярною соціальною мережею серед студентів є Instagram, яким користується 65% опитаних, на другому місці знаходиться Facebook з 30%, а на третьому місці – TikTok з 20%. Загалом, результати дослідження показали, що використання віртуального простору може мати як позитивні, так і негативні наслідки для підлітків. Ці наслідки можуть включати збільшення соціалізації та підвищення рівня задоволеності життя, але також можуть включати ризик появи

[1] Postgraduate Student, Pereyaslav-Khmelnitsky State Pedagogical University, Pereyaslav-Khmelnitsky, Ukraine.
[2] PhD in Historical Sciences, Scientific Secretary, Research Institute of Ukrainian Studies, Kyiv, Ukraine.
[3] Doctor of Philosophy, Deputy Director for Scientific Work, Research Institute of Ukrainian Studies, Kyiv, Ukraine.
[4] PhD in Historical Sciences, Associate Professor, Department of History of Ukraine and Methods of Teaching History, Faculty of History, Political Science and International Relations, Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine.
[5] PhD in Historical Sciences, Associate Professor, Department of World History, Faculty of History, Political Science and International Relations, Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine.

behaviour and to develop strategies to minimize negative consequences. Future research may be aimed at analysing different types of virtual space and their impact on adolescent socialization.

Keywords: virtualization, social competences, higher education, adolescence, gamification.

шкідливих звичок та стиків зі злочинністю. Важливо проводити подальші дослідження для розуміння механізмів впливу віртуальних світів на поведінку підлітків та розробки стратегій для мінімізації негативних наслідків. Майбутні дослідження можуть бути націлені на аналіз різних видів віртуального простору та їх вплив на соціалізацію підлітків.

Keywords: віртуалізація, соціальні компетенції, вища освіта, підлітковий вік, гейміфікація.

Introduction

Relevance

The study of the effectiveness of virtual space in adolescent socialization under martial law is currently an urgent problem. Virtual space is an indispensable part of the life of adolescents, who actively use Internet resources and social networks to communicate and obtain information. At the same time, the martial law can significantly change the social environment for the adolescents, in particular, reduce opportunities for development and socialization. So, there is a need to study the effectiveness of using virtual space in such conditions (Bystrova et al., 2019).

It is necessary to determine the features of the impact of virtual space on the adolescents' psyche. The features of its use that are reflected in the development of social competences and the emotional sphere should also be identified. This work has great theoretical and practical potential. The study will reveal the possibilities of using virtual space for the development of adolescents' social skills, in particular cooperation, communication and interaction with other people (Varela et al., 2021).

Socialization in adolescence is a special stage in life. The basic values, attitudes towards the world and other people, interests and beliefs that will affect the further development of the personality are being formed. The increasing role of peers is one of the main features of socialization in adolescence. Adolescents begin to interact with each other more actively, thereby forming a more defining social group, which can influence their behaviour (Luchinkina & Yudeeva, 2020).

Socialization in adolescence is also characterized by changes in relations with parents and adults. Adolescents begin to actively show their autonomy and independence, which can lead to conflicts (Crespo Ramos et al., 2022). Such changes can be difficult because they face problems of mutual understanding and interaction (Tatyanchikov, 2022). Besides, adolescents begin to pay more attention to their own appearance and social status, which can affect their attitude to themselves and to other people. These values translated in a social group can entail negative consequences, such as violence, bullying, mental problems, and others (Pavlyk, 2022).

Virtual space is a new environment that affects the adolescents' socialization. Its main feature is providing the opportunity to interact with other people, while being different from traditional forms of interaction (Gómez-Ortiz et al., 2018). First of all, it enables adolescents to interact with the world without leaving home. They can access large volumes of information and resources for a variety of tasks (Ishchenko et al., 2022). Besides, virtual space enables adolescents to come into contact with people from different countries, and communicate with them on different topics (Boccio & Leal, 2023).

Virtual space also has, however, its drawbacks. For example, adolescents may face the lack of non-verbal cues, such as facial expressions and gestures commonly used in traditional interaction. The adolescents may encounter privacy and security issues in the virtual space because of virtual espionage and surveillance of users (Leal et al., 2022).

Unexplored issues

Previous studies provide an insight into the impact of virtual space on the adolescents' socialization, but there are several unexplored issues that can be the subject of further research. The first unexplored issue is the impact of virtual space on the formation of values, attitudes towards war and national identity among adolescents. It is important, as it can highly impact moral and ethical principles of young people, which will determine their behaviour in the future. Another unexplored issue is the relationship between virtual communication and empathy of adolescents. This issue is important for understanding the impact of the virtual environment on the development of social skills and emotional intelligence in young people. The third unexplored issue is the role of virtual space in providing social support to adolescents experiencing stressful situations during martial law. It is important because it opens up new opportunities for creating online communities that provide support and help in difficult situations.

Aim

The aim of the research is to study the impact of virtual space on the adolescents' socialization under martial law by analysing mechanisms of values, attitude to war, national identity, and other aspects of socialization.

Objectives/questions

1. Study the impact of Internet communication on the formation of adolescents' attitudes towards war during a military conflict.
2. Analyse the mechanisms of influence of virtual space on adolescents' national identity during martial law.
3. Study the influence of social networks on adolescents' empathy in adolescents who experience stressful situations during a military conflict.

Literature review

The issue of socialization in virtual space is becoming increasingly popular. The researchers focus on the impact of social networks on socialization and personality development in the digital age. Virtual space has become an important source of information and communication for many young people, and it can influence their social behaviour.

Lian et al., (2020) found that cell phone addiction among Chinese adolescents was driven by a desire to seclude themselves because of psychological stress. The authors found that reflection is a mediating variable between mobile phone addiction and psychological stress. This study confirms the importance of the mediating role between personal factors and the psychological implications of mobile phone addiction.

Malander (2019) examines the relationship between technology-dependent children their perceptions of parenting practices. The author explores different types of technological dependence and their relationship to the children's perception of parenting. Research showed that those parents who regulate the use of technology have less addicted children.

Malo-Cerrato et al., (2018) studied the psychosocial profile of Spanish adolescents with a pathological addiction to social networks. The article describes in detail the dynamics of the use of social networks, its impact on the attitude towards oneself and other people, as well as on the mood. The study showed that adolescents addicted to social networks have feelings of loneliness, fear and anxiety more often.

Martínez et al., (2019) dealt with the influence of parenting methods on the likelihood of traditional bullying and cyberbullying among children and adolescents. The study found that children who receive protection from their parents are less likely to be victims of traditional bullying and cyberbullying. On the contrary, parents who are excessively restrictive of their children's Internet use can produce a negative effect, increasing the likelihood of child's feeling stigmatized on social networks.

Mengyun et al., (2021) identified a relationship between perceptions of parental conflict and problematic social media use among Chinese adolescents. The researchers found that self-esteem and maladaptive cognitive processes played a mediating role in this process.

Steinsbekk et al., (2021) studied the relationship between social media use and self-assessment of the appearance from childhood to adolescence. Research found that frequent use of social media has a negative effect on self-esteem in adolescence, especially among girls.

Verheijen et al., (2021) described the relationship between adolescent use of video games and aggression. They found that adolescents who were abused as children are more vulnerable to the effects of violent video games, and are more prone to aggressive behaviour.

Villanueva-Blasco and Serrano-Bernal (2019) study the relationship between the pattern of Internet use, parental control in social networks, and the use of sexting among adolescents. The article examines this relationship in the context of gender differences.

Onoi et al., (2019) examined the role of active tourism in the adolescents' socialization. The study shows the relationship between various forms of active tourism and social adaptation of adolescents.

Du et al., (2021) studied the relationship between games, communication and control mechanisms in virtual environments among children and adolescents. The results of the study indicate that some games can have a positive effect on the development of social and cognitive skills in children and adolescents.

Methods

Research design

The research consists of the following stages:

1. *Research planning (May-June 2022)*: The first stage involved determining research objectives and advancing the hypothesis to be tested. The methods of data collection and analysis were determined, and sampling criteria were established.
2. *Data collection and analysis (September-December 2022)*: The next stage was data collection and analysis. The methods of data collection such as questionnaire survey, observations, and testing were used at this stage. Statistical analysis, content analysis and others were used for data analysis. The respondents were distributed into two groups — Control and Experimental — at this stage with the help of expert analysis of the results of the questionnaire survey.
3. *Drawing conclusions (2023):* data collection and analysis was followed drawing conclusions on the fulfilment of the research objective and the advanced hypothesis. Besides, recommendations for further research and practical applications of the obtained results were proposed.

Sampling

Random selection was applied to form a sample of 200 people who studied at 1st-2nd years of different faculties at the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". This sampling principle avoids distortion of research results, as all students had equal chances to be included in the sample. This approach fulfils several objectives, in particular, it establishes the characteristic features of students' socialization at the initial stages of education, identifies their attitude to war, national identity, and other aspects of socialization. Besides, the sample allows for a comparative analysis between students of different faculties, which can help reveal common and distinctive features of their socialization. Two groups were formed — experimental and control. A total of 100 students were included in the experimental group, who were more involved in the virtual space than the students of the control group (100 people). An expert group consisting of 30 teachers of this higher educational institution.

Methods

1. *The method of expert evaluations*: the application of this method involves the evaluation and analysis of the opinions and experiences of experts who have professional expertise in this area. They can answer questions related to certain aspects of the study.
2. *Questionnaire survey*: the research is conducted by sending questionnaires (Appendix A) to the appropriate audience. The questionnaire contains questions about social adaptation, attitudes towards war, national identity, and other aspects of socialization.
3. *Sociometry*: this method determines the relationships between people and groups. A researcher can use sociometry to study the impact of virtual space on social relations and socialization of adolescents during the military conflict. To analyse the sociometry of the study, it was suggested to fill out a questionnaire with the following questions:

1. How often do you use social networks?
2. Which social network do you use most often?
3. What type of content do you view on social networks most often?
4. Do you attend cultural events, such as exhibitions, concerts, theatre performances?
5. Do you find time for self-development (reading books, watching educational videos, etc.)?
6. Do you participate in volunteer projects?
7. Do you communicate with your classmates outside the educational institution?
8. Do you have friends studying at other faculties?
9. Do you have friends studying at other universities?
10. Do you find a common language with your teachers at extracurricular time?

The questionnaire contains questions that assess various aspects of life: a person's social activity, interests and relationships with others. Questions about social media use and the type of content viewed are valid because they show which social networks and types of content people are most interested in.

Questions about attending cultural events, self-development, and volunteering can provide information about a person's interests and motivations. However, these questions may be more valid if they are made more specific, for example by asking about specific cultural events, books or videos viewed, and specific volunteer projects. Questions about communication with groupmates, friends from other faculties and universities, as well as about communication with teachers at extracurricular time can provide information about a person's social relationships. However, these questions may be less valid because people may respond positively, when in reality their social connections may be limited or absent. The questions can also be more valid if they are specified, for example, asking about specific people with whom they are communicating.

Data analysis

1. *Correlation and regression analysis*. This method is used to study the relationships between two or more variables and determine their nature. This method was used to study the dependence between virtual space and socialization of adolescents during a military conflict.
2. *Factor analysis using the maximum likelihood method* is a statistical method of studying dependencies between variables, which reduces the number of variables by grouping them into factors. This method is widely used in social sciences, medicine, biology and other fields. The maximum likelihood method determines which variables reflect the maximum variance in a data set. The result of factor analysis using the maximum likelihood method is the grouping of variables into factors that explain most of the variance. This method reduces the complexity of the data set, and saves more significant variables for further analysis.
3. Spearman's coefficient, which is found by the formula:

$$P = \frac{6\sum d_i^2}{n(n^2-1)}, \quad (1)$$

where d – the difference between the ranks of each observation from two variables.

Data collection

For the research methods section, data were collected using several methods, including questionnaires, observations, and interviews. Surveys were conducted online and offline among different groups of adolescents who used virtual space during a military conflict. Observations were made on social media platforms, forums and other websites to understand how adolescents interact in the virtual space. Interviews were conducted with some adolescents who had experience of using virtual space in the context of military conflict.

Ethical criteria

The following ethical criteria were observed during the study. Confidentiality of data and identification of survey participants was ensured. The respondents were informed about the aims and methods of the study and gave their voluntary informed consent for participation. All data were stored encrypted with restricted access. The ethical principles, principles of professionalism and academic integrity were complied with at each stage of the research.

Results

Factor analysis was conducted to check the validity of the questionnaire. Table 1 presents the results of the calculations.

Table 1.
Factor analysis of the questionnaire using the maximum likelihood method

Factor	Questions included in the factor
1	1, 2
2	3, 4, 5
3	6, 7, 8
4	9
5	10, 11, 12

Source: created by the authors based on the results of the study

A factor analysis of the questionnaire was carried out using the maximum likelihood method. The questions were divided into five factors, depending the degree of influence on the results of the questionnaire. The first factor included the first and second questions related to the student's faculty and year of study. The second factor included the third, fourth and fifth questions, which were related to the use of social networks and the type of content that the student views. The third factor included the sixth, seventh, and eighth questions related to the experience of participating in online discussions and the impact of social networks on the student's social adaptation and national identity. The fourth factor includes the ninth question, which was about the influence of the news on opinions about the war. The fifth factor included the tenth, eleventh and twelfth questions, which related to national consciousness and identity, as well as the influence of the environment and cultural events on the student's national identity. This analysis revealed the relationship between various aspects of students' lives, and determined the main factors that influence their national identity and social adaptation.

Table 2 contains the questions and answer options of the survey. Besides, the table shows the estimated percentages, which indicate the frequency of responses to each question.

Table 2.
The results of the survey of students of the higher educational institution

Question	Answers	Estimated percentages
1	Faculty 1	30%
	Faculty 2	25%
	Faculty 3	20%
	Faculty 4	15%
	Other	10%
2	1st year	35%
	2nd year	30%
	3rd year	20%
	4th year	10%
	Other	5%
3	Less than an hour	25%
	1-2 hours	40%
	2-3 hours	20%
	3-4 hours	10%
	More than 4 hours	5%
4	Facebook	40%
	Instagram	25%
	TikTok	20%
	Twitter	10%
	Other	5%
5	Photo and video	35%
	News	25%
	Memes	20%
	Music and video clips	10%
	Other	10%
6	Yes	45%
	No	55%
7	Yes	30%
	No	70%
8	Yes	25%
	No	75%
9	Yes	40%
	No	60%
10	Yes	30%
	No	70%
11	Yes	25%
	No	75%
12	Yes	35%
	No	65%

Source: created by the authors based on the survey results

Having analysed the table, several conclusions can be drawn regarding students' attitude to social networks and their influence on students' socialization. In particular, it was found that the most popular use of social networks among students is from 1 to 2 hours a day, and therefore, students do not spend a large amount of time on the Internet. The table shows that more than half of the students use Facebook, which indicates its considerable popularity.

Photo and video materials, as well as musical content are the most popular types of content among students. This indicates that they pay more attention to the visual and audio components of the content than to the text. It was also found that only a third had experience participating in online discussions, which may indicate a low level of student engagement.

Regarding the impact of social networks on social identity, more than half of students believe that social networks do not affect their social adaptation, nor do they help to preserve and strengthen their identity. However, more than half of students believe that national consciousness and identity are important for them, and cultural events can influence their worldview. Next, the Spearman's correlation coefficient was used to estimate the correlation between pairs of variables. Table 3 presents the results.

Table 3.
The results of the analysis of the data obtained during the questionnaire using the Spearman's correlation coefficient

Variables	Spearman's correlation coefficient
Faculty, year of study	-0.195
Time in social networks, Networks	0.165
Content Type, Networks	-0.035
Experience of participation, Influence of SM	0.144
Influence of SM, National identity	0.164
News, War	0.038
Environment, National identity	0.144
Cultural events, National identity	0.219

Source: created by the authors based on the survey results

The analysis of Table 3 found that the most pronounced correlation between cultural events and national identity. The least pronounced correlation is observed between the content type in social networks and attendance of cultural events. However, other correlations may be found depending on the question.

By type of social network, Facebook is the most popular among students, and Twitter is the least popular. Regarding the content type, photos and videos are the most popular among students, while music and video clips are the least popular. It can also be noted that questions 6-12 concern students' scientific life and participation in the university's activities. In particular, questions 6 and 7 concern students' attendance of scientific conferences, questions 8 and 9 - participation in scientific research, and questions 10-12 - acquaintance with teachers and teaching of university courses by students. It was suggested to fill out questionnaires for the sociometry analysis. Table 4 presents the survey results.

Table 4.
Results of sociometry of control and experimental groups

Question	Experimental group	Control group
1	80%	50%
2	30%	20%
3	25%	15%
4	50%	30%
5	60%	40%
6	20%	10%
7	70%	50%
8	40%	20%
9	25%	15%
10	50%	30%

Source: created by the authors based on the survey results

According to the obtained results, it can be concluded that the EG students are more involved in the virtual space than the CG students. They also participate more actively in discussions on social networks, and attend virtual cultural events. These results do not, however, provide a complete picture of the impact of virtual space on students' academic performance, and they need to be supplemented by additional research.

Discussion

The research analysed the results of the questionnaire survey and expert evaluations of the group of respondents. It was noted that the relationship between involvement in virtual space and social behaviour indicators is complex and multifaceted.

Peschansky (2023) determined that virtual space has an impact on the adolescents' consciousness. Additionally, possible factors that influence involvement in virtual space, such as age, gender, social status, and others, as well as their impact on social behaviour were discussed. However, Kremen et al. (2022) point out that virtual space, on the contrary, hinders normal socialization.

Koshova-Kuklishyna and Denisyuk (2022), Slyusarevskyy (2022) and Griva (2022) concluded that the use of Internet technologies has a significant impact on the adolescents' development. In particular, the active use of social networks and games can lead to addiction, as well as become a risk factor for various types of behavioural disorders. On the other hand, using the Internet can become an important socializing tool for adolescents, helping them to keep in touch with friends and meet new people. This is stated in the studies of Escario and Wilkinson (2020) and Díaz-López et al., (2020).

León-Moreno and Musitu-Ferrer (2019) and Gutiérrez & Gleni (2019) indicate that the control of the use of the Internet by parents and teachers is an important factor in reducing the risk of negative consequences from the use of Internet technologies. For example, controlling the time adolescents use the Internet and the content they view can help prevent various types of harmful behaviour.

Despite this, studies have also shown that there are unknown factors that may influence the use of the Internet and its consequences for adolescents. So, it is necessary to conduct additional research in order to study these factors and their influence on the adolescents' behaviour in the virtual space.

The study made a significant theoretical contribution to the understanding of the impact of virtual space on the adolescent socialization during a military conflict. It provided an insight into various mechanisms of influence on the values, attitudes to war, national identity and other aspects of adolescent socialization, which is important for further research in this area. The results of the study can be practically applied in education and the development of programmes for improving the culture of communication on the Internet, maintaining a healthy lifestyle, and preventing the impact of negative aspects of virtual space on adolescents.

The study of the influence of virtual space on adolescent socialization in the context of a military conflict is of great practical importance. The study provides a significant amount of data on the mechanisms of influence on the values, attitudes towards war, national identity, and other aspects of adolescent socialization. They can be useful for developing effective social adaptation programmes for adolescents during military conflicts. Besides, the results of the study can be used to develop appropriate strategies for social support and rehabilitation of adolescents who have become witnesses or victims of military conflicts.

The obtained data may be of interest to researchers in the field of social psychology, especially in the context of adolescent socialization. Moreover, the results may be of interest to teachers engaged in the formation of the national identity of students, military experts studying the impact of military conflicts on socialization, as well as other researchers in the field of social sciences.

The study had a number of limitations. The time for research was limited, which affected the depth of information analysis. There is a possibility of insufficient accuracy or objectivity of answers from respondents. All these limitations can affect the accuracy and reliability of the obtained results. The study was conducted in compliance with all necessary academic and ethical standards to reduce the impact of these limitations.

Conclusions

Relevance. The research provides an insight into the mechanisms of the influence of virtual space on adolescent socialization, which can contribute to the development of effective approaches to the education of the younger generation.

Research findings. The research was conducted with the aim of studying the influence of virtual space on adolescent socialization in the context of a military conflict. It was found that the virtual space has a significant impact on the values, attitudes towards war, national identity, and other aspects of adolescent socialization. The results obtained were compared with previous studies in this area, and the need for further research into the relationship between the virtual world and social behaviour was emphasized.

Applications. The survey results can be applied in various fields, such as education, psychology, sociology, politics, information technology, etc. For example, research data can be used in education to create effective pedagogical methods that will contribute to adolescent socialization during a military conflict.

Prospects for future research. Future research in this area could focus on the interaction between virtual space and socialization in other contexts, for example, in the business or political context. The impact of virtual space on children and adults can also be studied. A detailed analysis of the interaction between various mechanisms of influence on socialization can be carried out.

Bibliographic references

Boccio, C. M., & Leal, W. E. (2023). Does socializing in the virtual world impact victimization in the real world?. Journal of interpersonal violence, 38(3-4), 3756-3776. https://doi.org/10.1177/08862605221109922

Bystrova, T., Tokarskaya, L., & Vukovic, D. (2019). Optimum virtual environment for solving cognitive tasks by individuals with autism spectrum disorders: The questions and methods of design. International Journal of Cognitive Research in Science, Engineering and Education, 7(1), 63-72. https://doi.org/10.5937/ijcrsee1901063B

Crespo Ramos, S., Vázquez Cano, E., & López Meneses, E. (2022). Impact of family communication on Spanish adolescents' dysfunctional behaviour on social networks. Journal of Aggression, Maltreatment & Trauma, 31(7), 942-961. https://doi.org/10.1080/10926771.2022.2043974

Díaz-López, A., Maquilón-Sánchez, J., & Mirete-Ruiz, A. (2020). Maladaptive use of ICT in adolescence: Profiles, supervision and technological stress. Comunicar, 28(64), 29–38. https://doi.org/10.3916/C64-2020-03

Du, Y., Grace, T.D., Jagannath, K., & Salen-Tekinbas, K. (2021). Connected play in virtual worlds: communication and control mechanisms in virtual worlds for children and adolescents. Multimodal Technologies and Interaction, 5(5), 27. https://doi.org/10.3390/mti5050027

Escario, J-J., & Wilkinson, A. (2020). Exploring predictors of online gambling in a nationally representative sample of Spanish adolescents. Computers in Human Behavior, 102, 287–292. https://doi.org/10.1016/j.chb.2019.09.002

Gómez-Ortiz, O., Romera, E.M., Ortega-Ruiz, R., & Del Rey, R. (2018). Parenting practices as risk or preventive factors for adolescent involvement in cyberbullying: Contribution of children and parent gender. International Journal of Environmental Research and Public Health, 15(12), 2664. https://doi.org/10.3390/ijerph15122664

Griva, E. (2022). Alternative assessment: Rethinking the methods of assessment in modern school (21 st century school). New Ukrainian school: Results and prospects: Collection of materials, IV All-Ukrainian scientific and practical conference with international participation, 47. Recovered from https://mdu.in.ua/Nauch/Konf/2022/zbirnik_tez_nush.pdf#page=47

Gutiérrez, W, & Gleni, M. (2019). Clima social familiar y conductas antisociales en adolescentes de una institución educativa. Universidad Nacional Federico Villarreal. Recovered from http://repositorio.unfv.edu.pe/handle/UNFV/3667

Ishchenko, Y., Vdovenko O., Nych, T., Moroz-Rekotova, L., & Arystova, L. (2022). Effectiveness of distance learning in higher educational institutions under martial law. Apuntes Universitarios, 13(1), 348–364. https://doi.org/10.17162/au.v13i1.1332

Koshova-Kuklishyna, L., & Denisyuk, O. (2022). Formation of high school students' communication skills in social networks. In M.P. Vasiliev I.A. Romanov; I.O. Shepliakov M.O. Shtanko (Eds), Modern realities and prospects of social education of personality in various social institutions: Materials of the All-Ukrainian Scientific and Practical Conference (pp. 134-136). Dedicated to the 300th anniversary of the birth of Hryhoriy Savych Skovoroda. Recovered from https://acortar.link/XFtGSu

Kremen, V., Bykov, V., Liashenko, O., Lytvynova, S., Lugovyi, V., Malovanyi, Y., Pinchuk, O., & Topuzov, O. (2022). Scientific and methodological provision of digitalisation of education in Ukraine: Status, problems, prospects. Herald of the National Academy of Educational Sciences of Ukraine, 4(2), 1-49. https://doi.org/10.37472/v.naes.2022.4223

Leal, W. E., Boccio, C. M., & Jackson, D. B. (2022). The interplay between virtual socializing, unstructured socializing, and delinquency. Crime & Delinquency. https://doi.org/10.1177/00111287221083898

León-Moreno, C., & Musitu-Ferrer, D. (2019). Estilos de comunicación familiar, autoconcepto escolar y familiar, y motivación de venganza en adolescentes. European Journal of Investigation in Health, Psychology and Education, 9(1), 51–58. Recovered from https://dialnet.unirioja.es/servlet/articulo?codigo=7109643

Lian, S., Sun, X., Niu, G., Yang, X., Zhou, Z., & Yang, C. (2020). Mobile phone addiction and psychological distress among Chinese adolescents: The mediating role of rumination and moderating role of the capacity to be alone. Journal of Affective Disorders, 279, 701-710. https://doi.org/10.1016/j.jad.2020.10.005

Luchinkina, A., & Yudeeva, T. (2020). Deviant forms of socialization of personality in the internet space. ARPHA Proceedings, 3, 1511-1518. https://doi.org/10.3897/ap.2.e1511

Malander, N. (2019). Adicciones tecnológicas en adolescentes: Relación con la percepción de las prácticas parentales. Drugs and Addictive Behavior, 4(1), 25-45. https://doi.org/10.21501/24631779.2761

Malo-Cerrato, S., Martín-Perpiñá, M., & Viñas-Poch, F. (2018). Excessive use of social networks: Psychosocial profile of Spanish adolescents. Comunicar, 26(56), 101–110. https://doi.org/10.3916/C56-2018-10

Martínez, I., Murgui, S., Garcia, O.F., & Garcia, F. (2019). Parenting in the digital era: Protective and risk parenting styles for traditional bullying and cyberbullying victimization. Computer in Human Behavior, 90, 84–92. https://doi.org/10.1016/j.chb.2018.08.036

Mengyun, W., Quan, X., & Ning, H. (2021). Perceived interparental conflict and problematic social media use among Chinese adolescents: The mediating roles of self-esteem and maladaptive cognition toward social network sites. Addictive Behaviors, 12. https://doi.org/10.1016/j.addbeh.2020.106601

Onoi, M., Mindrigan, V., & Nastas, N. (2019) The Role of active tourism forms on adolescents' socialization. Annals of "Dunarea de Jos" University of Galati. Fascicle XV, Physical Education and Sport Management, 2, 34-39. https://doi.org/10.35219/efms.2019.2.08

Pavlyk, N. (2022). Current problems of the social sphere. In N. Pavlyk (Ed.), Collection of articles of students and teachers, Issue 12. (pp. 1-75). Zhytomyr: Zhytomyr Ivan Franko State University. Recovered from http://eprints.zu.edu.ua/33938/1/АПСС_Вип_12_2022.pdf

Peschansky, D. (2023). The influence of social networks on the content of value orientations in adolescents. (Doctoral dissertation). Izmail State Humanitarian University, Ukraine, Izmayil. Recovered from http://dspace.idgu.edu.ua/jspui/handle/123456789/1889

Slyusarevskyy, M. (2022). The socio-psychological state of Ukrainian society in the conditions of a full-scale Russian invasion: Urgent challenges and responses. Herald of the National Academy of Educational Sciences of Ukraine, 4(1). https://doi.org/10.37472/v.naes.2022.4124

Steinsbekk, S., Wichstrom, L., Stenseng, F., Nesi, J., Wold, B., & Skalická, V. (2021). The impact of social media use on appearance self-esteem from childhood to adolescence – A 3-wave community study. Computers in Human Behavior, 114, 106528. https://doi.org/10.1016/j.chb.2020.106528

Tatyanchikov, A.O. (2022). Cyber socialization of personality in conditions of mixed reality. Odessa: Odesa Law Academy National University, 237-241. Recovered from https://hdl.handle.net/11300/18469

Varela, M.V., Méndez-Lois, M.J., & Barreiro Fernández, F. (2021). Gender-based violence in virtual environments: A look at adolescent reality. Electronic Journal of Research in Educational Psychology, 19(55), 509-532. Recovered from https://cutt.ly/44Rkc4z

Verheijen, G., Burk, W., Stoltz, S., Berg, Y., & Cillesse, A. (2021). A longitudinal social network perspective on adolescents' exposure to violent video games and aggression. Cyberpsychology, Behavior, and Social Networking, 24(1). https://doi.org/10.1089/cyber.2019.0776

Villanueva-Blasco, V., & Serrano-Bernal, S. (2019). Pattern of internet use and parental monitoring of social networks as a predictor of sexting in adolescents: a gender perspective. Revista de Psicología y Educación, 14, 16-26. https://doi.org/10.23923/rpye2019.01.168

Appendix A

We offer a questionnaire with 12 questions for students of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" in the 1st and 2nd years of different faculties:

1. Which faculty do you attend?
2. What is your year of study?
3. How much time do you spend on social networks every day?
4. What social networks do you use?
5. What type of content do you view on social networks most often?
6. Do you have experience participating in online discussions?
7. Do you think that social networks affect your social adaptation?
8. Do you think that social networks help preserve and strengthen national identity?
9. Do you think that the news affects your opinion about the war?
10. Do you feel national consciousness and identity?
11. Do you think that your environment affects your national identity?
12. Do you think that cultural events affect your national identity?

DOI: https://doi.org/10.34069/AI/2023.63.03.26

How to Cite:
Tsumarieva, N., Hryshchenko, M., Merdov, S., Hospodarenko, V., & Kyslenko, D. (2023). The model of training law enforcement officers' readiness for professional self-fulfillment. *Amazonia Investiga*, *12*(63), 277-288. https://doi.org/10.34069/AI/2023.63.03.26

The model of training law enforcement officers' readiness for professional self-fulfillment

Модель підготовки працівників правоохоронних органів до професійного саморозвитку

Received: March 15, 2023 Accepted: April 30, 2023

Written by:
Natalia Tsumarieva[1]
https://orcid.org/0000-0002-4005-0745
Maksym Hryshchenko[2]
https://orcid.org/0000-0002-6516-671X
Stanislav Merdov[3]
https://orcid.org/0000-0001-8816-5384
Volodymyr Hospodarenko[4]
https://orcid.org/0000-0001-9842-0633
Dmytro Kyslenko[5]
https://orcid.org/0000-0001-6929-4236

Abstract

The aim of the study was to determine an effective model of training law enforcement officers' readiness for professional self-fulfillment taking into account the level of their professional training and the demands of society. The research involved the methods of questionnaire survey, expert evaluations and interviews with the use of focus groups. The obtained data were analysed using the methods of mathematical statistics. According to the results of the factor analysis, motivation, support, ability to manage time, recognition of success and relaxation have the greatest impact on readiness for self-fulfilment. Stress, insecurity, self-criticism and attitude to risk have a negative impact on readiness for self- fulfilment. The research gave grounds to conclude that readiness for self- fulfilment depends on various factors, such as the level of stress, insecurity, support, self-criticism, motivation, recognition of success, ability to manage time, independence,

Анотація

Метою дослідження було визначення ефективної моделі підготовки працівників правоохоронних органів до професійного самореалізації з урахуванням рівня їх професійної підготовки та вимог суспільства. Дослідження включало методи опитування за допомогою анкет, експертних оцінок та інтерв'ю з використанням фокус-груп. Отримані дані аналізувалися за допомогою методів математичної статистики. Згідно з результатами факторного аналізу, мотивація, підтримка, здатність керувати часом, визнання успіху та релаксація мають найбільший вплив на готовність до самореалізації. Стрес, невпевненість, самокритика та ставлення до ризику мають негативний вплив на готовність до самореалізації. Дослідження дало підстави вважати, що готовність до самореалізації залежить від різних факторів, таких як рівень стресу, невпевненості, підтримки, самокритики, мотивації, визнання успіху,

[1] PhD of Psychological Sciences, Associate Professor, Social and Humanitarian Disciplines Department, Faculty № 1, Donetsk State University of Internal Affairs, Kropyvnytskyi, Ukraine.
[2] PhD of Law Sciences, District Police Officer, Prevention Sector of Police Department № 2, Kharkiv District Police Department № 2, Main Department of the National Police in Kharkiv Region, Kharkiv, Ukraine.
[3] Senior Lecturer, Department of Special Physical and Premedical Training, Faculty №3, Donetsk State University of Internal Affairs, Kropyvnytskyi, Ukraine.
[4] PhD of Law Sciences, Lecturer, Academic Department of Criminal Law Disciplines, Faculty of Law Training, Law Enforcement, Management and Economics, Kryvyi Rih Education and Scientific Institute of Donetsk State University of Internal Affairs, Kryvyi Rih, Ukraine.
[5] Doctor of Pedagogic Sciences, Professor, Law Enforcement and Anti-Corruption Activities Department, Educational and Scientific Institute of Law. Prince Vladimir the Great Interregional Academy of Personnel Management, Kyiv, Ukraine.

attitude to risk, and relaxation. Further research can help in understanding more precise mechanisms of influence of various factors on readiness for self-fulfilment and personality development.

Keywords: professional education, law enforcement system, national police, training of specialists, professional self-fulfilment.

здатності керувати часом, самостійності, ставлення до ризику та релаксації. Подальше дослідження може допомогти у розумінні більш точних механізмів впливу різних факторів на готовність до самореалізації та розвитку особистості.

Keywords: професійна освіта, система правоохорони, національна поліція, підготовка фахівців, професійна самореалізація.

Introduction

Relevance

The importance of studying the peculiarities of training law enforcement officers' readiness for professional self-fulfilment is increasing. New challenges and threats in the modern world, high-quality professional training of law enforcement officers is one of the main tasks. This issue is urgent for ensuring security and stability in the country.

The model of training readiness for professional self-fulfilment is an important element of professional training in this field. It is a key quality that determines success in the work and career growth of law enforcement officers. The main goal of the model is the development of the employee's personality aimed at professional development. So, the self-development of a law enforcement officer is one of the main components of readiness for professional self-fulfilment, and is an important element in the formation of psychological stability, spirituality and ethics (Anwar et al., 2021).

Various pedagogical technologies and methods are used to achieve this goal. For example, an individual approach to each employee, the creation of conditions for independent work and self-education, the use of modern information and communication technologies, game and training methods, interactive forms of education and many others. An important element of the model is the psychological support of law enforcement officers, which ensures the formation of appropriate personal qualities and competencies, as well as contributes to the preservation of their mental and emotional stability (Boiko & Filonenko, 2021).

One of the key components of readiness for professional self-fulfilment is knowledge and skills in the field of legal regulation of one's own professional activity. That is why the model focuses on the development of legal knowledge and skills. Legal regulation of the activities of law enforcement agencies has a direct impact on the performance of official duties of employees, as well as on ensuring the rights and freedoms of citizens. Therefore, readiness for professional self-fulfilment cannot be complete without proper legal knowledge and skills (Fridman et al., 2019). The development of legal knowledge and skills should be a constant and systematic process in the professional training and further development of law enforcement officers. It is advisable to develop and implement special programmes for legal training and retraining of employees, which will contain the necessary knowledge and practical skills in the field of legal regulation of the activities of law enforcement agencies (Bondarenko et al., 2020a).

It is important to pay attention not only to theoretical aspects, but also to the practical component in the process of training employees to perform official duties. Various forms of training, such as trainings, seminars, practical classes, etc. can be used for this purpose. It is important that the educational process is as much oriented to real situations that law enforcement officers may encounter in everyday practice (Okhrimenko et al., 2020; Ishchenko et al., 2022).

In the process of training law enforcement officers, it is important to assess its effectiveness. Various methods and tools are used for this purpose, for example, testing, questionnaire survey, observing the behaviour of employees in different situations, etc.

