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Особливості соціальної перцепції алгоритмізованого психотерапевта
українськими користувачами великих мовних моделей (LLMs)6

O. Prokopenko, M. Zhydko, Yu. Guliy

Features of social perception of an algorithmised psychotherapist
by Ukrainian large language models (LLMs) users.....6

В. Васютинський, І. Губеладзе, О. Суший, Л. Коробка, В. Вінков, В. Діброва

Опосередкована оцінка схожості/несхожості окремих груп
українців на росіян: очікуване і несподіване.....17

V. Vasiutynskyi, I. Hubeladze, O. Sushyi, L. Korobka, V. Vinkov, V. Dibrova

An indirect assessment of the similarity/dissimilarity of specific groups
of Ukrainians to Russians: The expected and the unexpected.....17

А. Березюк

Висвітлення гуманітарної допомоги Святого Престолу
для України в період російсько-української війни у ЗМІ32

A. Bereziuk

Media coverage of the Holy See's humanitarian aid
for Ukraine during the Russo-Ukrainian War in the mass media32

Ю. Гундєртайло

Промоція психогієнічних практик серед учасників освітнього процесу
в умовах екологічних та епідемічних загроз: гендерний аналіз.....45

Yu. Hundertailo

Promotion of mental hygiene practices among educational participants in
the context of environmental and epidemic threats: A gender analysis45

О. Богдан

Трансформація цінностей добробуту в умовах цифрових та воєнних викликів.....53

O. Bohdan

Transformation of well-being values under digital and wartime challenges.....53

Т. Ларіна

Когнітивні предиктори сприйняття студентами екологічних
та епідемічних загроз здоров'ю під час війни63

T. Larina

Cognitive predictors of students' perception
of environmental and epidemic health threats during wartime63

Ю. Паскевська

Факторна структура складових характеристик психічного здоров'я
працівників пенітенціарних установ з високим рівнем безпеки та діагностованим рівнем резильєнтності70

I. Paskevsk

Factor structure of the component characteristics of mental health
among high-security penitentiary staff by diagnosed levels of resilience70

О. Дзюбенко

Факторна структура психологічного добробуту учнів закладів загальної середньої освіти.....83

O. Dziubenko

Factor structure of the psychological well-being of pupils in general secondary education institutions83



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**Features of social perception of an algorithmised psychotherapist
by Ukrainian large language models (LLMs) users****Olesia Prokopenko***

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Abstract. The growing demand for mental health support, along with the development of artificial intelligence technologies, has led to the increasing use of large language models (LLMs) for obtaining psychological assistance. The aim of this study was to examine the social perception of generative artificial intelligence in the role of a psychotherapist among Ukrainian users of large language models. The survey questionnaire included a socio-demographic section as well as questions regarding respondents' experience of receiving psychological assistance through generative artificial intelligence (AI). In addition, a projective colour association technique and a projective method of selecting an associative image were employed in order to identify how users of an algorithmised psychotherapist perceive it. The final sample consisted of 85 participants aged between 17 and 54, including 22 men and 58 women. The study showed that generative artificial intelligence in the role of a psychotherapist is perceived as calm, unemotional, genderless, and cold. It was also found that an algorithmised psychotherapist based on LLMs is simultaneously perceived as a coherent structure and as something mysterious and hidden. At the same time, generative AI in the role of a psychologist is not associated with evil or deceit, which may indicate a potential vulnerability to confident error and therefore requires further investigation. It was determined that perceptions of generative artificial intelligence do not depend on age or prior experience of receiving professional psychological assistance. The visual representation of generative AI is influenced by mass media in terms of colour, but not in terms of anthropomorphisation, provided that usage remains moderate. The results may be used by psychologists, AI developers, and policymakers to design ethically grounded and socially sensitive AI-based mental health tools

Keywords: generative artificial intelligence; archetypal representations; digital psychotherapy; projective methods; anthropomorphisation

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INTRODUCTION

The development and widespread dissemination of generative artificial intelligence have led to its active use across a wide range of domains. In the field of mental health, large language models are increasingly used as tools for psychological assistance, often replacing or supplementing human interaction. However, there is limited empirical evidence on how users perceive such systems in the role of a psychotherapist.

Since perceptions of empathy, competence, and neutrality directly influence trust and self-disclosure, studying the social representation of an algorithmised psychotherapist is necessary for assessing potential risks, including overtrust and unrealistic expectations.

According to M. Zao-Sanders (2025) generative AI was used for personal and professional support, content creation and editing, learning and education, technical assistance and troubleshooting, creativity and recreation, research, analysis, and decision-making. Notably, emotional support emerged as the most popular use case for gen AI. Therefore, the features of the social perception of artificial intelligence are particularly important when it comes to obtaining psychological assistance through generative AI. Given the growing demand for psychological assistance, as reported by the World Health Organization (2025), artificial intelligence is increasingly incorporated into mental health support in two principal formats. The first involves specialised applications – such as Wysa, ZuriHealth, Friend, and AI PSY HELP – which offer structured and task-oriented forms of digital support. The second format concerns the use of large language models, whose potential for psychological dialogue and emotional assistance has been analysed by Z. Guo *et al.* (2024). To denote artificial intelligence technologies used for providing psychological assistance, a new term – algorithmised psychotherapist – was proposed.

An algorithmised psychotherapist is software based on rule-based systems, machine learning, or large language models (LLMs) that is either explicitly designed to support or improve mental health and assist in resolving personal problems (specialised applications and chatbots), or is used for this purpose at the user's request (generative artificial intelligence services). A. Clarke & L. Tyler (2015) concluded that the visual representation of an object is of particular importance. During the initial perception of an object, its perceptual characteristics are immediately mapped onto semantic knowledge, enabling rapid inferences about its purpose and potential modes of use. Consequently, semantic expectations begin to guide subsequent cognitive interpretation and interaction with the object practically from the moment it enters the visual field. Visual representations of artificial intelligence significantly influence how people understand and evaluate this technology. A. Romele & M. Severo (2025) demonstrated that

the type of illustration used in a scientific article about AI – whether a realistic photograph of a researcher at work or a stock image of a robot with binary code – affects content comprehension. Participants who viewed the realistic photograph showed better understanding of the technical details of the text, whereas those who saw the stock image exhibited weaker rational comprehension but a stronger emotional response.

P. Brauner *et al.* (2025a) highlighted the influence of cultural factors on the evaluation of expectations, benefits, and risks associated with artificial intelligence. Given that Ukrainian culture is considerably closer to German (European) culture than to Chinese culture, it can be assumed that Ukrainians' perceptions of artificial intelligence will be more similar to those of Germans, who demonstrated greater scepticism and a stronger focus on risks and ethical implications, particularly with regard to privacy, autonomy, and control. Accordingly, it could be expected that Ukrainians would perceive generative artificial intelligence as suspicious or potentially dangerous. This was further supported by P. Brauner *et al.* (2025b) involving both artificial intelligence development experts and members of the general public, which found that experts assessed the development of AI as less risky and more beneficial than did the public.

In Ukrainian context Yu. Typtyuk & T. Ivanova (2025) analysed the use of AI systems in psychological counselling, focusing on chatbot-based tools such as Woebot and Wysa. The author noted their accessibility and structured support functions but emphasised the need to assess their methodological validity and compliance with professional standards. The study highlights potential risks of overreliance and insufficient personalisation, underscoring the importance of examining users' perceptions of AI-based psychological assistance. O. Starovoitenko *et al.* (2025) outlined criteria for evaluating digital mental health tools, emphasising not only technical effectiveness but also safety, ethics, and user experience. The authors highlighted that trust and perceived reliability directly influence the real-world impact of such technologies, which underscores the importance of studying users' perceptions of an algorithmised psychotherapist. Thus, numerous scientific studies have examined AI in mental health, visual representations of AI, and cultural differences in risk perception. However, insufficient attention has been paid to the social perception of LLM-based systems specifically in the role of a psychotherapist, particularly in the Ukrainian cultural context and with regard to archetypal and visual associations. The aim of this study was to identify the features of social perception of an LLM-based algorithmised psychotherapist among Ukrainian users and to determine the factors influencing these perceptions.

MATERIALS AND METHODS

The study was conducted on the online platform Lime-Survey from October 21, 2025, to November 15, 2025. The survey was administered in Ukrainian. A total of 85 Ukrainian participants took part in the study. After removing the responses of participants who failed

the attention check (i.e., selected the same answer for oppositely worded questions), 80 validated responses remained, comprising 22 men (27.5%) and 58 women (72.5%) aged between 17 and 54 years. The demographic data and characteristics of the respondents obtained in the first block of the survey are presented in Table 1.

Table 1. Socio-demographic characteristics of the respondents

		N	%
Gender	Man	22	27.5%
	Female	58	72.5%
Age	<30	46	57.5%
	30+	34	42.5%
Experience of receiving professional psychological help	Yes	46	57.5%
	No	34	42.5%
Last year country of residence	Ukraine	63	77.8%
	Other (Germany, Poland, Sweden, Switzerland, Hungary, Italy, Latvia, The Netherlands)	17	22.2%

Source: developed by the authors

The study consisted of three stages. At the first stage, respondents sequentially answered survey questions aimed at identifying the participants' socio-demographic characteristics and the specifics of their experience using generative AI in the role of a psychologist. At the second stage, a projective colour association method was applied. Respondents were presented with eight colour cards (white #ffffff, black #000000, green #008001, red #ff0000, yellow #f7d917, purple #7f00ff, blue #0000ff, and orange #ff6600) and were asked to

first select the colour that most strongly associates with generative AI in the role of a psychotherapist, and then the colour that associates with it the least. At the third stage, a projective image selection method was employed. For this study, 15 images were developed (Table 2), drawing on C.G. Jung's archetypes – shadow, self, persona, and anima/animus (Jung, 1990). Respondents were asked to first select three images that most strongly associate with generative AI in the role of a psychotherapist, and then three that associate with it the least.

Table 2. Jungian archetypes and images for the projective image selection method

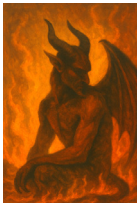
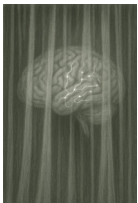
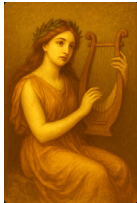
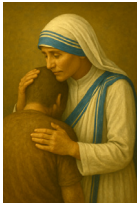
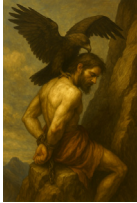
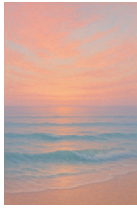
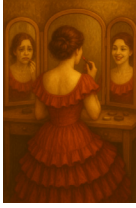
Archetype	Image 1	Image 2	Image 3
Shadow	 The Devil	 The Joker	 The brain behind the veil
Anima	 A muse	 Mother Teresa	 Seductive woman
Animus	 Wise man	 Prometheus, whose brain is pecked by an eagle	 The sword in the stone

Table 2, Continued

Archetype	Image 1	Image 2	Image 3
Self	 Eastern culture temple	 An oak	 Ocean at dawn
Persona	 Alice in Wonderland	 A dancer in a mirror	 Masks

Source: developed by the authors

Respondents were asked to indicate which specific software they used and how frequently they used it for psychological support, as well as to select which colours and images, in their view, most and least correspond to generative AI in the role of a psychotherapist. The use of projective methods made it possible to examine the qualities and metaphorical images that participants subconsciously attribute to generative artificial intelligence in the role of a psychotherapist. The Fisher angular transformation method and the Mann-Whitney U test were used to analyse the results. Statistical analyses were conducted using BM SPSS Statistics, v31. The level of statistical significance was set at $\alpha = 0.05$. Each participant has reviewed the informed consent form before agreeing to participate

in the study. When reporting research involving human participants, the authors state that the study was conducted in accordance with the principles of the Declaration of Helsinki (2013).

RESULTS

Empirical data reveal distinct patterns in the use of generative artificial intelligence in the role of a psychologist. The findings reflect both the frequency and character of using AI-based support, as well as differences between respondent groups. According to the survey results, the majority of respondents (96.25%) use ChatGPT to engage in discussions on psychological topics. Some respondents reported using multiple large language models as a psychologist (Fig. 1).

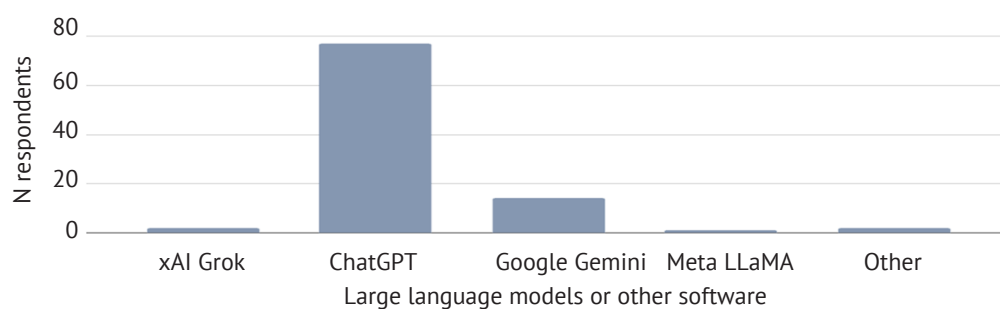


Figure 1. Use of large language models as an algorithmised psychotherapist

Source: developed by the authors

The survey results also showed that the majority of respondents (42.5%) use generative AI as a psychologist only in isolated cases. The frequency of using generative AI as a psychologist is presented in Figure 2.

The survey showed that 81.25% of respondents spend up to 30 minutes communicating with AI on psychological topics. Most frequently, users turn to AI with questions related to personal development (65%),

emotional difficulties (52.50%), and relationship issues (45%), while topics related to the sexual sphere (13.75%), relationships with children (13.75%), and traumatic experiences (15%) are addressed least often. At the same time, 48.75% of respondents indicated that they would never turn to AI for sexual issues, and 38.75% reported that they are not willing to discuss traumatic experiences with an algorithmised psychotherapist.

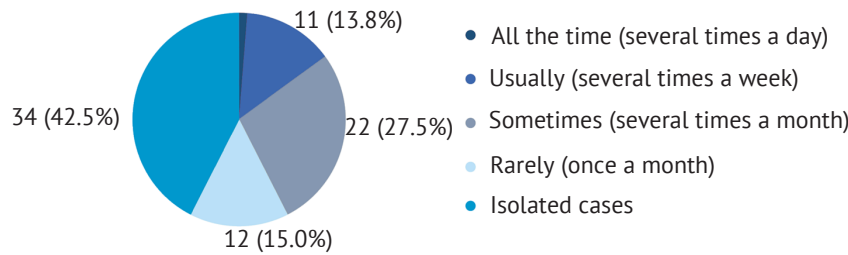


Figure 2. Frequency of using generative AI as a psychologist

Source: developed by the authors

In addition, within the group that had experience receiving professional psychological assistance, 12 respondents (26.09%) indicated that there are no topics they consider inappropriate for addressing with AI. By comparison, in the group without experience of professional psychotherapy, only one respondent (2.94%) reported this view. Overall, 57.50% of respondents reported that they usually feel better after a session with an algorithmised psychotherapist; however, this

proportion is lower than the percentage of those who feel better after a session with a professional psychotherapist (Table 3). As part of the survey, respondents were asked to evaluate the effectiveness of using generative AI on a 10-point scale, where 0 indicated that interaction with AI did not help at all, and 10 indicated that it completely resolved the issue for which the respondent sought help. The mean effectiveness ratings are presented in Table 4.

Table 3. Well-being after psychotherapeutic interaction with AI and a psychologist

Response	N AI	% AI	N psychologist	% psychologist
Better	46	57.50%	34	73.91%
Worse	0	0.00%	1	2.17%
The same	21	26.25%	5	10.87%
Not defined	13	16.25%	6	13.04%

Source: developed by the authors

Table 4. Mean effectiveness rating of generative AI in the role of a psychologist

Overall	Group with experience	No experience group	< 30 years old group	30+ years old group
5.81	5.87	5.74	6.06	5.47

Source: developed by the authors

The application of the Mann-Whitney U test yielded an Asymptotic Sig. (2-sided test) value of 0.894 when comparing effectiveness ratings between groups with and without experience of receiving professional psychological assistance, and an Asymptotic Sig. (2-sided test) value of 0.220 when comparing ratings between participants under 30 years of age and those aged 30 and above. In both tests, the Asymptotic Sig. (2-sided test) exceeded the threshold value of 0.05, indicating

the absence of a statistically significant difference between the groups. The group with experience of attending professional psychotherapy rated the effectiveness of real psychotherapy at an average of 7.5 out of 10, which is higher than the effectiveness of interaction with an algorithmised psychotherapist. Figure 3 presents the ranking of colours that were selected as the most and least associated with generative AI in the role of a psychotherapist.