The model of training readiness for professional self-fulfilment is an important tool for improving the professional activity of law enforcement officers and improving their competence. The implementation of this model ensures high-quality training and improve professional skills of law enforcement officers (Bondarenko et al., 2020b).

However, it must be remembered that this process is complex and long-term. It requires a certain responsibility and perseverance from employees and their managers. Therefore, it is important to ensure constant monitoring and evaluation of the effectiveness of the implementation of the model, as well as support and stimulation of employees in the process of its implementation.

Unexplored issues

Despite the large number of publications on the topic, there are still a number of unexplored issues. The impact of various factors on self-development has not been studied. The relationship between self-development and happiness has not been analysed. No studies have been conducted on the impact of cultural factors on self-development. Further research on the development of effective methods of self-development and their impact on improving people's quality of life is also required.

Aim

The study was conducted with the aim of determining an effective model of training law enforcement officers' readiness of for professional self-fulfilment, which would take into account the level of their professional training and the demands of society. The aim of the study was to improve the quality of professional training of law enforcement officers and ensure their effective activity in modern conditions. Various approaches to the formation of the readiness of law enforcement officers for self-realization in the professional sphere were considered during the study taking into account the specifics of their professional activity and the demands of society.

Objectives/questions

1. Study the respondents' attitude to readiness for professional self-fulfilment;
2. Study the factors affecting readiness for professional self-fulfilment;
3. Analyse the reasons that prevent the professional self-fulfilment of law enforcement officers.

Literature review

Tverdokhliebova (2020) analysed in detail the issue of professional self-fulfilment of law enforcement officers at the stage of professional training. The article was based on a survey of law enforcement officers. The author found that professional self-fulfilment is important for ensuring effective operation of law enforcement agencies. It was determined that an important component of readiness for professional self-fulfilment is knowledge and skills in the field of legal regulation of one's own professional activity.

The article by Klymenko and Shvets (2023) considered the uniqueness of the value experience of a police officer during professional training and the ways of further development in professional activity. The authors note that valuable experience is a key element in the professional activity of law enforcement officers, as it determines their goals, motivation, and morale. The article identifies the main aspects of the value experience of police officers, in particular, the influence of training on the development of value orientations and the formation of values and a worldview.

Bliznyuk (2021) and analysed the didactic principles of professional training of future law enforcement officers of the Armed Forces of Ukraine with a bachelor's degree. The author studied the theoretical aspects of the formation of the readiness of future law enforcement officers for professional self-realization, in particular, the didactic principles and peculiarities of professional training. The author emphasizes that training readiness for professional self-fulfilment should take into account the requirements of the labour market and the needs of society.

Rustamovich M. A. (2022) analysed the problems of motivation of students of law enforcement majors. The author points out that it is necessary to use innovative technologies that increase interest in learning and develop the personal qualities of future law enforcement officers in order to enhance the professional motivation of students and cadets.

Khlon (2021) dealt with the issues related to increasing the effectiveness of psychological training of law enforcement officers. The author focused on the study of theoretical and practical aspects of making professional and psychological training of law enforcement officers more effective.

An analysis of the article by Ostapovych and Davidova (2022) was carried out. This publication examines the legal and psychological aspects of motivational monitoring of the professional activity of security police officers. The authors consider the issue of ensuring legal protection of the rights and freedoms of citizens that are related to the activities of the security police, as well as the issue of motivating police officers to perform high-quality and effective professional activities.

Anisimov and Antipova (2022) analysed the impact of gender characteristics on the level of physical training of law enforcement officers. The author of the work proved that gender is of great importance for assessing the physical abilities of law enforcement officers and their success in professional activities. In particular, the state of health and level of physical activity of men and women may differ, which in turn affects their physical training.

Karimjonov (2022) dealt with the psychological support of military university cadets. The method of psychological diagnostics and questionnaire survey was used to conduct the research. The author drew attention to the importance of psychological support of military personnel during training and service, in particular, to the support of their mental health.

Okhrimenko et al., (2022) analysed in detail the individual and psychological characteristics of law enforcement officers as a basis for effective psychological selection of personnel for police agencies. The authors emphasized the importance of a psychological approach to the selection of candidates for the positions of law enforcement officers, as it enables increasing the efficiency of policing and preventing cases of professional burnout. The article describes the methods of determining the individual and psychological characteristics of law enforcement officers, which gives grounds to draw objective conclusions about their professional qualities and being qualified for the position.

Bondarenko et al., (2022) conducted a comparative analysis of the level of physical fitness of law enforcement officers in European countries. For this purpose, this indicator was analysed in ten countries, in particular in Ukraine, Poland, Germany, France, Spain and others. The authors of the study used such research methods as the analysis of academic literature and statistical data analysis. The analysis found that the level of physical fitness of law enforcement officers in different countries can differ significantly.

The literature review identified the following unexplored issues:

- Development of a more detailed model of training law enforcement officers' readiness for professional self-fulfilment taking into account modern requirements of innovative development in the field of law enforcement activities;
- Development of effective pedagogical technologies and methods aimed at training readiness of future law enforcement officers for professional self-fulfilment;
- Studying the influence of the use of modern technologies and innovative approaches on the effectiveness of training future law enforcement officers' readiness for professional self-fulfilment.

Methods

Research design

The study consists of three stages, which include various procedures. Table 1 presents the research stages.

Table 1.
Research stages

Research stage	Period	Content
1. Pre-research	January-March 2022	Selection of research methods. Study of literature on the topic of research, analysis of academic publications and statistics. Development of a questionnaire for studying readiness for professional fulfilment (Appendix A).
2. Main	2022	Carrying out the procedure of selecting respondents. Conducting a survey. The formation of two focus groups for further interviews with the help of a group of experts.
3. Final	February- 2023	Conducting an expert assessment of readiness for professional implementation. Statistical analysis of the obtained data. Drawing conclusions.

Source: created by the authors of the research

Sampling

The sample was selected at the Educational and Scientific Institute of Correspondence and Distance Learning of the National Academy of Internal Affairs. The number of respondents at the first stage was 250 people. Such parameters as gender, age, major and year of study were used to determine the formation criteria. The method of stratified random selection was applied to ensure the representativeness of the sample. It is important to ensure the confidentiality and anonymity of participation in the research. For this purpose, personal data protection can be unsured by storing it on a secure server, as well as use coded identifiers for students. An expert group of 30 people was formed from among the teachers of the same educational institution.

Methods

1. *Questionnaire survey*. This method involves filling out a questionnaire that contains questions on the issue under research. Questionnaires were sent to law enforcement officers with a certain level of professional training (*Appendix A*). Respondents' answers help to collect information about the level of readiness for professional self-fulfilment. Questionnaire surveys are an effective method for collecting a large amount of data from many respondents. It is also used to collect data from a large number of regions and localities. Cronbach's alpha for the questionnaire is 0.69, which gives grounds to assert its validity.
2. *The method of expert evaluations* is a method based on the opinions and assessments of experts in a certain field of knowledge. In order to carry out research using this method, it is necessary to identify a group of experts who have a sufficient experience and knowledge for this purpose. It is usually used to obtain estimates of quality, cost, risks and other parameters in the decision-making process. To carry out research using this method, experts may be asked questions or scenarios on which they need to express their opinion or make an assessment. Based on the results of experts' evaluations, data can be collected that give grounds to draw conclusions and make decisions on the issues under research.
3. *Interview*. The aim of interviews with a subgroup of employees who received the highest and lowest scores at the questionnaire survey stage is to clarify the reasons that affect the level of readiness for professional self-fulfilment in this category of law enforcement officers. The interview provides an opportunity to understand what specific factors and circumstances influence the level of this readiness, and what opportunities for self-development are available to employees with different levels of readiness. The results of the interview can be used to improve the research methodology and develop recommendations for increasing the level of readiness for professional self-fulfilment in this category of employees (Dowdall & Singleton, 1989).

Data analysis

Spearman's rank correlation coefficient, which is calculated by the formulae:

$$P = \frac{6\sum d_i^2}{n(n^2-1)}, \quad (1)$$

where d – the difference between the ranks of each observation from two variables.

Cronbach's alpha coefficient characterizes the internal consistency of the test items. The Cronbach's alpha coefficient is calculated by the formula (Skrebets, 2007):

$$\frac{N}{N-1}\left(\frac{\sigma_X^2 - \sum_{i=1}^{N}\sigma_{Y_i}^2}{\sigma_X^2}\right); \quad (2)$$

where σ_X^2 – total test score variance;
$\sigma_{Y_i}^2$ – element *i* variance. Values in the range of 0.7-0.8 are considered satisfactory.

Chi-squared test was calculated by the formulae (Stechenko & Chmyr, 2005):

$x^2 = (f_1 - f_2)^2 / (f_1 + f); (3)$

where f_1 and f_2 are frequencies of compared samples.

Data collection

To collect data, a questionnaire was developed, which consisted of 12 questions about the professional ambitions, motivation for professional development, the ability to plan and achieve set goals, availability of certain resources for achieving success, interest in professional training and practical classes, a certain level of self-esteem, etc. The survey was conducted in written form. Questionnaires were distributed to the participants of the study in person at classes. Respondents had enough time to fill out the questionnaire and submitted it in only after completing it. The survey was anonymous and voluntary. The obtained results were entered into the database and analysed. Statistical data processing methods were used for the analysis.

Ethical criteria

The ethical criterion implies ensuring compliance with academic standards during the research, as well as responsible and safe use of the obtained data. In the context of work on the formation of professional competencies of future law enforcement officers, the ethical criterion means that the research should be conducted taking into account the safety of respondents. The research must also be conducted with due regard to the voluntary participation principle, with the consent of each research participant. Besides, researchers must use only ethical research methods and adhere to the principle of objectivity and non-discrimination.

Results

The answers to the questions of the questionnaire for checking the law enforcement officers' readiness for professional self-fulfilment are given in the table below along with the percentages of the most common answers. Table 2 reflects the answers of law enforcement officers to the questionnaire on readiness for professional self-fulfilment.

Table 2.
Checking law enforcement officers' readiness for professional self-fulfilment

Questions	Answers	Percentage of most common answers
1	Development of professional skills and knowledge	45%
	Increasing the job level	35%
	Obtaining new professional knowledge	20%
2	Knowledge of legislation	40%
	Computer skills	25%
	Communication skills	20%
	Weapon skills	15%
3	Daily	50%
	Once a week	35%
	Once a month	15%
4	Conducting independent research	30%
	Participation in professional trainings	25%
	Reading specialized literature	20%
	Video lessons on professional topics	15%
	Others	10%
5	Ready	55%
	Partly ready	30%
	Not ready	15%
6	Yes	70%
	No	30%
7	Exercise	40%
	Proper nutrition	30%
	Relaxation techniques	20%
	Sleep	10%
8	Positively	60%
	Negatively	40%
9	I clearly share	65%
	I partially share	25%
	I do not share	10%
10	Yes	75%
	No	25%
11	Providing consultations	65%
	I do not provide assistance	35%
12	Salary rewards and promotion	62%
	Obtaining new knowledge and skills	29%
	Work with interesting people	9%

Source: created by the authors of the study based on the obtained results

The results of the survey revealed that the majority of law enforcement officers set professional goals for themselves for the next 5 years. The respondents recognized the most important skills and knowledge for successful professional activity as knowledge of legislation and communication skills. Most employees improve their professional skills and knowledge regularly. They most often use participation in trainings and seminars as methods of improvement. In general, employees consider themselves ready to work in extreme situations. Most of the respondents have experience of participating in professional trainings and seminars. To maintain physical and mental health, they most often use sports and entertainment. The majority of employees have a positive attitude towards the independent solution of professional tasks and initiatives. Different people think about the separation of work and personal life. A minority of respondents perform regular self-assessment of their professional activities. Most employees help others improve their professional skills and knowledge. In the development of a professional career, they recognize the achievement of results and professional growth as the most important criteria.

A sample of 97 participants was created to analyse the results of the student survey. Of them, 46 students received the highest scores, and 51 students took the last place according to the results of the questionnaire. The main goal of the study is to clarify the reasons affecting the level of readiness of these subgroups of students for professional self-fulfilment. On the basis of these data, conclusions and recommendations can be made for further work with these groups, as well as strategies can be developed to increase readiness for professional self-fulfilment.

Additional studies were conducted in order to understand the reasons for obtaining low scores as a result of previous studies of readiness of law enforcement officers for professional self-fulfilment. Table 3 presents the results of an interview conducted by creating a focus group of selected respondents.

Table 3.
Results of focus group interviews of respondents with low indicators of readiness for professional self-fulfilment

Reasons	Percentage	Chi-square value
Lack of understanding of the task or material	12%	7.2
Lack of preparation for the survey	8%	4.8
Misunderstanding of questionnaire questions	7%	4.2
Insufficient knowledge and skills to answer the questions	14%	8.4
Lack of motivation for answers	10%	6
Stress or emotional difficulties affecting cognitive abilities	15%	9
Not enough time to think and answer questions	12%	7.2
Insufficient level of speaking skills	10%	6
Lack of concentration and attention	8%	4.8
Other factors that affect the survey process, such as physical limitations or technical difficulties	4%	2.4

Source: created by the authors of the study based on the obtained results

According to the results of clarifying the reasons for obtaining the lowest scores, the most common reasons are lack of understanding of the task or material, lack of preparation for the survey. Respondents with the lowest scores also indicated stress and emotional difficulties affecting cognitive abilities. The chi-square value gives grounds to conclude that different reasons have different degrees of impact on obtaining the lowest scores, and the most important reasons are lack of understanding of the task or material, lack of preparation for the survey, and misunderstanding of the questionnaire questions.

For the study of obtaining high scores, the main factors that influenced the choice of respondents were clarified. The results the interview conducted by creating a focus group of selected respondents are presented in Table 4.

Table 4.
Results of focus group interviews of respondents with high indicators of readiness for professional self-fulfilment

Reason	Percentage	Chi square
High motivation and interest in the survey topic	22%	18.02
Deep knowledge and skills in the area under study	18%	15.12
Effective time management during the survey	14%	11.32
Excellent understanding of the tasks and questions in the questionnaire	12%	9.72
The ability to formulate answers correctly	10%	8.10
High level of cognitive abilities and speed of thinking	8%	6.48
Reliable technical support and uninterrupted access to the questionnaire	7%	5.67
Absence of stress and emotional difficulties	6%	4.86
Excellent speaking skills	2%	1.62
Absence of external factors influencing the survey process	1%	0.81

Source: created by the authors of the study based on the obtained results

The chi-square value shows that these reasons interact with each other and have quite a strong impact on students getting the highest scores. The most important factors are motivation and interest in the survey topic, as well as deep knowledge and skills in the area under study. However, it is important to note that other factors, such as effective time management, excellent understanding of the task and questionnaire questions, and the ability to formulate answers correctly, also have a significant impact on students obtaining the highest scores.

The table shows that the main reason for students obtaining the lowest scores is lack of understanding of the task or material, which accounts for almost a third of all reasons. The next most important reasons are incorrect understanding of questionnaire questions and lack of knowledge and skills to answer the questions. In general, it can be concluded that problems with understanding the task and the material affect the lowest scores, which may be related to the quality of the teaching, the quality of the materials, or the quality of the students' perception of the material.

Besides, a factor analysis of the impact on the law enforcement officers' readiness for professional self-fulfilment was carried out. Table 5 presents the obtained data.

Table 5.
Results of a factor analysis of the impact on training law enforcement officers' readiness for professional self-fulfilment

Factor	Impact factor
Stress	-0.42
Uncertainty	-0.34
Support	0.67
Self-criticism	-0.29
Motivation	0.74
Recognition of success	0.52
Ability to manage time	0.62
Independence	0.48
Attitude to risk	0.31
Relaxation	0.56

Source: created by the authors of the study based on the obtained results

So, we can conclude that it is important to have support, be motivated, and be able to manage your time effectively in order to improve readiness for self-fulfilment. It is also necessary to have an appropriate attitude towards success, to be independent, and to find time for relaxation. At the same time, stress, uncertainty and self-criticism shall be avoided, as well attention to the attitude to risk shall be paid.

Discussion

The study revealed a number of factors that hinder the professional self-fulfilment of law enforcement officers. They include stress, insecurity, self-criticism and attitude to risk. Their impact is also discussed in the studies of Shvets et al., (2023) and Semenyshyn et al., (2023). These factors are quite common among law enforcement officers, as this profession requires a high level of responsibility and implies stressful situations. Uncertainty and self-criticism may be associated with a sense of responsibility and a lack of support from colleagues or management, as stated in the works of Ponomarenko et al., (2022) and Fedorenko et al., (2020). A significant part of law enforcement officers is prone to self-criticism, which can lead to inefficient work and loss of motivation. Stress is one of the main factors that hinders the professional self-fulfilment of law enforcement officers. They usually deal with difficult situations that can damage to their psyche and health in general. Frequent stressful situations can lead to loss of motivation and low self-esteem, which entails insufficient readiness for professional self-fulfilment. This is evidenced by the studies of Melnyk and Bohaychuk (2022) and Honcharova (2022). At the same time, personal characteristics that contribute to the readiness for professional self-fulfilment were identified, including motivation, time management skills, support, recognition of success, and relaxation. The same is discussed in the studies of Ryu et al., (2020) and Shvets et al., (2020). These characteristics can have a positive effect on law enforcement officers and ensure their successful professional self-fulfilment.

Motivation is a key factor that stimulates employees to achieve success and high results. High motivation can help to resist stressful situations and ensure an adequate level of self-esteem. Time management and relaxation are also important characteristics that help law enforcement officers be productive and efficient in the performance of their duties.

Support and recognition of success are also important factors that help ensure a positive attitude towards work, and increase self-esteem. This is confirmed by Ostapovich et al., (2020) and Kubaienko et al., (2021). Recognition of success can stimulate employees to further development and professional growth, which is important for their self-fulfilment. Support from colleagues and management is also important, as it can help reduce feelings of insecurity and self-criticism.

Therefore, it is important to consider these factors and characteristics when developing programmes and strategies to improve the readiness of law enforcement officers for professional self-fulfilment. To achieve success, it is necessary to create favourable conditions for the development of motivation, the ability to manage time, relaxation and support, as well as recognition of the success of employees. Such conditions can ensure successful professional self-fulfilment.

Theoretical and practical values were established as a result of the conducted research. The theoretical significance is that the peculiarities of professional self-fulfilment of law enforcement officers were revealed, and the factors affecting their readiness for self-development were identified.

The practical significance of the research is that they can be used to improve the readiness of law enforcement officers for professional self-fulfilment. The developed recommendations can be used in work with the personnel of law enforcement agencies, which will improve the efficiency of their work and the quality of providing services to citizens.

Limitations of the study included the limited resources available to conduct the study, as well as the relative complexity of the research topic. The study was conducted only among students of the National Academy of Internal Affairs, which may limit the generalization of the results to other groups of law enforcement officers. There are also possible limitations in terms of the reliability of answers to questionnaires and interviews, depending on the self-esteem and willingness of the respondents to be honest. It is also important to note that this study has a cross-sectional design and is based on self-reporting by respondents, which may lead to a certain degree of subjectivity in the data. Finally, the study did not take into account the possible influence of external factors, such as the political situation, the economic situation, the social situation, which can affect the readiness of employees for professional self-fulfilment.

Conclusions

Relevance

In view of the growing importance of the development of civil society institutions in the modern world, it is necessary to ensure proper training of future law enforcement officers. Moreover, the development of professional competencies and abilities of law enforcement officers is one of the key components of ensuring the effective functioning of state institutions, which emphasizes the relevance of this research topic.

Findings

Based on the conducted research, it can be concluded that there are certain factors that can affect the readiness of law enforcement officers for professional self-fulfilment. In particular, such factors include stress, insecurity, self-criticism, and attitude to risk. On the other hand, it was found that personal characteristics such as support, motivation, ability to manage time, independence and recognition of success can contribute to readiness for professional self-fulfilment. The obtained results indicate that it is important not only to understand the factors that hinder self-fulfilment, but also to develop and maintain personal qualities that will help law enforcement officers achieve their professional goals.

Applications

These studies are an important stage in the development of the theory and practice of improving the professional readiness of law enforcement officers. The results of the research can be used for the further creation of training programmes, and development of personnel in this field.

Prospects for future research

One of the possible directions of research is the study of the impact of the social and psychological climate in the team on the employees' readiness for professional self-fulfilment. It is also possible to consider the influence of motivation on readiness for self-development, as well as to study the role of individual characteristics in the formation of readiness for professional activity. Another possible direction of research can be the analysis of the relationship between the level of readiness for professional self-fulfilment and the professional success of law enforcement officers.

Bibliographic references

Anisimov, D., & Antipova, A. (2022). Gender aspects of physical training of law enforcement officers. Young Scientist, 10(110), 14-16. https://doi.org/10.32839/2304-5809/2022-10-110-3

Anwar, M. S. M., Sergeeva, M. G., & Ragimov, T. S. (2021). Formation of readiness of a future specialist to professional self-improvement. Nuances: Estudos sobre Educação, e021017-e021017. https://doi.org/10.32930/nuances.v32i00.9130

Bliznyuk, V. (2021). Didactic foundations of professional training of future law enforcement officers of the armed forces of Ukraine in terms of earning a bachelor's degree. International Journal of Innovative Technologies in Social Science, 3(31). https://doi.org/10.31435/rsglobal_ijitss/30092021/7686

Boiko, S. M., & Filonenko, V. M. (2021). Psychological preconditions for the implementation of the police officers' coping Behavior in the context of adaptive perfectionism. Law and Security, 3(82), 38-48. https://doi.org/10.32631/pb.2021.3.04

Bondarenko, V. V., Arsenenko, O. A., Korniychuk, Y. M., Bilyk, V. V., & Tykhyi, O. V. (2022). Determination of the level of physical fitness of law enforcement officers in European countries: Comparative analysis. Scientific and pedagogical problems of physical culture, 6(151), 21-25. Retrieved from http://enpuir.npu.edu.ua/handle/123456789/37740

Bondarenko, V., Okhrimenko, I., Tverdokhvalova, I., Mannapova, K., & Prontenko, K. (2020a). Formation of the professionally significant skills and competencies of future police officers during studying at higher educational institutions. The Romanian Journal for Multidimensional Education, 12(3), 246-267, https://doi.org/10.18662/rrem/12.3/320

Bondarenko, V., Okhrimenko, I., Yevdokimova, O., Sydorchuk, N., Dzhezhyk, O., Boichuk, I., Kalashnik, N., Kozlovets, M., Slyusar, V., Pavlenko, V., Biruk, N., Verbovskyi, I., & Bloshchynskyi, I. (2020b). Professional skills and competencies of the future police officers. International Journal of Applied Exercise Physiology, 9(5), 35-43. Retrieved from http://ijaep.com/Journal/vol.9.5.pdf

Dowdall, G. W., & Singleton, R. (1989). Review of Approaches to Social Research, by B. C. Straits, M. N. Straits, & R. J. McAllister. Teaching Sociology, 17(1), 84–85. https://doi.org/10.2307/1317936

Fedorenko, O., Dotsenko, V., Okhrimenko, I., Radchenko, K., & Gorbenko, D. (2020). Coping Behavior of criminal police officers at different stages of professional activity. Broad Research in Artificial Intelligence and Neuroscience, 11(2), 124-146. https://doi.org/10.18662/brain/11.2/78

Fridman, J., Barrett, L. F., Wormwood, J. B., & Quigley, K. S. (2019). Applying the theory of constructed emotion to police decision making. Frontiers in Psychology, 10, 1946. https://doi.org/10.3389/fpsyg.2019.01946

Honcharova, N. (2022). Features of professional and psychological training of law enforcement officers. Psychology and Personality, 1, 165-175. Retrieved from http://psychpersonality.pnpu.edu.ua/article/view/252065

Ishchenko, Y., Vdovenko O., Nych, T., Moroz-Rekotova, L., & Arystova, L. (2022). Effectiveness of distance learning in higher educational institutions under martial law. Apuntes Universitarios, 13(1), 348–364. https://doi.org/10.17162/au.v13i1.1332

Karimjonov, O. A. (2022). Psychological support of cadets of military universities. International Journal of Formal Education, 1(10), 123-126. Retrieved from http://journals.academiczone.net/index.php/ijfe/article/view/338

Khlon, O. M. (2021). Improving the effectiveness of professional and psychological training of law enforcement officers. Scientific bulletin of Kherson State University. Series "Psychological Sciences", 2, 103-109. https://doi.org/10.32999/ksu2312-3206/2021-2-12

Klymenko, I., & Shvets, D. (2023). The uniqueness of the formation of value experience of the police officer in the process of professional training and ways of further growth in professional activities. Science and Education, 2(23), 59-77. https://doi.org/10.15587/978-617-7319-67-1.ch4

Kubaienko, A., Okhrimenko, I., Kryzhanovska, O., Kislitsyna, I., & Hryshchenko, M. (2021). The police competence to ensure the rights and freedoms of citizens in modern society. Cuestiones Políticas, 39(69), 164-181. https://doi.org/10.46398/cuestpol.3969.09

Melnyk, I., & Bohaychuk, V. (2022). Improving the level of physical fitness and self-defense skills of future law enforcement officers in Ukraine. Actual Problems of Jurisprudence, 1, 97-101. https://doi.org/10.35774/app2022.01.097

Okhrimenko, I., Ostapovich, V., Barko, V. V., Barko, V. I., Smirnova, O., Hruzynska, I., & Marchenko, O. (2022). Individual and psychological characteristics of law enforcement officers as a basis for effective psychological selection of personnel for modern police organizations. Broad Research in Artificial Intelligence and Neuroscience, 13(4), 141-162. https://doi.org/10.18662/brain/13.4/380

Okhrimenko, I., Yevdokimova, O., Shvets, D., Pakhomova, N., & Fediy, O. (2020). Police training or police education: View on the matter. International Journal of Applied Exercise Physiology, 9(12), 129-136. Retrieved from http://ijaep.com/Journal/vol.9.12.pdf

Ostapovich, V., Barko, V., Okhrimenko, I., Yevdokimova, O., Ponomarenko, Y., Prontenko, K., Antonova, O., Sydorchuk, N., Sokolovskyi, O., & Bloshchynskyi, I. (2020). Psychological profile of successful criminal police officer. International Journal of Applied Exercise Physiology, 9(3), 120- 133. https://doi.org/10.26655/IJAEP.2020.3.27

Ostapovych, V., & Davidova, O. (2022). Legal and psychological aspects of motivational monitoring of professional activities of security police officers. Scientific Perspectives, 2(20), 408-423. https://doi.org/10.52058/2708-7530-2022-2(20)-408-423

Ponomarenko, Y., Okhrimenko, I., Klymenko, I., Shvets, D., Yevdokimova, O., & Okhrimenko, S. (2022). Peculiarities of decision making by police officers with different levels of professional self-fulfilment. Broad Research in Artificial Intelligence and Neuroscience, 13(2), 328-346. https://doi.org/10.18662/brain/13.2/346

Rustamovich, M. A. (2022). Development of professional motivation of students and cadets of higher educational institutions of law enforcement agencies. Galaxy International Interdisciplinary Research Journal, 10(1), 235-239. Retrieved from https://giirj.com/index.php/giirj/article/view/1006

Ryu, G. W., Yang, Y. S., & Choi, M. (2020). Mediating role of coping style on the relationship between job stress and subjective well-being among Korean police officers. BMC Public Health, 20, 470. https://doi.org/10.1186/s12889-020-08546-3

Semenyshyn, M., Bondarenko, V., & Protsenko, T. (2023). Strategic guidelines for the quality of training of National Police officers in the context of Ukraine's integration into the European educational space. Quality parameters of higher education officers of the National Police in the conditions of imperative human-scale values (pp. 1–24). Kharkiv: PC TECHNOLOGY CENTER. Retrieved from http://dspace.oduvs.edu.ua/handle/123456789/4861

Shvets, D., Yevdokimova, O., & Larionov, S. (2023). Reflection of personality self-organization of future police employees as a condition for the development of psychological resilience. Quality parameters of higher education officers of the National Police in the conditions of imperative human-scale values (pp. 78–91). Kharkiv: PC TECHNOLOGY CENTER. Retrieved from https://dspace.univd.edu.ua/xmlui/handle/123456789/16451

Shvets, D., Yevdokimova, O., Okhrimenko, I., Ponomarenko, Y., Aleksandrov, Y., Okhrimenko, S., & Prontenko, K. (2020). The new police training system: Psychological aspects. Postmodern Openings, 11(1Supl1), 200-217. https://doi.org/10.18662/po/11.1sup1/130

Skrebets, V.O. (2007). Statistical processing of primary materials of psychodiagnostic studies. Kyiv: Slovo Publishing House. (In Ukranian)

Stechenko, D., & Chmyr, O. (2005). Methodology of scientific research. Kyiv: Knowledge. https://acortar.link/VGaa9l

Tverdokhliebova, N. Y. (2020). Professional self-realization of law enforcement officers at the stage of professional training. Law & Safety, 1(76), 162-166. https://doi.org/10.32631/pb.2020.1.23

APPENDIX A

Law enforcement officers' readiness for professional self-realization questionnaire

1. What are your professional goals for the next 5 years?
2. What skills and knowledge do you consider most important for successful professional activity?
3. How often do you improve your professional skills and knowledge?
4. What methods of improving professional skills and knowledge do you use?
5. How do you rate your readiness to work in extreme situations?
6. Do you have experience participating in professional trainings and seminars?
7. What methods do you use to maintain physical and mental health?
8. How do you feel about performing professional tasks and initiatives independently?
9. How do you separate your work from your personal life?
10. Do you perform regular self-assessment of your professional activities?
11. How do you help other employees improve their professional skills and knowledge?
12. What criteria are the most important for you in the development of a professional career?

DOI: https://doi.org/10.34069/AI/2023.63.03.27
How to Cite:
Bortniak, K., Merdova, O., Tsomra, V., Daraganova, N., & Mykhailov, R. (2023). Experience of administrative and legal support for control and supervision. *Amazonia Investiga*, *12*(63), 289-298. https://doi.org/10.34069/AI/2023.63.03.27

Experience of administrative and legal support for control and supervision

Досвід адміністративно-правового забезпечення контрольно-наглядової діяльності

Received: March 20, 2023 Accepted: April 30, 2023

Written by:
Kateryna Bortniak[1]
https://orcid.org/0000-0002-2135-3820
Web of Science ResearcherID: EQW-5951-2022
Olga Merdova[2]
https://orcid.org/0000-0003-0769-2364
Web of Science ResearcherID: AAF-7927-2021
Volodymyr Tsomra[3]
https://orcid.org/0000-0003-2331-9084
Web of Science ResearcherID: HTL-4426-2023
Nina Daraganova[4]
https://orcid.org/0000-0002-1512-2938
Web of Science ResearcherID: M-7684-2016
Ruslan Mykhailov[5]
https://orcid.org/0000-0003-2965-7260
Web of Science ResearcherID: AFK-5340-2022

Abstract

The aim of this article is to analyse the experience of the EU countries regarding the administrative and legal support for control and supervision in the context of Ukraine's accession to the EU. The main methods of research in the article are methods of structural construction, analytical substantiation, and logical construction. The development and implementation of a new public administration policy was determined in the article as one of the most important vectors for the modernization of public administration. It reduces the relativity and number of points of contact between companies and the state. On the other hand, the European Community establishes a model of the number of regulatory bodies, and the conditions for Ukraine's accession to the EU require bringing their objectives in line with European standards. When the optimization of the system

Анотація

Метою даної статті є аналіз досвіду країн Європейського Союзу щодо адміністративно-правового забезпечення контрольно-наглядової діяльності в умовах входження України до ЄС. Основними методами дослідження в статті визначені методи структурної побудови, аналітичного обґрунтування та логічної побудови. В статті одним із найважливіших векторів модернізації державного управління визначена розробка та впровадження нової політики державного управління, яка зменшує релятивність та кількість точок дотику між компаніями та державою, а з іншого боку – Європейське співтовариство встановлює модель кількості регуляторних органів, а умови входження України до ЄС вимагає приведення їх завдань у відповідність до європейських стандартів. Водночас, коли оптимізація системи

[1] PhD of Law Sciences, Associate Professor, Department of Public and Private Law, Kyiv V.I. Vernadsky Taurida National University, Kyiv, Ukraine.
[2] PhD of Law Sciences, Head of the Department of Administrative and Legal Disciplines of the Faculty №2, Donetsk State University of Internal Affairs, Kropyvnytskyi, Ukraine.
[3] Postgraduate Student, Kyiv V.I. Vernadsky Taurida National University, Kyiv, Ukraine.
[4] Doctor of Law Sciences, Professor, Department of Administrative, Financial and Information Law, Faculty of International Trade and Law, State University of Trade and Economics, Kyiv, Ukraine.
[5] PhD of Law Sciences, Associate Professor, Department of Law Enforcement and Police Studies, Faculty No. 1, Kryvyi Rih Educational and Scientific Institute of the Donetsk University of Internal Affairs, Kropyvnytskyi, Ukraine.

of control and supervisory institutions is imperfect, it is fundamentally important to make a balanced acceptable decision and to avoid an imbalance in the work of state control and supervisory bodies. Based on the conducted research, a list of measures to reduce control and regulatory activities in the context of Ukraine's accession to the EU was made. At the same time, regulatory bodies are the most important guarantors of the success and sustainable development of the entire country. This determines the relevance of the research and substantiates the need to analyse the experience of the EU countries regarding administrative and legal mechanisms of supervision and control. Prospects for further research are the analysis of the effectiveness of the proposed measures, and determining a range of interested persons in order to improve the administrative and legal support for control and supervision.

Keywords: control, supervision, administration, provision, analysis.

контрольно-наглядових установ є недосконалою, принципово важливим є виважене та наукове прийнятне рішення та уникнення дисбалансу в роботі органів державного контролю та нагляду. В результаті проведеного дослідження сформований перелік заходів щодо зменшення контрольно-регуляторної діяльності в умовах входження України до ЄС. При цьому, контролюючі органи є і залишається найважливішим гарантом успіху та сталого розвитку всієї країни. Це зумовлює актуальність дослідження та обґрунтовує необхідність аналізу досвіду країн ЄС щодо адміністративно-правових механізмів нагляду та контролю. Перспективами подальших досліджень є аналіз ефективності запропонованих заходів та визначення кола зацікавлених осіб щодо удосконалення адміністративно-правового забезпечення контрольно-наглядової діяльності.

Ключові слова: контроль, нагляд, адміністрування, забезпечення, аналіз.

Introduction

In the context of Ukraine's accession to the European Union, studying the experience of administrative and legal support in order to reduce control and supervisory pressure is relevant. Civilized and mutually beneficial relations with other countries can be developed through the creation and improvement of national laws, as well as administrative rules regulating control and supervision.

Since the independence of Ukraine, state authorities and local self-government bodies have developed and implemented a set of measures to ensure compliance with the legislation and state policy. However, the general level and quality of regulatory and legal support for control and supervision does not meet the needs of society and the state. In this regard, problems have accumulated during the period of Ukraine's accession to the EU, which require the fastest possible development and implementation of new forms and methods of administrative and legal regulation. Therefore, some parts of the laws of Ukraine have exhausted their regulatory legal resource and require a functional and meaningful revision. Cadastral management is not permanently organized to ensure effective control. The weak enforcement of legislation is one of the most urgent problems in this area, which has led to enormous corruption and bribery, abuses of power and lack of professionalism in this area. This significantly limits the subjects' capabilities and increases the distrust of the population in the governing bodies.

A large number of unsolved problems in this area indicates that the system of administrative and legal control and supervision requires improvement and strengthening of its role, which necessitates the development of control and supervision.

The aim of this article is to analyse the experience of the EU countries regarding the administrative and legal support for the control and supervision in the context of Ukraine's accession to the EU.

The aim involved the fulfilment of the following research objectives:

- study conceptual framework of control and supervision in Ukraine;
- analyse the state of the legislative framework regarding administrative and legal support;
- describe the administrative and legal framework for the support of the entities engaged in control and supervision;
- determine theoretico-methodological and practical proposals for improving the administrative and legal support for supervision.

The subject of the research is social relations between interested parties in the course of control and supervision. The object of the research is the principles, methods and mechanisms of administrative and legal support for control and supervision.

Literature review

The concepts of supervision and control are similar to ensure legality. Analysis of the most important scientific methods that distinguish between supervision and control, or vice versa, their identification confirms that control in the broad sense of supervision and inspection is a prerequisite, sub-function or stage of control. The use of the term "control and supervision" is explained by assigning control powers to the vast majority of subjects.

Hoerudin and Maolani (2019) defined the concept of control and supervision and emphasized the need to achieve optimality. It was determined that the positive impact of control and supervision can increase the efficiency and effectiveness of the government in public services with the benefit of the public. Rączka and Chludziński (2021) emphasize that it is necessary to distinguish between the concepts of control and supervision in the field of public administration.

At the same time, control and supervision must be supported by administrative and legal principles. A significant part of the above-mentioned and other problems have accumulated because of the lack of research. The studies on modern domestic and foreign administrative law focus on the issue of administrative law in different spheres. Syrett and Alder (2021) consider constitutional and administrative rights in public administration. Rosenbloom (2022), Rosenbloom et al., (2022) provided a deeper definition of administrative and legal support in public administration. Kokhanovskaya et al., (2019) conducted a similar study. Panagiotopoulos et al., (2019) explored the concept of administrative law in the field of digitization. Ellickson et al., (2020) study the issue of legal security of land relations. Exploring the genesis of the institution of administrative responsibility in the legal system of Ukraine, Goncharuk et al., (2020) observed the development of a new subject composition of officials who have the right to impose administrative fines and introduce subjects engaged in control and supervision. Mulligan and Bamberger (2019) examines administrative law in the field of education. So, the issues of administrative law are considered separately for each field of application. There is a need to develop a comprehensive approach to administrative and legal support for control and supervision.

Fisher and Shapiro (2020), Androniceanu (2021) considered the implementation of state policy at the administrative level. Research results show that ministries have made progress in ensuring administrative transparency. They are useful and interesting to both academia and ministries to help them identify ways of increasing transparency for better democratic governance.

Despite the large number of studies on specific issues related to the organization and carrying out control and supervision in Ukraine, this issue has not yet been fully studied, which determines its importance for a deep scientific understanding. The primary task is to improve and develop the existing systems of administrative and legal control and supervision of public relations in Ukraine.

Methods

The methodological framework of the research are general and special methods of modern scientific knowledge, the application of which is determined by a systematic approach to the issues in a single socially meaningful and legal form. The main conceptual tools were developed using logical semantics. The comparative law was used to describe the concepts and signs of control and supervision in the field of real estate, analyse its administrative and legal framework, and study the field of legal regulation of real estate.

The main methods are the general and special methods of scientific knowledge. Their application is determined by a systemic approach that allows to investigate the issues of social units and their legal form. The general scientific dialectics was applied to observe the development and interrelationships of legal phenomena and processes for identifying the main trends and directions of development in order to improve the legal support of control and supervision. The methods of analysis and synthesis, deduction and induction were used to study theoretical and practical issues of the process of legal regulation. A historical and legal approach, the development of scientific opinion regarding the control and supervision, and the emergence of a subject system of state control is considered. A systemic structural approach made it possible to determine the internal structure of the systems of control and regulatory bodies, as well as identify gaps in institutional and regulatory support. The distribution of roles, responsibilities, control and management was considered using a functional legal approach. The conceptual framework was deepened with the help of a logical semantic approach, in particular, the essence of such concepts as "control and supervision", "administrative and legal support", and the difference between the corresponding terms. A comparative law approach is used to analyse national laws governing the practice of control and supervision for ensuring compliance with relevant international agreements and conventions, as well as foreign laws. Recommendations for improving the current legislation were developed using modelling and forecasting methods, as well as formal methods. Conclusions and propositions are based on the requirements of formal logic for coherence, consistency and validity of judgments. The novelty of the work is an in-depth study of the organizational and legal foundations of state control and monitoring. As a result of the conducted research, the general trends of the development of a separate complex of legal regimes were determined, and new conceptual directions for the improvement of legislation were developed.

The empirical basis of the research is the statistics collected by control and supervisory bodies from management and other law enforcement practices.

The theoretical basis is formed by the studies of specialists in general political and legal theory, entrepreneurship, management, state, civil, economic and other legal sciences. The articles and conclusions are based on regulatory acts, laws and the Constitution of Ukraine, which determine the basic principles of administrative and legal support for control and supervision in Ukraine. The basis of the research is an overview of industry practices of control and supervision, analytical articles, political and legal news, reference publications, material statistics on these matters, and relations with countries. Personal experience of administrative and executive work is also used.

Results

Control and supervision are defined in forms that occur at all stages of the administrative process, extend to all its parties and are the main elements of norms of behaviour in the legal sphere. In general, public administration and society are governed by a large number of state, independent and public institutions with various supervisory and control powers. It is possible to oppose the bureaucratization of public administration mechanisms, and, if necessary, oppose official government institutions with the help of the active influence of the public on the course of all processes in society, in particular in the field of control and supervision, through the development of non-government institutions.

Control and supervision are taken by the state, territorial communities and competent government bodies in different control and supervision areas in order to ensure compliance with the legislation by state authorities and local self-government bodies. National laws regulate the activities of government institutions, enterprises, organizations and individuals. Figure 1 presents the features of control and supervision.

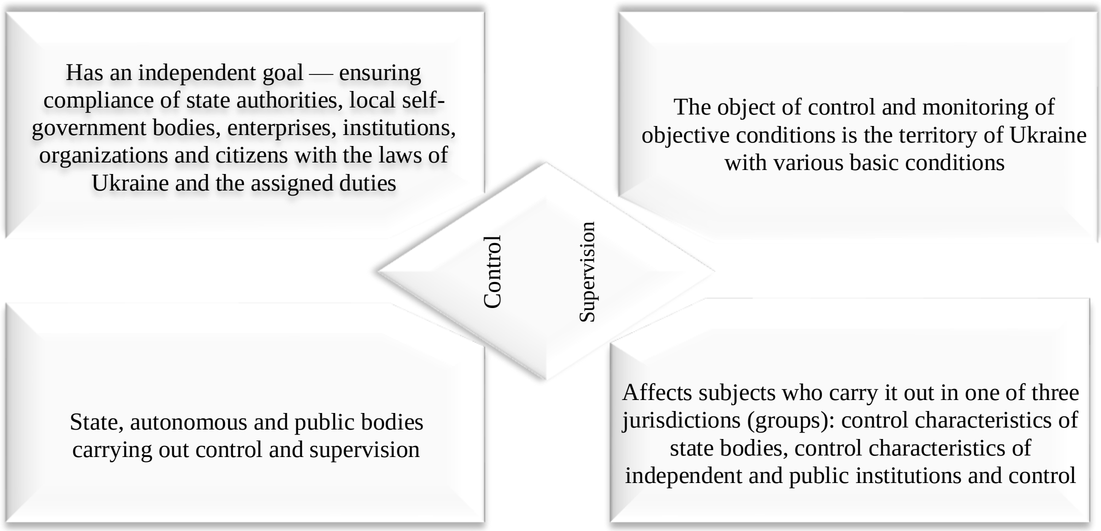


Figure 1. Special features of control and supervision in Ukraine (developed by the author)

The principles of regulatory activity form the main ideas, provisions and requirements that must guide all issues related to the type, form, direction and method of regulatory work. The analysis of regulatory legal practice and academic literature on the definition and consolidation of supervision principles makes it possible to divide the principles of supervision and control into two groups: general principles and specific principles. The general principles of control and supervision arising from the principles of public administration include legality, information, freedom, humanitarianism, justice, equality before the law, public participation in public administration. Specific principles of control and supervision related to the state and public relations are studies, design, system, objectivity, production, complexity, justice, efficiency, officiality, interaction. So, control and supervision can be divided into three main levels: state level, independent control and supervision at the local level, and public control and supervision (Figure 2).

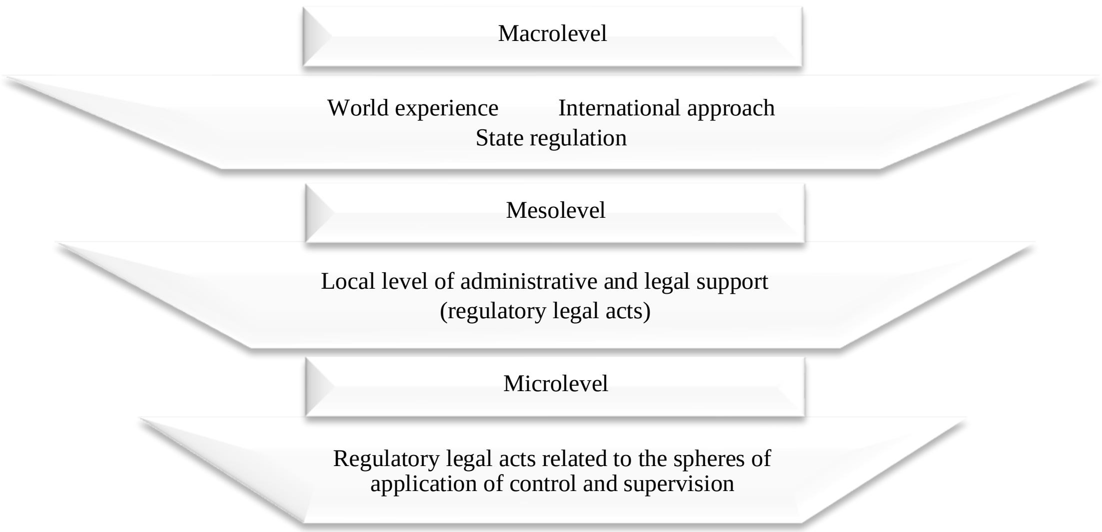


Figure 2. Levels of control and supervision (generalized by the author)

The effectiveness of control and supervision at each level of management is aimed at ensuring compliance with the legislation of Ukraine by state authorities, territorial communities, enterprises, institutions, organizations and citizens. Their effectiveness depends on optimal administrative and legal support at each level of the hierarchy of control and supervision. The Ukraine's accession to the European Union arose a need to make changes and additions to the regulatory legal acts, in particular with the aim of clarifying the material system of state control and supervision.

The formation of administrative and legal support for control and supervision has gone through several stages and is currently in the reformation stage (Figure 3).

The necessary regulatory and legal framework for proper control and supervision of state relations has been created throughout the territory of Ukraine, the necessary national target plans and improvement of activities have been approved. However, it should be noted that the development of the legal framework of control and supervision in Ukraine is significantly hampered by a number of factors, in particular, the strengthened control and supervision, as well as regulatory and legislative acts. Analysis of the current legislation, which regulates control and supervision in Ukraine, shows that it is necessary to make changes to the current legislation in order to solve the problems. The conditions for joining the European Union require the improvement of legislation in terms of reducing control. The institutionalization and unification of regulatory behaviour related to the management and control of state relations is planned at this stage. This is the main direction of improvement of state laws and regulatory acts in the field of state relations at all levels. Improvement of the legislative framework and strengthening of measures of administrative responsibility, legal limitation of powers of government bodies and citizens regarding resource management and control over relations, improvement of unified implementation of control procedures. In Ukraine, national legislation and regulations on control and supervision should be brought into line with international legislation.

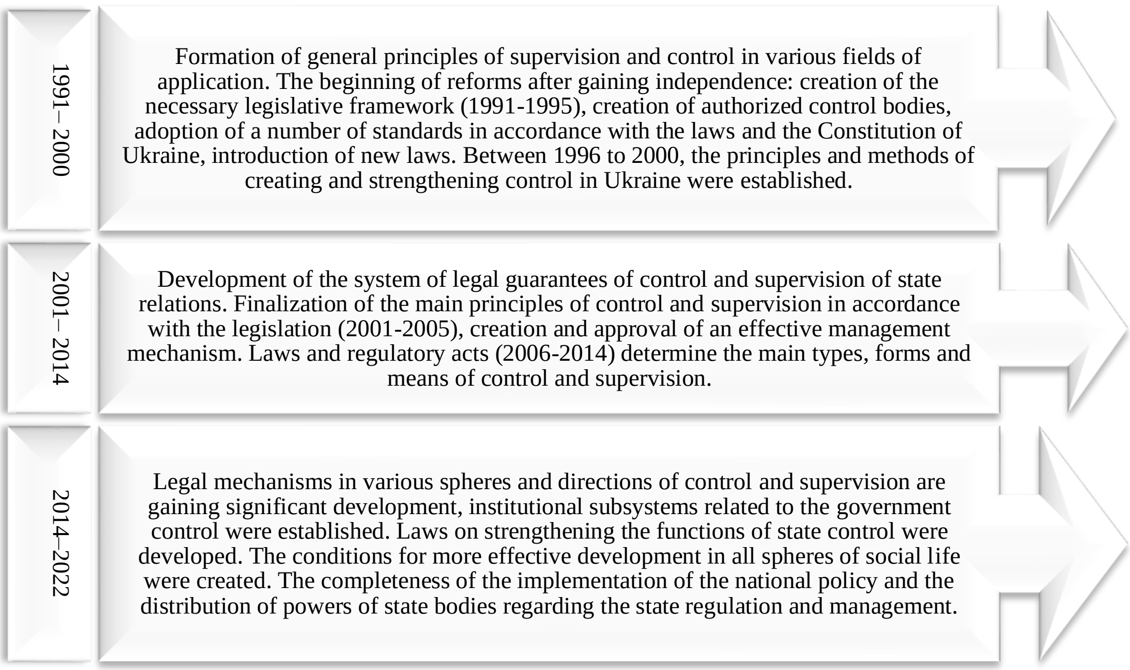


Figure 3. Stages of development of administrative and legal support for control and supervision (generalized by the author)

For this purpose, the necessary priority task is the analysis of the world experience of administrative and legal support for control and supervision. Table 1 presents the characteristics of the administrative and legal support in the leading countries of the world.

Table 1.
International experience of administrative and legal support for control and supervision (author's own development)

Country	Main law	Legislation at the state level	Regulatory and legal support at the local level	Peculiarities
United States	The US Constitution	State bodies are endowed with special powers of higher executive bodies	Regulatory acts of 50 municipal systems	State bodies have the right to exercise state control
Republic of Lithuania	Constitution of the Republic of Lithuania	Law on Local Communities	European Charter of Local Self-Government	A detailed list of competencies. All activities are divided into state and independent functions.
Germany	Constitution of Germany	Legislation passed by the Central Government and the relevant state bodies	Regulatory acts approved by the Ministry of Internal Affairs of the federal land	It is based on the Basic Law with the provision of full responsibility and independence to local communities.
Poland	Constitution of Poland	Laws and by-laws of the Supreme Chamber	Enforcement of laws at the state level	Control is divided into external and internal. The local level of law enforcement is ensured by the fear of sanctions.
France	Constitution of France	National Gendarmerie of France. State and administrative institutions	Enforcement of laws approved at the state level	The prefect performs the functions of supervision and control over the local authorities, that is, it exercises administrative vigilance and leaves the independence of local communities.

European local self-government bodies have undergone major changes that enabled them to better cooperate with each other on policies and related programmes. Later, the conceptual framework of activities had to be further modified to reflect internationalization, especially because of the accession of countries to the EU. These reforms can be divided into four types: regulation of the number of units, organizational reforms, financial reforms, functional and procedural reforms. As part of the first wave of reform, the number of self-governing units, especially municipalities, was reduced through mergers. An operational substantiation was used as a starting point: it was assumed that large groups and administrative units were needed to effectively deliver services on the ground to avoid overhead and benefit from economies of scale. Thanks to consolidation, new forms of local institutions, such as service circles, parish committees, and self-government, were reduced, and in other places significantly increased.

Based on the principles of democracy and decentralization, local self-government bodies are empowered to independently resolve all issues of local importance, promote the optimal combination of local and national interests, and carry out the most effective socio-economic activities of the regions. Therefore, local self-government should be considered as an integral part of civil society and an indicator of democracy. As we saw on the example of the EU member states, local self-government is one of the most important institutions in the social structure of local self-government. As regards city self-government, problems related to the life of citizens should be considered and solved first of all.

Current administrative and legal norms have their own peculiarities. The organization of administrative law provides for a set of measures aimed at the organization and rationalization of national administrative systems to ensure regulatory influence by creating legal and economic conditions for the stable functioning of all types of assets in terms of ownership, use and transfer. The body representing the state is entrusted with a number of tasks in the field of regulation, where the functions of supervision and control are one of the most important means of ensuring legality. It is emphasized that the creation of an adequate administrative and legal system of regulation is a reliable means of ensuring the achievement of the goals and objectives set by the state and creates the necessary basis for achieving the overall stability of the country's economy and society.

Management functions are mainly carried out with the help of administrative and legal means of politics. Unlike other methods of management (social, psychological, economic, informational), the method of administrative law is based on authority, order and responsibility. The main form of implementation and use of administrative law management methods is an orderly and operative intervention in the management process with the aim of coordinating the efforts of its participants to fulfil the assigned tasks.

From the perspective of improving the principles and norms of supervision, it is based on a positive perception of time, adopting relevant foreign experience, and its emphasis on the current realistic needs. The peculiarities of regulation are partly determined by the peculiarities of their legal systems (Roman-Germanic, Anglo-American). Attention is drawn to the principles of regulation of registered works, the relevant state supervisory and control bodies, the limits of intervention of these bodies in the production activities of controlled objects (as a rule, only in cases of prevention and termination), the possibility of applying laws on the rational use of resources, European and world standards of quality and safety, as well as consulting on organization and structures.

There is a need for further systematization of laws in this area through the adoption of a special Law of Ukraine. A study of the problems of supervision and control was conducted, inconsistencies and shortcomings in the work of local self-government bodies were identified, he amendments to the current laws were proposed to solve the identified problems. Summarizing foreign experience, we can conclude that in Ukraine it is necessary to clearly define the list of state bodies and officials who have the right to organize effective control and supervision of the work of state bodies and local self-government officials. The main tasks can be defined as carrying out control and supervision in the field of local self-government, limitation of powers of subjects of supervision, standardization of supervisory and control procedures in the public sphere, introduction of principles and methods of unification of state administration at the regional and local levels.

Discussion

For Ukraine, the trend of globalization and integration of state development poses an urgent strategic task of reforming control and supervision and bringing them in line with those current in the EU. Khadzhyradieva et al., (2020) studied in detail the directions of reforming control and supervision in the context of accession to the EU. The lack of resources for the implementation of certain reforms at the current stage was also noted. Onyango (2020) and Halligan (2020) conducted a similar study in this area. At the same time, the practical implementation of measures proposed in these studies is limited by public distrust of authorities.

Two groups of characteristics of control and supervision can be distinguished: general, characterizing it as a general activity, and specific, characterizing this activity as a legal phenomenon. The peculiarities of control and supervision are determined depending on their legal nature: the nature of powers, intentionality, type of organization regulated by law, enabling independent actions of the subject to entrust control and supervision to a lower entity. These features are discussed in Aman et al., (2020), Rosenbloom (2022), Kuhlmann and Wollmann (2019). Administrative and legal support permeates all aspects of social life under the influence of law and is regulated by law to ensure its effectiveness. Van Helden and Reichard (2019) study the efficiency issues. At the same time, the adaptation of the proposed approach to the instable external environment requires the study of additional approaches and directions.

The activity of the state control and supervisory bodies is highly specialized (Cobbe, 2019, Topolia, 2022; Pleskach, 2020; Dombrovan & Izbash, 2022) and involves the relevant tasks: compliance with land legislation, quality- and safety-related issues. The financial, legal regulatory integration measures should be implemented, amendments to regulatory acts should be introduced in order to increase the efficiency of competent control and supervisory institutions. The authors note internal vertical and horizontal connections between the said state bodies, as well as connections of national control and supervision bodies with the general system of control bodies. So, control and supervision are at different levels, and are divided into different types depending on the part of public life.

Programmes that provide various administrative services, mainly in industries and types of activity, remain unregulated. Analysing the current state of the legislation on administrative and legal support in Ukraine, one can notice a number of shortcomings that lead to a significant decrease in the effectiveness of their practical application.

Measures ensuring the effectiveness of administrative responsibility for offences in the field of relations of the country include identifying and excluding inconsistencies in current laws from the list of violations on the territory of the country.

Conclusions

The effectiveness of supervision and control is important for the development of the economy as a whole, both in terms of the actual results of supervision and the set social goals. It is determined by a number of social, economic, and legal criteria.

The article defines that the level of legal foundations of control and supervision is one of the main indicators of the effectiveness of control measures. Therefore, the quality of reform largely depends on the success of improving the quality of administrative and legal support. The laws that regulate control measures in this area accurately define and establish the legal status of the main objects, clearly regulate the form and method of control in the field of relations with the state. Systematization, division into appropriate stages and legal provisions of the type of independent and state control in Ukraine, creation of legal guarantees of the legality of control measures.

In the field of modern legal frameworks, it was determined that the institutional structure of state control is characterized by the lack of clarity in determining the powers of the controlling body. This leads to the duplication of tasks in the relevant ministries and departments, such as the Ministry for Regional Development, Building and Housing of Ukraine, the Ministry of Agrarian Policy and Food of Ukraine, Ministry of Ecology and Natural Resources of Ukraine. The need for further improvement of control and supervision, clarification of roles, powers and duties of administrative bodies at all levels and individual supervisory officials is emphasized. This mission requires the reduction of existing supervisory and regulatory bodies and the centralization of supervision in this area, appointment of a single supervisory agency, avoiding the duplication of supervisory functions between jurisdictions and executive authorities.

The main task of ensuring the effectiveness of supervision and control is the cessation of illegal activities and the improvement of law enforcement measures. The main task is to strengthen responsibility and establish effective mechanisms to prevent abuse. It is necessary to clearly define the legal obligations and main characteristics of legal entities as independent subjects of legal relations in order to increase the effectiveness of control. Increasing the effectiveness of control in this area can also contribute to taking measures to prevent and eliminate violations in state relations.

As an integral part of the general process of democratization of public administration in Ukraine, the optimization of the management system also requires its mandatory decentralization. Therefore, it is necessary to develop and implement mechanisms to ensure the decentralization of the industry in order to ensure sustainability in the long term and its effective use by turning local communities into full owners. Based on the decentralization principle, it seems necessary to drastically reduce the number of management bodies outside the territory of control. So, the improvement of monitoring and control appears to be directly related to the redistribution of control between government institutions and local self-government bodies, as well as full self-government. It is currently necessary to develop and adopt the relevant legal documents containing the conditions of autonomy and public control in the sphere of state relations as soon as possible.

The practical significance of the results obtained in the article can be determined as follows: the results are the basis for the further development of theoretical and legal issues of control and supervision of relations in the country, the definition and clarification of laws and regulatory acts which will improve the effectiveness of control and supervision.

Bibliographic references

Aman, C., Penniman, W., & Rookard, L. W. (2020). Administrative Law and Process. Carolina Academic Press. https://www.repository.law.indiana.edu/facbooks/230/

Androniceanu, A. (2021). Transparency in public administration as a challenge for a good democratic governance. Revista Administratie si Management Public, 2021(36), 149-164. https://econpapers.repec.org/article/romrampas/v_3a2021_3ay_3a2021_3ai_3a36_3ap_3a149-164.htm

Cobbe, J. (2019). Administrative law and the machines of government: judicial review of automated public-sector decision-making. Legal Studies, 39(4), 636-655. https://doi.org/10.1017/lst.2019.9

Dombrovan, N. V., & Izbash, K. S. (2022). Administrative and legal support of staff training for the National Police of Ukraine. Publishing House “Baltija Publishing”, 198-230. http://baltijapublishing.lv/omp/index.php/bp/catalog/download/223/6039/12607-1?inline=1

Ellickson, R. C., Been, V. L., Hills, R. M., & Serkin, C. (2020). Land use controls: Cases and materials. Aspen Publishing. https://www.aspenpublishing.com/Ellickson-LandUse5

Fisher, E., & Shapiro, S. A. (2020). Administrative competence: Reimagining administrative law. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108870818

Goncharuk, S., Kuzmenko, O., Gurzhii, T., Berlach, A., Yarmaki, K. (2020). Establishment of the institute of administrative responsibility in the legal system of Ukraine. Journal of law and political sciences, 23(2), 234-258. https://drive.google.com/file/d/15r3HAXqJ7Mow4-jaoLcBKZo8hEeL_xJY/view

Halligan, J. (2020). Reforming public management and governance: Impact and lessons from Anglophone countries. Edward Elgar Publishing. https://doi.org/10.4337/9781839107498

Hoerudin, C. W., & Maolani, D. Y. (2019). Supervision and control of the government internal supervisory apparatus in the implementation of regional autonomy. International Journal of Science and Society, 1(1), 56-69. https://doi.org/10.54783/ijsoc.v1i1.16

Khadzhyradieva, S., Slukhai, S., & Rachynskyi, A. (2020). Public administration in Ukraine: Adjusting to European standards. NISPAcee Journal of Public Administration and Policy, 13(1), 81-108. https://doi.org/10.2478/nispa-2020-0004

Kokhanovskaya, I. I., Fatykhova, A. L., Khachaturyan, A. A., & Khachaturyan, K. S. (2019). Questions of the estimation of efficiency of public administration in modern conditions. SHS Web of Conferences, 62, 02002. http://dx.doi.org/10.1051/shsconf/20196202002

Kuhlmann, S., & Wollmann, H. (2019). Introduction to comparative public administration: Administrative systems and reforms in Europe. Edward Elgar Publishing. https://acortar.link/1WjYmo

Mulligan, D. K., & Bamberger, K. A. (2019). Procurement as policy: Administrative process for machine learning. Berkeley Technology Law Journal, 34, 773. https://btlj.org/data/articles2019/34_3/03_Mulligan_Web.pdf

Onyango, G. (2020). Legislative oversight and policy-reforms in “unsettled” political contexts of public administration. International journal of public administration, 43(3), 213-228. http://dx.doi.org/10.1080/01900692.2019.1627556

Panagiotopoulos, P., Klievink, B., & Cordella, A. (2019). Public value creation in digital government. Government Information Quarterly, 36(4), 101421. https://doi.org/10.1016/j.giq.2019.101421

Pleskach, M. (2020). The mechanism of administrative and legal support of human cybersecurity: concept and basic elements. Law Review of Kyiv University of Law, (4), 201-209. https://doi.org/10.36695/2219-5521.4.2020.36

Rączka, P., & Chludziński, B. (2021). Control and supervision on the part of the Marshal of the Voivodship over tour operators and tourist entrepreneurs. Studia Iuridica Toruniensia, 27, 289-308. http://dx.doi.org/10.12775/SIT.2020.032

Rosenbloom, D. H. (2022). Administrative law for public managers. Routledge. https://doi.org/10.4324/9781003303176

Rosenbloom, D. H., Kravchuk, R. S., & Clerkin, R. M. (2022). Public administration: Understanding management, politics, and law in the public sector. Routledge. https://acortar.link/moM7nl

Syrett, K., & Alder, J. (2021). Constitutional and administrative law. Bloomsbury Publishing. https://acortar.link/uigepA

Topolia, R. (2022). Scope of the administrative support of expert activities in Ukraine. Entrepreneurship, Economy and Law, 2, 97–100. https://doi.org/10.32849/2663-5313/2022.2.15

Van Helden, J., & Reichard, C. (2019). Management control and public sector performance management. Baltic Journal of Management, 14(3), 158-176. http://dx.doi.org/10.1108/BJM-01-2018-0021

DOI: https://doi.org/10.34069/AI/2023.63.03.28
How to Cite:
Mukhina, H., Yakymchuk, I., Oliinyk, Y., Elvizou, M., & Shvalb, A. (2023). The relationship between coping strategies of extreme job holders and post-traumatic stress disorders. *Amazonia Investiga*, *12*(63), 299-309. https://doi.org/10.34069/AI/2023.63.03.28

The relationship between coping strategies of extreme job holders and post-traumatic stress disorders

Зв'язок копінг стратегій фахівців екстремальних професій та посттравматичних стресових розладів

Received: March 15, 2023 Accepted: April 18, 2023

Written by:
Halyna Mukhina[1]
https://orcid.org/0000-0001-8866-794X
Iryna Yakymchuk[2]
Web of Science ResearcherID: EHI-3481-2022
https://orcid.org/0000-0002-4627-2066
Yuliia Oliinyk[3]
Web of Science ResearcherID: HTL-6718-2023
https://orcid.org/0000-0003-3214-0422
Mariia Elvizou[4]
Web of Science ResearcherID: IAP-5943-2023
https://orcid.org/0000-0002-6092-8164
Anton Shvalb[5]
https://orcid.org/0000-0002-9729-1099

Abstract

Extreme workers are constantly exposed to negative impact in the course of their work. Over time, excessive stress and traumatic events can cause symptoms of post-traumatic stress disorder (PTSD). As a result, employees are unable to fully function as specialists, which manifests in the destructive coping strategies. The aim of the study involves determining the symptoms of PTSD and related coping strategies of extreme workers. Methods. The study is based on the use of standardized PTSD diagnostic tests (Screen PC-PTSD, IES-R, SDS) and coping strategies of employees (CSI). Data processing was carried out using quantitative analysis and statistical methods: descriptive statistics, multiple regression analysis. Results. The study showed that the symptoms of intrusion, avoidance, excitability, high depression, and destructive coping strategies is observed in emergency specialists with PTSD symptoms. It was

Анотація

Фахівці екстремального профілю постійно піддаються негативним впливам у процесі трудової діяльності. З часом надмірний стрес та травматичні події можуть викликати симптоми посттравматичного стресового розладу (ПТСР). У результаті працівники не можуть повністю функціонувати як спеціалісти, що проявляється в деструктивних стратегіях подолання стресу. Мета дослідження полягає в визначенні симптомів ПТСР та пов'язаних із ним копінг стратегій працівників. Методи. Дослідження базується на використанні стандартизованих діагностичних тестів ПТСР (Screen PC-PTSD, IES-R, SDS) та стратегій подолання працівників (CSI). Обробка даних проводилась за допомогою кількісного аналізу та статистичних методів: описової статистики, множинної регресійної аналізу. Результати. Дослідження показало, що симптоми вторгнення, уникнення, збудженості, високої

[1] PhD of Pedagogical Sciences, Associate Professor, Department of Social and Humanitarian Disciplines, Donetsk State University of Internal Affairs, Kropyvnytskyi, Ukraine.
[2] PhD of Psychological Sciences, Associate Professor, Department of Psychology, Faculty of Social and Psychological Education, Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine.
[3] PhD of Medical Sciences, Associate Professor, Department of Hygiene and Ecology No. 1, Kharkiv National Medical University, Kharkiv, Ukraine.
[4] Master's Degree, Lecturer, Faculty of Linguistics, International School, Vietnam National University, Hanoi, Vietnam.
[5] PhD of Psychological Sciences, Lecturer, Department of General Psychology, Social and Psychological Faculty, National University of Civil Defence of Ukraine, Kharkiv, Ukraine.

established that specialists with PTSD symptoms have pronounced “avoidance” coping (p=0.000, β=0.082), while “problem solving” was dominant coping of specialists with no PTSD (p=0.000, β=-0.045). They have pronounced depression (p=0.000, β=0.25), as well as such symptoms as avoidance (p=0.000, β=0.27), excitability (p=0.000, β=0.33) and intrusion (p =0.000, β=0.31). Conclusions. The relationship between the PTSD symptoms of emergency workers and their coping strategies was empirically found. The avoidance strategy is the most typical for specialists with PTSD symptoms. Prospects. The obtained results can be used in the prevention of PTSD in emergency workers. They can also be used for building a model of comprehensive overcoming of the consequences of PTSD by these specialists.

Keywords: Behavioural strategies, adaptive behaviour, stress reactions, depression, post-traumatic symptoms.

депресії та деструктивних стратегій подолання спостерігаються у надзвичайних спеціалістів з симптомами ПТСР. Було встановлено, що у фахівців із симптомами ПТСР виражені "уникання" як механізм заспокоєння (p=0.000, β=0.082), тоді як "пошук рішення проблем" був домінуючим механізмом у фахівців без ПТСР (p=0.000, β=-0.045). Вони мають виражену депресію (p=0.000, β=0.25), а також такі симптоми, як уникання (p=0.000, β=0.27), збудженість (p=0.000, β=0.33) та вторгнення (p =0.000, β=0.31). Висновки. Емпірично було виявлено зв'язок між симптомами ПТСР у фахівців екстрених ситуацій та їх стратегіями заспокоєння. Механізм "уникання" є найбільш типовим для фахівців із симптомами ПТСР. Перспективи. Отримані результати можуть бути використані для запобігання ПТСР у фахівців екстрених ситуацій. Вони також можуть бути використані для створення моделі комплексного подолання наслідків ПТСР у цих фахівців.

Ключові слова: Поведінкові стратегії, адаптивна поведінка, стресові реакції, депресія, посттравматичні симптоми.

Introduction

The professional activity of certain categories of specialists has considerably been affected by significant climatic, political, scientific and technical changes in society. This impact determines the effectiveness and prospects of their activities. The extreme working environment involves not only physical overloads, but also in most cases has a psycho-emotional and psycho-physiological nature (Campillo-Cruz et al., 2021; Warren-James et al., 2022). Deviations from normal working conditions require the specialist to make voluntary efforts that go beyond the physiological norm (Thielmann et al., 2022). Because of extreme conditions, professions of this type involve difficult working conditions and, in many cases, a physical threat to life. The constant stress that such specialists experience is inevitably reflected in their personality (Machado et al., 2020) and the quality of their professional duties (McKeon et al., 2022). At the same time, each such specialist can experience strong stressful events in doing the job, which can cause negative psycho-emotional states and personality disorders. This results in the development of post-traumatic stress disorders (PTSD) in those specialists. Such disorders are characterized by the experience of anxiety (Loef et al., 2021), stress (McKeon et al., 2022), depression (Stevelink et al., 2020), psychophysiological changes (Lee et al., 2022).

The researchers studied PTSD most often in the work of servicemen, police officers, rescuers, and ambulance workers. These professions involve working in extreme conditions, that is, those that go beyond normal functioning. Numerous studies prove the wide-spread PTSD among ambulance workers. According to Ntatamala and Adams (2022), the share of individuals with PTSD symptoms in the studied population was 30%. At the same time, Petrie et al., (2018) indicate that this share is 11%, while it is 10% in the study of Bartzak (2016).

PTSD can develop over many years, and its symptoms greatly affect the specialist’ well-being. In such a situation, the specialist begins to use an avoidance coping strategy trying to mitigate the negative effect of stress (Hruska & Barduhn, 2021). This strategy involves eliminating any contact that can increase anxiety or stress. Such specialists avoid solving the problem, grounding it by various factors. The accumulation of unresolved problems and unreacted emotions leads to the complication of PTSD symptoms, personal deformations (Chen et al., 2021; Vagni et al., 2022), asocial behaviour (Ciułkowicz et al., 2021). Workers with pronounced symptoms of PTSD are unstable in their professional activity, often given to drinking alcohol and smoking (Jovanovic et al., 2017). This is a maladaptive behaviour, which reduces their functional capacity to work effectively (Stevelink et al., 2020).

In view of the foregoing, it should be noted that the study of the relationship between coping strategies and PTSD symptoms provides grounds for more profound research into the issue of PTSD in extreme workers, in particular, emergency workers. The aim of the study is to establish a causal relationship between basic coping strategies and PTSD symptoms. The aim involved the following research objectives:

– carry out a comprehensive analysis of diagnostic tools to ensure the validity and reliability of diagnostics;
– conduct primary screening to identify PTSD symptoms in the subjects;
– identify differences in PTSD symptoms and coping strategies of specialists with PTSD symptoms and those without PTSD;
– study the relationship between coping strategies and PTSD symptoms of the subjects.

The research hypothesis was determined based on the aim and research objectives: there is a relationship between the type of coping strategies and PTSD. Extreme workers with pronounced PTSD symptoms have a dominant “avoidance” coping, while “problem solving” coping is characteristic of specialists with no PTSD.