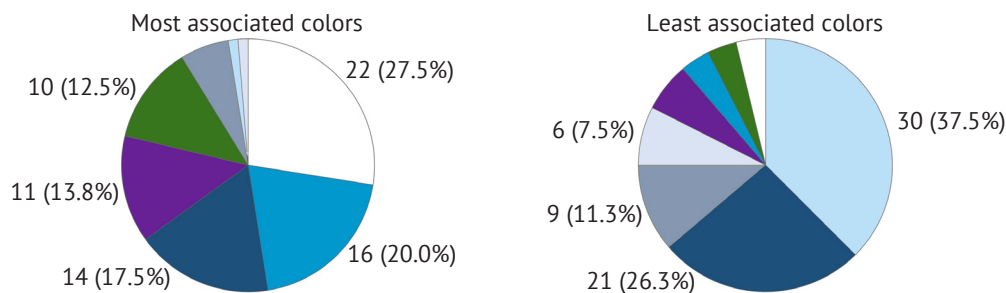


Figure 3. Frequency of colour choices most and least associated with generative AI in the role of a psychotherapist

Source: developed by the authors

Thus, the colours most strongly associated with an LLM-based algorithmised psychotherapist are white (27.50%), blue (20%), and black (17.50%), whereas the least associated colours are red (37.50%), black

(26.25%), and yellow (11.25%). The frequency of selection of images that are most and least associated with generative AI in the role of a psychologist is presented in Table 5.

Table 5. Frequency of selection of archetypal images associated with generative AI in the role of a psychologist

Image (Archetype)	N most associated	% most associated	N least associated	% least associated
The brain behind the veil (Shadow)	48	60.00%	3	3.75%
An oak (Self)	33	41.25%	9	11.25%
Alice in Wonderland (Persona)	28	35.00%	14	17.50%
Ocean at dawn (Self)	27	33.75%	7	8.75%
Wise man (Animus)	18	22.50%	23	28.75%
The Joker (Shadow)	18	22.50%	13	16.25%
A dancer in a mirror (Persona)	16	20.00%	4	5.00%
Eastern culture temple (Self)	10	12.50%	8	10.00%
Seductive woman (Anima)	10	12.50%	21	26.25%
A muse (Anima)	9	11.25%	24	30.00%
Masks (Persona)	7	8.75%	16	20.00%
The sword in the stone (Animus)	6	7.50%	16	20.00%
Mother Teresa (Anima)	6	7.50%	14	17.50%
The Devil (Shadow)	3	3.75%	54	67.50%
Prometheus, whose Wbrain is pecked by an eagle (Animus)	1	1.25%	14	17.50%

Source: developed by the authors

Thus, the archetypes most strongly associated with an LLM-based algorithmised psychotherapist are the Self (corresponding images were selected a total of 70 times, 29.16%) and the Shadow (corresponding images were selected a total of 69 times, 28.75%). Anima and Animus were the least frequently selected as images most associated with generative AI in the role of a psychotherapist (25 selections each, 10.42%). The Shadow archetype was most frequently selected as the least associated with an LLM-based algorithmised psychotherapist (70 selections, 29.16%), whereas images corresponding to the Self archetype were least frequently chosen as least associated with generative AI in the role of a psychologist (24 selections, 10.00%). A comparison of the results of the method across groups using Fisher's angular transformation showed no statistically significant differences between participants with and without experience of receiving professional psychological assistance in the selection of images most or least associated with an algorithmised psychotherapist. However, a statistically significant difference was found between participants under 30 years of age and those aged 30 and above in the selection of images corresponding to the Persona archetype.

Respondents under the age of 30 were statistically less likely ($\varphi_{\text{emp.}} = 1.689$; $p \leq 0.05$) to select images corresponding to the Persona archetype as the most associated with an LLM-based algorithmised psychotherapist compared to respondents aged over 30. At the same time, respondents under 30 were statistically more likely ($\varphi_{\text{emp.}} = 1.711$; $p \leq 0.05$) to select images

corresponding to the Persona archetype as the least associated with an LLM-based algorithmised psychotherapist. Thus, the Persona archetype – which ranks third among those most associated with generative AI in the role of a psychotherapist and fourth among those least associated – appears to be more congruent with an LLM-based algorithmised psychotherapist for an older audience.

The results of the study show that ChatGPT is the most frequently used tool for discussing psychological issues (96.25%). The popularity of ChatGPT can be explained both by the overall versatility of this large language model and by its significant prevalence of use in Ukraine. The majority of respondents (42.50%) turn to AI for help only in isolated cases, indicating that at present respondents do not view an algorithmised psychotherapist as a stable source of psychological assistance. The majority of respondents (81.25%) spend up to 30 minutes communicating with AI on psychological topics, which can be more accurately characterised as psychological counselling rather than a full-fledged psychotherapeutic session. This highlights the importance of informality in terms of interaction duration as an advantage of LLM-based algorithmised psychotherapists (Naik, Thomas, Mandawa, & Reddy, 2025). Such interaction length may indicate the superficial nature of the assistance received by respondents. It can be assumed that respondents approach AI with a specific query, obtain an answer or material for reflection, and then terminate the interaction without delving into deeper exploration. The analysis of the popularity of AI

query domains showed a clear predominance of the following areas: personal development (65%), emotional problems (52.5%), and relationship issues (45%). This distribution may indicate a greater awareness of the need for assistance in these domains or a higher prevalence of problems in these areas compared to others.

Twelve respondents from the group with experience of receiving professional psychological assistance (26.09%) indicated that they are willing to turn to AI with any type of question, whereas only one respondent from the group without psychotherapy experience shared this view. This difference may be explained by a greater sense of control over interactions with generative AI among those with prior experience of professional psychological support, or by a generally higher openness to discussing any topics. In the group under 30 years of age, respondents rated the effectiveness of generative AI in the role of a psychologist at 6.06 points, which is more than 0.5 points higher than the rating in the group aged over 30. This suggests greater effectiveness in addressing psychological issues among the younger group. This difference may be explained by a lower complexity of the problems addressed or by lower expectations of AI.

Red was the colour least associated with an LLM-based algorithmised psychotherapist, selected by 37.50% of respondents. This colour was also among the two least popular choices among those most associated with generative AI in the role of a psychologist. Red is typically associated with passion, love, and often anger. Selecting this colour as the least appropriate for generative AI in the role of a psychologist indicates that respondents do not associate artificial intelligence with strong emotions or intense feelings. The second most popular colour least associated with an LLM-based algorithmised psychotherapist was black, selected by 21 respondents (26.25%), which is approximately one third more than the number of respondents who selected it as the most appropriate colour for AI (14). Given that this colour appears in both selections, it can be concluded that respondents either attribute different associations to the colour itself or hold ambivalent perceptions of generative AI in the role of a psychologist. The third most popular colour was yellow, which is typically associated with joy, curiosity, and happiness according to K. Milutina *et al.* (2024). This colour was also selected by only 6.25% of respondents as the most appropriate for artificial intelligence in the role of a psychologist. This choice further indicates that respondents do not associate an LLM-based algorithmised psychotherapist with colours that are characteristic of emotional expression.

The image selected most frequently (60%) depicted a brain concealed by a veil, corresponding to the Shadow archetype. This finding indicates a social perception of AI in the role of a psychologist as mysterious and hidden, which also resonates with the selection of black

during the colour association stage. The high frequency of this image choice may be related to the common association of intelligence with the brain – an association likely shaped by mass media representations of AI rather than by a direct perception of an LLM-based algorithmised psychotherapist as something negative. The second most frequently selected image (41.25%) depicted a strong oak tree against a purple background, corresponding to the Self archetype. This may be related to the fact that the majority of respondents (65%) reported turning to AI for purposes of personal development, with the LLM-based algorithmised psychotherapist functioning as part of a self-exploration process that integrates the conscious and unconscious components of the personality.

The third most frequently selected image (35%) depicted Alice in Wonderland wandering through a forest filled with clocks and playing cards, corresponding to the Persona archetype. This choice may indicate a social perception of generative artificial intelligence in the role of a psychologist as adaptive to the client (user), not possessing ready-made answers, but instead searching for them together with the client within a confusing and ambiguous informational space. It is important to note that in the absence of cards dominated by white or blue colours, respondents selected metaphorical images in accordance with the frequency of colour choices at the previous stage of the study (black, purple, green; see Figure 3), which may indicate a connection between the results obtained using the different methods. Slightly less frequently than the Alice in Wonderland image, respondents selected the image of an ocean at dawn (33.75%), which also corresponds to the Self archetype. The image itself conveys calmness, which aligns with the interpretation of white as the colour most associated with generative artificial intelligence in the role of a psychologist.

The image least associated with generative artificial intelligence in the role of a psychologist was that of the devil, corresponding to the Shadow archetype, selected by 67.50% of respondents. This indicates that an LLM-based algorithmised psychotherapist is not perceived as something that tempts individuals toward sin or misguided decisions. This choice also corresponds with the selection of red as the colour least associated with generative AI in the role of a psychologist (see Figure 3), as the devil in the metaphorical image is depicted in red tones. The next most frequently selected images were the Muse (Anima), the Wise Man (Animus), and the Seductive Woman (Anima), chosen by 30%, 28.75%, and 26.25% of respondents, respectively. Thus, the LLM-based algorithmised psychotherapist is not perceived as inspiring or creative, nor as a wise figure possessing all the answers, nor as seductive. Overall, this suggests that generative AI in the role of a psychologist is generally not anthropomorphised, at least when considering the archetypes underlying the images.

Images corresponding to the Shadow archetype were selected most frequently; however, as with the choice of black in the previous stage of the study, this is likely related to the attribution of different qualities of the Shadow as an archetype. Generative AI in the role of a psychotherapist is associated with hiddenness, unconsciousness, and mystery, but not with temptation, negativity, or unacceptability. Older respondents are more likely than younger ones to perceive an LLM-based algorithmised psychotherapist as seeking to be liked and to appear more acceptable to the user, which is likely related to a more developed ability to recognise “masks”, given that generative AI often adapts to users’ requests and communication styles. Overall, the results of the projective image selection method are consistent with those of the colour association method: metaphorical images were selected in accordance with the popularity or unpopularity of their dominant colours.

DISCUSSION

The unwillingness to discuss traumatic experiences and issues related to the sexual domain may be explained by the general taboo surrounding these topics due to upbringing or prior negative experiences, by a reluctance to engage deeply in addressing problems that fall within these areas, or by a lack of trust in artificial intelligence when it comes to sensitive matters. This interpretation aligns with the findings of cross-cultural research by P. Brauner *et al.* (2025a), who demonstrated that evaluations of AI systems vary depending on perceived risk and cultural context. While their study focused on general expectations and risk perception, the present findings extend this perspective to the specific domain of psychological disclosure. Z. Guo *et al.* (2024) noted that large language models can produce confident errors, creating an illusion of reliability. Therefore, the absence of perceived malicious intent in the present study should not be interpreted as evidence of safety, but rather as a potential indicator of users’ unawareness of AI’s persuasive limitations. The generally positive perception of generative AI may thus reflect not only trust but also a risk of overreliance.

A. Naik *et al.* (2025) emphasised that the accessibility and informality of AI-based psychological tools constitute one of their primary advantages. The present findings support this position, as 81.25% of respondents reported spending no more than 30 minutes communicating with AI on psychological topics. Such interaction duration is more characteristic of brief psychological counselling than of a structured psychotherapeutic process. This suggests that generative AI is perceived as a convenient, situational support tool rather than as a replacement for long-term professional psychotherapy. More than half of the respondents reported improved well-being after interacting with an algorithmised psychotherapist. The absence of reports of deterioration after AI-based interaction corresponds

with the conclusions of H. Li *et al.* (2023), who identified short-term positive emotional effects associated with AI-supported psychological tools. However, in line with H. Li *et al.* (2023) and L. Spytska (2025), the present study also demonstrates that professional psychotherapy is perceived as more effective than AI-based support. The higher mean effectiveness rating of professional psychotherapy (7.5 points) compared to generative AI (5.87 points in the experienced group and 5.74 in the non-experienced group) suggests that algorithmised psychotherapists are currently perceived as supplementary rather than equivalent to professional care. The slightly higher effectiveness rating among respondents with prior psychotherapy experience may indicate greater competence in articulating psychological requests or interpreting reflective responses. This observation does not contradict previous research but rather complements it, suggesting that user experience and psychological literacy may moderate the perceived usefulness of AI systems.

D. Jonauskaitė *et al.* (2020) demonstrated the relative stability of color-emotion associations across cultures, which allows the present findings to be interpreted within a broader perceptual framework. The predominance of white (27.50%) among respondents suggests that generative AI in the role of a psychologist is perceived as calm, neutral, and emotionally restrained. This interpretation is consistent with K. Milutina *et al.* (2024), who noted that white is typically characterised by low emotional intensity. At the same time, as indicated by T. Clarke & A. Costall (2008), visual perception is shaped by socially shared representations, which implies that the association of AI with white may also reflect mass media imagery rather than solely individual evaluative experience. The selection of black among the most associated colours may reflect the attribute of “mystery”, as suggested by P. Brauner *et al.* (2025b), who noted that opacity in AI functioning influences perception. Rather than indicating negativity, black appears to symbolise the incomprehensibility of algorithmic processes. At the same time, red was most frequently selected as the least associated colour, reinforcing the interpretation that generative AI is not perceived as emotionally intense or impulsive.

The archetypal image analysis further supports this interpretation. The simultaneous association with the Self and the Shadow suggests that generative AI is perceived both as a tool for self-exploration and as something opaque or partially hidden. Unlike classical psychotherapy, where therapist gender plays a significant role in transference processes, the low frequency of Anima and Animus selections indicates that the algorithmised psychotherapist is largely perceived as gender-neutral. This observation is noteworthy, as it suggests limited anthropomorphisation in the specific context of psychotherapy, even though anthropomorphic representations of AI are prevalent in mass media.

W. Zhong *et al.* (2024) found that AI chatbots can alleviate depressive and anxiety symptoms in short-course contexts, indicating potential for provisional psychological relief while highlighting limitations in long-term therapeutic impact. This supports the interpretation of generative AI as a source of brief, situational assistance rather than a substitute for professional psychotherapy, and underscores the need to recognise both utility and constraint in users' perceptions. Scientists L. Hawke *et al.* (2025) reported high acceptability of digital agents alongside ongoing concerns regarding safety, accuracy, and ethical boundaries. The findings of current indicated that generative AI in the role of a psychotherapist is perceived as emotionally neutral, moderately effective, and generally non-threatening. Respondents tend to attribute cognitive competence rather than emotional depth to the algorithmised psychotherapist, while professional psychotherapy remains evaluated as more effective. The associative and archetypal patterns identified in the study suggest that AI is viewed simultaneously as a tool for self-exploration and as a system characterised by opacity and symbolic ambiguity.

CONCLUSIONS

The survey showed that, despite the popularity of using generative AI as a psychologist, the frequency of such use is relatively low, and interactions are brief and tend to be superficial. The analysis of archetypal images, narratives, and colours associated with LLM-based algorithmised psychotherapists showed that AI is perceived simultaneously as whole, calm, cold, and detached – corresponding to the Self archetype – and as mysterious and unconscious, corresponding to the Shadow archetype. Importantly, the social perception of generative AI in the role of a psychologist is not negative: it is not viewed as deceitful, seductive, or evil. Thus, the Shadow archetype manifested primarily in the context of hiddenness, which is likely related to a limited understanding of how the neural networks underlying AI function. Attributing characteristics of the Self archetype to artificial intelligence may be associated both with the popularity of its use for personal development

and self-exploration and with its perception as a coherent structure lacking concealed components. Female and male archetypes were identified as the least associated with artificial intelligence, which likely indicates the perception of an LLM-based algorithmised psychotherapist as genderless.

It can also be concluded that mass media shape representations of AI through the colours used in visual imagery; however, this does not appear to influence the anthropomorphisation of AI. Overall, perceptions of generative AI in the role of a psychotherapist do not depend on age or prior experience of professional psychotherapy. However, one statistically significant difference was identified: respondents aged over 30 were significantly more likely to conceptualise an LLM-based algorithmised psychotherapist in terms of the Persona archetype. This may indicate a greater ability to recognise the adaptive, user-oriented behaviour of generative AI and, consequently, suggests the need for more controlled and cautious use of the technology among younger users. The study demonstrated that generative artificial intelligence in the role of a psychologist is perceived as impersonal, cold, and calm. Perceptions of generative artificial intelligence in the role of a psychotherapist do not substantially differ from general representations of AI shaped by mass media. At present, the question remains open as to whether perceptions of an LLM-based algorithmised psychotherapist change with more prolonged interactions over time. Further research is needed to examine perceptions of generative artificial intelligence in the role of a psychologist under conditions of prolonged use, as well as gender-based differences in perceptions of an LLM-based algorithmised psychotherapist.