Literature review

In 2013, the American Psychiatric Association (APA) revised the diagnostic criteria for PTSD in the fifth edition of The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR). In the new version of DSM-5-TR, PTSD is included into the new category “Trauma- and Stressor-Related Disorders”. This category involves the impact of a traumatic or stressful event as a diagnostic criterion. The following main criteria are distinguished: intrusion, avoidance of thoughts and unwanted behaviour, negative changes in thoughts and moods, changes in excitement and reactivity. In addition, each criterion has its own symptoms that characterize the state of PTSD.

The main criterion in diagnosing PTSD among those listed in DSM-5 is the impact of one or more traumatic events characterized by a real threat to the life and health of specialists. Such an event can be experienced both directly and indirectly (in the case of emergency workers), while the PTSD symptoms will be the same for them.

When determining the psychological essence of PTSD, attention should be paid to the main condition of this disorder: post-development. It is implied that this disorder is the result of a certain traumatic event that had a significant psycho-emotional impact on the individual (Horowitz et al., 1979). This results in the gradual disturbance of the cognitive, emotional and mental spheres of a person. In some cases, this leads to psychiatric disorders (Chatzea et al., 2017).

Arebo et al., (2022) note that PTSD is a disorder arising as a result of a traumatic event and characterized by re-experiencing, avoidance, negative cognitive state, psychophysiological arousal for at least one month. Berger et al., (2011) determined that PTSD syndrome is most characteristic of rescuers and emergency workers. The authors note that rescuers are at high risk for PTSD because the risk of developing PTSD increases with the number of experienced traumatic events. Bartzak (2016) believes that PTSD is an anxiety disorder caused by experiencing a traumatic event. The latter refers to the threat of death or physical injury that causes feelings of fear, helplessness, or terror.

Chen et al. (2021) state that PTSD can occur not only in direct participants of traumatic events, but also in witnesses and indirect participants. However, traumatic events have a significant impact on mental health, in particular, their experience is manifested in arousal and emotional changes.

PTSD can manifest itself with many psychiatric symptoms. The main ones are intrusion, avoidance, and hyperarousal, which occur after experiencing a traumatic event. Psychiatric symptoms of PTSD negatively affect the cognitive sphere of specialists, in particular, a negative impact on attention and executive function is noted (Lee et al., 2022).
It is noted that the ability to respond in a certain way to stressful and traumatic events is associated with behavioural coping strategies (Oliveira et al., 2019). In particular, positive coping strategies help prevent the development of PTSD symptoms in some cases (Ciułkowicz et al., 2021).

Coping strategies are defined as an individual’s ability to overcome certain stressful situations and stabilize the psycho-emotional state (Freire et al., 2020). Coping is considered as a behavioural, cognitive, and emotional response to situations that require adaptation (Loef et al., 2021). Coping strategies reduce psychological stress and anxiety (Freire et al., 2020). Coping strategies consist of coping acts, while strategies determine coping styles of behaviour. They can be functional and dysfunctional, that is adaptive or maladaptive (Rojas et al., 2022).

Coping strategies provide psycho-emotional stability and resistance to traumatic events in ambulance workers Loef et al., (2021). It was proved that the development of psychological resilience and adaptive coping skills contribute to effective coping with stress, thereby reducing its psychological impact. This provides primary PTSD prevention (Bilsker et al., 2019).

According to Shepherd and Wild (2014) emergency medicine workers who frequently use problem-solving strategies usually have low PTSD rates. This may indicate the importance of developing adaptive coping strategies in mitigating PTSD and its symptoms.

Research analysis shows that PTSD is a consequence of a traumatic event in the work of emergency medical workers. At the same time, PTSD contributes to the development of many negative changes in the employee's personality and health. The use of maladaptive coping worsens the workers' condition and leads to its exacerbation. Therefore, it is advisable to conduct an empirical study to identify the relationship between the coping strategies of ambulance workers and the PTSD.

Methods

Research Procedure

The study was conducted from May 2022 to July 2022 in several stages. The first stage involved the study of the academic background and methodological framework of diagnostics and sampling. The diagnostic criteria and methods were selected, and the research programme was determined. The sample size, which ensures representativeness, was justified. The second stage provided for an empirical diagnostics of the selected respondents according to the aim and objectives of the research. The time distribution of the selected methods was carried out in accordance with the possibilities of surveying the respondents. The third stage involved processing of diagnostic data and interpreting the results. Quantitative, qualitative and statistical analyses were used. The fourth stage consisted in the analysis of the obtained data, identification of shortcomings and research prospects. A comparative analysis of the obtained data with existing studies was carried out, the differences were determined, and unestablished facts were substantiated.

The research was conducted on different days and hours in order to cover as many specialists as possible, as they work in shifts.

Sampling

Ambulance workers were chosen for the study among the extreme workers. This job is quite stressful and traumatic, and poorly studied at the same time. Most research examines PTSD in rescuers, servicemen, and police officers, but little attention has been paid to the study of PTSD symptoms in emergency medicine workers. In order to ensure representativeness, the study provided for a randomized sample of 230 respondents who reflect the characteristics of the general population. All subjects worked in the Emergency Department of Kyiv. They included 103 male and 127 female. The selected sample was uniform. The inclusion criterion was the age, as it was necessary to select respondents with 5 or more years of work experience to identify PTSD symptoms. Therefore, the sample included employees from 30 to 50 years old.

Methods

The methods of surveying, testing, and statistical analysis were used in order to achieve the aim of the research. Standardized methods of psychological diagnostics were used as diagnostic tools. The PTSD in the subjects was determined using the Primary Care PTSD Screen for DSM-5 (PC-PTSD-5). The PC-PTSD-5 is a 5-item screener designed to identify individuals with probable PTSD in primary care facilities. The diagnostic process involved answers to 5 questions. In particular, the first question was to identify a traumatic event in the respondent's life. If this answer is negative, the test ends automatically with a score of 0 and this indicates the complete absence of PTSD in the subject. If the answer is positive, the subject is asked to answer additional questions that describe concomitant symptoms of PTSD during the last month. The result is positive if the subject answered 'yes' to any three or more proposed options. However, we considered positive answers to one or two questions as partial PTSD symptoms, which could have arisen under the influence of personal problems or nervous overstrain and are not trauma-related. That is why an additional diagnostics of PTSD symptoms and depression as the main symptom of this disorder was carried out.

The Impact of Event Scale (IES-R) was used to diagnose PTSD symptoms and their severity. This technique was published by Horowitz in 1979 (Horowitz et al., 1979). Horowitz distinguished two specific reactions of the individual to stressors in the structure of the method: "intrusion" and "avoidance". The author attributed nightmares, obsessive thoughts and emotions to the symptoms of intrusion. Symptoms of intrusion included decreased activity and retreat from problem solving. The method was adapted in 2001 by Tarabrina in the study of PTSD in people who have experienced traumatic events. The method consists of 22 items, the answers to which enable determining the level of PTSD on three scales: "intrusion", "avoidance" and "excitability". The calculation of points on the scales is based on the method key. The total score for trauma was determined by summing the scores of the three scales. The results were processed separately by scales, followed by the calculation of the total indicator.

Zung Self-Rating Depression (SDS). This scale was developed by Zung for diagnosing depressive states. The method was adapted in the Department of Narcology of Bekhterev Psychoneurological Institute. The scale includes 20 items that determine the respondent's well-being and are aimed at identifying depression symptoms. The level of depression is determined based on the calculation. The absence of depression is diagnosed if the subject who scored no more than 50 points. A score of 50 to 59 indicates mild depression. A total of 60 to 69 points indicate hidden depression. A depressive state is determined when 70 or more points are scored.

The Coping Strategy Indicator (CSI) by Amirkhan. The technique involves the diagnosis of basic coping strategies that are used to overcome stressful situations. The author singles out the following among the basic coping strategies: problem solving, seeking social support, and avoidance. According to the author of the technique, the avoidance strategy describes a destructive-type maladaptive behaviour. The technique was adapted at t Bekhterev Psychoneurological Institute by Sirota and Yaltonsky in 1994-1995. The structure of the technique includes 33 statements with which the subject can agree or disagree. The results are evaluated according to the test key.

Data processing was carried out using qualitative, quantitative and statistical analyses. Calculations were performed in Microsoft Excel and SPSS 22.0. Descriptive statistics was used to analyse the mean values of the surveyed for the techniques. Multiple regression analysis was used to identify the relationship between coping strategies and PTSD in emergency medicine workers.

Ethical Criteria of the Research

The survey participants gave their informed consent for the diagnosis before the start of the study. The aim and objectives of the study were indicated. The respondents were informed that the study is completely anonymous, voluntary and will not affect them in any way. It was also stated that all data are confidential and will not be disclosed in relation to an individual subject. The research was conducted with due regard to the principles of the Declaration of Helsinki, which ensured its propriety.

Results

The obtained results showed there are persons with existing PTSD symptoms among the subjects (Figure 1).

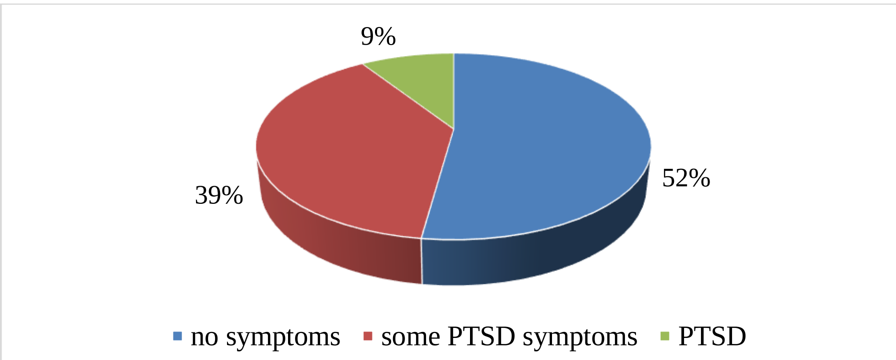


Figure 1. PTSD indicators in ambulance workers

The first screening showed that there were specialists with PTSD symptoms among the studied ambulance workers. This indicates that this category of workers has experienced a stressful traumatic event. Such experience caused obvious or hidden negative emotional states that have a destructive effect on the worker's personality. At the same time, they continue to work without focusing on their condition, which worsens their psycho-emotional state. Such workers need urgent help from specialists to improve their functional condition.

The scale for assessing the impact of a traumatic event revealed the average indicators of PTSD symptoms in emergency medicine workers (Table 1).

Table 1.
Average indicators of PTSD symptoms among emergency medicine workers (p≤0.001)

PTSD level	PTSD symptoms						IES-R	
	intrusion		avoidance		excitability			
	M	SD	M	SD	M	SD	M	SD
No PTSD symptoms (n=120)	7.83	0.27	7.08	0.23	6.51	0.19	21.41	0.39
Some PTSD symptoms (n=89)	8.48	0.22	9.54	0.25	8.52	0.21	24.54	0.55
PTSD (n=21)	20.14	1.83	18.14	1.90	19.15	1.73	57.42	5.14

The data provided in Table 1 reflect varying degrees of severity of PTSD symptoms in the studied emergency medicine workers. It was found in the first screening that workers with no PTSD symptoms have almost the same average indicators of PTSD symptoms as workers with mild PTSD symptoms. At the same time, workers who have been diagnosed with PTSD have significantly higher rates. The "intrusion" symptom in workers with no PTSD symptoms and workers with mild PTSD symptoms is within the normal range, while this symptom is very pronounced in workers with PTSD. This indicates that workers diagnosed with PTSD have obsessive feelings and thoughts, night terrors, sleep disorders and normal lifestyle disturbances. The "avoidance" symptom corresponds to the norm in workers without PTSD symptoms and workers with mild PTSD symptoms. It is quite clearly pronounced in workers diagnosed with PTSD. This symptom demonstrates the respondents' attempts to avoid the repeated action of the stressor, to mitigate traumatic events, to switch attention, and in some cases to delve into alternative activities (excessive enthusiasm for sports, active recreation, etc.). The "excitability" symptom is characteristic within the normal range for workers with no PTSD symptoms and workers with mild PTSD symptoms. This symptom is clearly pronounced in specialists with PTSD symptoms, which indicates their neuro-psychic stress, irritability, anger, and poor concentration.

The data of the general scale of the impact of a traumatic event are within the normal range for workers with no PTSD symptoms and workers with mild PTSD symptoms. This indicator is quite pronounced in workers diagnosed with PTSD. This demonstrates dysfunctional emotional features, which developed as a result of the traumatic event.

The dominance of various strategies in selected groups of specialists was identified using the Coping Strategy Indicator (CSI) by Amirkhan.

Table 2.
Average indicators of coping strategies among emergency medicine workers (p≤0.001)

PTSD level	PTSD symptoms					
	problem solving		seeking social support		avoidance	
	M	SD	M	SD	M	SD
No PTSD symptoms (n=120)	25.6	0.73	22.15	0.77	21.64	0.58
Some PTSD symptoms (n=89)	27.44	0.84	23.87	0.80	22.75	0.69
PTSD (n=21)	14.38	1.57	29.14	1.9	31.14	1.56

The data in Table 2 indicate that the "problem solving" strategy is the dominant strategy for workers with no PTSD symptoms and workers with mild PTSD symptoms. This strategy is aimed at solving the problem situation that has arisen. Therefore, the workers who use it are quite active in dealing with stressful situations, which improves their adaptive capabilities. The avoidance strategy dominates in the group of workers with some PTSD symptoms. This indicates a style of behaviour aimed at reducing contact with stressful situations, conflicts or people. Such workers try to avoid traumatic events under any circumstances.

The strategy of “seeking social support” is equally used by workers with some PTSD symptoms and those without PTSD. However, in the latter use it more often. Such data describe low attempts to resort to external help from relatives and specialists in resolving a problem situation. Zung Self-Rating Depression (SDS) technique made it possible to detect signs of depression in the studied emergency medicine workers with different PTSD levels (Table 3).

Table 3.
Average indicators of coping strategies among emergency medicine workers ($p \leq 0.001$)

PTSD level	Depression	
	M	SD
No PTSD symptoms (n=120)	39.06	1.20
Some PTSD symptoms (n=89)	40.39	1.39
PTSD (n=21)	65.23	4.11

The obtained results demonstrate a low level of depression in subjects without PTSD and in subjects with some PTSD symptoms. A high level of depression was found in workers who has pronounced PTSD symptoms. Depressive states not only have a negative impact on the personality, but can also provoke other more serious emotional disorders and diseases. Therefore, overcoming PTSD symptoms must necessarily include working with depression.

A linear regression analysis was performed to establish the relationship between coping strategies and the PTSD symptoms of emergency medicine workers, which revealed the dependence between the variables. The dependent variable was the indicator of the PTSD among emergency medicine workers, the independent variables were PTSD symptoms, the level of depression, and coping strategies. The relationship between the PTSD and PTSD symptoms was studied during the analysis (Table 4).

Table 4.
Regression analysis of the relationship between the PTSD and the PTSD symptoms of emergency medicine workers

PTSD symptoms	β	SD	r (p)	R^2	F	P
intrusion	0.27	0.026	0.514 ($p \leq 0.001$)	0.353	41.17	0.000
avoidance	0.33	0.032	0.519 ($p \leq 0.001$)			
excitability	0.31	0.017	0.564 ($p \leq 0.001$)			

The figures in Table 4 indicate a statistically significant effect of the PTSD on PTSD symptoms. Subjects diagnosed with PTSD have such symptoms as intrusion ($\beta=0.31\pm0.017$, $r=0.514$, $p \leq 0.001$), avoidance ($\beta=0.33\pm0.032$, $r=0.519$, $p \leq 0.001$) and excitability ($\beta=0.25\pm0.026$, $r=0.564$, $p \leq 0.001$). Therefore, the regression model confirms the existence of a relationship between PTSD signs and PTSD symptoms ($R2 = 0.353$, $F = 41.17$, $p<0.001$). Regression analysis also revealed the dependence of PTSD symptoms and the depression level of ambulance medicine specialists (Table 5).

Table 5.
Regression analysis of the relationship between the PTSD and depression level in emergency medicine workers

PTSD symptoms	β	SD	r (p)	R^2	F	P
depression	0.25	0.04	0.389 ($p \leq 0.001$)	0.245	38.55	0.000

According to the data in Table 5, high depression rates were found in workers diagnosed with PTSD ($\beta=0.25\pm0.04$, $r=0.389$, $p \leq 0.001$). Accordingly, the regression model shows that emergency medicine workers diagnosed with PTSD have severe depression ($R2 = 0.245$, $F = 38.55$, $p < 0.001$). A relationship between the PTSD and the coping strategies of emergency medicine workers was established in the course of the regression analysis (Table 6).

Table 6.
Regression analysis of the relationship between the PTSD and the coping strategies of emergency medicine specialists

PTSD symptoms	β	SD	r (p)	R²	F	P
problem solving	-0.45	0.011	-0.174 (p≤0.01)	0.335	23.11	0.000
seeking social support	-0.021	0.011				
Avoidance	0.82	0.011	0.276 (p≤0.01)			

It was found that emergency medicine workers with PTSD symptoms use an avoidance coping strategy ($\beta=0.82\pm0.011$, $r=0.276$, $p\leq0.001$). Problem solving is a basic coping strategy typical for emergency medicine workers who have not been diagnosed with PTSD ($\beta=-0.45\pm0.011$, $r=-0.174$, $p\leq0.001$). The obtained regression coefficients testify to the relationship between coping strategies and the PTSD in emergency medicine workers ($R2 = 0.335$, $F = 23.11$, $p < 0.001$). A direct relationship shows the intensity of avoidance in workers diagnosed with PTSD, an inverse relationship indicates the intensity of coping with problem solving in workers without PTSD.

The obtained results statistically proved that emergency medicine workers diagnosed with PTSD use avoidance as a coping strategy for resolving stressful situations. The workers who have not been diagnosed with PTSD use a problem-solving coping strategy that is more adaptive and promotes effective functioning.

Discussion

The conducted study involved the identification of the relationship between coping strategies and PTSD in emergency medicine workers as extreme workers. It can be noted based on the results that the workers diagnosed with PTSD have pronounced symptoms of intrusion, avoidance, and excitability. They are characterized by obsessive feelings, emotions about a traumatic event, nightmares (Alshahrani et al., 2022; Bovin et al., 2021; Schäfer et al., 2019). At the same time, such workers avoid any contact with the stressor, avoid talking about the traumatic event and look for ways to avoid experiences. According to the data obtained by Thielmann et al., (2022), the workers diagnosed with PTSD have anxiety, anger, decreased concentration, behavioural disorders, hyperexcitability against the background of a decreasing general psycho-emotional well-being.

According to the general trauma scale, the studied emergency medicine workers have unfavourable emotional and personal characteristics that arose against the background of subjective perception of a traumatic event. The same results were obtained in the study of Soravia et al., (2021), who diagnosed PTSD symptoms and signs in emergency medicine workers. Their study showed that regardless of profession, the main prognostic factors of PTSD are symptoms of avoidance and distraction, alcohol consumption, self-destructive behaviour, excessive physiological excitability, irritability and aggressiveness.

A high level of depression was found in specialists with PTSD signs. Depression is a consequence of the long-term impact of a traumatic event. Emergency medicine workers with signs of depression are ineffective specialists, unable to respond constructively in difficult and stressful situations, need help. They are characterized by low adaptive potential and problems with behavioural regulation, a certain inclination to neuro-psychical breakdowns, lack of adequacy of self-esteem and real perception of reality; possible manifestations of antisocial behaviour, difficulties in building contacts with others (Vagni et al., 2022; Warren-James et al., 2022). Stevelink et al., (2020) determined that depression is a characteristic symptom of emergency workers and negatively affects their professional activity. Petrie et al., (2018) reached the same conclusion, who found a high level of anxiety and depression in emergency medicine workers with PTSD. Despite the findings of Bjørn et al., (2022), who report that emergency medicine workers have low manifestations of PTSD, anxiety, and depression, this study provides evidence that depression is a typical symptom of PTSD.

In a linear regression model, avoidance coping was a significant predictor among workers diagnosed with PTSD. Whereas problem-solving coping was predominant in workers with no

PTSD. It follows that emergency medicine workers diagnosed with PTSD use a dysfunctional avoidance strategy in their behaviour. As Vicente et al., (2021) noted, the avoidance strategy involves the aggravation of the post-traumatic stress state due to the refusal to solve the problem, the unwillingness to think about it and react appropriately. Chen et al., (2021) also determined that the avoidance strategy is positively related to PTSD, and is characterized by distancing from problems, switching to another activity, avoiding direct contact with the stressor.

The failure to identify the traumatic event and its consequences leads to deterioration of the condition, causes complex personal changes and reduces work capacity. Moreover, as Jovanovic et al., (2017), showed in their study, this strategy leads to addictive behaviour. When PTSD is acute, avoidance coping causes alcohol and tobacco addiction.

Ciułkowicz et al., (2021) concluded in their study that healthcare workers who frequently use maladaptive avoidance strategies have more negative psychopathological symptoms. Among them, the authors primarily single out depression and social dysfunction, which, according to them, disrupt the adaptive potential of emergency medicine workers.

As a summary, attention should be paid to the data of Campillo-Cruz et al., (2021), who found the impact of routine work-related stressors on the development of PTSD among emergency medicine workers. According to their data, the more developed PTSD and avoidance strategies, the more likely the worker's condition will deteriorate under the impact of new stressors. In other words, the failure to treat PTSD will negatively affect the professional duties.

At the same time, Ntatamala and Adams (2022) identified factors that affect the occurrence of PTSD in emergency workers. Among these factors, they name age, gender, educational level, marital status. The following areas of research identified by Oliveira et al., (2019) are also important. They included sources of stress, coping strategies and means of prevention. On these grounds, the inclusion of such factors in further research can be considered appropriate and justified.

Conclusions

This study showed that emergency medicine workers with PTSD signs have dominant avoidance coping, which involves conscious resistance to traumatic events and is destructive to the individual. Workers with such coping are unable to cope with stressful situations in the course of performing professional duties. The gradual accumulation of PTSD symptoms leads to emotional distress and negative emotional states. Considering the peculiarities of the extreme type of activity, emergency medicine workers need special attention to their psycho-emotional state. Many of them ignore the PTSD signs and do not take any measures.

The limitations of the study include the complex work schedule of emergency medicine workers, which does not allow excluding all external factors influencing the diagnostic process. In some cases, workers may work two or three shifts, which worsens their condition and may give false results. At the same time, one of the limitations is the lack of control over the dynamics of PTSD development. The course of this disorder is individual and many specialists do not recognize the problem, which complicates its treatment and control.

The research prospects involve the study of the consequences of PTSD for workers, as destructive coping in stressful situations provokes the occurrence of PTSD and can cause such negative emotional states as anxiety, depression, and fear. It is appropriate to further study the corrective possibilities of the development of adaptive coping strategies of emergency medicine workers in reducing PTSD.

Bibliographic references

Alshahrani, K., Johnson, J., & O'Connor, D. B. (2022). Coping strategies and social support are associated with post-traumatic stress disorder symptoms in Saudi paramedics. International Journal of Emergency Services. Retrieved from https://doi.org/10.1108/IJES-08-2021-0056

Arebo, B., Ewach, G., Omara, J., Oyella, P., Lucky, R., & Kabunga, A. (2022). Post-traumatic stress disorder and coping strategies among people with HIV in Lira District, Uganda: A cross-sectional study. HIV/AIDS - Research and Palliative Care, 14, 255-264. https://doi.org/10.2147/HIV.S358575

Bartzak, P. (2016). Physiological antecedents of the psychological manifestations of PTSD. Medsurg Nursing, 25(5), 323–326.

Berger, W., Coutinho, E., Figueira, I., Marques-Portella, C., Luz, M., Neylan, T., Marmar, C., & Mendlowicz, M. (2011). Rescuers at risk:

A systematic review and meta-regression analysis of the worldwide current prevalence and correlates of PTSD in rescue workers. Social Psychiatry and Psychiatric Epidemiology, 47, 1001-1011. https://doi.org/10.1007/s00127-011-0408-2

Bilsker, D., Gilbert, M., Alden, L., Sochting, I., & Khalis, A. (2019). Basic dimensions of resilient coping in paramedics and dispatchers. Australasian Journal of Paramedicine, 16. Retrieved from https://doi.org/10.33151/ajp.16.690

Bjørn, O. R., Næss-Pleym, L. E., Haugland, H., Dale, J., Uleberg, O., & Espetvedt Nordstrand, A. (2022). Posttraumatic stress responses and psychological well-being in Norwegian medical helicopter personnel. Air Medical Journal, 41(3), 292-297. https://doi.org/10.1016/j.amj.2022.02.006

Bovin, M. J., Kimerling, R., Weathers, F. W., Prins, A., Marx, B. P., Post, E. P., & Schnurr, P. P. (2021). Diagnostic accuracy and acceptability of the Primary Care Posttraumatic Stress Disorder Screen for the Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition) among US Veterans. JAMA Network Open, 4(2), e2036733. Retrieved from https://doi.org/10.1001/jamanetworkopen.2020.36733

Campillo-Cruz, M., González-Gutiérrez, J. L., & Ardoy-Cuadros, J. (2021). Relevance of traumatic events and routine stressors at work and PTSD symptoms on emergency nurses. Sustainability, 13(11), 6050. https://doi.org/10.3390/su13116050

Chatzea, V., Sifaki-Pistolla, D., Vlachaki, S.-A., Melidoniotis, E., & Georgia, P. (2017). PTSD, burnout and well-being among rescue workers: Seeking to understand the impact of the European refugee crisis on rescuers. Psychiatry Research, 262, 71-74. https://doi.org/10.1016/j.psychres.2017.09.022

Chen, Y., Li, X., Chen, C., An, Y., Shi, J., Huang, J., & Zhao, Y. (2021). Influence of avoidant coping on posttraumatic stress symptoms and job burnout among firefighters: The mediating role of perceived social support. Disaster Medicine and Public Health Preparedness, 16, 1-6. https://doi.org/10.1017/dmp.2021.155

Ciułkowicz, M., Maciaszek, J., Misiak, B., Pałęga, A., Rymaszewska, J., & Szcześniak, D. M. (2021). Coping strategies and psychopathological responses among medical and non-medical professionals – a cross-sectional online survey. Frontiers in Psychiatry, 12. https://doi.org/10.3389/fpsyt.2021.663224

Freire, C., Ferradás, M., Regueiro, B., Rodríguez, S., Valle, A., & Núñez, J. (2020). Coping strategies and self-efficacy in university students: A person-centered approach. Frontiers in Psychology, 11, 841-862.

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of event scale: A measure of subjective stress. Psychosomatic Medicine, 41(3), 209-218.

Hruska, B., & Barduhn, M. S. (2021). Dynamic psychosocial risk and protective factors associated with mental health in Emergency Medical Service (EMS) personnel. Journal of Affective Disorders, 282, 9–17. https://doi.org/10.1016/j.jad.2020.12.019

Jovanovic, M., Dickov, A., Kajtez, M., Dickov, V., & Dragisic, T. (2017). The relation of stress coping strategies and self-handicapping strategies to the process of opiate addicts behavior changes. Military medical examination, 76, 47-47. https://doi.org/10.2298/VSP170222047J

Lee, D., Lee, J., Lee, J., Changsoo, K., & Jung, Y.-C. (2022). Insular activation and functional connectivity in firefighters with post-traumatic stress disorder. BJPsych Open, 8(1), e32. https://doi.org/10.1192/bjo.2022.32

Loef, J., Vloet, L. C. M., Vierhoven, P. H., van der Schans, L., Neyman-Lubbers, Y., de Vries-de Winter, C., & Ebben, R. H. A. (2021). Starting ambulance care professionals and critical incidents: A qualitative study on experiences, consequences and coping strategies. BMC Emergency Medicine, 21, 110. https://doi.org/10.1186/s12873-021-00500-9

Machado, V. A., Volchan, E., Figueira, I., Aguiar, C., Xavier, M., Souza, G. G. L., Sobral, A. P., de Oliveira, L., & Mocaiber, I. (2020). Association between habitual use of coping strategies and posttraumatic stress symptoms in a non-clinical sample of college students: A Bayesian approach. PloS One, 15(2). https://doi.org/10.1371/journal.pone.0228661

McKeon, G., Steel, Z., Wells, R., Fitzpatrick, A., Vancampfort, D., & Rosenbaum, S. (2022). Exercise and PTSD symptoms in emergency service and frontline medical workers: A systematic review. Translational Journal of the American College of Sports Medicine, 7(1). https://doi.org/10.1249/TJX.0000000000000189

Ntatamala, I., & Adams, S. (2022). The correlates of post-traumatic stress disorder in ambulance personnel and barriers faced in accessing care for work-related stress. International Journal of Environmental Research and Public Health, 19(4), 2046. https://doi.org/10.3390/ijerph19042046

Oliveira, A. C., Neto, F., Teixeira, F., & Maia, Â. (2019). Working in prehospital emergency contexts: Stress, coping and support from the perspective of ambulance personnel. International Journal of Workplace Health Management, 12(6), 469-482. https://doi.org/10.1108/IJWHM-01-2019-0004

Petrie, K., Milligan-Saville, J., Gayed, A., Deady, M., Phelps, A., Dell, L., Forbes, D., Bryant, R., Calvo, R., Glozier, N., & Harvey, S. (2018). Prevalence of PTSD and common mental disorders amongst ambulance personnel: A systematic review and meta-analysis. Social Psychiatry and Psychiatric Epidemiology, 53(9), 897–909. https://doi.org/10.1007/s00127-018-1539-5

Rojas, R., Hickmann, M., Wolff, S., Kolassa, I-T., & Behnke, A. (2022). Coping in the Emergency Medical Services: Associations with the Personnel's Stress, Self-Efficacy, Job Satisfaction, and Health. Clinical Psychology in Europe, 4, 1-25. Retrieved from https://doi.org/10.32872/cpe.6133

Schäfer, S. K., Becker, N., King, L., Horsch, A., & Michael, T. (2019). The relationship between sense of coherence and post-traumatic stress: A meta-analysis. European Journal of Psychotraumatology, 10(1). https://doi.org/10.1080/20008198.2018.1562839

Shepherd, L., & Wild, J. (2014). Cognitive appraisals, objectivity and coping in ambulance workers: A pilot study. Emergency Medicine Journal, 31, 41-44. Retrieved from http://dx.doi.org/10.1136/emermed-2011-200511

Soravia, L. M., Schwab, S., Walther, S., & Müller, T. (2021). Rescuers at risk: Posttraumatic stress symptoms among police officers, fire fighters, ambulance personnel, and emergency and psychiatric nurses. Frontiers in Psychiatry, 11. https://doi.org/10.3389/fpsyt.2020.602064

Stevelink, S. A. M., Pernet, D., Dregan, A., Davis, K., Walker-Bone, K., Fear, N. T., & Hotopf, M. (2020). The mental health of emergency services personnel in the UK Biobank: A comparison with the working population. European Journal of Psychotraumatology, 11(1), 1799477. https://doi.org/10.1080/20008198.2020.1799477

Thielmann, B., Schnell, J., Böckelmann, I., & Schumann, H. (2022). Analysis of work related factors, behavior, well-being outcome, and job satisfaction of workers of emergency medical service: A systematic review. International Journal of Environmental Research and Public Health, 19. https://doi.org/10.3390/ijerph19116660

Vagni, M., Maiorano, T., Giostra, V., Pajardi, D., & Bartone, P. (2022). Emergency stress, hardiness, coping strategies and burnout in health care and emergency response workers during the COVID-19 pandemic. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.918788

Vicente, V., Jansson, J., Wickström, M., Danehorn, E., & Rubenson Wahlin, R. (2021). Prehospital emergency nurses' coping strategies associated to traumatic experiences. International Emergency Nursing, 59. https://doi.org/10.1016/j.ienj.2021.101083

Warren-James, M., Dodd, N., Perera, C., Clegg, L., & Stallman, H. M. (2022). How do paramedics cope? A scoping review. Australasian Emergency Care, 25(3), 191-196. https://doi.org/10.1016/j.auec.2021.12.003

DOI: https://doi.org/10.34069/AI/2023.63.03.29
How to Cite:
Mosendz, O., Ponomarevska, O., Tereshchenko, O., Mykhailiuk, O., & Gula, Y. (2023). Strategic perspectives of design development in Ukraine: theory, practice and development innovations. *Amazonia Investiga*, *12*(63), 310-318. https://doi.org/10.34069/AI/2023.63.03.29

Strategic perspectives of design development in Ukraine: theory, practice and development innovations

Perspectivas estratégicas del desarrollo del diseño en Ucrania: teoría, práctica e innovaciones de desarrollo

Received: February 7, 2023 Accepted: April 1, 2023

Written by:
Oksana Mosendz[1]
https://orcid.org/0000-0003-1268-2179
Olena Ponomarevska[2]
https://orcid.org/0000-0002-2044-2186
Olha Tereshchenko[3]
https://orcid.org/0000-0001-6741-1005
Olga Mykhailiuk[4]
https://orcid.org/0000-0002-4934-5937
Yevhen Gula[5]
https://orcid.org/0000-0002-3559-2179

Abstract

The modern development of the information and globalized society causes new requirements for design. The purpose of the article is to analyze the strategic perspectives of design in modern Ukraine, to investigate certain theoretical and practical aspects of its development, the possibility of introducing innovations. General scientific methods were used. The forecasting method also made it possible to highlight the problem of the further transformation of design in the world and in Ukraine. In the results, new ideas and prospects for the development of design, caused by the restructuring of its concept from the classical to the neoclassical stage, innovative solutions in the development of the design environment are traced. The prospect of further harmonization of EN, ISO, IEC standards with Ukrainian samples has also been proven. The further development of design as an educational specialty is a promising direction, the effectiveness of which can be controlled thanks to the mechanism of accreditation of

Resumen

El desarrollo moderno de la sociedad de la información y globalizada provoca nuevos requisitos para el diseño. El propósito del artículo es analizar las perspectivas estratégicas del diseño en la Ucrania moderna, investigar ciertos aspectos teóricos y prácticos de su desarrollo, la posibilidad de introducir innovaciones. Se utilizaron métodos científicos generales. El método de previsión también permitió poner de relieve el problema de la transformación ulterior del diseño en el mundo y en Ucrania. En los resultados se trazan nuevas ideas y perspectivas para el desarrollo del diseño, causadas por la reestructuración de su concepto de la etapa clásica a la neoclásica, soluciones innovadoras en el desarrollo del entorno del diseño. También se ha demostrado la perspectiva de una mayor armonización de las normas EN, ISO, IEC con muestras ucranianas. El desarrollo ulterior del diseño como especialidad educativa es una dirección prometedora, cuya eficacia puede controlarse gracias al mecanismo de acreditación de los programas educativos. Se sugiere recurrir a

[1] Doctor of the Philosophy, field of study Culture and Art, Associate Professor Department of Fine Arts and Design, Faculty of Ukrainian and Foreign Philology and Studi Arts, Oles Honchar Dnipro National University, Dnipro, Ukraine.
[2] Candidate of Study of Art, Associate Professor Department of Architecture and Environmental Design, Educational-scientific institute of architecture, design and geodesy, Chernihiv Polytechnic National University, Chernihiv, Ukraine.
[3] Postgraduate, Assistant, Department of Art and Costume Design, Faculty of Design, Kyiv, Ukraine, National University of Technology and Design, Ukraine.
[4] PhD in Design, Associate Professor Department of Graphic Design, Faculty of Design, Kyiv, Ukraine, National University of Technologies and Design, Ukraine.
[5] Professor, Head of the Department of Graphic Design, Faculty of Design, Kyiv National University of Technologies and Design, Kyiv, Ukraine.

educational programs. It is suggested to turn to informal education, which is more dynamic than classical university education, and allows you to acquire not only professional, but also business skills. The conclusions showed that further transformations of design will influence the creative development of designers.

Keywords: design, Ukraine, digitalization, innovation, higher education.

la educación informal, que es más dinámica que la educación universitaria clásica y permite adquirir no sólo competencias profesionales, sino también empresariales. Las conclusiones muestran que las nuevas transformaciones del diseño influirán en el desarrollo creativo de los diseñadores.

Palabras clave: diseño, Ucrania, digitalización, innovación, enseñanza superior.

Introduction

Modern social development, the widespread integration of digital technology in everyday life bring major changes in the functioning of all spheres of human activity. In particular, it also refers to the new horizons of the use of design, because modern consumers need not only the functionality of products (performance of direct duties) but also in the aesthetic appearance and compliance with a certain style. Thanks to this, some world-famous corporations have now earned themselves a certain image, which acts as an advertising business card, as the quality of their products. Similar processes are also characteristic of architecture, industrial production, services (including digital and the Internet).

Accordingly, the modern attention of scientists to the field of design, its likely ways of development, and the prospects for integration with the digitalization of society are relevant vectors for research. Equally important are the scientific aspects of design studies, their disclosure using pedagogical methods, the introduction of updated national standards that meet the requirements of modernity, etc. All this only adds to the interest of design problematics, which is especially important in Ukraine under specific circumstances. Russian aggression of 2022 has paid attention to problematic moments of design functioning as separate directions of the educational, business community of Ukrainians' everyday life. Along with the demand for everything Ukrainian, it causes the necessity of the development of different spheres of design, at least allocation of ways for further development and improvement of this sphere.

The aim of the article is to analyze the strategic prospects of design in contemporary Ukraine, to explore some of the theoretical and practical aspects of its development, the possibility of innovation. Accordingly, the main objectives of the study are as follows:

1. To trace new ideas and competencies that are used in the restructuring of the design concept at the current stage of development.
2. To characterize the administrative and legal aspect of design development in Ukraine.
3. To explore the possibilities of design as an element of the creative economy for Ukraine.
4. Analyze innovative solutions in the development of design environment.

Theoretical Framework or Literature Review

Given the comprehensive digitalization and globalization, the question of strategic development of design activities is relevant and of interest to many European and American scholars. Calabretta & Kleinsmann (2017) through the lens of the technological revolution investigated the main changes taking place in the field of design. The researchers note that the active development of digital technology has influenced changes in the way companies to innovate and create new products: "as a key function of innovation, design has also evolved to better support companies in dealing with the speed and complexity of technological, economic, and societal change" (Calabretta & Kleinsmann, 2017, p. 292). Camburn et al., (2017), through the lens of integrated analysis, highlighted the major ongoing innovative changes taking place in today's design environment. Gemser & Barczak (2020) explored features of future design development through an analysis of the likely design trajectories of the field. Hay, Cash & McKilligan (2020) characterized the problem of cognitive design analysis. The researchers note that current environmental trends in the use of artificial intelligence constitute major long-term challenges to the development of cognitive design systems. Magistretti, Dell'Era & Verganti (2020) provide a detailed review of the technology development literature to demonstrate how companies can develop technology to promote innovation. Verganti, Vendraminelli& Iansiti (2020) outlined key innovations in the era of artificial intelligence. Meanwhile, May et al., (2021) characterized the importance of design in shaping social innovation. Micheli et al., (2018) investigated the problem of design thinking formation. Syomka (2017) analyzed the specifics of the use of bionics in the design environment of Ukraine. The researcher notes that this style is predominantly characterized by the use of light colors, atypical zoning techniques, structural system of construction, modular principle. Varyvonchyk & Kulyk (2022) described the current innovative design trends in Ukraine. Researchers note that the widespread use of modern innovative methods of modeling and design, the use of unique techniques of non-traditional materials provide unlimited opportunities for the designer's activity. Despite this, the problem of the modern and economic potential of design in Ukraine and its improvement remains understudied. Also debatable is the problem of legislative regulation of design in Ukraine, its standardization. This aspect requires further analysis. In addition, the problem of the development of non-classical design and coverage of new competencies of designers in connection with the digitalization and globalization of society is understudied.

Methodology

The study is formed based on general scientific and specifically scientific research methods. In particular, among the general scientific methods used analysis, synthesis, concretization, forecasting. By means of the analysis, the main subject of the research (design development strategy) is divided into smaller parts (research of the administrative and legal aspect of design development in Ukraine, analysis of innovative creative economy through the prism of design, etc.). Based on synthesis the above-mentioned elements are united and own hypotheses concerning strategic development of design in Ukraine are formed. The problem of further transformation of design in the world and Ukraine is reflected through the use of forecasting.

The main method of the study was the method of content analysis of scientific literature. The use of this research approach made it possible to systematically review scientific texts on the subject, identify current expert assessments of the state of development of the design field in Ukraine, and identify and compare it with the capabilities of modern European countries and the United States. Thanks to the systematic description and categorization of scientific literature, it was also possible to realize the purpose and objectives of the study in accordance with various aspects of evaluative judgments and research hypotheses.

Between specially scientific methods the legal and historical principles of research are allocated. In work legal methods are applied through a prism of use of a dogmatic approach for an explanation of reality. Of separate importance was the use of the historical method by which the development of design from the classical to the non-classical period is reflected.

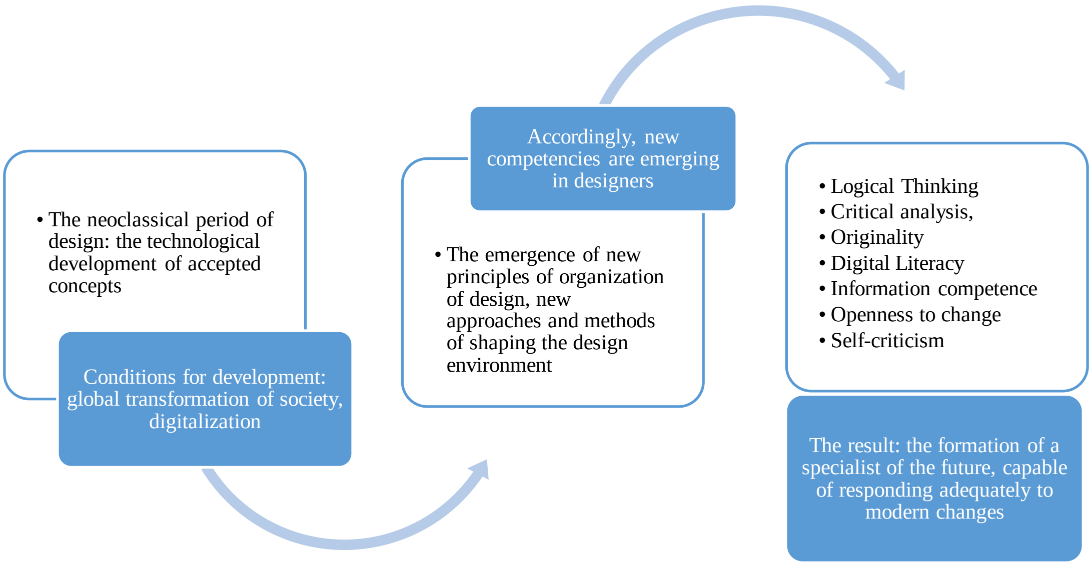
Results and Discussion

Restructuring of the design concept from classical to the non-classical stage of development: new ideas, new competencies

Nowadays design is recognized as an integral part of the innovative activity of most modern organizations and enterprises. Newly established organizations and companies recognize that in the conditions of global competition in Ukraine and internationally they must constantly innovate, develop, shape new products and services, and focus on the differences of their work from their competitors, winning new customers and retaining old ones. At the same time, in order to remain competitive, today's design institutions must keep up with innovative changes (Borgianni et al., 2020). Calabretta & Kleinsmann, 2017).

Contemporary researchers have noted that among the significant qualities of “classic” design are dominated by the principles of economic manufacturability, engineering functionality, financial pragmatism, sales growth trends, and gross margin (Camburn et al., 2017). For this reason, the competence of designers is measured by the depth of their practical mastery of these categories and the skill of being able to find an organic combination of often conflicting requirements. However, according to Plantec et al., (2019), an unplanned reliance on industrial mechanisms of mass production has entailed a crisis of competence for designers. At the same time, the loss of a human reference point during the design and moral relativism in design goals have influenced conformism to become almost the only means of professional communication and human socialization through the lens of design activity. Modern transformational changes require original solutions from designers, while at the same time, the universal set of humanitarian guidelines has led to the fact that "classical" design as the highest form of theory and practice has receded to second place (Dell'Era et al., 2020). For this reason, non-classical design is relevant in the world. Note that the term non-classical period of design development refers to this type of design activity caused by the expansion of new rationalities in the context of social and cultural crises (Gemser & Barczak, 2020). The neoclassical stage of design is effective in the rapid and global transformation of the new economy because that is when both the rational and emotional part of human nature influences customer and consumer choices. (Gemser & Barczak, 2020). For this reason, in order to ensure cultural connotation, it is necessary to rethink the content of design: from functional modernism to non-utilitarian transmodernism. We predict that processes of such refinement should contribute to the emergence of new principles of design organization, new approaches, and competencies. (See Figure 1).

Figure 1.
Schematic model of the relationship between non-classical design and new competencies of designers



Article authors' development

Among the key advantages of a professional designer in Ukraine, the logical ability to comprehensively solve complex problems traditionally plays an important role. Separately, given modern transformations, critical thinking, innate creativity, originality, empirical actualization, digital competence, and information literacy play an important place.

The restructuring of the design concept entails the designer's personal creative mobility and his/her ability to switch to different types of design activities, the development of heuristic and critical thinking, and integration (Liedtka, 2014). The mentioned skills and beliefs should influence the professional activity of the designer in Ukraine. We believe that such qualities as flexibility of thinking, openness to changes, readiness for new situations will become important for the non-classical Ukrainian designer because the competence of the latter will become aimed at mastering the qualities necessary for professional development: mobility, mastering the fundamental and practical knowledge of technique and art. Also important will be self-critical thinking, that is, the ability to choose among the many author's solutions the best and successful (Hay et al., 2020). In addition, the skill to refute typical models and optimal innovations will be important. At the same time, digital competence occupies almost the main role in the sphere of innovative designer skills (Magistretti et al., 2020). Now in Ukraine in the conditions of large-scale digitalization, it is especially relevant for all specialists. The ability to understand digital technologies, critically perceive digital information - all this will be required from the designer of the future. In general, the designer's awareness of their professional uniqueness will influence the formation of a new active unit of design activity, as delineated personal branding today is the foundation for the formation of working and competent tactics of personal leadership (Dell'Era et al., 2020). Contemporary researchers also argue that the skills of organizing authorial individualization of a design product through inclusive ergonomic empowerment should be among the important new competencies of the contemporary designer (Verganti et al., 2020). The skills of organizing radicalization of a design product through the formation of symbolic product imagery, active participation in the deindustrialization of product manufacturing processes using 3D printing, application of automated devices, outsourcing, etc. are also becoming important.

Design in Ukraine: the administrative and legal aspecto

Extremely relevant direction of design development is the formation of an appropriate regulatory framework, development, and implementation of certain provisions regarding regional and industry design-ergonomic services, relevant departments that functioned in enterprises, in scientific and production institutions, etc. (May et al., 2021). For this reason, there is a need, first of all, for appropriate accreditation of design structures, as well as - the development of national standards and other legal documentation that would define the design quality of products and ways to comply with the control of them. In fact, in the context of the creation of design centers that would develop appropriate design projects and perform an examination of the consumer quality of industrial products, advising producers of goods and services on design issues (Shkitsa et al., 2020). The development of such activities would allow a direct impact on improving product quality, the introduction of appropriate accreditation would actualize the influence of the centers on the relevant processes.

Regulatory support of the functioning of the design sphere, obviously, should create and develop an appropriate legal basis for its work, the bases of harmonization with the developed directives of the European Union member states, other interstate standards. It also refers to the prospects of creating their own Ukrainian legislation, which would optimize the living environment of people, improve the quality and competitiveness of manufactured physical and digital products. It is important that with Ukraine's accession to the World Trade Organization (hereinafter - the WTO) intensified work to address problems of harmonization of the adopted national standards with interstate, established information interaction with the WTO member countries.

It is also important to note that the fundamental difference from the old, previously adopted system of State Standards of Ukraine (hereinafter DSTU) from other international systems of standardization is the status of standards. Interstate standards are implemented voluntarily, while the requirements of DSTU, which are still partially in force in Ukraine in some areas, sometimes have mandatory requirements. The updated national standards of Ukraine already have a voluntary status. Appeal to ISO and EN standards in the field of design is to update certain provisions of current DSTU norms. In particular, we are talking about reformatting the principles and methods of design and its use, the terms and definitions of the main concepts, a new understanding of the principles and methodology of design to formulate and create comfortable and safe working conditions and leisure for a better performance of mental or physical loads, the use of design industry safety during manufacturing operations at various stages (creating designs, testing, and commissioning).

Compliance with European and international standards EN, ISO, IES is also aimed at guaranteeing greater competitiveness of Ukrainian products and generally increasing the quality of life of the population. However, such a global goal requires further improvement of the quality of human life (Shkitsa et al., 2020). It should be taken into account that the level of requirements of international standards in foreign practice is generally used as a baseline. Other national standards in European countries and the United States are much higher than this simple baseline. It is also important that in the leading countries of the world, the standards of special associations are actively used - in the work of organizations of scientific, technical, and professional direction, which are characterized by even higher requirements.

Separate mention should be made of standardization in the educational sphere. Prospective development of design is a further evolution of the control of higher education in Ukraine, in particular the specialty 022 Design. According to this document (for the training of bachelors in higher education - from December 13, 2018) determine the basic and special competencies that a design specialist must master during training. Since the development of the specialty does not stand still, here is the corresponding codification of the rules of training in universities will have a constant update and focus on the latest patterns used in the leading universities of the world. The introduction of appropriate accreditation schemes conducted by the National Agency for Educational Quality Assurance will have a positive effect, as this body will have the power to monitor the implementation of updating educational programs, links with other disciplines and programs of study, quality control of teaching, etc. (Micheli et al., 2018). This experience for the Ukrainian realities is quite innovative, so its development in the future will have a positive impact on the development of design, in particular the theoretical and practical aspects of implementation.

Design as an Element of Creative Economy: Experience for Ukraine

The legal transformation for the design field is relevant because of its economic potential. Researchers point out that design services in general are valuable and represent significant financial resources in Europe and America. As an example, cite indicators of GDP, which brings to the national treasury in the UK and Ireland - 71 billion pounds and 38 billion euros, respectively. for the Ukrainian reality, such figures are exorbitant, but design services are still little appreciated by entrepreneurs. Even the existing statistics about the workers and entrepreneurs involved in the industry is rather arbitrary.

It was found that most companies working in the market and individuals entrepreneurs are registered in Kyiv. This corresponds to global tendencies to concentrate production, intellectual and economic flows in the capitals of states. On the other hand, the probable reason for this situation is the lack of educational facilities in other regions, as they have few registered university training programs. Often regions simply do not have master's programs for relevant training, and even existing ones may have outdated content or teaching methods (Shkitsa et al., 2020). Obviously, the introduction of permanent accreditation of educational programs can improve this situation. The design industry is focused on the use of qualified personnel - creative professionals because the success of entrepreneurship will depend on their level of work (Plantec et al., 2019).

An important aspect was that the growth of the design services market in Ukraine is extensive. It occurs at the expense of the growth of the number of orders, rather than the added value of the work of specialists. For the market itself, the opposite scenario would be much more effective - growth at the expense of increasing the cost of projects. In the future, if such trends persist, the services of designers may turn into secondary work - the gross execution of low-cost and template orders that compete little with other, more experienced designers (Shkitsa et al., 2020). An innovative way to address this prospective development problem was to form individual designers' associations into larger organizations. It would also become more realistic to execute more complex and more valuable projects, which would accelerate qualitative development(See Table 1).

Table 1.
The main problems of design development in Ukraine and their solutions

Problems of design development in Ukraine	Proposed solutions
Growth of the design services market in Ukraine - extensive	Encourage individual designers to organize themselves into larger organizations. This would allow them to exchange creative ideas (develop) and be much more stable in the service market.
Lack of business competence	Introduction of additional informal education - special courses introducing designers to the basics of entrepreneurship outside of working hours
Low level of innovativeness in design solutions	Acquaintance with the modern innovative trends, improvement of designers' qualifications, and the introduction of additional non-formal education.
Little attention to the education of designers at the regional level	The system of introducing permanent accreditation of educational programs should improve the situation.

Article authors' development

A tangible problem in the designer market is the lack of business competence. Typically, business owners or independent designers have a poor understanding of the business model for their entrepreneurial activities. For this reason, they are also poorly aware of the potential threats that will arise during development. Because employees and executives have a poor understanding of the economics of how their business functions, the percentage of bankruptcies can increase. An effective way to get out of this situation and further develop design would be to introduce additional informal education - special courses that introduce designers to the basics of entrepreneurship outside of working hours (Mosely et al., 2018). This pathway is quite innovative - it involves building relevant business competencies, self-directed education, and practical skills. While non-formal education does not provide formal and nationally recognized qualifications, it can also accelerate the acquisition of certain professional qualifications that will be useful in project implementation. Flexibility is a tangible advantage of non-formal education. In addition, the formal decisions and regulations for higher education take a long time, whereas with non-formal education teachers independently formulate the goals and content of their courses, focusing on modern challenges. Also, non-formal education is quite dynamic (Bystryakova et al., 2017). Instead of a long university education, a few months of classes are offered, which already allow you to do your work more effectively. For this reason, the use of non-formal education in design in Ukraine is a quite promising area of development.

Innovative solutions in the development of the design environment

An important circumstance of increasing interest in design is the globalization of the economy, at the same time an important reason for the interest in design is the proliferation of design because there are still a significant number of separate forms and dimensions of design activity. English-language sources name more than fifty types of design activities, in particular: animation design, applied design, architectural design, biological design, business design, co-design, communication design, configuration design, convergent design, design activism, design cultures, design management, empathic design, experimental design, fashion design, game design, graphic design, interior design, market design, modular design, service design, social design, spatial design, strategic design, universal design, visual communication design, etc. Consequently, innovative trends in these types of design may vary, but there are some that apply to all areas of design activity.

The term innovation process in design should be understood as creative thinking, influencing the formation of innovations to improve the quality of the public and cultural environment. At the same time, innovations arising in design are realized by special technologies or gradual innovations that the market demands (Varyvonchyk & Kulyk, 2022). Also, this term should be understood as innovations that have a direct impact on the transformation of new markets, contributing to the emergence of new technologies.

Today's innovative design environment concepts require addressing different principles and aspects of human activity (Camburn et al., 2017). In particular, Plantec et al., (2019) note that new design trends should be borrowed from other industries, so neuroimaging techniques have emerged in design, and the issue of design neurocognition has become particularly debated and relevant. Neuroimaging techniques "contribute to connecting the neurophysiological and neuropsychological aspects of design creativity" (Plantec et al., 2019, p. 160). At the same time, Hay et al., (2020) note that neurocognitive research has enabled the emergence of new methods and tools to transform design shaped by current neurotechnologies.

The use of interactive technologies is a common innovation because an interactive environment can simplify people's lives and improve their comfort. A separate innovation is following the worldview of ecological design (Varyvonchyk & Kulyk, 2022). Although it has not yet completed its final formation, it is becoming increasingly popular among designers in Ukraine. For example, in the context of ecological architecture there is an emphasis on the use of local ecological data, the adoption of green original solutions, etc. The use of the principles of biomorphism contributes to the likening of design structures to natural objects, the use of various dynamic structures (Syomka, 2017).

Separately, we should mention light design, which can be used to implement original lighting solutions in order to give the space the necessary shapes, to improve it from a visual point of view (Borgianni et al., 2020). At the same time, the key tools of light design are categories such as space, shape, color, texture of things. Note that the use of modern innovative methods of modeling and design, the use of unique and non-traditional materials provide unlimited opportunities for the activities of the modern designer (Varyvonchyk & Kulyk, 2022). In particular, carbon fiber is now actively used in world design. This material came to interior and object design from the aviation and automobile industry, it is ultralight, rigid, and megastrength - such set of qualities gives designers new opportunities. Another innovative material is methacrylic, a type of plastic that has more machining possibilities. On the other hand, innovative designers are using plexiglass (acrylic glass), which is a textbook example for "space" design (Camburn et al., 2017). Cocoon polymer was not created for design intentions but was used in construction as an insulating material, but it is one of the most popular materials today. Another innovative design trend is the use of synthetic resin. It all started when the designer Gaetano Pesce found an alternative use for synthetic materials - the result was the Tavolone table. To create the tabletop, the designer poured cutting color resins into a mold, where they were able to mix with each other. Another famous experiment with synthetic resins is a product (sculptural table Pangea) of Italian designers Renzo Martini and Andrea Cedri, reminiscent of natural phenomena - stalactite outgrowths. In addition, the masters used futuristic configurations. These trends are among the most common in Europe.

Conclusions

1. So, at the present stage of design development, there are two periods: classical and non-classical. The neoclassical stage of design will become effective in the context of rapid digital transformation. Consequently, a rethinking of the content of design, from functional modernism to non-utilitarian transmodernism, is especially important to ensure cultural connotation. We predict that processes of such improvement will influence the emergence of new principles of design organization and new competencies of designers. The restructuring of design will affect the need for personal creative mobility of the designer, the development of heuristic, critical thinking, socialization, digital literacy, self-criticism, skills of organizing authorial individualization of the design product, etc. It will also be important to master the variation methodology, that is, the use of the design method most appropriate to the situation and type of design.
2. The administrative and legal aspect is important for the development of design in Ukraine, and it needs to be further improved. In particular, the current regulatory documents in place in Ukraine must comply with the directives of the European Union member states and other international standards. A separate area is the development of Ukrainian legislation that will optimize the human environment, improve the quality and competitiveness of physical and digital products.
3. It has been proven that the development of the creative economy has an impact on the further development of design. At the same time, this process is accompanied by considerable difficulties: a low level of innovation in design solutions, a lack of powerful players in the design market, and little attention is paid to the education of designers at the regional level. These problems are important vectors for further modernization. The above-mentioned vectors of modernization of design thinking and the professional values of designers will contribute to a new understanding of design in Ukraine as a transversal intercultural competence that develops philosophical, artistic, and personal-emotional understanding. At the same time, the powerful digitalization of society will influence the transformation of design in Ukraine as a whole: new forms and principles of work organization will appear.
4. Important aspects of the problem are standardization of designers' work and turning to European models. Thanks to Ukraine's membership in the WTO and other world organizations, there is a gradual adaptation and harmonization of design requirements to EU standards. An important direction of further work, for this reason, will be the adaptation of existing educational programs to the requirements of modern education, which can be carried out through a system of accreditation, which is periodically carried out by special state bodies. At the same time, the reality requires turning to non-formal education as a cheap, dynamic alternative to higher education (there are few master's programs in the specialty 022 Design in Ukraine). This is important not only to obtain the relevant professional competencies but also to obtain additional business competencies, important for the further development of this business within the state borders.

Bibliographic references

Borgianni, Y., Maccioni, L., Fiorineschi, L., & Rotini, F. (2020). Forms of stimuli and their effects on idea generation in terms of creativity metrics and non-obviousness. International Journal of Design Creativity and Innovation, 8(3), 147–164. doi: https://doi.org/10.1080/21650349.2020.1766379

Bystryakova, V., Osadcha, A., & Pilhuk, O. (2017). Innovations and technologies in

contemporary art. Bulletin of the Lviv National Academy of Arts, 32, 189–199. (In Ukranian)
Calabretta, G., & Kleinsmann, M. (2017). Technology-driven evolution of design practices: Envisioning the role of design in the digital era. Journal of Marketing Management, 33(3-4), 292–304. doi: https://doi.org/10.1080/0267257x.2017.1284436
Camburn, B. A., Auernhammer, J. M., Sng, K. H. E., Mignone, P. J., Arlitt, R. M., Perez, K. B., . . . Wood, K. L. (2017). Design innovation: A study of integrated practice. In ASME 2017 international design engineering technical conferences and computers and information in engineering conference. American Society of Mechanical Engineers. doi: https://doi.org/10.1115/detc2017-68382
Dell'Era, C., Magistretti, S., Cautela, C., Verganti, R., & Zurlo, F. (2020). Four kinds of design thinking: From ideating to making, engaging, and criticizing. Creativity and Innovation Management, 29(2), 324–344. doi: https://doi.org/10.1111/caim.12353
Gemser, G., & Barczak, G. (2020). Designing the future: Past and future trajectories for design innovation research. Journal of Product Innovation Management, 37(5), 454–471. doi: https://doi.org/10.1111/jpim.12543
Hay, L., Cash, P., & McKilligan, S. (2020). The future of design cognition analysis. Design Science, 6, 55-68. doi: https://doi.org/10.1017/dsj.2020.20
Liedtka, J. (2014). Perspective: Linking design thinking with innovation outcomes through cognitive bias reduction. Journal of Product Innovation Management, 32(6), 925–938. doi: https://doi.org/10.1111/jpim.12163
Magistretti, S., Dell'Era, C., & Verganti, R. (2020). Searching for the right application: A technology development review and research agenda. Technological Forecasting and Social Change, 151, 119879. doi: https://doi.org/10.1016/j.techfore.2019.119879
May, J., Shea, A., Amatullo, M., & Boyer, B. (2021). Design for social innovation: Case studies from around the world. Taylor & Francis Group. (In Ukranian)
Micheli, P. G., Bhatti, S., Wilner, S., & Beverland, M. (2018). Doing design thinking: Conceptual review, synthesis, and research agenda. Academy of Management Proceedings, 2018(1), 16071. doi: https://doi.org/10.5465/ambpp.2018.16071abstract
Mosely, G., Wright, N., & Wrigley, C. (2018). Facilitating design thinking: A comparison of design expertise. Thinking Skills and Creativity, 27, 177-189. https://doi.org/10.1016/j.tsc.2018.02.004
Plantec, Q., Le Masson, P., & Weil, B. (2019). Inventions and scientific discoveries: Impact of designers' collaborations on creativity. an analysis towards fixation effects. Proceedings of the Design Society: International Conference on Engineering Design, 1(1), 159–168. doi: https://doi.org/10.1017/dsi.2019.19
Shkitsa, L., Kornuta, V., Kornuta, O., Bekish, I., & Bui, V. (2020). Information support of design innovation activity of the technical university. Management Systems in Production Engineering, 28(2), 127–132. doi: https://doi.org/10.2478/mspe-2020-0019
Syomka, S. (2017) Bionics in Environmental Design. Kyiv: Publishing House Lira-K. Retrieved from: http://elib.nakkkim.edu.ua/handle/123456789/2519?show=full&locale-attribute=en.
Varyvonchyk, A., & Kulyk, A. (2022). Modern innovative trends in the development of environment design. Current issues of humanitarian sciences, 52(1), 85-90. Retrieved from: https://aphn-journal.in.ua/archive/52_2022/part_1/11.pdf
Verganti, R., Vendraminelli, L., & Iansiti, M. (2020). Innovation and design in the age of artificial intelligence. Journal of Product Innovation Management, 37(3), 212–227. doi: https://doi.org/10.1111/jpim.12523

DOI: https://doi.org/10.34069/AI/2023.63.03.30
How to Cite:
Khmyz, M., Sopilnyk, R., Hudyma, V., Semchuk, Y., & Sopilnyk, L. (2023). Socio-political discourses on war-related damage to ukrainian citizens: Analysis of public policy in the context of court cases. *Amazonia Investiga*, *12*(63), 319-329. https://doi.org/10.34069/AI/2023.63.03.30

Socio-political discourses on war-related damage to ukrainian citizens: Analysis of public policy in the context of court cases

Суспільно-політичні дискурси про збитки громадянам України, пов'язані з війною: аналіз публічної політики в контексті судових справ

Received: March 10, 2023 Accepted: April 20, 2023

Written by:
Mariana Khmyz[1]
https://orcid.org/0000-0003-3553-8022
Rostyslav Sopilnyk[2]
https://orcid.org/0000-0001-9942-6682
Vitaliy Hudyma[3]
https://orcid.org/0000-0001-6708-3910
Yurii Semchuk[4]
https://orcid.org/0000-0001-8862-0172
Liubomyr Sopilnyk[5]
https://orcid.org/0000-0002-6256-0121

Abstract

The purpose of this study is to identify mechanisms based on effective political decisions that will fully impose material damage caused by military actions on the aggressor country. The methodological basis of the work was formed by general theoretical and special scientific methods, which ensured the formation of reliable conclusions and the solution of the tasks. In the course of this study, the author identified the main procedural problems faced by citizens in the process of ensuring the right to compensation for damage caused to them as a result of hostilities. The analysis of the Supreme Court's case law shows that after the start of the full-scale invasion of the Russian Federation, the courts began to take a radically different approach to resolving the issue of compensation in favor of citizens, and in fact deny the immunity of the aggressor state. Authors identify the main political decisions that will be useful in the future for the actual resolution of the issue of compensation for damages. The author analyzes certain legal acts that define the mechanism of compensation for damage. The author assesses the international achievements

Анотація

Метою даного дослідження є визначення механізмів на підставі дієвих політичних рішень, які будуть повністю покладати матеріальну шкоду заподіяну воєнними діями на країну-агресора. При цьому методологічну основу роботи склали загальнотеоретичні та спеціально-наукові методи, що забезпечили формування достовірних висновків та вирішення поставлених завдань. В ході даного дослідження було виокремлено основні процедурні проблеми з якими зіштовхуються громадяни у процесі забезпечення права на відшкодування шкоди завданої їм у результаті воєнних дій. З аналізу судової практики Верховного Суду було установлено, що після початку повномасштабного вторгнення військ Російської Федерації суди стали застосовувати кардинально інший підхід у вирішенні питання стягнення шкоди на користь громадян, та фактично заперечувати імунітет держави-агресора. Було визначено основні політичні рішення, які у перспективі стануть корисними для реального вирішення питання відшкодування шкоди.

[1] PhD in Law, Associate Professor of the Department of Economic and Legal Disciplines, Lviv University of Business and Law, Ukraine.
[2] DrSc in Law, Professor, Honored Lawyer of Ukraine, Professor of the Department of Economic and Legal Disciplines, Institution of higher education "Lviv university of business and law", Ukraine.
[3] PhD in Law, Associate Professor, Department of Judiciary, Prosecutor's Office and Advocacy, Institution of higher education "Lviv university of business and law", Ukraine.
[4] PhD in Law, Head of the Department of Economic and Legal Disciplines, Institution of higher education "Lviv university of business and law", Ukraine.
[5] Graduate student of the Department of Judiciary, Prosecutor's Office and Advocacy, Institution of higher education "Lviv university of business and law", Ukraine.

of Ukraine that will further simplify the procedure for compensation for damages, in particular, international legal acts. In general, the study assessed the real state of affairs in Ukraine regarding compensation for damage to citizens as a result of armed aggression and concluded that effective mechanisms for such compensation have not yet been implemented.

Keywords: citizens, court decision, damage, General Assembly, protection of reparations, war.

Проаналізовано окремі нормативно-правові акти, які визначають механізм відшкодування шкоди. Дано оцінку міжнародним здобуткам України, які надалі спростять процедуру відшкодування завданих збитків, зокрема було досліджено міжнародні правові акти. Загалом дослідження дало оцінити реальний стан справ в Україні щодо відшкодування шкоди громадянам у результаті збройної агресії, та дійти висновку, що дієві механізми такого відшкодування ще по суті не впроваджені.

Ключові слова: війна, Генеральна Асамблея, завдана шкода, захист громадян, репарації, судове рішення.

Introduction

The full-scale invasion of Ukraine by the Russian Federation was the largest attack in Europe since World War II. The Russian Federation is committing the most serious international crimes that violate fundamental human rights. The aggressor country has caused suffering to millions of Ukrainian citizens who have been forcibly deported to Russian territory or forced to leave their homes due to constant shelling and bombardment and have become internally displaced. People lost their property and the ability to work. In essence, by one cruel decision, millions of citizens were deprived of their constitutional rights, which are enshrined in Article 3 of the Constitution of Ukraine, according to which a person, his or her life and health, honor and dignity, inviolability and security are recognized in Ukraine as the highest social value (Law № 254к/96-ВР, 1996). It is currently difficult to estimate the actual number of war victims. That is why the consequences of the war should be counterbalanced by real actions of the state in combination with international experience and efforts to involve all possible jurisdictions, both national and international.

After the outbreak of armed aggression, not only state institutions but also the legal system as a whole faced difficult challenges (Kaplina, 2022). Accordingly, the need for adequate lawmaking, taking into account the challenges of war, has become particularly acute.

Since 2014, citizens have been filing lawsuits in search of justice in courts where the Russian Federation is the defendant. An analysis of the established case law on compensation for damage shows that before the full-scale invasion, the courts were somewhat loyal and did not seek real ways to punish the aggressor country. It was only in April 2022 that the vector of the legal position changed dramatically. However, a positive resolution of court cases does not guarantee a real solution to the issue of compensation for damage, as the defendant in these cases is a state that does not respect the same legal values. Therefore, it is important that, along with the judicial resolution of the issue of compensation, citizens have the opportunity to use other mechanisms to help them restore their violated rights. Such mechanisms should be created by the state and ensure the simplified procedure for obtaining compensation by citizens, but at the same time prevent abuse by persons who are not entitled to such compensation.

Thus, the purpose of this work is to systematically analyze the case law of national courts, in particular, the Supreme Court of Ukraine, as well as the legal acts that determine the conditions, procedures, and mechanisms for compensation for damage to citizens. Based on the study, the author proposes effective recommendations for compensation for citizens who suffered from the war started by the Russian Federation.

Literature Review

The topic of war has become particularly acute for all citizens of Ukraine. Researchers also do not stay away from this negative phenomenon. For example, Komnatnyi (2022) paid attention to the issue of inspecting residential properties damaged as a result of the war, in particular, the author investigated the introduction of effective mechanisms for compensation for damage by adopting appropriate regulations. Anisimova (2020) also studied the same issue, but the author conducted her research in the context of the events that took place in the East of Ukraine before the full-scale invasion, but the conclusions drawn by the author are relevant to this study. The issue of the state immunity of the Russian Federation in court cases on compensation for damages was studied by Cherniak (2022) and Spiesivtsev (2022a), the latter paying special attention to the issue of compensation for damages after the end of the war. The topic of reparations was also reflected in their works: Podupeiko (2022), Mykolenko and Kaminets (2022). Thus, Podupeiko studied the issue of compensation for citizens since 2014, from the beginning of the temporary occupation of certain territories and concluded that Ukraine has taken a number of legal actions to bring the Russian Federation to justice for acts of terrorism and discrimination, and, accordingly, to obtain compensation from the aggressor country. While studying the issue of compensation for damage caused by armed aggression, Mykolenko and Kaminets rightly pointed out the gaps in the national legislation regulating compensation for damaged property. Solomko (2022) assessed the UN General Assembly resolution “Provision of Remedies and Reparations for the Aggression against Ukraine” in her article. The general theoretical topic of legal nihilism, which is also important in the context of this study, was addressed by Rezvorovych (2022).

Methodology

The search for a methodological basis for the study was carried out in the following areas: studying scientific works and summarizing the ideas of well-known scholars who have studied the issue of compensation for damage to citizens; analyzing Ukrainian legislation and the case law of the Supreme Court of Ukraine; conducting research on specific approaches to solving the problem of damage compensation, including through international cooperation, as well as analyzing concepts in this area of scientific and practical activities of Ukrainian scholars and practitioners.

In the course of researching the topic of compensation for war-related damage to citizens of Ukraine, various general theoretical, special scientific methods and approaches were used to study the subject matter of the study, which ensured the formation of reliable conclusions and the solution of the tasks set. The following methods were used in the course of the study: formal legal, comparative legal, analytical, synthetic, analogy and generalization.