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REFERENCES

- [1] Brauner, P., Glawe, F., Liehner, G. L., Vervier, L., & Ziefle, M. (2025). Cultural dimensions of AI perception: Charting expectations, risks, benefits, tradeoffs, and value in Germany and China. *ArXiv*. doi: 10.48550/arXiv.2412.13841.
- [2] Brauner, P., Glawe, F., Liehner, G. L., Vervier, L., & Ziefle, M. (2025). Perception gaps in risk, benefit, and value between experts and public challenge socially accepted AI. *ArXiv*. doi: 10.48550/arXiv.2412.01459.
- [3] Clarke, A., & Tyler, L.K. (2015). Understanding what we see: How we derive meaning from vision. *Trends in Cognitive Sciences*, 19(11), 677-687. doi: 10.1016/j.tics.2015.08.008.
- [4] Clarke, T., & Costall, A. (2008). The emotional connotations of color: A qualitative investigation. *Colour Research and Application*, 33(5), 406-410. doi: 10.1002/col.20435.
- [5] Guo, Z., Lai, A., Thygesen, J.H., Farrington, J., Keen, T., & Li, K. (2024). Large language models for mental health applications: Systematic review. *JMIR Mental Health*, 11, article number e57400. doi: 10.2196/57400.

- [6] Hawke, L.D., Hou, J., Nguyen, A.T.P., Phi, T., Gibson, J., Ritchie, B., Strudwick, G., Rodak, T., & Gallagher, L. (2025). Digital conversational agents for the mental health of treatment-seeking youth: Scoping review. *JMIR Mental Health*, 12, article number e77098. doi: [10.2196/77098](https://doi.org/10.2196/77098).
- [7] Jonauskaite, D., et al. (2020). Universal patterns in color-emotion associations are further shaped by linguistic and geographic proximity. *Psychological Science*, 31(10), 1245-1260. doi: [10.1177/0956797620948810](https://doi.org/10.1177/0956797620948810).
- [8] Jung, C.G. (1990). *The archetypes and the collective unconscious* (Vol. 9, Part 1). Princeton: Princeton University Press.
- [9] Karpyus, V. (2025). *ChatGPT dominates AI chatbots: Over 80% of sessions worldwide and over 90% in Ukraine*. Retrieved from <https://www.itc.ua/ua/novini/chatgpt-dominuye-sered-shi-chatbotiv-ponad-80-seansiv-u-sviti-ponad-90-v-ukrayini/>.
- [10] Ladak, A., Wilks, M., Loughnan, S., & Anthis, J.R. (2025). Robots, chatbots, self-driving cars: Perceptions of mind and morality across artificial intelligences. In *Proceedings of the 2025 CHI conference on human factors in computing systems* (pp. 1-19). New York: Association for Computing Machinery. doi: [10.1145/3706598.3713130](https://doi.org/10.1145/3706598.3713130).
- [11] Li, H., Zhang, R., Lee, Y.-C., Kraut, R.E., & Mohr, D.C. (2023). Systematic review and meta-analysis of AI-based conversational agents for promoting mental health and well-being. *NPI Digital Medicine*, 6, article number 236. doi: [10.1038/s41746-023-00979-5](https://doi.org/10.1038/s41746-023-00979-5).
- [12] Milutina, K., Balashevych, O., & Zarubin, I. (2024). How Ukrainians perceive emotions and colours: An analysis of specific features. *Salud, Ciencia y Tecnología – Serie de Conferencias*, 3, article number 1224. doi: [10.56294/sctconf2024.1224](https://doi.org/10.56294/sctconf2024.1224).
- [13] Naik, A., Thomas, J., Mandawa, T.S., & Reddy, H. (2025). Artificial empathy: AI based mental health. *ArXiv*. doi: [10.48550/arXiv.2506.00081](https://doi.org/10.48550/arXiv.2506.00081).
- [14] Romele, A., & Severo, M. (2025). How effective are depictions of AI? Reflections from an experimental study in science communication. *AI and Society*, 40(7), 5127-5138. doi: [10.1007/s00146-025-02283-0](https://doi.org/10.1007/s00146-025-02283-0).
- [15] Spyska, L. (2025). The use of artificial intelligence in psychotherapy: Development of intelligent therapeutic systems. *BMC Psychology*, 13, article number 175. doi: [10.1186/s40359-025-02491-9](https://doi.org/10.1186/s40359-025-02491-9).
- [16] Starovoitenko, O., Sliusarevskyi, M., & Chorna, L. (2025). Mental health: Criteria for evaluation of the digital applications as facilitative tools of public psychoeducation. *Insight: The Psychological Dimensions of Society*, 13, 485-518. doi: [10.32999/2663-970X/2025-13-20](https://doi.org/10.32999/2663-970X/2025-13-20).
- [17] The Declaration of Helsinki. (2013). Retrieved from <https://www.wma.net/what-we-do/medical-ethics/declaration-of-helsinki/>.
- [18] Typtiuk, Yu., & Ivanova, T. (2025). The use of artificial intelligence systems for psychological support under martial law conditions in Ukraine. *Journal of Social and Practical Psychology*, 6, 171-177. doi: [10.32782/psy-2025-6-24](https://doi.org/10.32782/psy-2025-6-24).
- [19] World Health Organization. (2025). *Over a billion people living with mental health conditions – services require urgent scale-up*. Retrieved from <https://www.who.int/news/item/02-09-2025-over-a-billion-people-living-with-mental-health-conditions-services-require-urgent-scale-up>.
- [20] Zao-Sanders, M. (2025). *How people are really using generative AI now*. Retrieved from <https://hbr.org/2025/04/how-people-are-really-using-gen-ai-in-2025>.
- [21] Zhong, W., Luo, J., & Zhang, H. (2024). The therapeutic effectiveness of artificial intelligence-based chatbots in alleviation of depressive and anxiety symptoms in short-course treatments: A systematic review and meta-analysis. *Journal of Affective Disorders*, 356, 459-469. doi: [10.1016/j.jad.2024.04.057](https://doi.org/10.1016/j.jad.2024.04.057).

Особливості соціальної перцепції алгоритмізованого психотерапевта українськими користувачами великих мовних моделей (LLMs)

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Анотація. Зростаюча потреба в підтримці ментального здоров'я, а також розвиток технологій штучного інтелекту призвели до популяризації використання великих мовних моделей для отримання психологічної допомоги. Метою цього дослідження було вивчення соціального сприйняття генеративного штучного інтелекту в ролі психотерапевта серед українських користувачів великих мовних моделей. Опитувальник включав соціально-демографічну секцію, а також питання щодо досвіду отримання психологічної допомоги засобами генеративного штучного інтелекту (ШІ). Також застосовувались проєктивна методика кольорових асоціацій та проєктивна методика вибору асоціативного зображення з метою виявити, як користувачі послуг алгоритмізованого психотерапевта його сприймають. Фінальна вибірка склала 85 учасників віком між 17 та 54, серед яких 22 чоловіки та 58 жінок. Дослідження показало, що генеративний штучний інтелект в ролі психотерапевта уявляють як спокійного, беземоційного, безстатевого, холодного. Було також встановлено, що алгоритмізований психотерапевт на основі великих мовних моделей одночасно сприймається як цілісна структурована система і як щось загадкове та приховане. Водночас генеративний штучний інтелект у ролі психолога не асоціюється зі злом або обманом, що може свідчити про потенційну вразливість до впевненої помилки та потребує подальшого дослідження. Визначено, що сприйняття генеративного штучного інтелекту не залежить від віку респондентів або їхнього попереднього досвіду отримання професійної психологічної допомоги. Візуальне уявлення про генеративний ШІ навіяне мас-медіа в контексті кольору, проте не в контексті антропоморфізації за умови помірного використання. Результати можуть бути використані психологами, розробниками систем штучного інтелекту та суб'єктами формування державної політики для створення етично обґрунтованих і соціально чутливих інструментів психічного здоров'я на основі ШІ

Ключові слова: генеративний штучний інтелект; архетипічні образи; цифрова психотерапія; проєктивні методи; антропоморфізація



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**An indirect assessment of the similarity/dissimilarity of specific groups
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Abstract. The relevance of this study lies in the need to understand the deep psychological and cultural processes of the Russification of Ukrainian identities, which is important for developing effective strategies of de-russification in the context of contemporary social and political change. The aim of the study was to attempt an indirect transfer of cognitive-behavioural constructs of similarity/dissimilarity between Ukrainians and Russians onto the evaluation of social groups of Ukrainians that differ in the degree of Russification of their consciousness. The empirical measurement of differences between representatives of various social groups was based on a procedure of indirect socio-cognitive assessment that determines perceived similarity/difference between

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groups. Traits were identified by which Ukrainians and Russians are perceived by students as least different, and these were used to assess employees of educational administration bodies, school teachers, university lecturers and students; consumers of Russian-language, English-language and Ukrainian-language culture; supporters of mass, elite and folk culture; believers of the Ukrainian Orthodox Church, the Orthodox Church of Ukraine, the Ukrainian Greek Catholic Church, atheists; residents of large cities, small towns and villages; and representatives of older generations, middle-aged groups and youth. As expected, the groups assessed as most similar to Russians were consumers of Russian-language culture, believers of the Ukrainian Orthodox Church, and representatives of the older generation. Unexpected results requiring further interpretation included relatively high levels of Russification among school teachers, supporters of folk culture, and rural residents. The significance of the findings lies in identifying implicit and deeply rooted consequences of the Russification of Ukrainian identities. The development of de-russification measures is a critically important task for socio-psychological practice and further psychological research

Keywords: russification and de-russification of identities; cognitive and behavioural biases; indirect socio-cognitive assessments; traits of similarity/dissimilarity to Russians; empirically keyed scale; social groups of Ukrainians

INTRODUCTION

The relevance of studying the similarities and differences between Ukrainians and Russians is growing in the context of current socio-political changes, particularly against the backdrop of Russian aggression and the processes of national identity in Ukraine. An analysis of the social, cultural and psychological differences between these peoples helps to understand the underlying factors that determine their different paths of development, identity and political orientation. The study of aspects such as the role of language, culture, and political and moral values is of great importance for understanding not only internal processes in Ukraine but also foreign policy, particularly in the context of European integration and derussification.

The issue of similarities and differences between Ukrainians and Russians attracts the attention of many researchers – psychologists, cultural studies scholars, political scientists and other academics. In line with the contemporary socio-psychological and political-ideological context, Ukrainian researchers O. Radchenko (2022), I. Todorov (2022) and H. Pivtorak (2025) have focused primarily on the characteristics that distinguish Ukrainians from Russians. They highlight numerous differences, particularly in historical, political, national, mental, social, cultural, psychological and spiritual dimensions. Cultural differences, according to V. Zhelanova & O. Matvienko (2022), are determined by the different sociocultural practices, norms and values characteristic of each nation. Ukrainians have a more individualistic approach to social norms and values, reflected in an emphasis on individual rights, civic initiatives and social mobility.

Another important aspect is the mental and psychological differences between Ukrainians and Russians. H. Pivtorak (2025) emphasised that Ukrainians have more positive preferences, compared to Russians, regarding social norms, life priorities, moral values, traditions and habits. This includes greater flexibility in social relations, an emphasis on the importance of personal rights and freedoms, as well as a greater role

for family and community ties in society. O. Radchenko (2022) noted that Ukrainians are characterised by greater gender equality, a love of freedom, and a preference for non-authoritarian forms of government, which is reflected in greater social mobility and support for democracy. At the same time, I. Todorov (2022) drew attention to Ukrainians' affiliation with European and Euro-Atlantic civilisation, emphasising their orientation towards European values, democracy, the rule of law, and the aspiration for integration into European structures. These differences not only shape national identity but also determine the political course and social dynamics of each nation in the context of contemporary global and regional changes.

This study conducted a series of empirical investigations based on the premise that cognitive and behavioural biases may reflect mental differences between members of various social groups, including ethnic, political and others. Drawing on academic and journalistic materials, the areas of public life in which the processes of Russification of Ukrainian identities were particularly pronounced were identified: culture, education, religion, the urban environment and intergenerational interaction. The aim of the article was to highlight an attempt to indirectly transfer cognitive-behavioural constructs of similarity/dissimilarity between Ukrainians and Russians to the assessment of specific social groups of Ukrainians, which differ significantly in the degree of Russification of their consciousness.

LITERATURE REVIEW

An analysis of the processes of Russification and de-russification in Ukraine must take into account their profound impact on the cultural, social and political structures that have taken shape under the influence of the Soviet past and contemporary transformations. Studying these processes provides a better understanding of how changes in Ukrainian identities are reflected at the level of national consciousness in the face of contemporary challenges. As noted by R. Suny (1993)

and R. Brubaker (1996) noted, during the Soviet period all the aforementioned social spheres were integrated into the ideological project of forming a “single Soviet people” – a supranational community designed to level out ethno-cultural differences and replace them with universalised Soviet values. Cultural forms – mass, elite and folk – were institutionally hierarchised and endowed with varying degrees of legitimacy. M. Bassin & C. Kelly (2012), as well as V. Mudrakov *et al.* (2020), noted that mass culture served as a key instrument in the formation of Homo Sovieticus, transmitting standardised models of thought, values and behaviour necessary for the reproduction of the Soviet way of life. Traditional folk culture, meanwhile, underwent folklorisation and depoliticisation. Elite culture, formally representing “high” forms of art, functioned as an instrument of symbolic legitimisation of the Soviet project, as emphasised by D. Eglitis (2002).

M. Läänemets (2023) noted that Western culture, institutionally restricted to ideologically “neutral” forms, functioned not so much as an aesthetic resource as a marker of freedom, otherness and an imagined alternative to the Soviet system. Soviet education fulfilled the important mission of cultivating the ideologically “correct” new Soviet individual, with teaching staff acting as conduits of state ideology. Alongside family upbringing, schools exerted a powerful influence on the formation of basic perceptions, values, and behavioural models, and their role in shaping the citizen was regarded as a priority of state policy, often even exceeding that of the family, as highlighted by Kaganov (2022). At the same time, the state actively combated religious beliefs prevalent in society. Teaching staff were also involved in this campaign, participating in atheist propaganda and the secularisation of the population, as noted by M. Kagalna (2015).

B. Kang (2020) and W. Partlett & H. Küpper (2022) analysed that, following the collapse of the USSR, post-Soviet states faced the task of re-evaluating the socio-cultural legacy of the colonial past and overcoming imperial-Soviet structures of influence. In the academic literature, these processes are increasingly interpreted as a specific form of Eurasian decolonisation, combining decommunisation, derussification and a broader redefinition of cultural and symbolic orders. In Ukraine, the process of purging the cultural sphere of Russian influence has long been uneven and fragmented in nature, driven by both internal socio-cultural inertia and external influences, as emphasised by V. Kulyk (2017). Under these conditions, culture continued to function as a channel for consolidating Russia’s symbolic presence, according to L. Iakubova (2018) and P. Artymyshyn & O. Kostyuk (2019). In the public perception, Russian culture is often portrayed as universal and normative, whilst Ukrainian culture is seen as secondary or confined to the realm of the traditional. Consequently, the “Russian world” ideologue was

internalised as a “natural” cultural backdrop, normalising asymmetrical notions of identity and perpetuating a sense of cultural inferiority.

The analysis of the development of domestic education conducted by M. Sliusarevskyi (2024) reflects both the process and the stages of its derussification. This involves the formation of a state education policy independent of the imperial centre, the creation of a nationally appropriate educational environment, the improvement of quality and restructuring of education, the modernisation of its content, and the establishment of a Ukrainian studies component. According to O. Danylevska (2020), legislative changes have laid the groundwork for de-russification in the field of education; however, research indicates a slow improvement in the linguistic situation within it. One of the main reasons for this is considered to be the post-totalitarian nature of education, which manifests itself in the double standards of behaviour among participants in the educational process and residual phenomena of totalitarianism.

An extremely important sphere of worldview and political self-determination for Ukrainians in wartime has become the confessional affiliation of the Orthodox majority. At the core of confessional choice lies identity – both religious and political. V. Volotovska (2024) defined religious identity as a complex, multifunctional phenomenon of identification with particular religious traditions, groups, and shared values; this identity evolves at both the societal and individual levels and constitutes a dynamic construct shaped by individuals and communities. In studying religious identity in contemporary Ukraine, P. Lakiichuk (2008) focused on the consequences of the long-term subordination of Ukrainian Orthodoxy to Moscow leadership, which led, among other things, to the erosion of ethnocultural and national layers of identification within Ukrainian society. Russian military aggression has intensified the issue of the status of religious organisations in Ukraine that are connected to Russian centres (Synchak, 2025). As any connection between churches in Ukraine and the Russian Orthodox Church is considered impossible and unacceptable, a balance must be sought between the needs of national security and the protection of believers’ rights and freedoms (Marchenko, 2025).

An important socio-psychological characteristic of the state of Ukrainian society is the relationship between believers of the Ukrainian Orthodox Church (UOC), which, together with the Russian Orthodox Church, has been accused of promoting Russian interests (Danylenko, 2010), on the one hand, and supporters of pro-Ukrainian churches on the other. For example, notable differences were identified in the studies by T. Brik & J. Casanova (2021) and T. Kalenyshenko *et al.* (2023) regarding the influence of Orthodox churches on believers’ responses to the COVID-19 pandemic. The inability to reach mutual understanding generates

hostility between churches. The main actors in this confrontation are parishioners, who project their beliefs onto those around them. However, it is important to note that this confrontation is generally not radical in nature (Lakiichuk, 2008). It may be added that this confrontation was indeed milder in the pre-war period but intensified with the outbreak of war under the pressure of existential circumstances.