The theoretical basis of this study was formed by such primary sources as: The Constitution of Ukraine, the Law of Ukraine “On Compensation for Damage and Destruction of Certain Categories of Real Estate Objects as a Result of Hostilities, Terrorist Acts, Sabotage Caused by the Armed Aggression of the Russian Federation against Ukraine”, and the “State Register of Property Damaged and Destroyed as a Result of Hostilities, terrorist acts, sabotage caused by the armed aggression of the Russian Federation against Ukraine” (Law № 2923-IX, 2023), the Civil Protection Code of Ukraine, the Civil Code of Ukraine, as well as bylaws of the Cabinet of Ministers of Ukraine that define the mechanisms of compensation for damage caused by hostilities. The key role in the topic was played by the Supreme Court rulings, the systematic analysis of which reveals a fundamental modification of the Supreme Court's legal position after the start of the full-scale invasion. Thus, the analysis of the aforementioned case law and legal acts regulating the issue of compensation for damage in the war was carried out using formal legal and analytical methods. In particular, to determine the unified legal position of the Supreme Court, the author used the analytical and synthetic methods by identifying common features and generalizing similar conclusions, which ensured the integrity and structure of the study.

In addition to the methods mentioned above, this paper uses logical, structural-functional, and system analysis methods, as well as other special methods of scientific cognition.

Results and Discussion

The large-scale military actions of the Russian Federation after February 24, 2022, which led to significant losses, damage, and destruction. According to various estimates, the amount of damage ranges from hundreds of billions to a trillion US dollars. Real estimates will be possible only after the war is over. In such circumstances, the issue of protecting the violated rights and interests of the affected persons has become particularly acute. The citizens of Ukraine who lost their loved ones and relatives and who suffered physical suffering, moral harm, property (material) damage from the destruction of and damage to property have suffered enormous damage. The issue of compensation for the damage caused by the aggressive actions of the Russian Federation has been raised since 2014. In this regard, since the beginning of the temporary occupation of certain territories, Ukraine has taken a number of legal actions to obtain compensation from the Russian Federation: five cases are pending in the European Court of Human Rights on Ukraine's applications against the Russian Federation, and the International Court of Justice is considering Ukraine's claim against the Russian Federation to hold the latter accountable for acts of terrorism and discrimination, and the financing of terrorism (Podupeiko, 2022).

Today, human and civil rights and freedoms should remain a priority for the state, even in the context of martial law throughout Ukraine, which is a difficult phenomenon for our country today, and certainly causes difficulties in the functioning of the mechanism for the protection and enforcement of constitutional rights and freedoms (Savaida & Cherevko, 2022). Violation of individual rights, especially the right to life, honor, dignity, housing, property, security, and a weak mechanism for their legal protection undermine faith in the law, in the ability of the state to ensure order and peace in society and to protect people from criminal attacks. The powerlessness of the law does not generate a positive attitude towards it on the part of the population but only causes irritation, discontent, and protest (Rezvorovych, 2022).

Therefore, the issue of regulatory regulation and practical compensation for losses to the population is particularly acute. Until March 2023, the issue of compensation for damage or destruction of residential real estate caused by hostilities, terrorist acts, sabotage caused by the military aggression of the Russian Federation remained unresolved, and in fact, Ukraine lacked a systematic and structured mechanism for providing compensation or material assistance to victims of the military aggression of the Russian Federation (Komnatnyi, 2022).

On 23.02.2023, the Verkhovna Rada of Ukraine adopted the Law of Ukraine "On Compensation for Damage and Destruction of Certain Categories of Real Estate as a Result of Hostilities, Terrorist Acts, Sabotage Caused by the Armed Aggression of the Russian Federation against Ukraine, and the State Register of Property Damaged and Destroyed as a Result of Hostilities, Terrorist Acts, Sabotage Caused by the Armed Aggression of the Russian Federation against Ukraine" No. 2923-IX. According to the website of the Verkhovna Rada of Ukraine, the law will enter into force on 22.05.2023 (Law № 2923-IX, 2023), and only then will effective mechanisms for compensation for the damaged property be implemented.

It should be emphasized that the above draft law was submitted to the Verkhovna Rada of Ukraine in March 2022. In fact, during the year of the war, the issue of determining the legal and organizational framework for compensation for damage and destruction of certain categories of real estate was not regulated by law, and the mechanisms, procedures, conditions for the payment of monetary compensation and other compensation for damage caused by hostilities were regulated by special bylaws approved by the Cabinet of Ministers of Ukraine, as shown in Table 1.

Table 1.

Resolutions of the Cabinet of Ministers of Ukraine that determined the specifics and mechanisms of compensation for damage caused as a result of hostilities

No.	Resolution of the Cabinet of Ministers of Ukraine	Basic mechanisms and procedures
1	Procedure for submitting an information report on damaged and destroyed real estate as a result of hostilities, terrorist acts, sabotage caused by the military aggression of the Russian Federation of March 26, 2022 No. 380 (Order № 380, 2022)	defines the conditions, mechanism, and procedure for filing applications for damaged and destroyed real estate as a result of hostilities.
2	The Procedure for Determining Damage and Losses Caused to Ukraine as a Result of the Armed Aggression of the Russian Federation of March 20, 2022 No. 326 (Decree №326, 2022)	establishes the procedure for determining damage and losses by the competent authorities.
3	The Procedure for Performing Urgent Work to Eliminate the Consequences of the Armed Aggression of the Russian Federation Related to Damage to Buildings and Structures No. 473 of April 19, 2022 (Resolution № 473, 2022)	establishes a mechanism for recording damage to buildings and structures of various forms of ownership caused by the armed aggression of the Russian Federation
4	The Procedure for Providing and Determining the Amount of Financial Assistance to Victims of Emergency Situations and the Amount of Financial Compensation to Victims Whose Residential Buildings (Apartments) were Destroyed as a Result of a Military Emergency Caused by the Armed Aggression of the Russian Federation No. 947 of December 18, 2013 (Law № 947, 2013)	establishes a mechanism for providing and determining the amount of financial assistance to victims of emergencies and the amount of financial compensation to victims whose residential buildings (apartments) were destroyed as a result of a military emergency caused by the armed aggression of the Russian Federation.

Source: Authors' elaboration based on the Resolutions of the Cabinet of Ministers of Ukraine (Order № 380, 2022; Decree № 326, 2022; Resolution № 473, 2022; Law № 947, 2013)

The above acts do not cover the entire problem but essentially define a certain procedure for determining damage, the specifics of filing applications, and the procedure for recording damage to property.

Analyzing Procedure No. 326, we can identify the main areas of damage determination, which are shown in Table 2.

Table 2.
Areas of damage and loss determination

	No.	Directions
Areas of damage and loss determination	1	Human losses and related social costs
	2	Economic losses associated with human losses
	3	Military losses
	4	Losses associated with ensuring public safety and order
	5	Social protection of war veterans
	6	Loss of housing stock and amenities
	7	Loss of public buildings
	8	Loss of housing and communal facilities
	9	Damage to land resources
	10	Loss of subsoil
	11	Damage to water resources
	12	Damage caused to the atmosphere
	13	Losses of the forest fund
	14	Damage to the nature reserve fund
	15	Loss of transportation infrastructure and electronic communication network infrastructure (including physical)
	16	Loss of energy infrastructure;
	17	Losses of cultural heritage; 18) (except for defense industry enterprises
	18	Economic losses of enterprises, including business entities
	19	Losses of institutions and organizations (except for institutions and organizations of the defense industry)
	20	Economic losses of defense industry enterprises (including business entities);
	21	Losses of institutions and organizations of the defense industry

Source: authors' development based on the analysis (Decree № 326, 2022)

In the context of this study, we consider the issue of damage to citizens, in particular in connection with the loss of housing stock and human losses, and related social costs.

At present, in the midst of the war in Ukraine, the general principles of compensation and reimbursement of damage to victims of emergencies (including military operations) are essentially in place and are enshrined in the Civil Code of Ukraine (Articles 22, 225 and 1166 - compensation for damage caused by violation of civil rights) (Civil Code of Ukraine № 435-IV, 2003) and Art. 89 of the Civil Protection Code of Ukraine, which refers to the provision of housing to victims whose housing has become uninhabitable as a result of an emergency, and in our case, armed aggression (Civil Protection Code of Ukraine № 5403-VI, 2012).

Mykolenko and Kaminets (2022), in their study of the issue of compensation for damage caused by armed aggression, rightly noted that the above-mentioned provisions of the Civil Protection Code do not oblige the Ukrainian state to compensate all victims. They require the state to help only one category of victims - those who lost their homes. At the same time, monetary compensation to such victims is only one of the possible ways the state can provide them with assistance. The state pays monetary compensation to victims of housing loss provided that the victims voluntarily hand over their destroyed or damaged housing to the state, and the amount of compensation is not determined by the actual value of the houses destroyed or damaged. In this case, the principle of subsidiarity of the European Union would be effective, but at this stage, Ukraine is deprived of such a mechanism, as it is not a member of the said Union (Kumar, 2021).

At the same time, there is a need for special regulation of compensation for victims. Anisimova (2020) studied the issue of compensation for damages, even before the full-scale invasion of Ukraine by the Russian Federation troops and identified the main areas of the state's proper response to the challenges faced by citizens in the context of armed conflict. In particular, the author correctly emphasized the need to create a special legislative framework that would regulate the mechanism of compensation for damages to the population whose housing was damaged or destroyed. It is necessary to take into account the significant scale of the damage and the need to provide housing for citizens who have lost their homes. In today's context, we can state that the author's forecasts have begun to be realized through the adoption of Law No. 2923-IX (Law № 2923-IX, 2023).

Since the existing mechanisms of compensation for damage do not give the desired result, citizens are looking for ways to solve the problem on their own, including by filing a lawsuit against another guilty party for compensation for material and moral damage. In our case, the guilty party for the damage caused by the war is the Russian Federation.

Analyzing the case law of the Supreme Court, which was formed even before the full-scale invasion of the Russian Federation, in particular: the decision of 03.06.2020 in case No. 357/13182/18 (Resolution 357/13182/18, 2020); the decision of 13.05.2020 in case No. 711/17/19 (Resolution 711/17/19, 2020); resolution of 24.06.2020 in case No. 711/16/19, (Resolution 711/16/19, 2020), one can safely trace one negative trend that national courts dismissed such claims, referring to the provisions of Art. 79 of the Law of Ukraine "On Private International Law", which stipulates that filing a claim against a foreign state, involving a foreign state as a defendant or third party, seizing property owned by a foreign state and located on the territory of Ukraine, applying other means of securing a claim to such property and foreclosing on the such property may be allowed only with the consent of the competent authorities of the relevant state, unless otherwise provided by an international treaty of Ukraine or the law of Ukraine. The Law of Ukraine "About Private International Law" essentially provided an opportunity to avoid liability for damages (Law № 2709-IV, 2005).

In particular, national courts dismissed claims on the grounds that the Russian Federation cannot be a defendant in a case without the consent of their embassy in Ukraine. The courts also suspended proceedings until they received responses to the Russian Embassy's consent or non-consent to the Ukrainian court's consideration of a particular case. Even in the justice systems that we consider to be the most perfect, dispute resolution usually takes a long time and is expensive, and no one but lawyers understand this process (Melnychenko, 2021). Similarly, in the case of the above cases, they were delayed, and citizens did not receive the desired result.

Legal scholars have proposed a solution to the judicial immunity of the Russian Federation in Ukrainian courts, in particular by deviating from the rule of judicial immunity, guided by the principles of reasonableness and fairness (Spiesivtsev, 2022a).

However, the vector of negative judicial practice on the protection of the rights of citizens affected by the armed aggression of the Russian Federation has changed dramatically after the Supreme Court adopted a ruling of 14.04.2022 in case No. 308/9708/19, which overturned previous court decisions in this case (Resolution 308/9708/19, 2022).

According to the case, the woman filed a lawsuit against the Russian Federation for compensation for non-pecuniary damage suffered by her and her children in connection with the death of her husband and the father of her children as a result of the Russian armed aggression in Ukraine. In justifying its decision, the Supreme Court referred to the European Convention on the Immunity of States of 16.05.1972 (Article 11) and the UN Convention on Jurisdictional Immunities of States and Their Property of 02.12.2004 (Article 12).

The fact that deserves attention in the context of the above case is that Ukraine is not a party to any of these conventions, which the Supreme Court referred to in its decision. The European Convention on the Immunity of States of 1972 (Council of Europe, 1972) has not been widely used - it has entered into force only in 8 states: Austria, Belgium, Cyprus, Great Britain, Luxembourg, the Netherlands, Germany, and Switzerland. The 2004 UN Convention on Jurisdictional Immunities of States and Their Property (Liga 360, 2002) has not yet entered into force, as only 22 states out of 30 signatory states have ratified it (Austria, Czech Republic, Equatorial Guinea, Finland, France, the Islamic Republic of Iran, Iraq, Spain, Italy, Japan, Kazakhstan, Latvia, Lebanon, Liechtenstein, Mexico, Norway, Portugal, Romania, Saudi Arabia, Slovakia, Sweden, Switzerland, and Spain). At the same time, these conventions are certainly worthy of attention, primarily because they reflect the trend in international law to recognize that there are limits to which a foreign state has the right to claim immunity in civil proceedings (Cherniak, 2022).

The court substantiated the application of conventions not ratified by Ukraine by the fact that the rules formulated in them and relating to the limits of damage, inadmissibility of invoking judicial immunity (in case a state crosses the “red line”), must be observed by absolutely all states, because these rules are *Jus Cogens* (rules of international law binding on all participants in the civilized world).

In addition, the Supreme Court in its decision No. 308/9708/19 stated the following: “Given the fact that the Russian Federation has been carrying out armed aggression against Ukraine since 2014 and continues to do so as of the date of this decision, there is no need to send requests to the Russian Embassy in Ukraine for the Russian Federation's consent to be a defendant in cases of compensation for damage in connection with the Russian Federation's armed aggression against Ukraine and its disregard for the sovereignty and territorial integrity of the Ukrainian state. And starting from February 24, 2022, such a request will not be possible due to the severance of diplomatic relations between Ukraine and the Russian Federation”. The judge's inner conviction probably played a significant role in making this decision.

The currently effective Civil Procedure Code of Ukraine provides that when selecting and applying a rule of law to a disputed legal relationship, the court shall take into account the conclusions on the application of the relevant rules of law set forth in the rulings of the Supreme Court (Civil Procedure Code of Ukraine № 1618-IV, 2004). At the same time, the risks that could arise as a result of the consideration of the above case cannot be dismissed, since the court's reference to the Conventions not ratified by Ukraine could result in the transfer of such a case to the Grand Chamber of the Supreme Court, which, if there were grounds, could deviate from the legal position expressed in the decision of 14.04.2022.

It is worth noting that case No. 308/9708/19 concerned the recovery of non-pecuniary damage, but its conclusions were later applied to the recovery of pecuniary damage. Thus, and in accordance with the requirements of Part 4 of Article 263 of the Civil Procedure Code of Ukraine, the Supreme Court's decision No. 308/9708/19 of 14.04.2022 became the basis for further decisions in similar legal relations. Thus, the Supreme Court issued the following rulings:

- 18.05.2022 in the case No. 7428/11673/19 (Resolution No. 7428/11673/19, 2022);
- 08.06.2022 in the case No. 490/9551/19 (Resolution No. 490/9551/19, 2022);
- 22.06.2022 in the case No. 311/498/20 (Resolution No. 311/498/20, 2022).

In these decisions, the Supreme Court concluded that maintaining the judicial immunity of the Russian Federation is incompatible with Ukraine's international legal obligations in the field of counterterrorism. After all, a prerequisite for compliance with the principle of international law on judicial immunity is the mutual recognition of state sovereignty by another country. A similar conclusion was reached by Spiesivtsev (2022b) in his study.

Analyzing the judicial practice that has developed since April 14, 2022, we can trace a positive trend, namely, the unity of the judiciary with the people of Ukraine in the fight against the aggressor state. At the same time, it is important that judges have knowledge of military law since when considering disputes about damage caused by military actions, they should have special knowledge (Horinov & Mereniuk, 2022).

Having passed the first judicial stage of resolving the issue of compensation for damage, society faces new challenges in the actual enforcement of such decisions. As a general rule, court decisions can be enforced by seizing the property of the Russian Federation located in Ukraine, as well as by applying to foreign courts for recognition of the court decision and its enforcement in the country of application where the property of the Russian Federation is located. In addition, for the compensation mechanism to work, assistance must come from the state through effective political decisions, including through international cooperation.

For example, By the Decree of the President of Ukraine of May 18, 2022, No. 346/2022, a working group was established to develop and implement international legal mechanisms for compensation for damage caused to Ukraine as a result of the armed aggression of the Russian Federation. Paragraph 2 of this order obliged the working group to develop and submit proposals for means and legal instruments for compensation for damage and losses caused to Ukraine as a result of the armed aggression of the

Russian Federation, including reparations, confiscation, contributions, as well as steps to implement them, taking into account international legal mechanisms, international experience, and judicial practice (Decree № 346/2022, 2022).

In early November 2022, Minister of Justice of Ukraine Maliuska D. met with Ambassador Extraordinary and Plenipotentiary of Japan to Ukraine Kuninori Matsuda. The meeting was also attended by Deputy Minister of Justice Mudra I. and Third Secretary of the Embassy of Japan in Ukraine Koga Masayuki. The main focus of the meeting was to discuss the creation of a special compensation mechanism for compensation of losses to Ukraine and Ukrainians caused by the aggression of the Russian Federation. The participants also noted that the international treaty on the establishment of a mechanism for compensation for damages caused by Russian aggression is important in the Ukrainian concept of a compensation mechanism. This is a treaty that can be joined by countries that have a large share of the frozen assets of the Russian Federation (Ministry of Justice of Ukraine, 2022).

A historic event on the way to real recovery of damages from the aggressor country occurred on November 14. At its 11th emergency special session, the UN General Assembly voted in favor of the resolution “Provision of Remedies and Reparations for the Aggression against Ukraine”, which aims to create mechanisms to compensate Ukraine for the damage caused by the full-scale Russian aggression. 94 countries supported the adoption of the document, 73 abstained, and only 14 voted against. Among the countries that did not support the resolution, in addition to Russia, Belarus, Syria, the DPRK, Nicaragua, Iran, and China. The draft resolution was initiated by Ukraine, Canada, Guatemala, and the Netherlands. Before the vote, 56 countries signed the document as co-sponsors (Solomko, 2022).

Returning to the above-mentioned Law No. 2923-IX, which was adopted by the Verkhovna Rada, it can be unequivocally stated that after its entry into force, it will be the main regulatory document that will determine the legal and organizational framework for providing compensation for damage and destruction of certain real estate objects. Considering Art. 2 of Law No. 2923-IX, we can identify the recipients of compensation, as shown in Figure 1, and Figure 2 identifies the persons who cannot be such recipients.

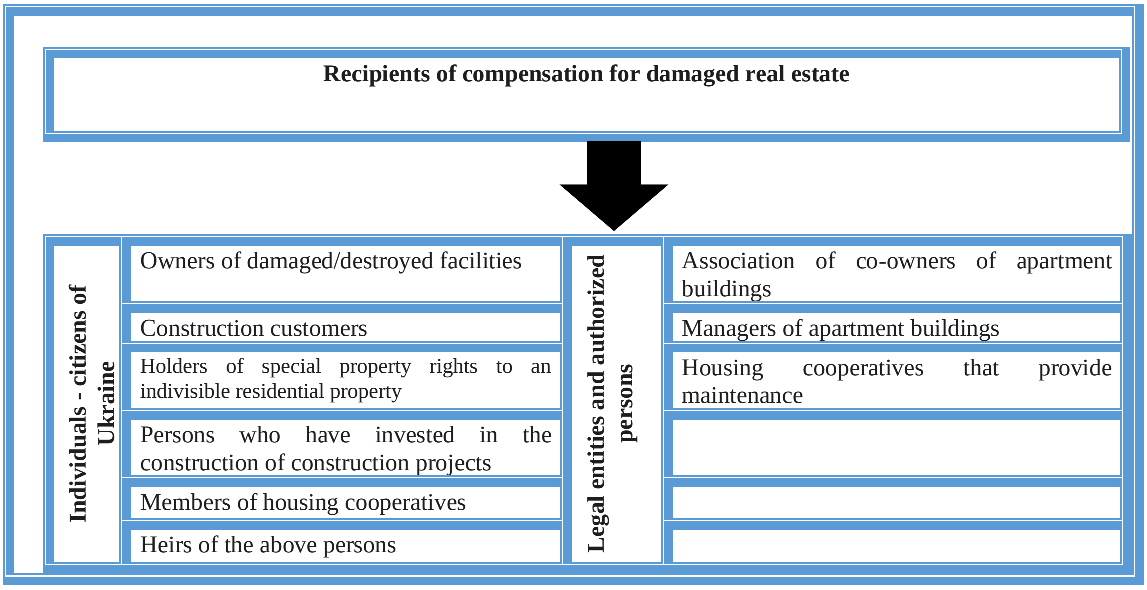


Figure 1. Recipients of compensation for damaged property
Source: (Law № 2923-IX, 2023)

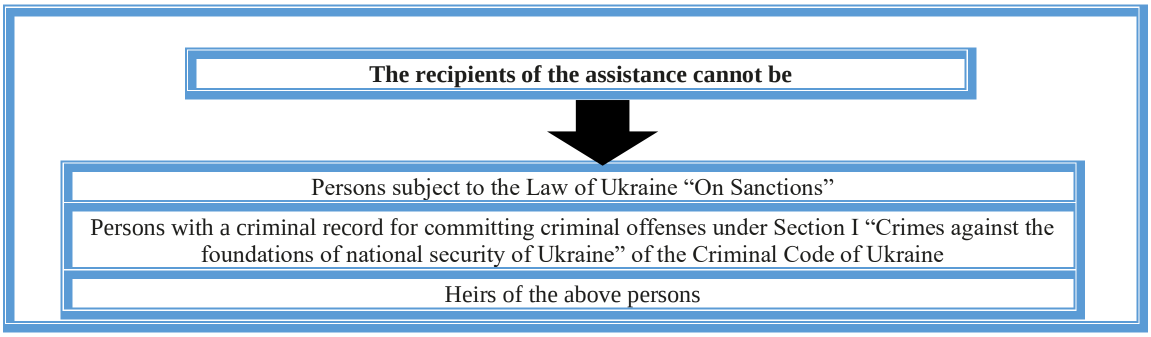


Figure 2. Persons who cannot receive compensation for damaged property
Source: (Law № 2923-IX, 2023)

Based on the systematic analysis of the above law, it appears that compensation will be provided to the citizens referred to in part 1 of Article 2 of Law No. 2923-IX in the order of priority and on the basis of submitted applications. Despite the fact that the said law does not provide for a direct obligation to provide a court decision for the award of compensation, the availability of such a decision will greatly simplify the procedure for obtaining compensation, since the fact and extent of the damage will already be established by the court.

Conclusions

Summarizing the above, we can confidently state that the right to judicial protection is one of the fundamental human rights, this right is guaranteed by the Constitution of Ukraine and enshrined in a number of legal acts. It is worth noting that even under martial law, this constitutional right of Ukraine is not suspended or limited. However, in addition to the possibility of access to justice, it is important for citizens to receive real results from these lawsuits in the form of compensation for damage. The study found that the Verkhovna Rada of Ukraine has already adopted a law that will provide for compensation, but the implementation of this law requires material support, which is a significant problem for a country at war. In such circumstances, for the mechanism of compensation to work, national legislation should fully impose material damage caused by the hostilities on the aggressor country. At the same time, the property of the Russian Federation located in the territory of third countries should be used unscrupulously to compensate for damages, and Ukraine, in turn, should direct such funds to compensate its citizens. Such a mechanism cannot ensure justice, because along with the damaged property, we have the disfigured lives of millions of Ukrainian citizens, but it will ensure a fair material balance and consolidation of international unity against the aggressor country.

Bibliographic references

Anisimova, A. (2020). Compensation for losses caused by damage or destruction of housing as a result of armed conflict. Business, economy, and law, 7, 13–17. https://doi.org/10.32849/2663-5313/2020.7.02

Cherniak Yu. (2022, March 13). Jurisdictional Immunity of a Foreign State in Civil Cases for Damages: Qui Vadis. Judicial and legal newspaper: Blog. Retrieved from https://acortar.link/g6k5bT

Civil Code of Ukraine № 435-IV. On Higher Education. Verkhovna Rada of Ukraine, 2003. Retrieved from https://zakon.rada.gov.ua/laws/show/435-15#Text

Civil Procedure Code of Ukraine № 1618-IV. On Medicines. Verkhovna Rada of Ukraine, 2004. Retrieved from https://zakon.rada.gov.ua/laws/show/1618-15#Text

Civil Protection Code of Ukraine № 5403-VI. On Citizenship of Ukraine, 2012. Retrieved from https://zakon.rada.gov.ua/laws/show/5403-17#Text

Council of Europe (1972). European Convention on State Immunity. ETS No. 074. Retrieved from https://rm.coe.int/16800730b1

Decree № 346/2022**.** On the Working Group on the Development and Implementation of International Legal Mechanisms for Compensation for Damage Caused to Ukraine as a Result of the Armed Aggression of the Russian Federation, 2022. Retrieved from https://zakon.rada.gov.ua/laws/show/346/2022#Text

Decree № 326. On Approval of the Procedure for Determining Damage and Losses Caused to Ukraine as a Result of the Armed Aggression of the Russian Federation, CABINET OF MINISTERS OF UKRAINE, 2022. Retrieved from https://zakon.rada.gov.ua/laws/show/326-2022-%D0%BF#Text

Horinov, P., & Mereniuk, K. (2022). Military law in Ukraine: future prospects for development. Futurity Economics & Law, 2(3), 18–27. https://doi.org/10.57125/FEL.2022.09.25.03

Kaplina, O. (2022). Prisoner of War: Special Status in the Criminal Proceedings of Ukraine and the Right to Exchange [Special issue]. Access to Justice in Eastern Europe, 4, 8-24. https://doi.org/10.33327/AJEE-18-5.4-a000438

Komnatnyi, S. (2022). Legal and methodological problems of surveying residential buildings damaged and destroyed as a result of armed aggression and assessing damages. Philosophical and methodological problems of law, 2(24), 64-69. https://doi.org/10.33270/02222402.64

Kumar, A. (2021). Analysis of the Principle of Subsidiarity as a Principle of EU Law: Future Perspectives. Futurity Economics & Law, 1(4), 18–27. https://doi.org/10.57125/FEL.2021.12.25.03

Law № 2709-IV. About Private International. Verkhovna Rada of Ukraine, June 23, 2005. Retrieved from https://zakon.rada.gov.ua/laws/show/2709-15#Text

Law № 2923-IX. On Compensation for Damage to and Destruction of Certain Categories of Real Property as a Result of Hostilities, Terrorist Acts, and Sabotage Caused by the Armed Aggression of the Russian Federation against Ukraine and the State Register of Property Damaged and Destroyed as a Result of Hostilities, Terrorist Acts, and Sabotage Caused by the Armed Aggression of the Russian Federation against Ukraine, 2023. Retrieved from https://zakon.rada.gov.ua/laws/show/2923-IX#Text

Law № 947. On Approval of the Procedure for Providing and Determining the Amount of Financial Assistance to Victims of Emergency Situations and the Amount of Financial Compensation to Victims Whose Residential Buildings (Apartments) were Destroyed as a Result of a Military Emergency Caused by the Armed Aggression of the Russian Federation, 2013. Retrieved from https://zakon.rada.gov.ua/laws/show/1301-2021-%D0%BF#Text

Law № 254к/96-ВР. Constitution of Ukraine. Verkhovna Rada of Ukraine, 1996. Retrieved from https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text

Liga 360 (2004). United Nations Convention on Jurisdictional Immunities of States and Their Property. A/59/49. Retrieved from https://ips.ligazakon.net/document/MU04277

Melnychenko, N. (2021). Claim and its modern modifications: definitions of the future. Futurity Economics & Law, 1(1), 4–11. https://doi.org/10.57125/FEL.2021.03.25.1

Ministry of Justice of Ukraine (2022, November 9). Denys Maliuska met with Ambassador Extraordinary and Plenipotentiary of Japan to Ukraine Kuninori Matsuda. Retrieved from https://acortar.link/yYIwwi

Mykolenko, V., & Kaminets, V. (2022). Compensation for damage as a result of the armed aggression of the Russian Federation, materials of the II All-Ukrainian Scientific and Practical Conference “Problems of the Legal System of Ukraine”. Cherkasy: CHSTU.

Order № 380. On the collection, processing, and accounting of information on damaged and destroyed real estate as a result of hostilities, terrorist acts, sabotage caused by the military aggression of the Russian Federation, 2022. Retrieved from https://zakon.rada.gov.ua/laws/show/380-2022-%D0%BF#Text

Podupeiko, V. (2022). Compensation for Victims of the Russian-Ukrainian War, Proceedings of the II All-Ukrainian Scientific and Practical Conference “Problems of the Legal System of Ukraine”. Cherkasy: CHSTU.

Resolution No. 308/9708/19. Supreme Court, Tribunal Supremo de Ucrania, 2022. Retrieved from https://reyestr.court.gov.ua/Review/104086064

Resolution No. 311/498/20, Supreme Court, Tribunal Supremo de Ucrania, 2022. Retrieved from https://reyestr.court.gov.ua/Review/104942333.

Resolution No. 357/13182/18, Supreme Court, Tribunal Supremo de Ucrania, 2020. Retrieved from https://reyestr.court.gov.ua/Review/89928706

Resolution No. 490/9551/19, Supreme Court, Tribunal Supremo de Ucrania, 2022. Retrieved from https://reyestr.court.gov.ua/Review/104728451

Resolution No. 711/16/19, Supreme Court, Tribunal Supremo de Ucrania, 2020.

Retrieved from https://reyestr.court.gov.ua/Review/90143663

Resolution No. 711/17/19, Supreme Court, Tribunal Supremo de Ucrania, 2020. Retrieved from https://reyestr.court.gov.ua/Review/89509134

Resolution No. 7428/11673/19, Supreme Court, Tribunal Supremo de Ucrania, 2022. Retrieved from https://reyestr.court.gov.ua/Review/104635313

Resolution № 473. On Approval of the Procedure for Implementation of Urgent Works to Eliminate the Consequences of the Armed Aggression of the Russian Federation Related to Damage to Buildings and Structures, 2022. Retrieved from https://zakon.rada.gov.ua/laws/show/473-2022-%D0%BF#Text

Rezvorovych, K. R. (2022). Legal nihilism in Ukraine: essence, causes and ways to overcome. Legal sciences and their role in the development of the legal culture of a modern man [Scientific monograph] (pp. 163-179). Riga, Latvia: Baltija Publishing, 2022. https://doi.org/10.30525/978-9934-26-209-8-8

Savaida, O., & Cherevko, V. (2022). Protection of Human Rights during Martial Law, a collection of abstracts of the participants of the VIII All-Ukrainian Roundtable on State-building and Law-making in the Context of European Integration. Lviv.

Solomko, I. (2022, November 15). How the UN resolution on reparations to Russia will work. Voice of America. Retrieved from https://ukrainian.voanews.com/a/oon_rezolutsia_reparatsii_rosii/6834885.html

Spiesivtsev, D. (2022a). Immunity of the Russian Federation in Cases of Compensation for Damage Caused in the Course of Armed Aggression against Ukraine. Law and society, 5, 54-59. https://doi.org/10.32842/2078-3736/2022.5.9

Spiesivtsev, D. (2022b). “The winner takes all”: Compensation for Damage Caused by the Russian Federation in the Course of Armed Aggression against Ukraine. Legal scientific electronic journal, 7, 152-156. https://doi.org/10.32782/2524-0374/2022-7/32

DOI: https://doi.org/10.34069/AI/2023.63.03.31
How to Cite:
Turcas, I., Popa, D., Maican, C., Mușa (Piuaru), B.A., & Grigoroiu, M.C. (2023). Universities in the process of co-working with the labor market. *Amazonia Investiga*, *12*(63), 330-340. https://doi.org/10.34069/AI/2023.63.03.31

Universities in the process of co-working with the labor market

Universidades en proceso de co-trabajo con el mercado laboral

Received: March 6, 2023 Accepted: April 28, 2023

Written by:
Ioana Turcas[1]
https://orcid.org/0000-0001-7234-7335
Daniela Popa[2]
https://orcid.org/0000-0002-4538-7136
Catalin Maican[3]
https://orcid.org/0000-0002-1968-9958
Brenda-Andreea Mușa (Piuaru)[4]
https://orcid.org/0000-0002-9374-3844
Monica Claudia Grigoroiu[5]
https://orcid.org/0000-0002-4013-4017

Abstract

The current research focuses on investigating several generations of graduates to observe the level of absorption of graduates in the labor market in the context of improvements in educational policies. A longitudinal research design was used, a panel study with a prospective design. The research method was a questionnaire-based social survey. The results show that there are significant generational differences regarding the level of assimilation in the labor market, the degree of employment in the field of studies, and the level of satisfaction of the participants. Gender differences were observed in the timing of participants' jobs. Also, labor market absorption is dependent on the field of study, despite educational policies.

Keywords: employability, employment status, professional insertion, tertiary education.

Resumen

La investigación actual se centra en investigar varias generaciones de graduados para observar el nivel de absorción de los graduados en el mercado laboral en el contexto de mejoras en las políticas educativas. Se utilizó un diseño de investigación longitudinal, un estudio de panel con un diseño prospectivo. El método de investigación fue una encuesta social basada en cuestionarios. Los resultados muestran que existen diferencias generacionales significativas en cuanto al nivel de asimilación en el mercado laboral, el grado de empleo en el campo de los estudios y el nivel de satisfacción de los participantes. Se observaron diferencias de género en el momento de los trabajos de los participantes. Además, la absorción del mercado laboral depende del campo de estudio, a pesar de las políticas educativas.

Palabras clave: empleabilidad, situación laboral, inserción profesional, educación terciaria.

Introduction

Higher education has been widely accepted as having multiple roles for both the individual and society. According to the Ministry of Education from Romania (2019), there are four essential functions that higher education has: (1) education has significant implications for the economic prosperity of every individual, every community, and every nation; (2) cultural implications

[1] Ph.D. Student, Department of Marketing, Tourism, and International Business. Faculty of Economics, and Business Administration, Transilvania University of Brasov, Colina Universității, Brasov, Romania.
[2] Teacher Training Department, Faculty of Psychology and Science of Education, Transilvania University of Brasov, Brasov, Romania.
[3] Ph.D., Management and Economic Informatics Department, Faculty of Economics and Business Administration, Transilvania University of Brasov, Colina Universității, Brașov, Romania.
[4] Ph.D. Student, Department of Marketing, Tourism and International Business, Faculty of Economics and Business Administration, Transilvania University of Brasov, Colina Universității, Brașov, Romania.
[5]Ph.D. Student, Department of Marketing, Tourism and International Business, Faculty of Economics and Business Administration, Transilvania University of Brasov, Colina Universității, Brașov, Romania.

through which values and traditions are transmitted from generation to generation, are shaped to reflect cultural and economic developments and are anchored in contemporary social realities; (3) social role that offers each individual the opportunity to accumulate knowledge and ideas and develop the attitudes and skills necessary to become an informed and active citizen; and (4) personal development that enables learning throughout life as a vital direction in our contemporary society. Technologies and rapid developments have changed the business environment, and production processes, and increased competition at the local and global levels. Therefore, a well-educated workforce is crucial in today's competitive world.

At the macro level, some attempts to assess the graduate professional path may be highlighted. For instance, the European Union has implemented a study - Eurograduates - intending to try a unitary assessment of professional insertion. The study represents part of a wider project, which aims to create a single evaluation mechanism for European universities (Eurograduate, 2022).

In Romania, the purpose of university studies is in-depth learning, the development of expert-level skills in the field of study, as well as research and innovation in the field of study. University and postgraduate studies are built on the principle of interdisciplinarity and consider the dynamics of demand on the labor market at the regional and national level, based on medium and long-term development scenarios. In a dynamic labor market, universities offer adults the possibility to continuously develop in their professions or add skills that allow them to access new professions. Furthermore, the universities involve the economic sector in the individual support of the students for the integration into the work from the period of studies and thus achieve a good insertion in their active life.

Under these circumstances, the purpose of this study is to critically investigate if higher education from Romania meets the requirements of the labor market. It is important to highlight that Argos and Ezquerra (2014) consider that employability represents "a complex and polysemantic concept that includes different types of skills, and the graduates must display "proactive adaptability" which involves a good understanding of their future careers, good adaptability, and excellent communication skills (Asonitou, 2015).

Literature Review

The Importance of higher education for the global workforce

Higher education was described as any type of formal education done in a post-secondary institution of learning that results in acquiring a degree, diploma, or certificate of higher studies (Britannica, 2022). Related to the benefits of general education for their students, the four most important aspects were identified: (1) career preparation, (2) broader practical benefits, (3) personal development, and (4) pursuing a passion (Ma, Pender, & Welch, 2016). Furthermore, Daniel (2014) adds that the environment that surrounds these higher education institutions is becoming more complex, and at the same time, factors such as global economic, political, and social change pressure these institutions to equip their students properly so they can be relevant to the global job market. Higher education institutions are perceived, in general, as knowledge producers, promoters of innovation, supporters of entrepreneurial potential, leaders in the economy and civic societies, and most notably, knowledge pioneers (Bejinaru, 2017).

Moreover, when it comes to higher education, De Moura Castro & Levy (2015) stated that it has for functions: (1) academic leadership, (2) professional development, (3) technological training and development, and (4) general higher education. One crucial role that higher education has is related to the constant need to change, update, and upgrade the curriculum to maintain relevance in the market (Gursoy et al., 2012). The same author stated that the curriculum can be split into three sub-elements that are crucial for both the students and the employers: (1) skills, (2) knowledge, and (3) values. Jack et al., (2017) argue that the most common problem of higher education is that it fails to deliver more than knowledge resulting in a lack of necessary skills and the main purpose of higher education institutions should be to fill the spaces between knowledge and practice. Even so, according to Gursoy et al., (2012), working experience is important but managerial skills are even more so. As an argument, Jack et al., (2017) added that although skills and experience are the most important, they are not the only features needed to succeed. Higher education institutions must constantly change and adapt to the needs of the market so they can deliver the best future employees, regardless of the industry (Katajavuori, Lindblom-Ylanne, & Hiroven, 2006; Alexakis & Jiang, 2019).

http:// www.amazoniainvestiga.info ISSN 2322- 6307

Hard skills and soft skills - an asset for future graduates

In the era of the 21st century, where career opportunities are present at every company's door, and in every industry, it is almost impossible for freshly graduated students to recognize and choose their career paths (Balcar, 2016). The first academic year should be the period when students experience industries according to their area of interest, while the following year should be the time when they can experiment with different ideas, applying the theoretical knowledge they received (Landry et al., 2011). Along with the development of the workforce, Gore et al., (2011) sustain that career paths have become more diverse and eminent since individuals make career decisions within an increasingly dynamic organizational societal, and global environment.

Specialized bodies such as the National Qualifications Authority (NQA) propose elements of national policies and strategies to better coordinate the occupational and training profiles (Ministry of Education, 2022b). At the European level, a European Skills, Competences, Qualifications, and Occupations (ESCO) body has been set up to bridge the gap between the world of education and training and the world of work, helping to reduce skills mismatches and support a better functioning labor market (European Commission, 2022).

Skills are divided into hard skills (technical skills that usually involve or are associated with using equipment, data, and software) and soft skills (Chell, Athayde, 2011). The second category comprises interpersonal skills which refer to the ability to interact with oneself, and interpersonal skills that relate to interacting with others around us (Laker, Powell, 2011). Experiential learning exercises in the form of internships, computer-assisted instructions, and live cases are the best methods to transfer generic or soft skills such as communication, writing, interpersonal skills, judgment, and analytical skills (Culpin, Scott, 2012). Soft skills have high value and potential but even so, the education systems focus far more on hard skills. Hard skills attached to a qualification are crucial for employability and success. Even so, Balcar (2016) studies have shown that both hard and soft skills translate equally into wages. His findings revealed that hard skills and soft skills prove productive only when used together. Weber & Crawford (2016) reported that even though many skills are important, personality comes first. Necessary to perform well at the workplace are self-awareness and self-management capabilities that come from an intrinsic drive and motivation (Johnson et al., 2016).

More complex skills, such as decision-making, critical thinking, task planning, communication skills, and team management skills, are looked for in candidates or employees with the advancement in terms of occupied position on the hierarchical scale of a company (Chiang, Saw, 2018; Weber, Crawford, 2016). According to Merchante and Ortega (2012 cited in Sheehan et al., 2018), while studying the productivity leaks of different companies, one of the main sources identified was the differences between the education level required by the company versus the actual education level of employees. The same authors further stated that small and medium hospitality establishments are forced to hire underperforming employees due to a lack of alternatives which often leads to blockers in growth and expansion for the business and reduced quality products and services which translate directly into numerous negative effects on the overall performance of the business.

Overview of the professional insertion of recent graduates in the European Union

It has been widely accepted that Europe has been the epicenter of higher education providing high-quality students and graduates through famous universities and renowned institutions (Ye, 2022). In 2020, the UniRank database showed that in Europe there are 2725 officially recognized higher-education institutions of which 1922 are public and 777 are private. An interesting finding was that 97% of the top 200 universities in Europe are represented by public institutions demonstrating a high involvement of the governments. Moreover, according to Eurostat (2022), the European Union had 17.5 million tertiary education students divided as follows: 59.9% are represented by students studying for a bachelor's degree, 29.5% studying for a master's degree and 3.8% are studying for a doctoral degree.

Professional integration has been proven to be a challenging process that most people, especially young adults, must struggle to carry out on their own (Neagu, 2015). At the same time, the educational system frequently claims that its obligation toward the public ends as soon as students become graduates. On the other hand, employers, considered to be the main players in the labor market, are interested in recruiting and hiring qualified personnel yet, in most cases, they refuse to contribute to the professional and personal development of those who apply for job opportunities. It is a certainty that the labor market consists of both people who offer their labor force and whom they ask for it (Maquera-Luque et al., 2021). In this labor context, Monteiro (2022) explains that the demand-supply imbalances associated with this specific market may be attributed to various factors, in addition to the conventional ones. Additional elements including institutional, social, demographic, and cultural ones could serve for a more thorough interpretation of such imbalances. Job placement is not only related to people's lives and aspirations but is considered a process that establishes clear directions in every job market with obvious consequences for a person's professional progression (García-Blanco and Cardenas Sempertegui, 2018).

The professional integration of recent graduates and the effective measures that could be adopted is a priority for all members of the European Union. A recent study conducted by Eurostat (2021) showed that the European Union had the highest employment rate (79.6%) among those who graduated with a tertiary education compared with previous years. According to this research, 36.6% of young Romanians, between the ages of 15 and 34, work in other fields than those for which they have trained. The skills mismatch is defined as the discrepancy between a person's current occupation and the qualification according to the degree. Of the 30 European countries analyzed, the best placed, with the lowest job mismatch rates, are Iceland, with 17%, and Switzerland, with 20% while at the end of the ranking, we can see Romania (36.6%), France (35.4%) and Slovakia (35%). The discrepancies between the design of the curricula provided by higher education institutions and the demands of employers can generate an impenetrable gap and can cause skills mismatch. This is one of the main reasons why universities are becoming concerned with the professional integration of graduates into the labor markets, designing institutional mechanisms to facilitate students' transition to the workforce (Silva et al., 2016).

Ensuring the correlation of the higher education system with the requirements of the labor market continues to be both a priority and a challenge for Romania in recent years, with many solutions being identified using European funds within the sectoral operational programs regarding education and training to integrate into the labor market (Ministry of Education, 2022a). One of the most important measures regarding the correlation of university study programs with the requirements of the labor market is the promotion of entrepreneurial education (European Commission, 2022).

From the perspective of human capital, the national vision is to create a Romania with equal access to sustainable, quality employment, and an education system relevant to the labor market, stimulating lifelong learning. Considering these ambitious goals of the Romanian authorities through action bodies as well as the intentions of higher education institutions to deliver highly qualified human capital and prepared for the real needs of the labor market, through this study the authors aimed to investigate the indirect impact of educational policies on the level of employability, in the case of a comprehensive university.

Methodology

The authors chose a longitudinal research design, which involves measuring the investigated phenomenon in successive moments, from 2015 to 2021. The interest of the research is focused on how the employability rate evolved following the introduction of educational policies aimed at bringing the university educational offer closer to the labor market requirements. The panel study was based on a prospective model therefore, the information was collected from the moment the research started (2015), and in several later moments (2016-2021) continuously. Under these circumstances, the research method used was the questionnaire survey. The decision regarding choosing the appropriate research instrument was based on the aim of the research, in correlation with the need to capture the complexity of the research topic. For this article, one data collection instrument was considered, to gain a detailed understanding of the professional insertion of recent graduates in Romania.

Results and Discussion

One of the largest comprehensive universities in Romania, with a long tradition in tertiary education, having been established in 1948, was chosen as representative. It has 18 faculties covering all fundamental fields and offers 101 bachelor's programs, 79 master's, programs, and 19 doctoral study programs, benefiting approximately 20,000 students annually. The data collection procedure was as follows: a research instrument was constructed - a questionnaire that graduates completed one year after their graduation. This moment was not chosen by chance, but it was thoroughly considered because, in Romania, a diploma is issued one year after graduation. When the former students came to collect their diplomas, they were asked to fill out the questionnaire – the research tool decided.

Table 1.
Responses rate

Number of filled questionnaires*	Total/Year
Graduates 2021	14
Graduates 2020	705
Graduates 2019	1926
Graduates 2018	1217
Graduates 2017	1097
Graduates 2016	2743
Total	**7702**

***According to data collected until 10.03**

Furthermore, for the study, the rights and obligations of each research participant were explained to those who agreed to participate in the survey. Moreover, any graduate that wanted to participate in the research completed an informed consent document from the beginning of the collection year (2016), as we can observe in Table 1. Responses rate. According to a specific procedure, the questionnaires were adapted to different levels of study – bachelor, master, and Ph.D.

Sociodemographic features of participants

To analyze the data collected through the questionnaires, the IBM SPSS Statistic Tool was used, and the results showed a total number of 7702 participants divided for all years researched. Under these circumstances, most participants (35,6%) completed the questionnaire in 2016 while the lowest number was registered in 2021 (0,2%) mainly because all data was collected until March 2023. The age range of the respondents was not divided into any groups, with each participant being asked to provide the age. According to the descriptive statistics, out of 7702 participants, the youngest involved was 21 years old while the oldest person was 69 years old, the mean being 26.68 years with a standard deviation of 6.024. Important to mention is that the highest number of participants involved in the study was 24 years of age (22,4%) which is justified because they completed the questionnaire when collecting their diplomas.

Regarding gender, the authors decided to run a chi-square goodness-of-fit test to identify if there are statistically significant differences in the percentages of females and males that decided to complete the questionnaire. According to the results, $\chi^2(1) = 224.05$, $p < .0005$ therefore, women were more interested to complete the questionnaire than men one reason being the higher number of women graduates.

The research aims and objectives

The aim of the research consists in assessing some characteristics of the professional itinerary of graduates, by following them in time in a longitudinal way, to find out if there are differences regarding the professional pathways between the considered generations.

Research objectives are: to critically investigate the differences between generations regarding the level of absorption in the labor market; to examine the differences between generations regarding the degree of employment in the field of studies; to analyze the existing relationships between the level of student satisfaction with the graduate study program and the level of insertion; to inspect the existing relationships between the time of employment in the first job (during studies or after completion) and the gender of participants; to identify the level of absorption in the labor market according to the graduated faculties. For the study and in-depth analysis, five hypotheses were formulated to reveal the level of insertion of recent graduates from the university involved.

1. There are significant differences between generations regarding the level of assimilation in the labor market.
2. There are differences between generations regarding the level of insertion in the field of studies.
3. There is a relationship between the level of satisfaction of the students regarding the graduate study program and the level of insertion.

4. There are significant differences between gender regarding the time of employment in the first job (during studies or after completion);
5. There are differences between graduated faculties regarding the level of absorption in the labor market.

The study premises and analysis of results involve the presence of significant generational differences regarding the level of absorption in the labor market. The seven thousand seven hundred and two total respondents who have completed the questionnaire have answered five different sections of the survey, changing from answers with open answers, to score allocation and rating priorities to keep the engagement activities throughout the entire time, as well as to fully complete a graduate profile and test the accuracy of the answers.

When testing the first hypothesis, a chi-square test was run to determine if there were differences between the graduation year and the status of graduates in the labor market. As we can see in Figure 1. The relationship between variables: Graduation year and Status on the labor market, there are differences between the analyzed generations regarding their status on the labor market. The main categories were employed, business ownership, and unemployed. There were no outliers in the data as assessed by inspection of a boxplot. Under these circumstances, there is a significant difference between the year of graduation and the status of graduates in the labor market, as the test demonstrated $\chi^2(10) = 45.04$, $p < 0.0005$.

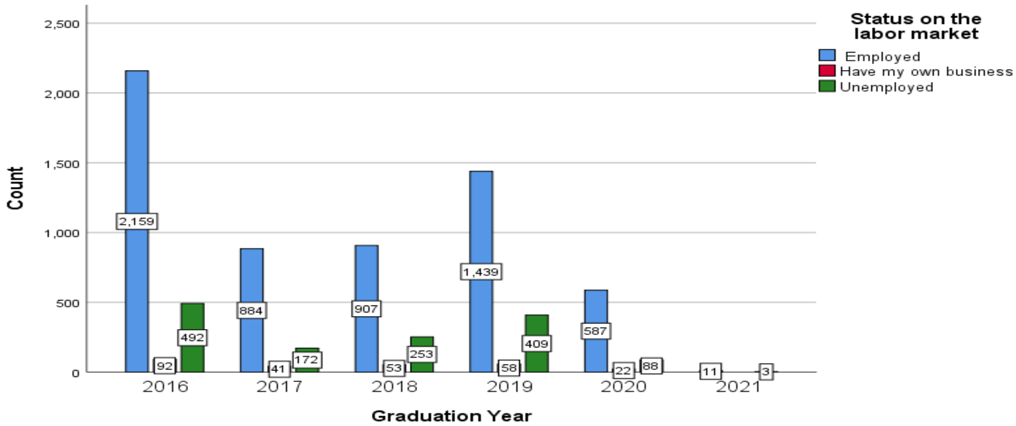


Figure 1. The relationship between variables: Graduation year and Status in the labor market

Furthermore, the researchers intended to investigate if there is a close relationship between the generations and their work field to fully understand if the widely known phenomenon, the skills mismatch was visible in the previous years. According to Eurostat (2021), only 36.6% of Romanian graduates are working in their field of studies but running a chi-square test has statistically shown that there is a significant difference between the graduation year and their work field, as the test demonstrated $\chi^2(5) = 24.88$, $p < 0.0001$. As the figure displays (Figure 2. The relationship between variables: Graduation year and Employment in the field of studies), the highest number of graduates that are having o job according to their studies is from 2016. As the results showed, 2016 is the year with the greatest number of participants (2743 out of 7702) and the year when employability was at a high level. Interesting to observe is that the graduates of 2016 in comparison with other years are working in their field of study.

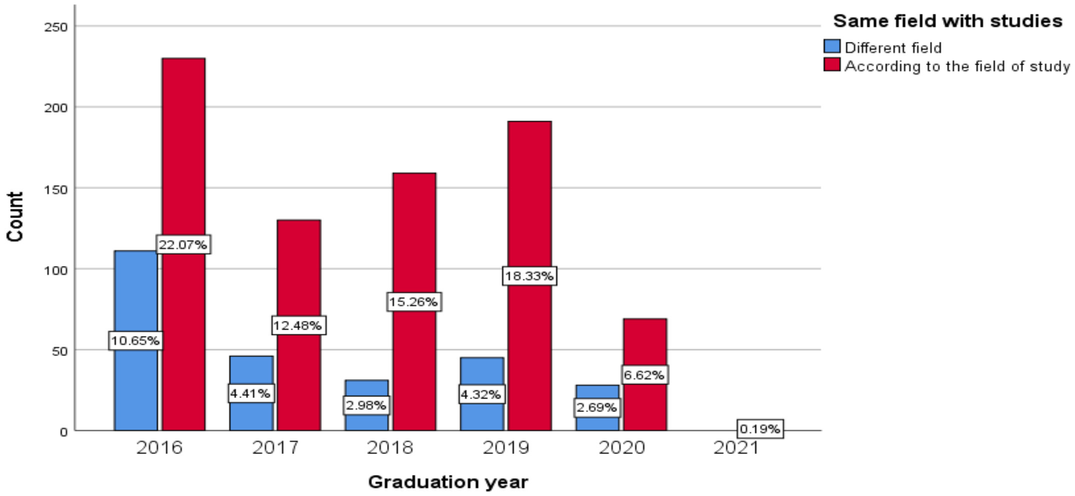


Figure 2. The relationship between variables: Graduation year and Employment in the field of studies

Moreover, the research focuses on observing if there are associations between the graduation year and the level of satisfaction of the graduates. To constantly improve the curricula to successfully match the industry requirements, most universities recognize the importance of self-actualization following the dynamic, globalized labor market. Therefore, the analysis was conducted, and the results showed that 80% of all respondents stated that, regardless of the graduation year, they are satisfied to a large extent or totally with the knowledge received throughout their program of study (Figure 3. The relationship between variables: Graduation year and the degree of satisfaction). Analysis of the results obtained shows that there are significant differences between generations, as the test demonstrated $\chi^2(20) = 33.68$, $p < 0.05$). Analyzing the data obtained, we observe a progressive increase between the years 2016-2019, which explains the impact of educational policies adopted both at a national and local level at the university under investigation.

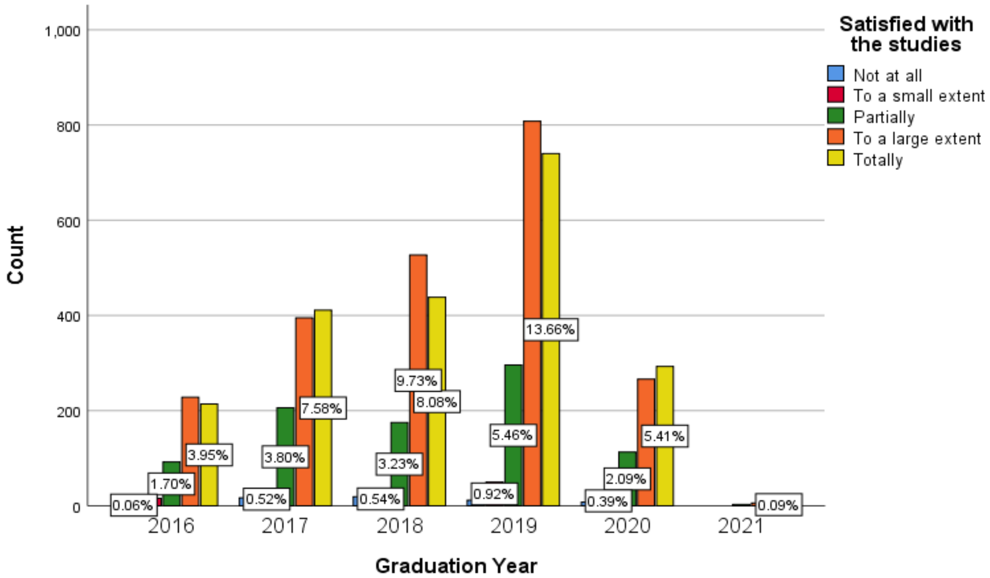


Figure 3. The relationship between variables: Graduation year and the degree of satisfaction

For the fourth hypothesis, the researchers aimed to investigate if gender had influenced their time of employment in the first job respondents. The analysis demonstrated that 66% of all respondents managed to have their first job during their undergraduate studies.

The results confirmed what Gursoy et. al (2012) stated highlighting the idea that working experience is important but managerial skills are even more so, according to and as a logical extension to be successful at the point of graduation, the students must have a firm grasp of both operational and managerial skills. At the same time, it is important to mention that, according to the analysis researchers performed ($\chi^2(5) = 13.006$, $p < .0005$), women who graduated from the investigated university managed to successfully obtain their first job during their undergraduate studies same as the men graduates, therefore, there is a clear association between gender and the period when respondents decided to apply for a first job (Figure 4. The relationship between variables: Gender of participants and the moment of the first job). The results contradict Eurostat (2021) which stated that even though there are more females than men who graduate, men are more inclined to be absorbed in the labor market.

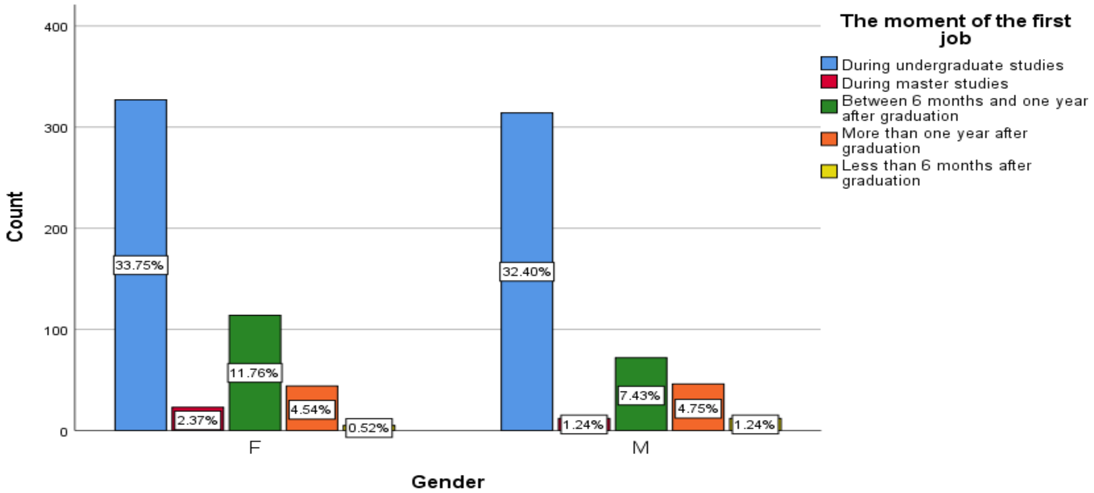


Figure 4. The relationship between variables: Gender of participants and the moment of the first job

When investigating whether there are possible associations between the type of faculty students graduated from and the level of absorption into the labor market, the results showed that those graduates who completed their studies at a faculty with higher applicability also have a higher insertion rate (Figure 5). The relationship between variables: Faculties and Employment status).

This confirms what Eurostat (2021) stated regarding the low integration of students who graduate from applied science faculties. Pearson $\chi 2$ test results for the association of variables indicate that Employment Status differs according to the faculty graduated, as the test demonstrated $\chi^2(36) = 424.26$, $p < 0.0001$. Those who complete educational programs such as Economics and Business Administration, Medicine, Food, and Tourism have a better chance of being absorbed into the labor market. Those who complete highly specialized degree programs such as Wood Industry, Materials Science, and Engineering have the lowest chances. Most entrepreneurs come from Economics Business Administration and Mechanical Engineering.

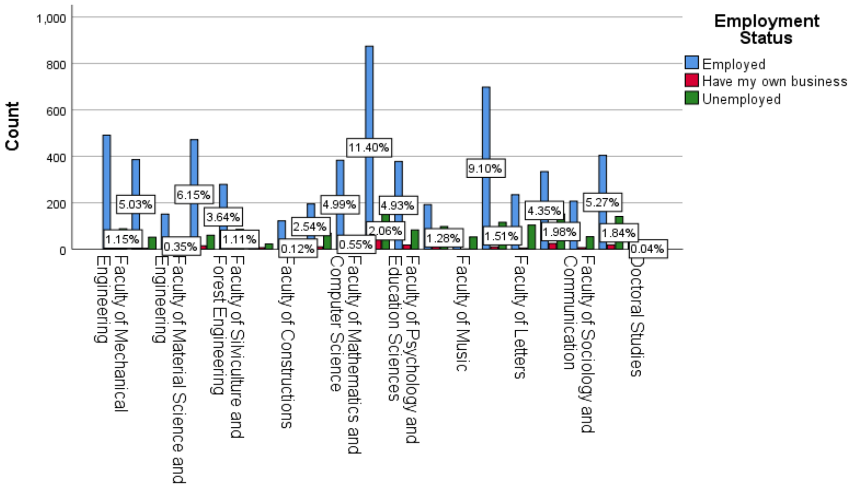


Figure 5. The relationship between variables: Faculties and Employment Status

Conclusions

This research investigated the indirect impact of educational policies on the level of employment in the case of a comprehensive university. In carrying out the research, essential aspects resulting from strategies and operational plans starting from 2016 were considered, analyzing the strategic objectives aimed at promoting an educational system based on a good transition from school to the labor market.

Consequently, several implemented projects were considered, which allowed the improvement of the transition process from the university to the labor market under different aspects: optimizing the professional path by developing collaboration with the economic environment; improving communication between universities, students, graduates, and companies by combining classic and modern communication tools; integrating the approach to the problems of the professional route – skills, orientation, and involvement.

There is an obvious connection between the level of insertion and the practical skills graduates obtained through their first job during the undergraduate program that enabled them to better blend theoretical knowledge with practical ones. It is essential for any university to constantly stimulate students to apply for jobs during their studies so they can apply all theoretical knowledge in various professional environments. Apart from this, students can discover more about their field of study and at the same time, they can establish quality networks that will eventually turn into different opportunities.

The hypotheses of the study have been confirmed, so we can affirm that there are differences between generations in the level of assimilation into the labor market, many of which are due to the change in university education policies in favor of the graduate, to ensure the highest degree of employability. One of the educational policies supported and developed has been the maintenance of close relations with the economic environment, enhanced by the creation of multiple internship opportunities and part-time student employment. The findings of our study show that those who participate in internships or are employed during their studies are more likely to find a job after graduation. Our findings are consistent with other studies (Nunley et al., 2016; Baert et al., 2021).

There were also notable differences between generations in terms of employment in the professional field of study completed. The level of satisfaction of the graduates showed a visible progression, both from year to year and within the categories referring to their employability status (unemployed, employed, self-employed). Interesting to note is the high proportion of research participants who have been engaged since the time of their studies, the results highlighting the existence of gender differences in this regard, with female representatives engaging at a higher rate compared to male students. This finding contradicts recent studies that highlight that being a woman and especially completing social science studies is a risk factor (Monteiro, 2020).

However, educational policies aimed at facilitating labor market integration do not act in the same way for all fields of study. The results obtained in this research show that there are fields where labor market take-up is lower than in others. Thus, the highest employment rates were presented by the graduates of the faculties of economics and business administration (874 graduates were employed), faculty of medicine (698 employed graduates), and those with the lowest employment were the graduates of the faculty of furniture design and wood engineering (79 employed graduates) and Civil Engineering (122 employed graduates).

One of the limitations of the study is represented by the fact that the results cannot be extrapolated to the entire Romanian graduate population. As the data are self-reported, they may also be biased by factors such as social desirability. Another limitation was the large number of incomplete questionnaires completed. This limitation was reduced to some extent by not including in the study those participants who did not provide sufficient data. Also, the data collected for the 2021 generation is not conclusive, as not enough data was collected and the process is still ongoing.

As a final appreciation, the process of transition from university to the labor market is continuously improved, as the labor market is a very dynamic one – due to specific causes and, also, to unexpected causes – and the university tries to adapt to its changes. This process might be considered a difficult one, as the process of adaptation is most of the time harder to realize in real-time with the labor market changes.

The study has both theoretical implications, as it establishes some aspects that might become components of insertion general assessment – employment status, employment in the fields of study, degree of satisfaction -, as well as practical implications, by carrying out an analysis that goes from the macro level – a general level and without focusing on issues related to each educational institution in particular – to a micro level (the university) - allowing the analysis to be framed in the national and European context.

Following the interpretation of these results, we consider it necessary that the skills offerings that universities provide to future graduates include more transversal competencies as well as an ncreased focus on the contexts for putting competencies into practice. This will allow students not only to test their theoretical knowledge but also to adapt their knowledge to the socio-economic reality.

Bibliographic references

Alexakis, G., & Jiang, L. (2019). Industry Competencies and the Optimal Hospitality Management Curriculum: An Empirical study. Journal of Hospitality & Tourism Education, 31(4), 210-220.

Argos, J., & Ezquerra, P. (2014). Universities and Skills for Employability. Procedia-Social and Behavioral Sciences, 139, pp. 290-296. Doi: 10.1016/j.sbspro.2014.08.002

Asonitou, S. (2015). Employability Skills in Higher Education and the Case of Greece. Procedia-Social and Behavioral Sciences, 175, 283-290.

Baert, S., Neyt, B., Siedler, T., Tobback, I., & Verhaest, D. (2021). Student internships and employment opportunities after graduation: A field experiment. Economics of Education Review, 83, 102141.

Balcar, J. (2016). It is better to invest in hard skills or soft skills? The Economic and Labor Review, 27(4), pp. 453-470.

Bejinaru, R. (2017). Dynamic Capabilities of Universities in the Knowledge Economy. Management Dynamics in the Knowledge Economy, 5(4), 577-595

Britannica. (2022, September 28) Higher education. Encyclopedia Britannica. Retrieved November 25, 2022 from https://www.britannica.com/topic/higher-education

Chell, E., & Athayde, R. (2011). Planning for uncertainty: soft skills, hard skills and innovation. Reflective Practice, 12(5), pp. 615-628.

Chiang, C., & Saw, Y. (2018). Do good looks matter when applying for jobs in the hospitality industry? International Journal of Hospitality Management, 71, pp. 33-40.

Culpin, V., & Scott, H. (2012). The effectiveness of a live case study approach: Increasing knowledge and understanding of “hard” versus “soft” skills in executive education. Management Learning, 43(5), pp. 565-577.

Daniel, B. (2014). Big data and analysis in higher education. Opportunities and challenges. British Journal of Educational Technology, 46(5), pp 904-920.

De Moura Castro, C., & Levy, D. (2015). Four functions of higher Education. International Higher Education, 23.

Eurograduate (2022) Eurograduate survey, Retrieved December 12, 2022 from https://www.eurograduate.eu/

European Commission (2022). What is ESCO? Retrieved November 30, 2022 from https://esco.ec.europa.eu/en/about-esco/what-esco

Eurostat (2021) Why do we need indicators about skills mismatches? Retrieved November 17, 2022 from https://ec.europa.eu/eurostat/web/experimental-statistics/skills

Eurostat (2022). Tertiary education statistics. Retrieved October 21, 2022 from: https://ec.europa.eu/eurostat/statistics explained/index.php?title=Tertiary_education_statistics

García-Blanco, M., & Cárdenas-Sempértegui, E.B. (2018). La inserción laboral en la Educación Superior. La perspectiva latinoamericana. Educación XX1, 21(2), pp. 323-347.

Gore, P. A., Jr., & Carter, L. P. (Eds.). (2011). Students in transition: Research and practice in career development. National Resource Center for The First Year Experience® and Students in Transition.

Gursoy, D., Rahman, I. and Swanger, N. (2012). Industry expectations from Hospitality Schools: What has changed? Journal of Hospitality & Tourism Education, 24(4), pp.32-42

Jack, K., Stansbie, P., & Sciarini, M. (2017). An examination of the role played by internships in nurturing management competencies in Hospitality and Tourism Management (HTM) students. Journal of Teaching in Travel & Tourism, 17(1), pp 17-33.

Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A., & Hall, C. (2016). NMC Horizon Report: 2016 Higher Education Edition. Austin, Texas: The New Media Consortium.

Katajavuori, N., Lindblom-Ylanne, S., & Hirvonen, J. (2006) The significance of Practical Training in Linking Theoretical Studies with Practice. Higher Education, 51(3), pp.439-464.

Laker, D. R., & Powell, J. L. (2011) The difference between hard and soft skills and their relative impact on training transfer. Human Resources Development Quarterly, 22(1), pp. 111-122.

Landry, L., Alameida, M., Orsolini, L., & Boyle, A. (2011). Responding to Demands to Change Nursing Education: Use of Curriculum mapping to Assess Curricular Content, Journal of Nursing Education, 50(10), pp. 587-90.

Ma, J., Pender, M., & Welch, M. (2016). The benefits of higher education for individuals and society. Trends in Higher Education Series. Education pays. Retrieved October 25, 2022 from https://files.eric.ed.gov/fulltext/ED572548.pdf

Maquera-Luque, P., Morales-Rocha, J., & Apaza-Panca, M. (2021). Socio-economic and cultural factors that influence the labor insertion of University Graduates, Peru. Heliyon, 7. Doi:10.1016/j.heliyon.2021.e07420

Ministry of Education (2019). Educatia ne uneste. Retrieved November 25, 2022 from https://acortar.link/VCrutt

Ministry of Education (2022a). Responsibilities for tertiary education. Retrieved November 12, 2022 from https://acortar.link/SQGghf

Ministry of Education (2022b). The National Authority for Qualifications acts as the National Coordination Point for EQF, the Contact Point for ESCO, the National Euro pass Center, the National Assistance Service for EPALE, and the National Euro Guidance Center. Retrieved November 30, 2022 from http://www.anc.edu.ro/

Monteiro, S., Almeida, L., Gomes, C., & Sinval, J. (2022). Employability profiles of higher education graduates: a person-oriented approach. Studies in Higher Education, 47(3), 499-512. Doi: 10.1080/03075079.2020.1761785

Neagu, G. (2015). Public policies of professional integration of young people in the EU and in Romania. Romanian Magazine for Multidimensional Education, 7(1), pp. 25-42.

Nunley, J. M., Pugh, A., Romero, N., & Seals Jr, R. A. (2016). College major, internship experience, and employment opportunities: Estimates from a résumé audit. Labour Economics, 38, 37-46.

Sheehan, M., Grant, K., & Garavan, T. (2018). Strategic talent management: a macro and micro analysis of current issues in hospitality and Tourism. Worldwide Hospitality and Tourism Themes, 10(1), pp. 28-41.

Silva, P., Lopes, B., Costa, M., Melo, A. Paiva, G., Brito, E., & Seabra, D. (2016). The million-dollar question: can internships boost employment? Studies in Higher Education. Routledge, Taylor, and Francis Group, 43(1), 2-21.

Weber, M., & Crawford, A. (2016) Developing Soft Skills for future Hospitality Leaders: A case study. Journal of Hospitality and Tourism Cases, 5(1), pp. 49-53.

Ye, L. (2022). A Comparative Study on Internationalization of Higher Education between China and Europe. 6th International Conference on Education, Management and Social Sciences.

DOI: https://doi.org/10.34069/AI/2023.63.03.32
How to Cite:
Dychkovskyy, S., Maksymchuk, M., Protsyk, I., Kulikova, S., & Zviahina, H. (2023). Digitalization of the management of social-cultural activities in the conditions of modern challenges. *Amazonia Investiga*, *12*(63), 341-350. https://doi.org/10.34069/AI/2023.63.03.32

Digitalization of the management of social-cultural activities in the conditions of modern challenges

Цифровізація менеджменту соціокультурної діяльності в умовах сучасних викликів

Received: January 21, 2023 Accepted: March 30, 2023

Written by:
Stepan Dychkovskyy[1]
https://orcid.org/0000-0003-4771-4521
Maksym Maksymchuk[2]
https://orcid.org/0000-0001-5177-539X
Iryna Protsyk[3]
https://orcid.org/0000-0002-6370-1344
Svitlana Kulikova[4]
https://orcid.org/0000-0003-0397-6853
Hanna Zviahina[5]
https://orcid.org/0000-0002-9778-6833

Abstract

The research addresses the digitalization of management processes in the socio-cultural sphere, assessing the factors that influence this process and the challenges faced by leaders of socio-cultural institutions and projects. Various analytical methods were used, including the analysis of scientific literature and an online questionnaire to gather practical perspectives. The findings reveal significant trends in the digitalization of socio-cultural activity management, identified from scientific literature and questionnaire responses. The study highlights the primary features of this process and provides a comprehensive view of the challenges and opportunities of implementing digital tools in socio-cultural activities.