Historically, the Ukrainian city has been a key space of Russification, where imperial and Soviet models of modernity, prestige, and “normality” were internalised through everyday practices, the symbolic landscape, and informal social interactions. Russification functioned not only as linguistic assimilation but as a complex identity process, encompassing hierarchical thinking, paternalistic attitudes, emotional familiarity with colonial cultural codes, and the devaluation of local Ukrainian forms of sociality. In the urban environment, these patterns were long reproduced as “non-ideological” and neutral, as demonstrated in the studies of M. Certeau (1984), H. Lefebvre (1991), and M. Billig (2017). G. Breakwell (1986) and N. Ellemers *et al.* (2002) observed that the high emotional comfort associated with Russified practices, combined with a low level of reflective awareness, created persistent resistance to change, even when decolonial narratives were cognitively accepted. A key role in the overall process of de-russification is played by the informal urban environment as a space for transforming normalised identity practices: language choices, communication styles, symbolic orientations, and forms of agency. It is precisely repeated everyday practices, socially reinforced within urban space, that ensure not a situational shift but a sustained de-russification of identities, linked to the restoration of agency, horizontal solidarity, and the formation of a Ukrainian urban modernity. Discussion of de-russification in education is largely centred on the language issue. Alongside the media and the family, the school becomes an effective factor in strengthening the communicative use of the Ukrainian language (Danylevska, 2020). S. Boyko (2022) and O. Pometun (2023) associated the process of de-russification in education with cultural and national self-awareness, as well as with the formation of national-cultural identity, which should be grounded in historical truth, historical memory, national ideals, national dignity, national self-awareness, and patriotism.

The state and dynamics of Ukrainian identities are significantly shaped by intergenerational interaction. The experiences of the older generation are largely permeated by ideological stereotypes formed under the influence of Soviet ideology and the policy of Russification, which have shaped their values, views and way of life. Consequently, this experience often gives way to the bolder approaches adopted by youth in solving their problems. The younger generation's experience has largely been shaped during the era of information

technology and keeps pace with contemporary trends. The mechanism of transgeneration – the transfer of experience from the older generation to the younger – is ineffective in many situations and, in contemporary conditions, is replaced by prefiguration: the reverse process of experience transfer (Vovchuk-Blakytina, 2019; Dovhan, 2020; Senko, 2023). In family interactions between representatives of different generations, the process of experience transfer often takes on a conflictual nature (Halychanska, 2014; Makarova, 2019).

T. Seniushkina (2013) emphasised that resolving intergenerational conflict can be achieved by fostering a culture of solidarity, based on dialogue, which will enable a better understanding of the similarities and differences in acquired experience formed under different circumstances, develop a shared vision, or at least maintain respect for the positions of representatives of other generations and support from their side. The process of de-russification in the sphere of intergenerational interaction does not lie in the arguments of one generation's representatives becoming the sole solution to the problem, but in the emergence of several possible solutions and the right to choose between them without condemnation from the other generation's representatives. In general, it should be said that the transition from the ‘imperceptible’ dominance of Russified practices to their symbolic labelling creates conditions for reflection, recategorisation and a shift in the emotional valence of Ukrainian forms of identity. The latent nature of mental influence determines its persistence and highlights the need to analyse the cognitive, value-based and behavioural aspects of identity construction.

MATERIALS AND METHODS

The empirical study was based on a psycho-semantic procedure of indirect socio-cognitive assessment. Its essence lies in the fact that certain cognitive-behavioural traits are regarded not as attributive psychological characteristics of the groups being assessed, but as empirically selected (based on purely statistical, rather than content-related, criteria) indicators of intergroup differentiation. These indicators collectively form an empirically keyed scale. This scale is then used to determine the degree of similarity/dissimilarity between different groups as perceived by respondents. In other words, the focus is not on the actual similarity or difference of the assessed groups, but on the representation of their similarity/difference in social perceptions and categorisations. The use of psychosemantic methods has a long-standing tradition in psychological research. However, a relatively uncommon approach is the transfer of perceptual criteria developed for certain objects onto the evaluation of others, which lends the method a somewhat projective character.

At the previous stage of the empirical study, lists of cognitive and behavioural biases were reviewed in

the works of R. Nickerson (1998), G. Maccoun & R. Ratcliff (1998), M. Haselton & D. Nettle (2006), E. Pronin & M. Kugler (2007), E. Lee *et al.* (2019), R. Mohanani *et al.* (2020), Ch. Rastogi *et al.* (2022), M. Soprano *et al.* (2024), and R. Bedeley *et al.* (2025). As a result of evaluating more than 200 bias variants presented in the literature, 60 were selected that reflect similarities (or differences) in the mental characteristics of Ukrainians and Russians. The methodology of the empirical study included a survey of students from Ukrainian universities, in which 60 cognitive and behavioural characteristics of Ukrainians and Russians were assessed using a 5-point Likert scale. The data were analysed using factor analysis (with varimax rotation) to identify key characteristics, as well as correlation analysis to assess relationships between the characteristics of the two groups. Assessments by students from different cultural, religious, and social groups were compared using one-way analysis of variance and the Friedman test to determine significant differences between them.

Data for the study were collected in several stages during 2025. The first stage took place in February 2025 and involved 168 students from Taras Shevchenko National University of Kyiv (109 participants) and Ivan Franko National University of Lviv (59 participants). The second stage was conducted in March 2025 and included 134 students from Drohobych Ivan Franko State Pedagogical University, Izmail State University of Humanities, the National University of Water and Environmental Engineering, Uzhhorod National University, and Yuriy Fedkovych Chernivtsi National University. The third stage took place in May 2025 with the participation of 558 students from Lesya Ukrainka Volyn National University, Oles Honchar Dnipro National University, Zaporizhzhia National University, Taras Shevchenko National University of Kyiv, Ivan Franko National University of Lviv, I. I. Mechnikov Odesa National University, Volodymyr Hnatiuk Ternopil National Pedagogical University, and Chernihiv Polytechnic National University. The empirical study programme was reviewed and approved by the Research Ethics Committee of the Institute of Social and Political Psychology of the National Academy of Educational Sciences of Ukraine (Protocol No. 5-VV022025). In reporting the study involving human participants, the authors state that the research was conducted in accordance with the provisions of The Declaration of Helsinki (2013).

RESULTS AND DISCUSSION

At the first stage in February 2025, 168 psychology students were surveyed from Taras Shevchenko National University of Kyiv (109 individuals) and Ivan Franko National University of Lviv (59 individuals). Ukrainians and Russians were assessed in terms of the extent to which 60 cognitive and behavioural characteristics were attributed to them, using a 5-point Likert scale. A comparison of the students' assessments from the two

universities using the Mann-Whitney test revealed significant differences in only two out of the 60 characteristics: Kyiv students gave higher ratings to the trait "Ukrainians value most highly what they themselves have created" (3.91 vs 3.53), while Lviv students rated higher the trait "Russians present wishful thinking as reality" (4.36 vs 4.63; in both cases $p \leq 0.05$). Such a minimal number of differences justified treating the entire sample as homogeneous and analysing the data as a single dataset.

Significant correlations between the characteristics attributed to Ukrainians and Russians were identified for 21 out of the 60 traits. Positive correlation coefficients for 20 traits ranged from 0.154 ("Perceive random phenomena as significant"; $p \leq 0.05$) to 0.287 ("Are convinced that others think and feel the same as they do"; $p \leq 0.01$). Only one trait showed a negative correlation: -0.171 ("Find strength in the unity of generations"; $p \leq 0.05$). A factor analysis (with varimax rotation) was then conducted separately for the evaluations of Ukrainians and Russians within the space of these 21 traits. In both cases, five factors were identified, explaining 54.1% and 56.2% of the total variance, respectively. Based on the results of the factor analysis, 10 traits were selected: first, those with substantial factor loadings; second, those that were strongly loaded in both analyses (for Ukrainians and Russians); and third, those representing all five factors.

The resulting list of characteristics included the following: a frequent preference for widely known information received regularly and susceptibility to its influence; a tendency to focus on negative events and expectations, as well as to overestimate the extent to which others agree with their views; a tendency to regard those who disagree with them as unintelligent; pride in the achievements of their nation and the belief that others think and feel the same as they do; reluctance to change their views and a tendency to label others while ignoring negative information about themselves. In selecting these traits, the primary criterion was not their substantive meaning but their statistical properties. To this list, six additional traits were added that characterise specific spheres of social life associated with signs of Russification: valuing education; preferring an urban lifestyle; taking pride in one's culture; believing that one's religion is the best; finding strength in the unity of generations; and engaging in social media on the Internet.

This compiled set of characteristics was used in the next stage of the study. In March 2025, 134 students were surveyed from Drohobych Ivan Franko State Pedagogical University (40 individuals), Izmail State University of Humanities (10 individuals), the National University of Water and Environmental Engineering in Rivne (50 individuals), Uzhhorod National University (11 individuals), and Yuriy Fedkovych Chernivtsi National University (23 individuals). Respondents were asked, for

each of the 16 characteristics, to assess Ukrainians and neighbouring peoples – Belarusians, Bulgarians, Moldovans, Poles, Russians, Romanians, Slovaks, and Hungarians. The assessment procedure required students, for each characteristic, to select from the ten listed nations between one and three to whom the characteristic was most applicable, and between one and three to whom it was least applicable. These selections were converted into a 3-point scale: most characteristic – 3 points, least characteristic – 1 point, and the remaining nations (not selected) were assigned 2 points. A series of statistical procedures was then applied to the obtained data. As expected, the closest and positively correlated evaluations were those of Ukrainians and Poles, while the most distant and negatively correlated were those of Ukrainians and Russians.

Next, five traits were selected for which the assessments of Ukrainians and Russians appeared relatively closer: “Are influenced by information that is received frequently” (Ukrainians were rated at 2.06 out of 3, Russians at 2.59, $p \leq 0.001$), “Believe that their religion is the best” (2.4 and 2.32, difference not significant), “Focus on negative events and expectations” (2.3 and 2.17, difference not significant), “Are convinced that others think and feel the same as they do” (2.05 and 2.35, $p \leq 0.01$), and “Do not like changing their views” (2.13 and 2.53, $p \leq 0.001$). Only two of the five traits showed non-significant differences. Since an instrument consisting of only two items would have been of limited use for further assessment, it was decided to retain the remaining three traits as well, even though they differentiated Ukrainians and Russians more noticeably, albeit still less than other characteristics.

At the next stage, in May 2025, 558 students were surveyed from Lesya Ukrainka Volyn National University (58 individuals), Oles Honchar Dnipro National University (192 individuals), Zaporizhzhia National University (27 individuals), Taras Shevchenko National University of Kyiv (126 individuals), Ivan Franko National University of Lviv (50 individuals), I.I. Mechnikov Odesa National University (79 individuals), Volodymyr Hnatiuk Ternopil National Pedagogical University (6 individuals), and Chernihiv Polytechnic National University (20 individuals). For comparative assessments based on the five aforementioned traits, students were asked to consider groups representing Ukrainian society, classified across six domains. The categories within each group were arranged according to hypothetical assumptions regarding their similarity or dissimilarity to Russians,

with those expected to be most similar listed first, followed by others in descending order. These included employees of educational administration bodies, secondary school teachers, higher education lecturers, and students. The next group comprised consumers of different cultures: Russian-language, English-language, and Ukrainian-language. Another category included supporters of different types of culture: mass (popular), elite (high), and folk (traditional). Further groups represented adherents of different confessions: the UOC (formerly and partially under the Moscow Patriarchate), atheists, the Orthodox Church of Ukraine (OCU), and the Ukrainian Greek Catholic Church (UGCC). Separate categories included residents of large cities, small towns and settlements, and rural areas. Finally, age groups were considered: representatives of the older generation, middle-aged individuals, and youth.

Within each group and for each of the five traits, respondents selected one category to which the trait applied more strongly compared to the others (assigned 3 points) and one to which it applied less strongly (assigned 1 point); the remaining one or two categories received 2 points. The total score across all five traits was then calculated. To assess differences between groups within each domain, the distributions of total scores were tested for normality. According to the Kolmogorov-Smirnov test, all distributions differed statistically from normal; however, visual inspection of the corresponding graphs raised doubts about this result. Thus, normality was further examined graphically with the assistance of ChatGPT. This analysis confirmed normal or near-normal distributions for most indicators. However, non-normality was identified in the assessments of atheists, consumers of English-language culture, and residents of large cities. Accordingly, differences between groups in the domains of education, culture (by level), and age were assessed using one-way repeated measures analysis of variance, while differences between groups based on language of culture, religious affiliation, and type of settlement were analysed using the Friedman test. All observed differences were statistically significant at the level of $p < 0.001$. The evaluations assigned to different groups within Ukrainian society are presented in Tables 1-6. According to an indirect assessment, consumers of Russian-language culture were found to be the most similar to Russians, followed by consumers of Ukrainian-language culture, and then those of English-language culture (Table 1).

Table 1. Assessments of groups in the cultural sphere by language

Group	Consumers of Ukrainian-language culture	Consumers of Russian-language culture	Consumers of English-language culture
Are influenced by information that is received frequently	2.05	2.47	1.58
Believe that their religion is the best	2.17	2.38	1.53

Table 1, Continued

Group	Consumers of Ukrainian-language culture	Consumers of Russian-language culture	Consumers of English-language culture
Focus on negative events and expectations	2.28	2.28	1.52
Are convinced that others think and feel the same as they do	2.14	2.27	1.66
Do not like changing their views	1.94	2.5	1.64
Overall (average) score	10.58 (2.12)	11.9 (2.38)	7.93 (1.59)

Source: compiled by the authors

In terms of their affinity for a particular type of culture, those most similar to Russians were found to be supporters of folk (traditional) culture; those less

similar were supporters of mass (popular) culture; and furthest from Russians on this scale were supporters of elite (high) culture (Table 2).

Table 2. Assessments of groups in the cultural sphere by level

Group	Supporters of elite (high) culture	Supporters of mass (popular) culture	Supporters of folk (traditional) culture
Are influenced by information that is received frequently	1.56	2.49	2.03
Believe that their religion is the best	1.88	1.68	2.5
Focus on negative events and expectations	1.67	2.2	2.19
Are convinced that others think and feel the same as they do	1.63	2.26	2.15
Do not like changing their views	1.98	1.65	2.42
Overall (average) score	8.72 (1.74)	10.28 (2.06)	11.29 (2.26)

Source: compiled by the authors

In the students' unconscious perceptions, teachers of secondary education institutions were found to be the most similar to Russians; employees of educational

administration bodies came next, followed by higher education lecturers and, lastly, the students themselves (Table 3).

Table 3. Assessments of groups in the field of education

Group	Teachers of secondary education institutions	Lecturers of higher education institutions	Employees of educational administration bodies	Students of higher education institutions
Are influenced by information that is received frequently	2.31	1.88	1.84	2.05
Believe that their religion is the best	2.29	2.06	2.2	1.48
Focus on negative events and expectations	2.25	1.9	1.79	2.14
Are convinced that others think and feel the same as they do	2.23	1.94	2.01	1.87
Do not like changing their views	2.3	2.11	2.19	1.45
Overall (average) score	11.38 (2.28)	9.89 (1.98)	10.03 (2.01)	8.99 (1.8)

Source: compiled by the authors

By the criterion of similarity to Russians, representatives of confessional groups were arranged in the following order: believers of the UOC, believers of the OCU, believers of the UGCC, while atheists were found

to be the least similar (Table 4). Students consider rural residents to be the most similar to Russians, followed by residents of small towns and villages, whilst residents of large cities are seen as the least similar (Table 5).

Table 4. Assessments of confessional groups

Group	Atheists	Believers of the OCU	Believers of the UOC	Believers of the UGCC
Are influenced by information that is received frequently	1.51	2.17	2.38	2.01
Believe that their religion is the best	1.54	2.17	2.38	1.98
Focus on negative events and expectations	1.63	2.09	2.38	1.93
Are convinced that others think and feel the same as they do	1.48	2.23	2.32	2.02
Do not like changing their views	1.73	2.06	2.32	1.96
Overall (average) score	7.89 (1.58)	10.72 (2.14)	11.78 (2.36)	9.9 (1.98)

Source: compiled by the authors

Table 5. Assessments by residents of settlements of different types

Group	Rural residents	Residents of small towns and villages	Residents of large cities
Are influenced by information that is received frequently	2.43	1.99	1.66
Believe that their religion is the best	2.66	1.99	1.41
Focus on negative events and expectations	2.05	2.07	1.94
Are convinced that others think and feel the same as they do	2.34	2.06	1.66
Do not like changing their views	2.61	1.91	1.52
Overall (average) score	12.09 (2.42)	10.02 (2)	8.19 (1.64)

Source: compiled by the authors

Members of the older generation were rated as most similar to Russians, middle-aged people ranked somewhere in between, whilst youth were rated as the least similar to Russians (Table 6).

To provide a more generalised view of the comparative ratings of all the groups of Ukrainians described, the relevant data has been compiled in Figure 1.

Table 6. Views of representatives of different generations

Group	Youth	Middle-aged people	Older people
Are influenced by information that is received frequently	1.82	1.78	2.49
Believe that their religion is the best	1.34	1.9	2.82
Focus on negative events and expectations	1.76	1.96	2.34
Are convinced that others think and feel the same as they do	1.96	2.02	2.08
Do not like changing their views	1.44	1.9	2.7
Overall (average) score	8.32 (1.66)	9.56 (1.91)	12.43 (2.49)

Source: compiled by the authors

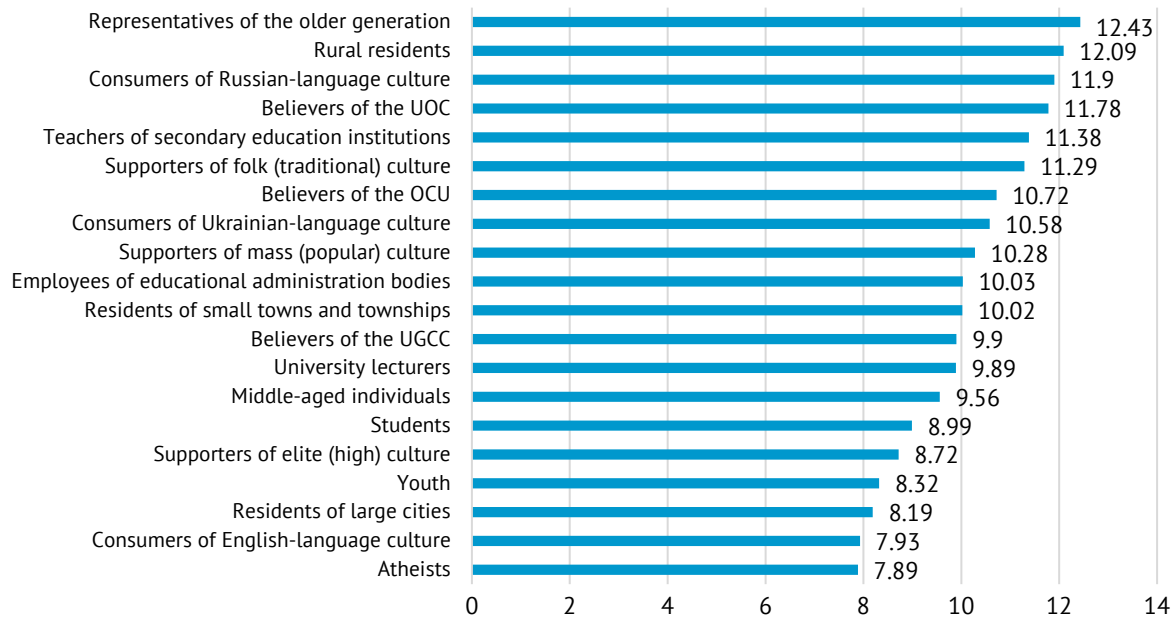


Figure 5. Total scores for all assessed group

Source: compiled by the authors

At the pole of similarity to Russians are representatives of the older generation, rural residents, consumers of Russian-language culture, and believers of the UOC. At the opposite pole are atheists, consumers of English-language culture, residents of large cities, and young people. The empirical data obtained provide grounds for conclusions about the specific nature of unconscious perceptions held by student youth towards different groups of Ukrainians in terms of their similarity/dissimilarity to Russians. In the cultural sphere, stable differences were identified between the images of various groups of cultural consumers. Assessments of consumers of Russian-language culture consistently show higher scores across all traits reflecting cognitive rigidity, a tendency towards normative thinking and conformity, inertia in cultural orientations, and heightened sensitivity to repeated informational influences. Such a profile of consumers of Russian-language cultural products reveals a structural similarity to models of cultural consumption formed during the Soviet period. Mass culture functions as a “normative background” that does not require reflection but is reproduced through habit, accessibility, and symbolic “obviousness”.

By contrast, consumers of Ukrainian-language culture occupy an intermediate position. Their scores are lower than those of the Russian-language group but higher than those of consumers of English-language cultural products. This configuration may indicate the transitional nature of the Ukrainian-language cultural space, which simultaneously bears traces of prolonged Russification and is undergoing active redefinition and internalisation of new cultural meanings. Ukrainian culture partly appears as an inertial “norm” tied to the

past, and partly as a space of choice requiring symbolic effort, conscious identification, and a rejection of established hierarchies of prestige. The results concerning levels of culture are particularly thought-provoking. The highest values were recorded among supporters of folk (traditional) culture, who therefore intuitively appear to young respondents as most similar to Russians. During the Soviet period, traditional culture was folklorised, depoliticised, and stripped of its identity-related content, effectively turning it into an ethnographic adjunct to the “great” Russian culture. In the contemporary context, traditional culture is gradually acquiring a different symbolic meaning, increasingly appearing not as a relic of the past but as a resource for cultural continuity and the restoration of agency.

The lowest scores across all traits are characteristic of supporters of elite (high) culture, making their image in students’ perceptions the most distant from that of Russians. This aligns with its historical function as a space of reflection, critical thinking, and individualised meanings, which, although subject to strict ideological control during the Soviet period, retained a potential for alternative perspectives. High scores among supporters of mass culture reproduce the logic of the Soviet cultural project, in which mass culture served as the primary instrument for the unification of consciousness and the normalisation of “correct” patterns of thinking and behaviour. In students’ assessments of groups within Ukrainian society in the field of education, teachers were found to be cognitively and behaviourally closest to Russians, followed by employees of educational administration bodies, then lecturers of higher education institutions, while student youth appeared to be the least influenced by Russian mental patterns.

These results can likely be explained by the fact that students perceive the activities of representatives of the teaching profession, especially school teachers, as subordinated to strict normative requirements, regulations, and social stereotypes. Interpreting this rather unfavourable image of teachers requires attention to their contradictory position in society. Teachers are expected, on the one hand, to comply with educational standards, and on the other, to demonstrate initiative and creativity; to adhere to prescribed curricula, principles, and demands, while also being tolerant and empathetic; to exhibit high moral qualities while simultaneously showing conformity and a willingness to compromise in the interests of the majority; and to maintain both physical and mental well-being despite often low material and economic conditions. Behind the declared values of democracy, innovation, social reflexivity, a mature system of values, and student-centredness, there may in reality emerge authoritarianism, rigidity, resistance to change, blurred values, and a lack of reflexivity (Petrunko, 2016).

The teaching community operates under the influence of complex and often challenging factors, as well as contradictory social trends that it cannot manage independently. As a result, its members may more readily resort to simpler, more familiar, and more stereotypical patterns of behaviour and self-definition, which can lead students to perceive them, to some extent, as somewhat outdated figures associated with the Soviet-Russian past. The most general conclusion regarding perceptions within the sphere of religious confessions is that, in students' assessments, believers of the UOC appear cognitively and behaviourally closest to Russians. This is unsurprising and logical, given that both the followers and leadership of this church are often characterised by a stronger orientation towards influences associated with Russian contexts. They are followed by believers of the OCU, whose proximity to UOC adherents may seem somewhat unexpected in light of their mutual ideological and confessional opposition. This may be explained, on the one hand, by political differences that distinguish these two confessions, and on the other, by shared Orthodox religious norms and stereotypes that bring their followers closer together.

Next on this scale are believers of the UGCC, who, in line with expectations, appear more distant from Russian influences and, it may be assumed, closer to their European Catholic counterparts. Respondents identified atheists as the least influenced by Russian mental patterns, which may seem surprising, given that contemporary atheism is often viewed as a legacy of Soviet ideological anti-religious pressure – an influence that historically affected Russians even more strongly than Ukrainians. Assessments of residents of different types of settlements reveal a paradox: rural inhabitants appear most similar to Russians, while residents of large cities appear the least similar, despite the fact that

urban environments have historically been – and often remain – spaces where the Russian language, culture, and, to some extent, identity have been dominant. This may be explained by the fact that living in an urban environment is associated with greater social differentiation, broader access to diverse sources of information, and more frequent interaction with people holding different views. In turn, this tends to reduce susceptibility to cognitive simplifications and categorical judgements.

Higher scores among rural residents – particularly in terms of confidence in their own views, lower willingness to change them, and greater sensitivity to informational influence – may be explained by a more homogeneous social environment, stronger traditional norms, and more limited access to alternative sources of information. Rural communities have historically remained more Ukrainian-speaking, culturally homogeneous, and traditional, with a more pronounced role of shared values, religion, and local identity. In such conditions, there is typically a stronger orientation towards consensus, stability, and a shared perception of reality, which may manifest in greater confidence in one's beliefs, less readiness to revise them, and increased responsiveness to information that reinforces established views. As expected, representatives of the older generation were found to be most similar to Russians. In addition to having experienced the strongest Russification influences, another factor likely played a role: when evaluating different generations, students may have implicitly identified themselves with younger people, whose views and behaviours they regarded as a kind of benchmark. The perception of the older generation as closer to Russians may, on the one hand, indicate a certain value gap between age groups and, on the other, reflect age-related biases present among some young people.

An interesting finding is that the older generation is characterised both by susceptibility to informational influence and by a reluctance to change their views. This suggests that older individuals may be less critical in their reception of information and more prone to drawing inaccurate conclusions. The ways in which representatives of the older generation interact with information were shaped during the Soviet period, when the dominant ideology required unconditional trust in information disseminated through mass communication or by authorised figures. Accordingly, the observed similarity between Ukrainians and Russians whose identities were formed in that historical period appears logical. The relatively small distance between younger and middle-aged individuals indicates their mental proximity in the eyes of students, alongside their shared distance from Russians. In their interaction with information, as in many other areas, middle-aged individuals serve as a kind of bridge between generations. Early in their lives, they were influenced by Soviet censorship and restrictions; their youth coincided with independence and the emergence of informational

freedom; and their most active years have taken place during the expansion of the Internet and social media. This diversity of contexts has provided this generation with the greatest cognitive and behavioural flexibility in engaging with information.

Young people differ from middle-aged individuals in the relative lack of such contextual diversity. They have been born and raised in the era of the Internet and social media, where real and virtual life are not merely complementary but form parts of a single whole. Accordingly, their level of trust in repeated information is somewhat higher, as their exposure to information is more constant and immediate. One consequence of this may be increased vulnerability to propaganda – not through past experience, as with the older generation, but through its concealment within contemporary mass culture. This makes the issue of de-russification not less, but even more relevant. Within the broader societal context shared by all the groups assessed, those found to be most similar to Russians were representatives of the older generation, rural residents, consumers of Russian-language culture, believers of the UOC, teachers, and supporters of folk culture. These groups may, to some extent, be broadly characterised as the most traditional within Ukrainian society of the Soviet and post-Soviet eras. The most unexpected findings here are the assessments of rural residents and supporters of folk culture as similar to Russians.

At the opposite pole are students, supporters of elite culture, young people, residents of large cities, consumers of English-language culture, and atheists. These groups are more strongly associated with images of modernity, dynamism, and a future-oriented outlook. Particularly surprising are the positions assigned to residents of large cities and, to some extent, supporters of elite culture and atheists. The main limitation of the study lies in the complexity and only relative validity of the indirect assessment method employed. Transferring a scale derived from one set of groups to another gives the method a strongly projective character and reduces the objectivity of the conclusions. The precision of the scale is also limited, as it is based on respondents' subjective selection of more and less appropriate objects of evaluation, subsequently converted into ordinal scores. Further reservations may be raised regarding the structure of the student samples at different stages of the study, which were either random or convenience-based.

The study also revealed the significant influence of modern information technologies on the development of Ukrainian identities, particularly in the context of Russification and de-russification. The findings provide a basis for comparison with other studies examining similar aspects of media and technological influence on national identities. As noted by T. Hurlieva (2019) and O. Sorokina (2025), trust in information depends on individual knowledge, media literacy, and critical thinking, which is reflected in the high level of distrust

towards information sources among Ukrainians during wartime. This aligns with the findings of Boyko (2025), which also indicate a low level of trust, representing a new dimension in understanding de-russification. At the same time, the importance of religious identity as a complex, multifunctional phenomenon has been emphasised by V. Volotovska (2024), while the role of Orthodoxy in Ukraine during wartime has also been explored in the works of P. Lakiichuk (2008) and other researchers, including B. Synchak (2025) and A. Marchenko (2025).

Another important aspect is intergenerational interaction, where research by O. Vovchyk-Blakytina (2019) and N. Dovhan (2020) has highlighted a shift in the mechanism by which experience is passed on from the older to the younger generation, particularly through prefiguration, which underscores a new approach to learning and the transmission of values in the contemporary context. Research findings on intergenerational conflicts, notably the works of A. Halychanska (2014) and M. Makarova (2019), have confirmed the importance of fostering a culture of solidarity and dialogue to overcome these differences. At the same time, this study expands on these arguments, pointing to the symbolic marking of Russified practices and the need for changes in the mental sphere, which allows for the formation of new identities through reflection and recategorisation.

R. Bedeley *et al.* (2025) analysed how cognitive biases influence the perception and dissemination of information on online opinion platforms. The authors demonstrate that biases such as confirmation bias, the groupthink effect and algorithmic “bubbles” significantly shape what people consider to be “authoritative” content. This is directly linked to the fact that trust in information depends on individual knowledge, context and media literacy, as R. Bedeley *et al.* (2025) demonstrate that it is precisely cognitive biases that can limit the ability to critically evaluate sources. In the context of Russification/de-russification, this emphasises that informational influences are not only technological but also cognitive: Ukrainians may perceive messages differently depending on their own biases, creating heterogeneous visualisations of reality. Thus, the study by R. Bedeley *et al.* (2025) confirmed the thesis regarding the importance of critical thinking and information literacy, but expands upon it by demonstrating that technological platforms themselves structurally bias information flows. M. Billig (2017) developed the concept of “banal nationalism” – almost imperceptible everyday practices through which national identity is constantly reproduced and maintained. M. Billig (2017) argues that national identity is not always expressed through major symbolic events or conflicts, but rather in the mundane, routine use of language, symbols, cultural markers, ways of thinking, and even everyday media practices. This correlates very well with the fact that the

processes of Russification/de-russification were not “visible” until a certain point, but became dominant precisely through the constant daily practices taking place in the information space. M. Billig (2017) reinforced the argument that the transition from latent Russification to its symbolic visibility is not merely the result of war, but a logical continuation of the daily reproduction of narratives (often unconscious). Overall, this study aligns with previous works, reinforcing conclusions regarding changes in cultural identities, yet offers new approaches to analysing the influence of information technologies and intergenerational interactions in the process of de-russification.

In particular, the Ukrainian mental space contains a tension between inherited models of Soviet-Russian cultural hegemony and new forms of symbolic self-determination. The mass consciousness of Ukrainians continues to reproduce cognitive and behavioural patterns formed under conditions of Russification, yet at the same time becomes a space for rethinking and re-discovering identity. It is within this dynamic that the deeper meaning of the processes of de-russification emerges, not merely as a linguistic or political phenomenon, but above all as a socio-psychological one, reflecting the transition from an inertial mental heritage to the active (re)construction of national identity.

CONCLUSIONS

A generalisation of the obtained indicators provided grounds for concluding that, among the six groups described, the expected assessments (as the most Russified according to the relevant traits) were those of consumers of Russian-language culture, believers of the UOC, and representatives of the older generation. The first group displayed a natural inclination towards Russian meanings that constitute the core content of Russian/Russian-language culture. For the second group, such an inclination is both a cause and a consequence of their heightened attachment to “everything Russian”. Older individuals appeared more closely tied to Russianness primarily due to an age-related factor: their youth took place under the influence of Soviet-era Russification. By contrast, relatively high assessments of school teachers, supporters of folk (traditional) culture, and rural residents (who are predominantly ethnic Ukrainians and Ukrainian-speaking) should be regarded as rather unexpected. It is likely that teachers appear as the most mentally Russified due to their well-internalised hierarchical dependence on official trends and requirements, as well as a considerable degree of stereotyped thinking and behaviour, at least in comparison with students, university lecturers, and even employees of educational administration bodies.

The images of supporters of folk (traditional) culture and rural residents substantially overlap: in the analysed context, they appear similar to one another in terms of the level of mental Russification, while

simultaneously differing in this respect from supporters of both mass (popular) and elite (high) culture, as well as from residents of small towns and large cities. From a common-sense perspective, the opposite might have been expected. It is possible that an effect of normativity and traditionalism operated here as a shared feature in the evaluation of these groups and Russians. It was found that residents of large cities were assessed as the least Russified, despite their greatest involvement in the Russian-language and Russian cultural space. In the eyes of student youth, urban residents represent a more attractive social group as carriers of contemporary Ukrainisation trends. As for the perception of atheists as dissimilar to Russians, it may be assumed that their lower susceptibility to Russifying influences is seen as a manifestation of their internal mental independence from authority.