Keywords: digitalization of management, digital technologies, digital transformation in management, the electronic environment of cultural organizations, economy digitalization.

Анотація

Дослідження стосується цифровізації процесів управління в соціокультурній сфері, оцінюючи фактори, які впливають на цей процес, і виклики, з якими стикаються керівники соціокультурних установ та проектів. Було використано різноманітні аналітичні методи, включаючи аналіз наукової літератури та онлайн-опитування для збору практичних перспектив. Результати показують значні тенденції в цифровізації управління соціокультурною діяльністю, виявлені з наукової літератури та відповідей на опитування. Дослідження акцентує основні особливості цього процесу і надає комплексний погляд на виклики та можливості впровадження цифрових інструментів в соціокультурній діяльності.

Ключові слова: цифровізація менеджменту, діджітал-технології, цифрова трансформація в управлінні, електронне середовищі організацій культури, цифровізація економіки.

[1] Doctor Culturology, Professor, Departments of Art Management and Event Technologies, National Academy of Culture and Art Management, Kyiv, Ukraine.
[2] Doctor of Economic Sciences, Professor, Department of Sociocultural Management, Faculty of Culture and Art, Lviv National University Named After Ivan Franko, Lviv, Ukraine.
[3] Candidate of Economic Sciences, Associate Professor, Lviv Polytechnic National University, Lviv, Ukraine.
[4] Candidate of Pedagogical Sciences, Associate Professor, Department of Art Education, Faculty of Pedagogy, Psychology and Arts, Volodymyr Vynnychenko Central Ukrainian State University, Kropyvnytskyi, Ukraine.
[5] PhD, Associate Professor, Department of Cultural Studies and Ukrainian Studies, Zaporizhzhia State Medical and Pharmaceutical University, Zaporizhzhia, Ukraine.

Introduction

Digital technologies can fundamentally change the way entire industries work and lead to the elimination of traditional, primarily geographical, boundaries.

Nowadays, the use of digital developments leads to changes in relations between the subjects of relations in such fields as energy, construction, banking, transport, trade, education, health care, mass media, security, etc. The constant complication of institutions of the social sphere and relations, which are increasingly based on modern digital technologies, causing an exponential growth of data flows, brings to the fore the issue of digitalizing the management of social-cultural activities. It is worth noting that the conditions of digitalization require special regulation, which is designed to stimulate the socially beneficial use of such technologies and prevent their inappropriate application.

Digitalization of social-cultural activities becomes a necessity in the reformation of the cultural sphere nowadays, the primary task for the effective development of the information society throughout the world. Digitalization of cultural management, in turn, is impossible without taking into account global tendencies, in particular, the intensive development of such technologies as augmented and virtual reality, artificial intelligence, the Internet of Things, robotics, blockchain, media education, gamification, interdisciplinary, etc.

The theoretical part of the present research reveals the features of the digital transformation concept in managing the social-cultural sphere, and determines the components and factors of the virtualization of managerial relations in social-cultural activities.

The practical part of the research outlines the most significant tasks of the scientific and methodological transformation of management as the most important prerequisites for digitalizing the management of social-cultural processes. It also highlights digital economy's main characteristics as prerequisites for applying its properties in managing the social-cultural sphere. By the way, this part determines the most important aspects of social-cultural activity requiring scientific study and practical investigation from the perspective of digitalizing the management of the cultural sphere, and the most characteristic tendencies of digitalization of social-cultural activity in the conditions of modern challenges. At the same time, it clarifies the respondents' standpoint regarding the vectors of the future reform of managing social-cultural activities in terms of strengthening its digitalization.

Based on the research results, conclusions were made regarding the analyzed issues. The survey has revealed that the primary tasks reflecting the need for scientific and methodical transformation of activities from the perspective of managing social-cultural processes are as follows: studying and considering the features of the intellectual development of users of social and cultural services in the scientific work, their cognitive interests and abilities, formation of information and digital competence of employees, methodological features of cultural and social processes in the conditions of a virtual educational environment, media education and safety of service users. At the same time, the primary characteristics of the digital economy, which are prerequisites for applying its properties in the management of the social-cultural sphere, are the production of electronic services, their distribution using electronic means and the creation of a network of subjects of social-cultural relations through the formation and exchange of digital assets going beyond the boundaries of the real world. According to the survey results, it has been established that the most significant aspects of social-cultural activity, requiring scientific study and practical investigation from the perspective of digitalizing the management in this area, are as follows: activity as an expression and formative factor of mass culture, which embodies mass values, typical models of mass behavior, determines the goals of production of information products, its purpose, as well as the impact of information on the social environment formed by mass culture, which is a consumer of information products. The research made it possible to establish that the main trends of digitization of social-cultural activities in the conditions of modern challenges are the development of artificial intelligence and the completion of social-cultural services from various modules in the social and cultural sphere. Along with this, the vectors of the future reform of managing social-cultural activities from the perspective of strengthening its digitalization are primarily the development of social-cultural processes in terms of applying complex electronic systems capable of adapting to changes in the external environment, as well as using digital management, forasmuch as standard approaches no longer meet the challenges of digital modernity.

Literature Review

Within the framework of our research, it is crucial to define digital transformation in managing the social-cultural sphere as a process of integrating digital technologies into all aspects of company activity, which requires fundamental changes in technology, the culture of activity and principles of creating new products and services in this sphere. Companies should completely transform processes and working models in order to ensure the most effective use of new technologies and their timely implementation in all spheres of activity. All business units are rapidly replacing traditional processes at all levels of management with digital management tools using state-of-the-art technologies (Vasylenko et al., 2022), (Leso, Cortimiglia & Ghezzi, 2023), (Kraus et al., 2022).

Currently, the demand for effective digital management technologies has increased significantly in the field of social-cultural environment. As a result, companies that have not been able to adapt to the new model of the digital consumer will most likely no longer exist. Organizations and projects that are open and ready for change and can adapt to more flexible working models have a greater potential for success than ever before. This is explained by the fact that digital transformation covers all aspects of the social-cultural sphere and offers effective ways to improve them together while developing digital technologies (Yanovska et al., 2019).

The virtualization process of managing relations is directly related to the emergence and introduction of a new class of virtual values into an economic turnover. The issue of exploring the significance of the virtualization process is considered in the works of modern scientists, the significance of which for the system of the modern world social-cultural sphere has been proven. At the same time, an effective mechanism for legal and administrative regulation of transformations provoked by similar processes in the system of social relations should be introduced (Ko et al., 2021), Papageorgiou et al., 2020). The scientists conducted a comparative characterization of the banking sector of Eastern Europe (Tarasenko, Saienko, Kirizleyeva, Vozniakovska, Harashchenko, & Bodnar, 2022) and developed strategies for the development of enterprise in post-industrial society (Hurzhyi, Kravchenko, Kulinich, Saienko, Chopko & Skomorovskyi, 2022).

On the basis of all social-cultural and political processes that have become a reality nowadays, a new way of communication is emerging, reflecting the characteristic features of modern mass culture. Modern mass communication is mediated by its essence, and, therefore, it requires the use of technical tools – means of mass communication. Technically, the communicative field of such processes is extremely problematic. It is characterized by a heterogeneous audience and has different levels: from private, intimate, existential contact to global and manipulative communication (Latilla et al., 2020), (Rodríguez-García et al., 2022).

A thorough analysis of modern economic practice and the latest scientific studies on the effectiveness of using management tools shows that the science of management is lagging behind the existing management practice. New conditions for the functioning and interaction of business entities in the social-cultural sphere due to using electronic networks and a wide range of professional equipment and software allow us to talk about new forms of communication, a new type of organization of production processes and new approaches to personnel management (Bendig et al., 2023), (Zoppelletto et al., 2023).

Aims

The purpose of the research is to determine the standpoints of IT specialists developing software products for organizing business processes, and heads of social-cultural institutions and projects regarding the features of the digitalization process of managing the objects of social-cultural activity in the context of today's challenges.

Materials and Methods

In this practical study, the objective was to investigate the prevailing trends in digitalizing the management of social-cultural objects in Ukraine. To accomplish this, a survey approach was adopted, targeting two key groups: practicing IT specialists and heads of social-cultural objects. A total of 259 IT specialists actively working in the field of digital technologies participated in the survey. These professionals possess expertise and knowledge in the latest digital tools and solutions relevant to managing social-cultural activities. Their insights were crucial in understanding the technical aspects and potential applications of digitalization in the social-cultural sphere. Additionally, 241 heads of social-cultural objects, such as institutions and projects, took part in the survey. These individuals, responsible for overseeing and managing social-cultural activities, provided valuable perspectives on the challenges and opportunities associated with implementing digital tools in their respective organizations.

The survey was conducted across multiple regions of Ukraine, including the Cherkasy, Poltava, Odesa, and Kyiv regions. This approach ensured a diverse representation of opinions and experiences regarding the digitalization of management processes in social-cultural objects throughout the country. To facilitate the data collection process, the ProProfs service was employed. This online survey platform enabled efficient administration and distribution of the survey to the targeted participants. It offered a convenient and user-friendly interface for respondents to provide their responses, ensuring a smooth and streamlined data collection process.

Results

In the conditions of informatization and digital transformation of society, the heads of institutions and organizations in the social-cultural sphere face special tasks. They reflect the requirements of scientific and methodical transformation of their activities from the perspective of managing social-cultural processes. According to the survey participants' standpoints, the following tasks are the most significant ones (Figure 1):

- studying and taking into account in the work the features of the intellectual development of users of social-cultural services, their cognitive interests and intellectual abilities (53% of respondents of IT specialists; 51% of respondents of heads of socio-culture institutions and projects).
- formation of information and digital competence of pedagogical, scientific-pedagogical and scientific workers and methods of their attestation in accordance with the functional capabilities of the activity (48% of respondents of IT specialists; 46% of respondents of heads of socio-culture institutions and projects);
- taking into account the methodological features of cultural and social processes in the conditions of a virtual educational environment, media education and the safety of service users (47% of respondents of IT specialists; 53% of respondents of socio-culture institutions and projects).

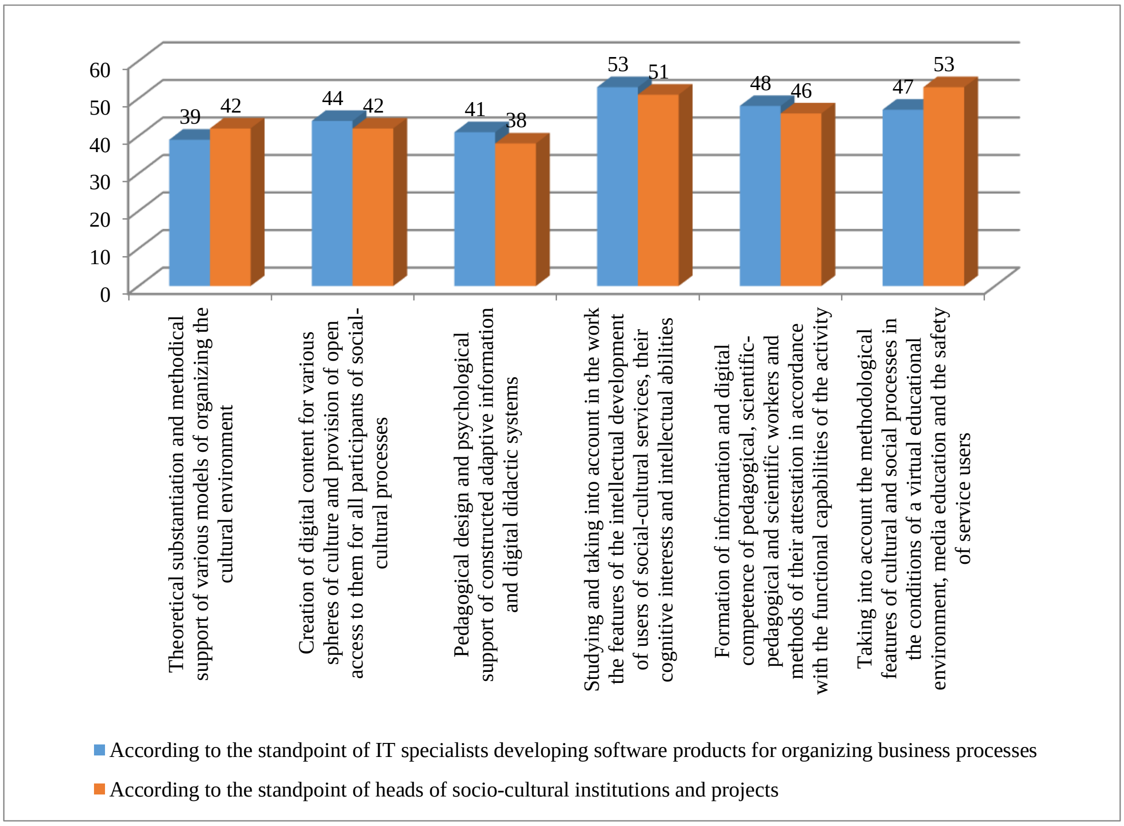


Figure 1. The tasks of the scientific and methodical transformation of management as the most significant prerequisites for digitalizing the management of social-cultural processes, %.
Source: compiled by the authors.

During the survey, the respondents identified the following primary characteristics of the digital economy as prerequisites for applying these features in the management of the social-cultural sphere (Figure 2):

- production of electronic products and services, their distribution by means of electronic tools (48% of respondents of IT specialists; 53% of respondents of heads of socio-culture institutions and projects);
- creations of a network of subjects of socio-cultural activity through the formation and exchange of digital assets going beyond the boundaries of the real world and do not have a physical medium (51% of respondents of IT specialists; 49% of respondents of heads of socio-culture institutions and projects);
- the dominant use of digital technologies in organizing current processes (47% of respondents of IT specialists; 37% of respondents of heads of socio-culture institutions and projects).

The survey has revealed that these characteristics are primarily the production of electronic products and services, their distribution by means of electronic tools and the creation of networks of cultural activity's subjects through the formation and exchange of digital assets going beyond the boundaries of the real world.

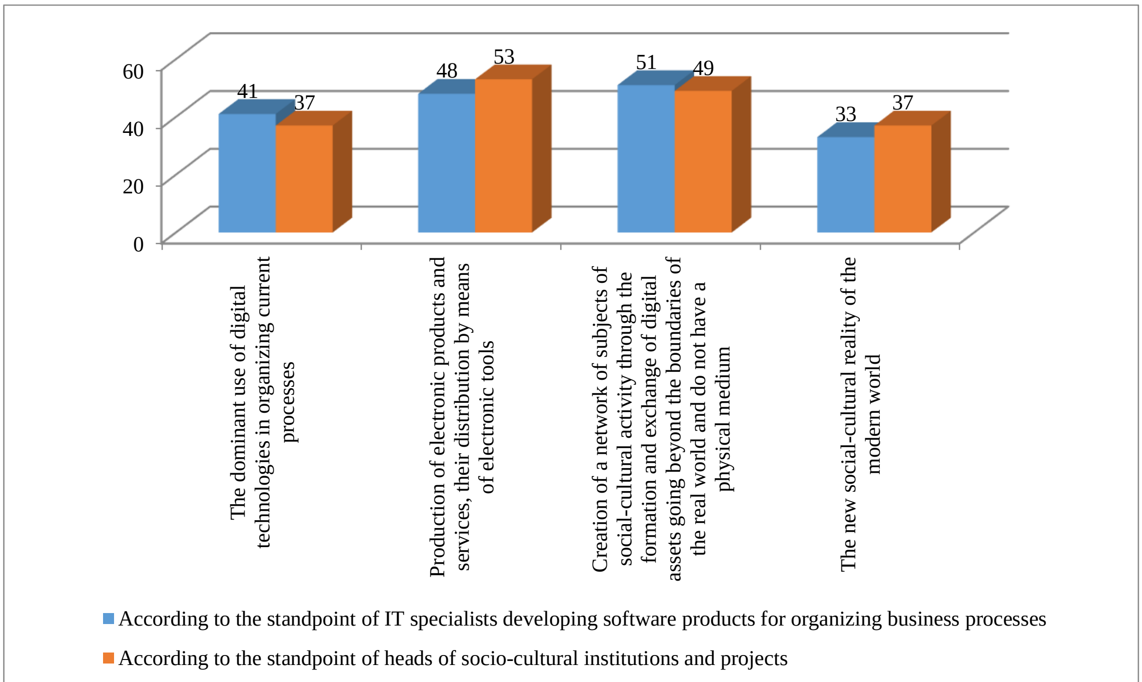


Figure 2. The primary characteristics of the digital economy as a prerequisite for applying its properties in the management of the social-cultural sphere, %.
Source: compiled by the authors.

The most significant aspects of social-cultural activities requiring scientific study and practical investigation from the perspective of digitalizing the management in this sphere, according to the respondents' standpoints, are as follows (Figure 3):

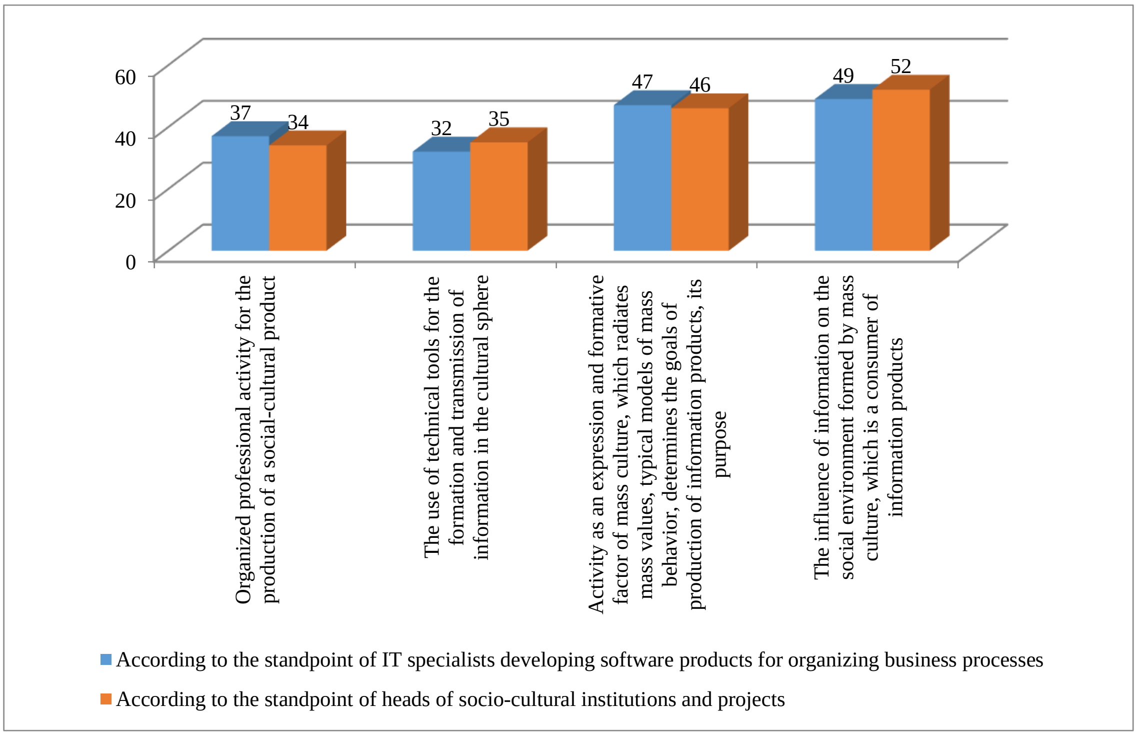


Figure 3. The most significant aspects of social-cultural activities requiring scientific study and practical investigation from the perspective of digitalizing the management in this sphere, %.
Source: compiled by the authors.

It can be observed from Figure 3 that such aspects are activity as an expression and formative factor of mass culture, which radiates mass values, typical models of mass behavior, determines the goals of the production of information products, their purpose, as well as the influence of information on the social environment formed by mass culture, which is a consumer of information products.

The clarification of the most characteristic tendencies of digitalizing social-cultural activities in the conditions of modern challenges is also a significant result of the questionnaire survey (Figure 4).

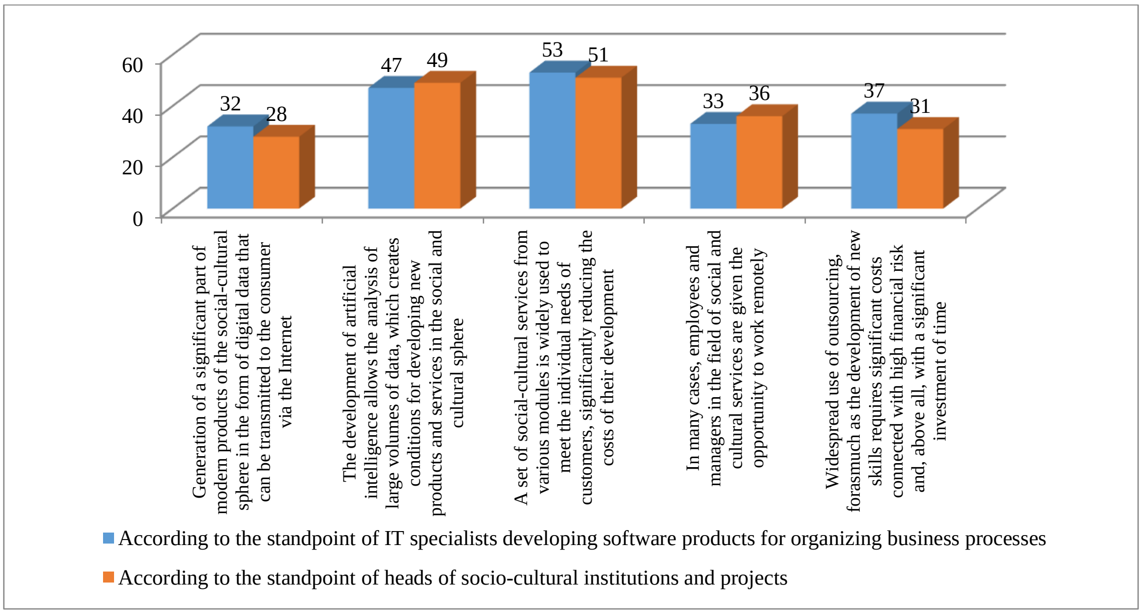


Figure 4. The most characteristic tendencies of digitalizing social-cultural activities in the conditions of modern challenges, %.
Source: compiled by the authors.

As can be seen from Figure 4, according to the survey participants' standpoints, the primary tendencies in developing the electronic social-cultural environment nowadays are the development of artificial intelligence and the completion of social-cultural services from various modules in the social and cultural sphere.

During the research, the respondents were asked to determine the vectors of reforming the management of social-cultural activities from the perspective of strengthening the digitalization of this process (Figure 5).

As can be seen from Figure 5, according to the standpoints of both IT specialists and heads of the social-cultural sphere, such directions are primarily the development of social-cultural processes in terms of complex electronic systems capable of adapting to changes in the external environment, as well as the use of digital management, since standard approaches no longer meet the challenges of digital modernity.

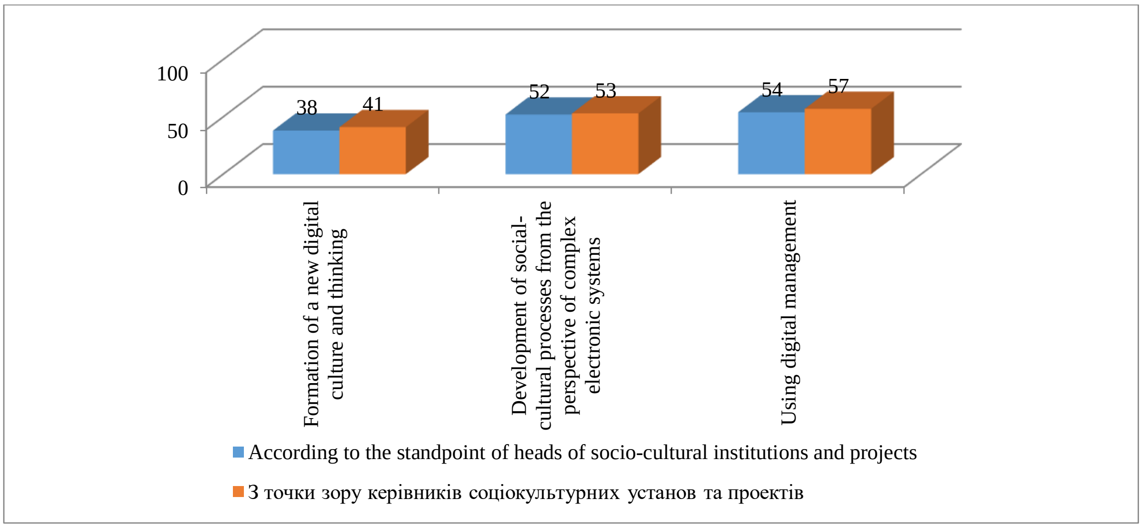


Figure 5. The vectors of reforming the management of social-cultural activities from the perspective of strengthening the digitalization of this process, %.
Source: compiled by the authors.

The survey results indicate a consensus among participants regarding the importance of digitalization in the social-cultural sphere. Both IT specialists and heads of social-cultural objects recognize the need to adapt to the digital era and leverage digital technologies for improved efficiency, innovation, and audience engagement. The identified trends in the survey highlight the significance of developing complex electronic systems that can adapt to the changing external environment. This reflects the understanding that digital technologies play a crucial role in enhancing the management and functioning of social-cultural objects. Additionally, the emphasis on digital management approaches underscores the recognition that traditional methods are no longer sufficient in addressing the challenges posed by the digital landscape. The survey also indicates a strong desire to embrace digital tools and platforms for effective communication and collaboration within the social-cultural sphere. The shift towards virtual companies, electronic objects, and electronic communication platforms demonstrates a recognition of the potential benefits and opportunities offered by digital technologies.

Discussion

Currently, taking into account the challenges of globalization intensifying and the need to solve communication problems, computerization is a significant factor in the civilizational progress of mankind. After all, it causes the wider use of computer systems, digital technologies, telecommunications and the Internet in all spheres of social life: science, business, and, of course, in the social-cultural environment (Cheng et al., 2022), (Singh, Klarner & Hess, 2020).

Information and digital tools and technologies are developing at an accelerated pace and are future-oriented. Scientific, technical, economic and political information is gaining more and more importance in social life nowadays, including for social and cultural activities (Shaw, Kim & Hua, 2020), (Banga, 2022).

Society as a whole and each individual, in particular, requires applying acquired knowledge in practice. Under such conditions, priority is given to science as a field producing new knowledge and culture as a field humanizing knowledge and, first of all, ensuring the individual development of a person (Biswas et al., 2022).

The difficulty of implementing the digital management concept in the social-cultural environment is largely due to the fact that deterministic processes are basically quite well-automated. At the same time, when human participation is required, the process is non-deterministic and challenging to automate with modern tools. It should also be borne in mind that the complexity and variety of business processes in non-manufacturing organizations lead to a more complex process of digitalizing management activities. Leading non-manufacturing companies today are quite actively involved in digital technology initiatives. They are engaged in the processes of formation of inter-industry, inter-regional and global digital space, ensuring the creation of product value, reflecting the need to involve business partners at all stages of product development and distribution (Filho et al., 2022), (Zhang, Pan, Feng & Qin, 2022), (Qian, Liu & Pan, 2022).

Digitalization of social-cultural processes creates opportunities for managers in this field which did not exist before. In particular, there is no need to remember large volumes of data nowadays as there is an opportunity to quickly share information: e-mail, video conferencing, real-time collaboration on one’s document, and other technologies are transforming communication (Timchuk & Evloeva, 2020), (Elia et all, 2021).

At the same time, it is worth emphasizing that these advantages are not capable of creating a truly working system of automated management in the social-cultural sphere due to the specificity of its processes. Electronic management tools are designed only to support decision-making, and provide collection and pre-processing of data necessary for the manager to solve specific tasks.

Conclusions

Therefore, the analysis of the scientific literature on the research topic and the questionnaire results showed that in the conditions of digitalization of the economy, communication and organizational relations in the social-cultural sphere have changed significantly nowadays. In particular, new components of such relationships have appeared, such as virtual companies and electronic objects, forms of electronic communication, etc.

Despite the valuable insights gained from this practical study on digitalizing the management of social-cultural objects in Ukraine, there are certain limitations that should be acknowledged. Firstly, the survey sample was limited to specific regions of Ukraine, namely the Cherkasy, Poltava, Odesa, and Kyiv regions. This regional focus may limit the generalizability of the findings to other parts of the country or even internationally. It is important to consider that different regions may have distinct socio-cultural contexts and varying levels of digital infrastructure and adoption, which could influence the outcomes.

Secondly, the research relied on self-reported data obtained through a survey. Self-reporting introduces the potential for response bias, where participants may provide answers that are influenced by personal opinions, experiences, or expectations. The accuracy and reliability of the collected data are dependent on the honesty and accuracy of the respondents. Additionally, the survey targeted practicing IT specialists and heads of social-cultural objects, which may not provide a comprehensive perspective on all stakeholders involved in the digitalization process. Other relevant parties, such as cultural policymakers, funding agencies, and end-users of social-cultural services, were not directly included in the study. Their perspectives could offer valuable insights and considerations that were not captured in the survey. Furthermore, the research focused primarily on digitalization in the management processes of social-cultural objects, potentially overlooking other aspects of digital transformation, such as audience engagement, content creation, or marketing strategies. A more comprehensive examination of the broader digital ecosystem within the social-cultural sphere could provide a more holistic understanding of the topic.

Lastly, the study employed a cross-sectional design, capturing a snapshot of the current state of digitalization in social-cultural objects. Longitudinal studies tracking the evolution of digitalization efforts over time would offer deeper insights into the trends and changes in the field. Considering these limitations, future research endeavors should strive for a broader geographical scope, involve a wider range of stakeholders, incorporate mixed-method approaches, and adopt longitudinal designs to provide a more comprehensive understanding of the digitalization of management processes in social-cultural objects.

Bibliographic references

Banga, K. (2022). Digital technologies and product upgrading in global value chains: Empirical evidence from Indian manufacturing firms. The European Journal of Development Research, 34, 77–102 https://link.springer.com/article/10.1057/s41287-020-00357-x

Bendig, D., Schulz, C., Theis, L., & Raff, S. (2023). Digital orientation and environmental performance in times of technological change. Technological Forecasting and Social Change, 188, 122272. https://doi.org/10.1016/j.techfore.2022.122272

Biswas, S., Echevarria, A., Irshad, N., Rivera-Matos, Y., Richter, J., Chhetri, N., Parmentier, M. J., & Miller, C. A. (2022). Ending the Energy-Poverty Nexus: An Ethical Imperative for Just Transitions. Science and Engineering Ethics, 28, 36. https://link.springer.com/article/10.1007/s11948-022-00383-4

Cheng, H., Dong, Y., Lu, C., Qin, Q., & Cadasse, D. (2022). Intelligent Oil Production Stratified Water Injection Technology, Wireless Communications and Mobile Computing, 3954446, 7. https://doi.org/10.1155/2022/3954446

Elia, S., Giuffrida, M., Mariani, M. M., & Bresciani, S. (2021). Resources and digital export: An RBV perspective on the role of digital technologies and capabilities in cross-border e-commerce. Journal of Business Research, 132, 158–169. https://doi.org/10.1016/j.jbusres.2021.04.010

Filho, W., Levesque, V., Sivapalan, S., Salvia, A. L., Fritzen, B., Deckert, R., ... & Shiel, C. (2022). Social values and sustainable development: community experiences. Environmental Sciences Europe, 34, 67. https://enveurope.springeropen.com/articles/10.1186/s12302-022-00641-z

Hurzhyi, N., Kravchenko, A., Kulinich, T., Saienko, V., Chopko, N., & Skomorovskyi, A. (2022). Enterprise Development Strategies in a Post-Industrial Society. Postmodern Openings, 13(1Sup1), 173–183. https://doi.org/10.18662/po/13.1Sup1/420

Ko, A., Fehér, P., Kovacs, T., Mitev, A., & Szabó, Z. (2021). Influencing factors of digital transformation: management or IT Is the driving force? International Journal of Innovation Science, 14(1), 1–20. https://doi.org/10.1108/ijis-01-2021-0007

Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A., (2022). Digital transformation in business and management research: An overview of the current status quo. International Journal of Information Management, 63, 102466. https://doi.org/10.1016/j.ijinfomgt.2021.102466

Latilla, V. M., Frattini, F., Franzo, S., & Chiesa, V. (2020). Organisational change and business model innovation: an exploratory study of an energy utility. International Journal of Innovation Management, 24(4), 2050036. https://doi.org/10.1142/s136391962050036x

Leso, B. H., Cortimiglia, M. N., & Ghezzi, A. (2023). The contribution of organizational culture, structure, and leadership factors in the digital transformation of SMEs: a mixed-methods approach. Cognition, Technology & Work, 25, 151–179. https://link.springer.com/article/10.1007/s10111-022-00714-2

Papageorgiou, K., Singh, P. K., Papageorgiou, E., Chudasama, H., Bochtis, D., & Stamoulis, G. (2020). Fuzzy cognitive map-based sustainable socio-economic development planning for rural communities, Sustainability, 12(1), 305. https://doi.org/10.3390/su12010305

Qian, W., Liu, H. A., & Pan, F.H. (2022). Digital economy, industry heterogeneity, and service industry resource allocation. Sustainability, 14, 8020. http://doi.org/10.3390/su14138020

Rodríguez-García, C., García-Pintos, A., Caballero, G., & Vázquez, X.H. (2022). The role of knowledge maps in sub-national climate change policymaking and governance. Climate Policy, 22(3), 273–284. https://doi.org/10.1080/14693062.2021.2022450

Shaw, R., Kim, Y. K., & Hua, J. (2020). Governance, technology and citizen behavior in pandemic: lessons from COVID-19 in East Asia. Progress in Disaster Science, 6, article 100090, https://linkinghub.elsevier.com/retrieve/pii/S2590061720300272

Singh, A., Klarner, P., & Hess, T. (2020). How do chief digital officers pursue digital transformation activities? The role of organization design parameters. Long Range Planning, 53(3), 101890. https://doi.org/10.1016/j.lrp.2019.07.001

Tarasenko, I., Saienko, V., Kirizleyeva, A., Vozniakovska, K., Harashchenko, L., &

Bodnar, O. (2022). Comparative Characteristics of the Banking Sector in Eastern Europe. International Journal of Computer Science and Network Security, 22(1), 639–649. https://doi.org//10.22937/IJCSNS.2022.22.1.84

Timchuk, O. G., & Evloeva, M. V. (2020). Difficulties in transforming the construction industry under the digital economy. IOP Conference Series: Materials Science and Engineering, 880, 012082. http://doi.org/10.1088/1757-899X/880/1/012082

Vasylenko, D., Butko, L., Domitrak, Y., & Alistrenko, N. (2022). Digital Infrastructure Management in the System of Socio-Cultural Institutions: The Archival Paradigm. Socio-Cultural Management Journal, 5(1), 74–91. https://doi.org/10.31866/2709-846x.1.2022.257677

Yanovska, V., Levchenko, O., Tvoronovych, V., & Bozhok, A. (2019). Digital Transformation of the Ukrainian Economy: Digitization and Transformation of Business Models. SHS Web of Conferences 67, 0. https://doi.org/10.1051/shsconf/20196705003

Zhang, L. L., Pan, A., Feng, S. S., & Qin, Y. Y. (2022). Digital economy, technological progress, and city export trade. PloS ONE 2022, 17, e0269314. http://doi.org/10.1371/journal.pone.0269314

Zoppelletto, A., Orlandi, L. B., Zardini, A., Rossignoli, C., & Kraus, S. (2023). Organizational roles in the context of digital transformation: A micro-level perspective. Journal of Business Research, 157, 113563. https://doi.org/10.1016/j.jbusres.2022.113563

Revista Amazonia Investiga
www.amazoniainvestiga.info