The main significance of the results lies in identifying implicit and deep-rooted consequences of the Russification of Ukrainian identities. Notable discrepancies emerge between widespread social perceptions of the positions of particular groups of Ukrainians on the scale of Russification and the recorded data on the unconscious attribution of corresponding traits to them. Accordingly, clarifying the possibilities of de-russification, as well as developing and applying appropriate measures, is an extremely important task for socio-psychological practice and psychological research. This should take into account not only the obvious and visible manifestations of Russification but also the subtle, deep psychological characteristics of carriers of Ukrainian identities. Further research should focus on a more in-depth study of the psychological mechanisms that contribute to subtle yet powerful processes of Russification, as well as on the development of effective methods of de-russification, focusing not only on explicit cultural changes but also on profound psychological and mental transformations.

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CONFLICT OF INTEREST

None.

REFERENCES

- [1] Artymyshyn, P., & Kostyuk, O. (2019). *Ideology of the "Russian world": Origins, genesis, and perception in Ukraine (analytical report)*. Lviv: Ivan Kryp'yakevych Institute of Ukrainian Studies of the National Academy of Sciences of Ukraine.
- [2] Bassin, M., & Kelly, C. (Eds.). (2012). *Soviet and post-Soviet identities*. Cambridge: Cambridge University Press. doi: 10.1017/CBO9780511894732.
- [3] Bedeley, R.T., Hao, H., & Ghoshal, T. (2025). Cognitive biases in online opinion platforms: A review and mapping. *Sage Open*, 15(1). doi: 10.1177/21582440251315564.
- [4] Billig, M. (2017). Banal nationalism and the imagining of politics. In *Everyday nationhood* (pp. 307-321). London: Palgrave Macmillan. doi: 10.1057/978-1-137-57098-7_15.
- [5] Boyko, S. (2022). Formation of the national and cultural identity of Ukrainian youth in the conditions of the Russian-Ukrainian war. *Ukrainian Studies Almanac*, 30, 17-22. doi: 10.17721/2520-2626/2022.30.2.
- [6] Breakwell, G.M. (1986). *Coping with threatened identities*. London: Methuen. doi: 10.4324/9781315733913.
- [7] Brik, T., & Casanova, J. (2021). *From "the Ukraine" to Ukraine: A contemporary history of 1991-2021*. Stuttgart: Ibidem Verlag.
- [8] Brubaker, R. (1996). *Nationalism reframed nationhood and the national question in the New Europe*. Cambridge: Cambridge University Press. doi: 10.2307/2501859.
- [9] Danylenko, V.M. (Ed.). (2010). *Religious policy in Ukraine in the 1960s-1980s and modern practice of interfaith relations*. Kyiv: Institute of History of Ukraine of the National Academy of Sciences of Ukraine.
- [10] Danylevska, O.M. (2020). *The language situation in Ukrainian schools of education at the beginning of the 21st century*. (Doctoral thesis, Institute of the Ukrainian Language of the NAS of Ukraine, Kyiv, Ukraine).
- [11] de Certeau, M. (1984). *The practice of everyday life*. Berkeley: University of California Press.
- [12] Dovhan, N.O. (2020). *Psychology of sociocultural interaction between generations*. Kyiv: Talkom.
- [13] Eglitis, D. (2002). *Imagining the nation: History, modernity, and revolution in Latvia*. Pennsylvania: Pennsylvania State University Press.
- [14] Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual Review of Psychology*, 53, 161-186. doi: 10.1146/annurev.psych.53.100901.135228.
- [15] Halychanska, A.V. (2014). *Intergenerational conflict as a way of interaction between representatives of different generations in a family*. *Scientific Notes of the National University "Ostroh Academy". Series: Psychology and Pedagogy*, 26, 35-38.
- [16] Haselton, M.G., & Nettle, D. (2006). The paranoid optimist: An integrative evolutionary model of cognitive biases. *Personality and Social Psychology Review*, 10(1), 47-66. doi: 10.1207/s15327957pspr1001_3.
- [17] Hurlieva, T.S. (2019). *Self-confidence in the attitude towards media text*. In *Proceedings of the international scientific and practical conference "Scientific potential and prospects for the development of psychological sciences"* (pp. 51-56). Lviv: Publishing House "Helvetyka".
- [18] Iakubova, L. (2018). *"Russian world" in Ukraine: On the edge of the abyss*. Kyiv: Klio.
- [19] Kagalna, M.V. (2015). *The influence of the political and ideological system on the teachers' daily life in the USSR in the second half of 50th and the first half of 60th years*. *Hileya: Scientific Bulletin*, 96, 113-117.
- [20] Kaganov, Yu. (2022). *Construction of the "Soviet man" (1953-1991): Ukrainian version*. Zaporizhzhia: Publishing House "Helvetica".
- [21] Kalenychenko, T., Hovorun, C., & Brik, T. (2023). *Church fragmentation and the pandemic: Analysis of four eastern Christian groups in Ukraine*. London: Routledge.
- [22] Kang, B. (2020). *Understanding the Ukrainian conflict from the perspective of post-soviet decolonization*. *Region*, 9(2).
- [23] Kulyk, V. (2017). *Hybrid derussification*. *Criticism*, 7-8, 2-7.
- [24] Läänemets, M. (2023). The rise of status consumption in the Estonian SSR: Socialist "Good taste" and western influence. *The Soviet and Post-Soviet Review*, 50(3), 259-283. doi: 10.30965/18763324-bja10081.
- [25] Lakiichuk, P.V. (2008). *Religious and confessional contradictions as an obstacle to the development of tolerance in Ukrainian society*. *Bulletin of the Ivan Franko Zhytomyr State University*, 38, 17-20.
- [26] Lee, E., Karimi, F., Wagner, C., Jo, H.H., Strohmaier, M., & Galesic, M. (2019). Homophily and minority-group size explain perception biases in social networks. *Nature Human Behaviour*, 3(10), 1078-1087. doi: 10.1038/s41562-019-0677-4.
- [27] Lefebvre, H. (1991). *The production of space*. Oxford: Blackwell.
- [28] MacCoun, G., & Ratcliff, R. (1998). Biases in the interpretation and use of research results. *Annual Review of Psychology*, 49, 25-42. doi: 10.1146/annurev.psych.49.1.25.
- [29] Makarova, M.V. (2019). Types of intergenerational communication as a mechanism of sociocultural continuity. *Issues of Cultural Studies*, 35, 206-214. doi: 10.31866/2410-1311.35.2019.188810.

- [30] Marchenko, A. (2025). "Religion and human rights in the realities of the Russian-Ukrainian war". *Occasional Papers on Religion in Eastern Europe*, 45(10), article number 3. doi: [10.55221/2693-2229.2702](https://doi.org/10.55221/2693-2229.2702).
- [31] Mohanani, R., Salman, I., Turhan, B., Rodríguez, P., & Ralph, P. (2018). *Cognitive biases in software engineering: A systematic mapping study*. *IEEE Transactions on Software Engineering*, 46(12), 1318-1339.
- [32] Mudrakov, V., Polishchuk, O., Popovych, M., & Mozolev, O. (2020). *Identity of homo sovieticus in retrospective and modernity: Value and anthropological objectivations of phenomenological and literary senses*. *Annals of the University of Bucharest. Political Science Series*, 22(1-2), 35-59.
- [33] Nickerson, R.S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology*, 2(2), 175-220. doi: [10.1037/1089-2680.2.2.175](https://doi.org/10.1037/1089-2680.2.2.175).
- [34] Partlett, W., & Küpper, H. (2022). *The post-soviet as post-colonial*. Cheltenham: Edward Elgar Publishing. doi: [10.4337/9781802209440](https://doi.org/10.4337/9781802209440).
- [35] Petrunko, O.V. (2016). *Socio-psychological potential of the pedagogical community*. *Pedagogical Process: Theory and Practice*, 1(52), 55-60.
- [36] Pivtorak, H. (2025). *Ukrainians, Belarusians, Russians: Three peoples, three paths*. Kyiv: CHTYVO.
- [37] Pometun, O.I. (2023). Current issues of forming students' national identity in the process of acquiring civic and historical education. *Bulletin of the National Academy of Educational Sciences of Ukraine*, 5(1). doi: [10.37472/v.naes.2023.5116](https://doi.org/10.37472/v.naes.2023.5116).
- [38] Pronin, E., & Kugler, M.B. (2007). Valuing thoughts, ignoring behavior: The introspection illusion as a source of the bias blind spot. *Journal of Experimental Social Psychology*, 43(4), 565-578. doi: [10.1016/j.jesp.2006.05.011](https://doi.org/10.1016/j.jesp.2006.05.011).
- [39] Radchenko, O. (2022). Mental and historical rationale for principal differences between the Ukrainian and Russian nations – introduction. *Journal of Geography, Politics and Society*, 12(S1). doi: [10.26881/jpgs.2022.S1.01](https://doi.org/10.26881/jpgs.2022.S1.01).
- [40] Rastogi, Ch., Yunfeng, Zh., Wei, D., Varshney, K.R., Dhurandhar, A., & Tomsett, R. (2022). Deciding fast and slow: The role of cognitive biases in AI-assisted decision-making. *Proceedings of the ACM on Human-Computer Interaction*, 6(1), article number 83. doi: [10.1145/35129](https://doi.org/10.1145/35129).
- [41] Seniushkina, T. (2013). *The problem of achieving intergenerational solidarity in Ukraine*. I.F. Kuras Institute of Political and Ethnic Studies of the National Academy of Sciences of Ukraine, 5, 184-221.
- [42] Senko, T.V. (2023). Psychological characteristics of interaction between generations in a family. *Current Problems of Psychology in Educational Institutions*, 13, 148-168. doi: [10.31812/psychology.v13i.7674](https://doi.org/10.31812/psychology.v13i.7674).
- [43] Sliusarevskyi, M. (2024). *Public opinion and educational horizons*. Kyiv: Talkom.
- [44] Soprano, M., Roitero, K., La Barbera, D., Ceolin, D., Spina, D., Demartini, G., & Mizzaro, S. (2024). Cognitive biases in fact-checking and their countermeasures: A review. *Information Processing & Management*, 61(3), article number 103672. doi: [10.1016/j.ipm.2024.103672](https://doi.org/10.1016/j.ipm.2024.103672).
- [45] Sorokina, O. (2025). Factors of trust in information in modern society: A socio-philosophical analysis. *Humanities Studies*, 24(101), 149-155. doi: [10.32782/hst-2025-24-101-14](https://doi.org/10.32782/hst-2025-24-101-14).
- [46] Suny, R.G. (1993). *The revenge of the past: Nationalism, revolution, and the collapse of the Soviet Union*. Stanford: Stanford University Press.
- [47] Synchak, B. (2025). Estonian and Ukrainian experience of getting out from under the influence of the Moscow patriarchy. *Occasional Papers on Religion in Eastern Europe*, 45(7), 102-114. doi: [10.55221/2693-2229.2654](https://doi.org/10.55221/2693-2229.2654).
- [48] The Declaration of Helsinki. (2013). Retrieved from <https://www.wma.net/what-we-do/medical-ethics/declaration-of-helsinki/>.
- [49] Todorov, I. (2022). Mental, historical and geopolitical background of differences between Ukraine and Russia. *Journal of Geography, Politics and Society*, 12(S1), 44-51. doi: [10.26881/jpgs.2022.S1.06](https://doi.org/10.26881/jpgs.2022.S1.06).
- [50] Volotovska, V.P. (2024). Religious identity of Ukrainians in the conditions of Russian aggression: Theoretical and methodological approaches. *Culturological Almanac*, 2, 125-137. doi: [10.31392/cult.alm.2024.2.14](https://doi.org/10.31392/cult.alm.2024.2.14).
- [51] Vovchyk-Blakytina, O.O. (2019). *Intergenerational interaction in the family as a resource*. *Current Problems of Psychology*, 7(47), 80-91.
- [52] Zhelanova, V.V., & Matviienko, O.V. (2022). *National and cultural identity of the individual: Essence and structure*. *Innovative Pedagogy*, 49(1), 17-20.

Опосередкована оцінка схожості/несхожості окремих груп українців на росіян: очікуване і несподіване

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Анотація. Актуальність цього дослідження полягає в необхідності розуміння глибинних психологічних та культурних процесів русифікації українських ідентичностей, що є важливим для розробки ефективних стратегій дерусифікації в умовах сучасних соціальних і політичних змін. Мета дослідження полягала в спробі опосередкованого перенесення когнітивно-поведінкових конструктів схожості/несхожості українців і росіян на оцінку соціальних груп українців, які різняться за ступенем русифікації їхньої свідомості. Емпіричне вимірювання відмінностей між представниками різних соціальних груп базувалося на процедурі непрямой соціально-когнітивної оцінки, що визначає сприйману подібність/відмінність між групами. Було визначено риси, за якими українці та росіяни найменше відрізняються у сприйнятті студентами, що використовуються для оцінки працівників органів управління освіти, шкільних учителів, викладачів університетів і студентів, споживачів російськомовної, англomовної та україномовної культури, прихильників масової, елітної та народної культури; віруючих Української Православної Церкви, Православної Церкви України, Української Греко-Католицької Церкви, атеїстів, мешканців великих міст, малих міст та сіл; представників старших поколінь, середнього віку та молоді. Очікувано, що групи, які оцінювалися як найбільш подібні до росіян, були споживачами російськомовної культури, віруючими Української Православної Церкви та представниками старшого покоління. Неочікувані результати, які потребують додаткового тлумачення, включали відносно високі оцінки русифікації серед шкільних учителів, прихильників народної культури та сільських мешканців. Значення отриманих результатів полягає у виявленні неявних та глибоко вкорінених наслідків русифікації українських ідентичностей. Розробка засобів дерусифікації є критично важливим завданням для соціально-психологічної практики та подальших психологічних досліджень

Ключові слова: русифікація і дерусифікація ідентичностей; когнітивні та поведінкові упередження; опосередковані соціально-когнітивні оцінки; риси схожості/несхожості на росіян; емпірично ключована шкала; соціальні групи українців

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Abstract. The objective of the study was to conduct an analysis of the representation of the Holy See through the prism of its humanitarian, spiritual, and diplomatic discourses within the context of the Russo-Ukrainian war. The research methodology was based on the synergy of theoretical analysis, relevance sampling, and frame analysis of publicistic publications of leading media resources of the world and the country from the period 2016-2026, as well as a structural-functional analysis of the Holy See's digital presence in the framework of information warfare. The media representation of the activities of the Holy See has undergone a fundamental paradigmatic transformation from philanthropy to realism. The shift from abstract to specific constructs within the media allowed the Vatican to function as a logistical hub in the provision of assistance to Ukraine in relation to its energy and medical crises. Furthermore, the Vatican's digital presence has facilitated the formation of numerous international solidarity networks, despite its vulnerability to the decontextualisation of its content within the information wars framework. The use of positive neutrality within the media was justified through the use of specific humanitarian actions that facilitated the restoration of the international legal order within Ukraine's peace formula. Overall, the functioning of the Vatican as a global moral arbiter within the multipolar world order depends upon its ability to translate spiritual authority into infrastructural outcomes. The significance of these findings can be utilised by specialists in the field of international relations, religious studies, and media to counter the deleterious influences of information warfare, as well as to optimise the relationship between religious and secular societies during periods of crisis

Keywords: positive neutrality; media resource; social solidarity; institutional realism; digital ecosystem; mediation

INTRODUCTION

The media representation of the Vatican's humanitarian initiatives within the context of the Russo-Ukrainian war emerges as a locus of collision between religious diplomacy, ethics, and geopolitical narratives. In the information space of the twenty-first century, a cognitive dissonance is observed between the magnitude of the Holy See's actual philanthropic activity and the perception of its political stance, which often leads to a distorted or fragmentary coverage of aid in the media. The problem lies in the vulnerability of humanitarian content to instrumentalisation by various actors in the information war. A scholarly analysis of this discourse is

essential for identifying the efficacy of Vatican media communications amidst a crisis of trust, as well as for understanding how digital and traditional mass media transform religious peacemaking activity into social symbols comprehensible to global society. Thus, studying the methods of framing Vatican aid will allow for the development of strategies to overcome information barriers and ensure an adequate reflection of the role of international institutions in mitigating the humanitarian consequences of war.

An analysis of the scholarly discourse has enabled an examination of the Vatican's media representation

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as a result of the interaction between religious dogmatics and geopolitical contexts. While studying media resources, B. Synchak *et al.* (2023) substantiated that the coverage of Pope Francis's humanitarian efforts is characterised by inconsistency and fragmentation. The authors established that the media discourse oscillates between a positive fixation on philanthropic initiatives and a critical analysis of diplomatic decisions, which were labelled as diplomatic flexibility. The study's scholarly conclusion was that such contradictory perception was conditioned by the specificity of the Vatican strategy, where doctrinal principles entered into a pragmatic conflict with the principle of neutrality in the context of an armed conflict. These theses correlate with the findings of V. Turenko (2023), who proved that under conditions of a full-scale war, the social mission of religious institutions transformed into a means of expressing an ideological position and civic solidarity. The researcher identified a differentiation in approaches to humanitarian support among various Orthodox denominations, where the nature of aid became a defining factor of their organisational identity. Thus, common vectors of work regarding the civilian population were identified; however, a divergence in the methods of implementing humanitarian strategies was recorded.

Simultaneously, O. Kostiuk (2024) ascertained the existence of a dissonance between the official position of the Holy See and the expectations of Ukrainian society. The research confirmed the limited influence of Vatican diplomacy on concrete political decisions, despite its ability to adjust public opinion in specific religious regions. The author demonstrated that the absence of a direct moral differentiation of the parties in the Vatican's media rhetoric influenced the perception of the Holy See as a mediator in conflict resolution. Complementing this analysis, H. Nadtoka & I. Horpynchenko (2025) established the presence of a historically conditioned continuity in the Apostolic See's policy of avoiding direct identification of the subjects of aggression. The scholars discovered that the aspiration to preserve diplomatic channels of communication came into conflict with traditional notions of just wars, which was identified as a key factor of contemporary Vatican policy. P. Smytsnyuk (2023a) substantiated that the Holy See's restrained reaction was, in fact, underpinned by a transition from the theory of "just war" to the concept of "just peace". The researcher established that the specificity of Pope Francis's position was conditioned by his refusal to interpret events from a single viewpoint. It was demonstrated that, in this manner, the Vatican's neutrality was transformed from a formal-legal status into an instrument of global mediation, aimed at overcoming bipolar political thought.

The scholarly opinion of foreign studies emphasised paradigmatic shifts and the ethical aspects of neutrality, which directly influenced the Vatican's global media image. This direction was developed by

M. Thureau (2024), who confirmed the relevance of the "just peace" concept as an alternative to the "just war" doctrine. The author demonstrated that Christian ethics, under conditions of full-scale aggression, insists on maintaining the primacy of civilian settlement and the building of just structures. The study recorded that this paradigmatic shift created a theoretical foundation for seeking a way out of the conflict beyond purely military resolution. However, K. McLarren (2023) characterised such rhetorical restraint as a systemic strategy for avoiding the direct legal qualification of Russia's actions. The researcher discovered that the lack of verbal identification of the aggressor influenced the perception of the moral and legal foundations for protecting state sovereignty. Thus, it was proved that in media discourse, the unspoken became a factor that prompted a discussion on the efficacy of traditional religious diplomacy in addressing contemporary security crises. Similarly, F. Mabile (2023) compared the Vatican's status to the neutrality of states such as Switzerland or Finland, underscoring that the Holy See's passive positioning was interpreted as a challenge to the institution of neutrality. The researcher found that the claim to the role of a universal moral authority came into contradiction with the principle of political non-intervention. It was established that this choice became a critical factor in the transformation of the Vatican's role in the modern international system. In the context of the media framing of the war's humanitarian consequences, N. Roman *et al.* (2020) recorded the absence of a unified global standard in representing the crisis of displaced persons. The scholars identified a divergence in the framing of events: while English-language publications prioritised statistical data, Ukrainian and Russian media focused on the applied aspects of social adaptation. The study demonstrated the absence of traditional negative frames concerning Ukrainians in Western discourse, evidencing the dependence of humanitarian journalism on geographical proximity to the conflict and the political priorities of states.

Despite the existence of research dedicated to the political neutrality of the Holy See, a comprehensive analysis of the media transformation of Pope Francis's purely religious and moral appeals into concrete social norms within the digital ecosystem has eluded scholarly attention. Furthermore, the adaptability of media messages on aid in relation to the escalation of hostilities, which conditions dynamic changes in the Vatican's image as a global moral authority, remains insufficiently examined. Therefore, the objective of the study was an analysis of the media representation of the Vatican's humanitarian and religious-ethical discourse during the Russo-Ukrainian war. To achieve the stated objective, the following tasks were delineated: to determine the specificity of the media representation of the Vatican's humanitarian, spiritual, and diplomatic vectors; to investigate the influence of social networks on the

dissemination of peace appeals; and to analyse the transformation of the Vatican's media strategies throughout the Russo-Ukrainian war.

MATERIALS AND METHODS

This study constituted a theoretical and applied analysis of the media representation of the humanitarian, spiritual, and diplomatic activities of the Holy See across the dynamics of the Russo-Ukrainian war. The chronological framework of the research encompassed the period from 2016 to 2026, thereby enabling an examination of the evolution of Vatican discourse from the localised phase of confrontation through the stage of full-scale aggression to the prospects of post-war recovery. The research employed the method of theoretical analysis, whereby the Holy See was examined as a "soft power" actor within the system of international relations. The material basis for applying this method was the provisions of the Lateran Pacts (specifically Art. 24) (1929). The application of this method made it possible to define the juridical foundation of Vatican neutrality and to substantiate the conceptual transition from the classical doctrine to the model of "positive neutrality".

The empirical base of the study was compiled using a purposive, relevance-based sampling method, resulting in a corpus of 22 publications. The inclusion criteria for sources in the analytical array were as follows: direct reference to humanitarian or diplomatic initiatives of the Holy See concerning Ukraine; the presence of terminological framing of the Pontificate's activities; and publication in authoritative media resources with a high level of credibility and global or nationwide reach. Conversely, the exclusion criteria were: duplication of news reports lacking authorial interpretation (reprints of press releases); materials containing only a cursory mention of the Vatican outside the context of the Russo-Ukrainian war; publications in anonymous sources or resources with unverified reputation.

The method of frame analysis was applied to investigate the media representation of Vatican initiatives in chronological retrospect across three key vectors: humanitarian, spiritual, and diplomatic. Within the humanitarian vector, publications concerning material and technical support were analysed in the outlets Vatican News (Kotsur, 2021; The Vatican will..., 2022; Shumylo, 2023; Capelli, 2025; Kotsur 2025). The analytical materials also included publications from New Voice (The Vatican has..., 2018; Vatican delivers generators..., 2026) and EWTN News/Catholic News Agency (Brockhaus, 2020). The spiritual vector was examined through the prism of pastoral care and socio-psychological solidarity, based on materials from the outlet Novynarnia (The Pope mentioned..., 2016; Klischuk, 2024) and Radio Free Europe (2023). Furthermore, materials from Barron's (Melki & Ritchie, 2022) and DAGENS (Frich, 2024) were analysed within the context of spiritual support, alongside publications on

Vatican News's social media profiles on X (Pope Leo XIV appeals..., 2025) and Instagram (Reflection from Pope..., 2026).

The diplomatic vector and the strategy of "positive neutrality" were analysed through the publications of V. Saakov (2023), Pope's envoy to visit Moscow on peace mission (2023), and D. Braslavsky (2023). Additionally, materials by Ukrinform (2023; 2024), J. McElwee (2025), I. Koshiw & R. Dixon (2025) were incorporated. The application of this method was essential for analysing the key informational constructs ("financial transparency", "ethics of presence", "infrastructural partnership", "geopolitical realism") and the contextual adaptation to security challenges. The differentiation criteria for media texts were defined by the linguo-semantic markers of the messages: the metaphysical – employing theologemes and ethical categories; and the rational – featuring verified quantitative indicators (funding volumes, technical specifications of equipment, logistical timelines) and an emphasis on infrastructural effectiveness. The analysis of the publications was conducted according to the following parameters: periodisation, type of media resource, object of aid/act of diplomacy, frame, and features of contextualisation of the message.

The method of structural-functional analysis made it possible to investigate the situation of the Vatican in the digital world and in the war for the information space, as well as the specificities of its communication with the youth audience. The object of analysis was the functional capabilities of the X social network (Pope Leo XIV appeals to young people on the example of his life, 2026) and Instagram social network (Reflection by Pope Francis on the state of the world, 2026). As a result of the research, it became possible to establish the mechanisms of forming solidarity from abroad based on the verification of metrics on the social networks. The approaches to interpreting the results of the research are based on the principles of systematicity and objectivity, making it possible to analyse the functioning of the Vatican's communication strategy in the information age.

RESULTS

Humanitarian vector:

Material-technical support and infrastructural recovery

The Holy See functions within the system of international relations as a soft power actor whose institutional influence is grounded in moral and ethical authority, the right of active and passive legation, and the capacity for international arbitration in the absence of mechanisms of military or economic coercion (Storoška, 2025). The juridical foundation of its international legal status is enshrined in Article 24 of the Lateran Pacts (1929). According to Article 24, the Holy See is defined as a neutral state that maintains a position of impartiality regarding interstate territorial and political disputes. An exception to this rule occurs when conflicting

parties jointly appeal to the Apostolic See for the purpose of undertaking a mediatory or peace-making mission. In the context of the Russo-Ukrainian war, the classical doctrine of neutrality has undergone a conceptual transformation and assumed the form of positive neutrality (Smytsnyuk, 2023b). This scholarly definition, introduced by the Cardinal Secretary of State of the Holy See, Pietro Parolin, delineates a specific model of diplomatic activity amidst the security crises of the 21st century. It incorporates such components as the dichotomy of engagement, the instrumental function, and ethical mediation. In contrast to passive neutrality, this model presupposes a dynamic adaptation of ecclesiastical institutions to the escalation of hostilities, wherein humanitarian activity becomes the principal means of the Holy See's international agency (Smytsnyuk, 2023a).

The humanitarian activity of the Holy See in addressing the consequences of the armed conflict is characterised by a transition from localised initiatives in 2014 (following the Russian aggression, the annexation of Crimea, and the Anti-Terrorist Operation) to large-scale logistical operations during the 2022-2026 period (prompted by Russia's full-scale invasion of

Ukraine on 24 February 2022) (Zavadilová, 2023). This transformation mirrors a shift in the Vatican's strategic priorities: from providing initial assistance to systemic participation in infrastructural recovery and ensuring the viability of affected regions. The instrument for implementing this policy was the Dicastery for the Service of Charity, under the leadership of Cardinal Konrad Krajewski. The activity of this institutional body during the period of full-scale escalation is directed towards the diversification of logistical chains, specialised medical support, and direct humanitarian presence. Thus, the Vatican's humanitarian vector integrates elements of classical philanthropy and crisis management, enabling the Holy See to retain the role of an active subject of international humanitarian security. The efficacy of implementing the positive neutrality model has been reflected in media discourse, where the representation of the Vatican's humanitarian initiatives adapts to the demands of global society. The systematisation of media messages facilitated an examination of the transition from financial reporting to infrastructural partnership concerning the Holy See's humanitarian activity (Table 1).

Table 1. Analysis of media representation of the Holy See's humanitarian activity (2018-2026)

Period/stage of war	Media resource (type)	Object of aid/event	Dominant media frame	Contextual adaptation of the message
2018 (Localisation of conflict)	New Voice (Secular, Ukr.)	EUR 16 million for Donbas	Financial Transparency	Validation of the Holy See's status as a relevant subject of international financial donation
2019 (Process Stagnation)	EWTN/CNA (Religious, Intl.)	1 million beneficiaries of the "Pope for Ukraine" project	Global Effectiveness	Legitimation of transnational fundraising through the demonstration of statistical indicators of the aid's impact factor
2021 (Period Preceding Full-Scale Aggression)	Vatican News (Official, Vatican)	Equipment for a hospital in Mariupol	Humanitarian Targetedness	Construction of the image of a depoliticised institution by emphasising social protection of vulnerable population groups
2022 (Outset of Invasion)		Collection of medicines and food in the Vatican	Mobilisational Readiness	Positioning of the religious centre as an operational logistical node within the crisis response system
2023-2024 (Protracted War)		Missions of K. Krajewski and the work of Caritas	Ethics of Presence	Communication strategy of personalising solidarity and visualising direct presence in high-security-risk zones
2025 (Energy Crisis)	New Voice (Secular, Intl.)	80 generators in Fastiv	Infrastructural Partnership	Rationalisation of humanitarian discourse and a shift from metaphysical narratives to the description of technical and technological support
2025-2026 (Prospect of Recovery)	Vatican News (Official, Vatican)	EUR 25 million in support of the Church	Strategic Recovery	Formation of a vision of long-term institutional sustainability and regeneration of Ukraine's social infrastructure

Source: compiled by the author based on The Vatican has allocated 16 million euros in two years to people affected by the war in Donbas (2018), H. Brockhaus (2020), T. Kotsur (2021), The Vatican will collect medicine and food for victims of the war in Ukraine (2022), J. Shumylo (2023), L. Klischuk (2024), T. Kotsur (2025), Vatican delivers generators, medicine to freezing Ukraine (2026)

Systematisation of the data presented in the table has revealed a pattern in the transformation of the Holy See's media image, wherein humanitarian discourse serves as an instrument for legitimising its international subjectivity. In the initial stages of the conflict, media representation was predicated on the principles of financial accountability and large-scale donations, aimed at establishing the Vatican as a relevant global donor. However, with the onset of full-scale escalation in 2022, a shift in communication strategy can be observed: media outlets moved away from statistics and metaphysical categories of moral support towards the coverage of concrete infrastructural solutions. This phenomenon may be defined as the rationalisation, or desacralisation, of aid, where religious narratives cede ground to descriptions of technical and technological partnership, such as the supply of energy or medical equipment (Zavadilová, 2023).

The logic of the media's message adaptation attests to the Holy See's flexibility in responding to the dynamics of the Russo-Ukrainian war. Whereas during the period of frontline stabilisation the emphasis was placed on long-term statistical indicators of impact factor to attract transnational benefactors, at moments of critical threat to energy and medical security, media focused on the operational efficiency of logistical chains (The Vatican will..., 2022). The strategy of personalised solidarity, implemented through the coverage of the Papal Almoner's missions directly in high-security-risk zones, warrants separate consideration. Notably, Cardinal Krajewski's visits to Ukraine shifted the tone of aid coverage towards a more existential register (Roman Catholic Church in Ukraine, 2024). During the period of energy terror in 2025, media shifted their focus to the technological aspect of support: "Three trucks carrying 80 electricity generators and medical supplies arrived in Fastiv, providing a vital shield against the winter darkness" (Vatican delivers generators..., 2026). In conclusion, the media representation of the Vatican's humanitarian vector constructs a vision of long-term institutional resilience, wherein the Holy See emerges not merely as a benefactor, but as a guarantor of the

regeneration of Ukraine's social infrastructure in the perspective of post-war recovery.

The spiritual and socio-psychological dimension: Pastoral care and media influence

The spiritual and socio-psychological dimension of the Holy See's pastoral care is characterised by a shift in emphasis towards the concept of personalistic accompaniment in crisis states (Zavadilová, 2023). Within this paradigm, religious institutions are transformed into functional hubs of psychological rehabilitation and the stabilisation of national identity during crisis states of society. The practical implementation of this approach in Ukraine can be traced through the reformatting of the parish network activities of the Ukrainian Greek Catholic and Roman Catholic Churches (Szalajko, 2026). Monastic and church complexes integrate spiritual care with the provision of humanitarian aid and shelter, performing the functions of civil defence centres. Attention is accorded to digital evangelisation as a tool for communication with youth audiences. The Vatican's use of specialised platforms, particularly in the context of the Jubilee of Digital Missionaries and Catholic Influencers (n.d.) initiatives, is aimed at creating networks of social solidarity that function as an alternative to algorithmic models of digital consumption. Such a strategy seeks to minimise the risks of youth digital isolation and to counteract destructive informational influences. Ethical discourse is shaped through the rhetoric of a "suffering people", where systematic calls for prayerful support for Ukraine facilitate the interpretation of military aggression as a violation of fundamental sacred norms (Zavadilová, 2023). The Holy See's media strategy, implemented through Vatican News resources, accentuates the moral and ethical aspects of the Church's presence in the information space, thereby upholding the Apostolic See's status as a subject of global humanitarian communication even amidst political multipolarity. Analysis of the media representation of the spiritual vector has made it possible to identify the specifics of forming solidarity networks through the rhetoric of the "suffering people" and the pastoral call (Table 2).

Table 2. Media representation of spiritual-motivational support and solidarity (2016-2025)

Period/stage of war	Media resource (type)	Object of aid/event	Dominant media frame	Contextual adaptation of the message
2016 (Initial phase of the conflict)	Novynarnia (Secular, Ukrainian)	Christmas message "Urbi et Orbi"	Global Inclusion	Integration of the Ukrainian question into the global religious agenda to prevent the informational isolation of the conflict
2022 (Refugee crisis)	Barron's (International, business)	Call for the protection of migrants (Malta case)	Universal Hospitality	Extrapolation of biblical narratives onto the contemporary crisis of displaced persons from Ukraine to stimulate European solidarity
2023 (Holodomor Anniversary)	RFE/RL (International, secular)	Reference to "martyred Ukraine" and the Holodomor	Historical Continuity of Suffering	Drawing cognitive parallels between past genocides and contemporary aggression to strengthen the moral legitimacy of Ukraine's defence

Table 2, Continued

Period/stage of war	Media resource (type)	Object of aid/event	Dominant media frame	Contextual adaptation of the message
2024 (Energy terror / Winter)	Unity.gov.ua (Governmental, Ukrainian)	Call for prayer and aid for children	Seasonal Solidarity	Adaptation of a pastoral address to current security challenges (winter period) with the aim of mobilising civilian support
2024 (Neutrality discourse)	DAGENS.com (Secular, international)	Advocacy of neutrality and aid	Ethical Pragmatism	Theoretical substantiation of the interrelation between the Holy See's neutral status and the effectiveness of its humanitarian access
2025 (War)	Vatican News (Official, Vatican)	Solidarity mission of Pope Leo	Personalistic Accompaniment	Transmission of the concept of the Apostolic See's uninterrupted spiritual presence as a stable moral compass amidst crisis

Source: compiled by the author based on The Pope mentioned Ukraine in his Christmas message and sent 6 million euros for Donbas (2016), C. Melki & A. Ritchie (2022), Radio Free Europe (2023), K. Frich (2024), L. Klischuk (2024), B. Capelli (2025)

An analysis of the data presented in the table has revealed a consistent pattern in the formation of the Holy See's spiritual-motivational narrative, wherein religious meanings are adapted to the shifting security context. During the initial stages, media representation focused on the symbolic inclusion of the Ukrainian question within the global agenda; however, as the Russo-Ukrainian war progressed, a transition toward more complex ethical constructs can be observed. Specifically, the use of historical analogy allows the media to interpret the events of the war through the prism of collective trauma. Recalling the anniversary of the Holodomor, the pontiff defined the current aggression as a prolonged collective trauma, emphasising the historical continuity of suffering: "This open wound, instead of healing, is made even more painful by the atrocities of war, which are causing this martyred people to suffer once again" (Radio Free Europe, 2023). Such rhetoric shifts the discourse from the geopolitical plane to the category of defending fundamental sacral norms. One aspect of media adaptation has been the extrapolation of universal Christian values onto concrete humanitarian challenges. Amidst the migration crisis, the media broadcasts call for solidarity rooted in biblical narratives, thereby stimulating the formation of a culture of hospitality within the European space. The pontiff stressed that assisting displaced persons constitutes a test of humanity: "Assisting those fleeing from conflicts and poverty should not be seen as a burden, but as an opportunity to show human solidarity" (Melki & Ritchie, 2022). This attests to the Vatican's use of "soft power" to coordinate the international community's ethical response to the consequences of war, where religious authority acts as a stabilising factor. The logic of media coverage of pastoral care also demonstrates a pragmatism of appeals during critical periods, particularly during the energy terror (in this context, the winter of 2024). The media adapts addresses to the faithful, focusing on the protection of vulnerable population groups: "Pope Francis recalled the Ukrainian children and adolescents who are suffering without heating amidst a very severe winter during this period"

(Klischuk, 2024). In conclusion, the spiritual vector in the media legitimises the concept of "positive neutrality", presenting the Vatican as an entity that provides uninterrupted personalist accompaniment to the afflicted. Thus, the Holy See has established a system of humanitarian communication that is efficient regardless of the state of the world politics.

An analysis of the activities of the Holy See in the digital media space demonstrated the ability of the Holy See to adapt to the conditions of the digital ecosystem. The efforts of Pope Francis to establish a presence on social media platforms such as X and Instagram garnered the attention of a multi-million audience (Crawl, 2018). Following his successor, Leo XIV, organised the "Jubilee of Digital Missionaries" in 2025 (Collins, 2025). During this event, the Holy See declared a shift away from the consumption of digital media towards the creation of "networks of solidarity" that would act as an alternative to the content feeds that social media platforms offer to their users. Despite the benefits of such a change, as revealed through the analysis of the media space, the efforts of the Holy See are challenged by the informational war. The messages of the Holy See can be exploited by the use of echo chambers and algorithmic filters that determine the information that individuals view on social media platforms (Jureńczyk *et al.*, 2025).

An analysis of specific cases within the digital communication of the Holy See allowed the translation of theoretical conclusions concerning the practice of the digital pontificate into verified data. The publication of the text *Reflection by Pope Leo XIV* (2026) on Instagram received 29.4 thousand likes and enabled the Holy See to cross linguistic barriers between its various continents (as of March 2026). The comments to the text were published in over 900 comments in Italian, Spanish, and English, indicating the presence of a global network of supporters of the Holy See. However, due to the nature of Instagram's communication platform, the message was reduced to a visual "lifestyle" message of the Holy See, rather than a message directed towards the theological primary source of the Catholic church.

Consequently, the message was vulnerable to being perceived in a superficial manner by the audiences on the social media platform.

Conversely, the publication of the message on X social media platform indicates one strategy of the Holy See to combat the dissemination of fake news (Pope Leo XIV appeals..., 2026). The social media channel garnered a total of 1 million views for the message, with 4 thousand shares of the message and 19 thousand likes to the message as of March 2026. The publication of the message in the form of a quote from the popes enabled the Holy See to fill the information vacuum within the conflict zones without the dissemination of fake news. Thus, the verification of the messages of the Holy See continues to be essential for the organisation in order to avoid the use of their communication channels as instruments of information-psychological influence.

The Vatican's diplomatic efforts – the strategy of “positive neutrality” and mediation

The diplomacy of the Holy See is based on the principles of so-called “positive neutrality”, which implies the active involvement of the Holy See in solving the humanitarian aspects of a conflict (Storoška, 2025). One of the instruments of the Holy See in achieving such a goal was the mission of Cardinal Matteo Zuppi (Zarembo, 2023). The cardinal performed official visits to

Kyiv, Washington, and Beijing. During his mission, he successfully facilitated the repatriation of children that were deported from Ukraine and also managed the exchange of prisoners of war. Thus, the Holy See experienced a transition towards the performance of specialised tasks within the legal and humanitarian field. A new dimension in the role of the mediator emerged in November 2025, when Ukraine approached the Holy See with a proposal to establish the Vatican as a platform for negotiating the release of the country's civilian hostages (Winfield & Novikov, 2025). Such an appeal by Ukraine indicates the Holy See's recognised capabilities regarding humanitarian issues. A new stage in the Vatican's foreign policy, associated with the pontificate of Leo XIV (from 08.05.2025), is the move towards institutional realism (Storoška, 2025). The cardinal has dedicated his efforts towards both the defence of the existing international security architecture, as well as the strengthening of the rhetoric concerning the inadmissibility of the use of nuclear weaponry by any of the actors involved in the war between Ukraine and Russia. In particular, the Holy See voiced support for the extension and modernisation of strategic offensive arms agreements, which positions the Vatican as an active defender of the global legal order and a proponent of legal deterrence in conditions of multipolarity. A detailed breakdown by stages of diplomatic activity and corresponding media frames is presented in Table 3.

Table 3. Representation of the Holy See's diplomatic efforts in media discourse (2023-2025)

Period/mission	Media resource (type)	Diplomatic act/event	Dominant media frame	Contextual adaptation of the message
05.2023 (Mission Initiation)	Deutsche Welle (International, secular)	Appointment of Cardinal-Envoy for a ceasefire	Peacemaking Subjectivity	Emphasis on the Vatican's readiness for direct intervention in the conflict as an alternative diplomatic force
06.2023 (Shuttle Diplomacy)	Yevropeiska Pravda (Secular, Ukrainian)	Papal Envoy's visit to Moscow	Direct Mediation	Coverage of attempts to establish a direct dialogue with the RF, which media-wise substantiates the importance of maintaining neutral channels of communication
07.2023 (Global Track)	RBC-Ukraine (Secular, Ukrainian)	Discussion of the war in Washington via the envoy	Transatlantic Coordination	Shaping the Vatican's image as a mediator synchronising humanitarian effort with the world's leading powers
03.2024 (Ethical Advocacy)	Ukrinform (State-owned, Ukrainian)	Appeal for a just and lasting peace	Legal Idealism	Representation of the Vatican as a moral arbiter insisting on a diplomatic end to the war based on the principles of justice
04.2025 (Institutional Dialogue)	Reuters (International, business)	Vatican's negotiations with S. Lavrov	Diplomatic Pragmatism	Affirming the Holy See's ability to sustain communication amidst profound isolation between the conflicting parties
05.2025 (Renaissance Realism)	Washington Post (International, USA)	Mediation prospects under the pontificate of Leo XIV	Geopolitical Realism	Geopolitical Realism Constructing the image of a renewed Vatican as a key node in the future security architecture and negotiations
2025 (Political Rapprochement)	Synod of Bishops of the Ukrainian Greek Catholic Church (Religious, Ukrainian)	Assurance of support for the “Peace Formula”	Value-Based Solidarity	Official affirmation of support for the Ukrainian vision of peace, harmonising religious ethics with Ukraine's national interests

Source: compiled by the author based on Pope's envoy to visit Moscow on peace mission (2023), Ukrinform (2023), V. Saakov (2023), D. Braslavsky (2023), Ukrinform (2024), J. McElwee (2025), I. Koshiw & R. Dixon (2025)

An analysis of the media representation of the Holy See's diplomatic activity has revealed patterns of transformation in the Vatican's foreign policy discourse, moving from declarative peace-making towards the concept of institutional realism. The systematisation of data in Table 3 demonstrated the evolution of media frames, which adapt to the shifting geopolitical context and the stages of the Russo-Ukrainian war. At the initial stage in 2023, media discourse focused on the initiation of Cardinal M. Zuppi's mission, where the Vatican was represented as an alternative diplomatic force. The frames of "peace-making subjectivity" and "direct mediation" in outlets such as Deutsche Welle (Saakov, 2023) and Yevropeiska Pravda (Pope's envoy to visit Moscow on peace mission, 2023) were aimed at legitimising the Holy See's right to maintain neutral channels of communication even under conditions of the aggressor's profound isolation. Subsequently, in the 2024-2025 period, a rationalisation of the diplomatic narrative is observed. Instead of general appeals for a ceasefire, the media began to accentuate diplomatic pragmatism and the specific outcomes of mediation. One aspect of the analysis involved the media's affirmation of the Vatican's functional role as a stable communication channel in a polarised world. Reuters highlighted this transition, noting: "The Holy See continues to discuss humanitarian issues and the return of prisoners, fulfilling its role as a persistent mediator in a polarised world" (McElwee, 2025). This confirmed that the media project the image of the Vatican not merely as a religious centre, but as a pragmatic mediator whose neutrality is a necessary prerequisite for resolving complex humanitarian issues, particularly the repatriation of deported children and prisoner-of-war exchanges.

Concurrently, the appearance of the geopolitical realism paradigm in the mass media published by international media also contributed to the prospects for mediation that were provided by the pontificate of Leo XIV. The Washington Post, for instance, wrote: "Could Pope Leo mediate between Russia and Ukraine? Many analysts see his pragmatic approach as a potential bridge for a future settlement" (Koshiw & Dixon, 2025). Here, the media began to envision the Vatican as a potential mediator in the future security architecture between the conflicting countries of Eastern Europe. Furthermore, the support that the Vatican provided for the Ukrainian "peace formula" began to take shape in the media as well. The Synod of Bishops of the Ukrainian Greek Catholic Church indicated that the fundamental aspirations of the Ukrainian people as expressed within the "peace formula" were in agreement with the media's conception of the Vatican's alignment with the country and its interests: "The Vatican assured the Catholic Church of Ukraine that the 'peace formula' meets the aspirations of the Ukrainian people, especially regarding its humanitarian aspects" (Ukrinform, 2023). Thus, the media representation of the Vatican in relation to

the military conflict indicated its flexibility in relation to the conflict, and led to the legitimisation of the strategy that employed the Vatican as a unique mediator in the conflict.

The systematisation and analysis of the media representation of the activities of the Holy See enabled an overview of the development of the Vatican's image within the media between 2016 and 2025. During this time, the Vatican transformed from a philanthropic organisation to an organisation that was also invested in the security of humanity's humanitarian conflicts. The various media publications reflected the shift of the organisation's priorities from philanthropy to humanitarian security. Furthermore, another element of the development of the Vatican within the media was the changing focus of its communications to the public. During the earlier portion of the reviewed time period (2014-2021), the communications of the Vatican to the media focused upon the foundation of its practices and its promise of financial transparency. After 2021, however, the organisation began to shift its communication to the media to highlight practices such as the provision of medical equipment to Eastern Europe, the construction of energy infrastructure (such as generators) in Eastern Europe, and the repatriation of the children and prisoners of war that were deported during the war.

Consequently, the performed analysis of the media representations of the Vatican during the 2016-2026 time period indicates that the Vatican did indeed transform from a religious organisation with humanitarian aims to one that was also realistic in its understanding of its capabilities as a mediator. The Vatican began to include elements like humanitarian logistics, religious care, and even specialised mediation into its communication to the public and as a general strategy for both the fulfilment of its religious and humanitarian commitments. Overall, then, the media has contributed to the establishment of the Vatican as a unique mediator for the world's conflicts.

DISCUSSION

The results of the conducted research confirmed that the media representation of the Holy See's activities during the Russo-Ukrainian war is a complex, multi-vector system that has transformed under the influence of security and digital challenges. The present study identified the Vatican's transition from symbolic peace-making to a model of institutional realism, a notion which finds theoretical substantiation in the work of S. Góra (2025). The author argued that Pope Francis's stance is based on the paradigm of a "culture of encounter", which converts Christian values of mercy into strategic diplomatic acts. These results fully coincide with the conclusions of the present study concerning the evolution of Vatican discourse. Both studies demonstrated that over a ten-year period (2014-2024), the Holy See managed to shape a new model of religious diplomacy, whereby

calls for dialogue are not passive but serve as a tool for the active legitimisation of international subjectivity through support for the victims of aggression.

The analysis of the media environment in the present study indicated a necessary condition for the visualisation of war in order to foster global solidarity. M. Costello & D.J. West (2022) established that international cable television created an effect of direct presence, which altered the perception of the humanitarian disaster in Ukraine. This approach correlates with the findings of the present study regarding the analysis of the ethics of presence. The media documentation of the presence of papal emissaries in risk zones amplifies this effect, transforming distant compassion into active engagement on the part of the global community. The researchers noted that, despite security risks and the withdrawal of journalists from hot spots, the Vatican preserved channels of personalistic accompaniment, thereby ensuring the continuity of media attention to Ukraine.

In examining the practical dimension of humanitarian aid, the efficacy of synergies between religious and volunteer structures was identified, which aligns with the findings of B.B. Brücher (2022). The author demonstrated that scholarly and veterans' organisations (such as the International Consortium of Research Excellence (INCORE) and the Theodor Billroth Academy (TBA)) are capable of ensuring the targeted delivery of medical assistance within the shortest possible time-frame by working directly with the Territorial Defence Forces of Ukraine. The results of the present study are contiguous with this position regarding the importance of direct logistics – the Vatican missions, analogously to the volunteer operations of European veterans, became the basis for the formation of the image of an operational logistics hub. Furthermore, the scholar's findings regarding support for Ukrainian medical students in Germany corroborated the conclusion that academic and religious support function as autonomous factors of international stability, independent of the political conjuncture. Particular attention within the context of analysing mechanisms of social stabilisation is merited by the work of S. Bylina (2022), which investigates the metaphysical instruments for the consolidation of religious communities in crisis conditions within media discourse. The researcher focused on the "Act of Consecration to the Immaculate Heart of Mary" as an instrument for consolidating the faithful and providing moral support to Ukrainian families. The findings of the aforementioned study are consonant with the conclusions of the present study concerning the analysis of the transformation of purely religious rituals into media symbols of solidarity. Within the framework of the present study, the conclusion was delineated that, in conditions of military confrontation, the pastoral rhetoric of the Pontiff becomes an effective mechanism for the desacralisation of pain and its transformation into a shared global responsibility, thereby integrating the

ethical imperatives of Christianity into the contemporary system of social communications.

The results of the analysis of diplomatic efficacy in the present study indicated the existence of objective limits to the soft power of religious institutions. R. Korniawan (2024) identifies that although religious approaches to conflict resolution were successful in various regions of the world, the Russo-Ukrainian war presented a significant challenge ("brain-drain") for the Vatican. This finding is in line with the conclusions of this research study regarding the need for synergy between the Vatican and the remainder of the global community. Both studies indicate the inability of the religious approaches to resolve conflicts between the great powers of the world. As such, the Vatican's use of media to propagate their message regarding the war was replaced with shuttle diplomacy to address the great powers involved. Furthermore, the hierarchisation of media coverage of the conflicts within the world correlates to the findings of E.V. Rodriguez (2024). E.V. Rodriguez documented the disproportionate media attention given to the conflicts in Ukraine and Yemen, indicating a double standard in the media according to the proximity of the conflict to the great powers of the world. Similar to the findings of the Vatican and its desire to avoid the perception of bias in its communications despite the racial and religious refugee crisis documented by S. Altam & G. DKokane (2023), the findings of both studies indicate the need for the Vatican to continually assess its communication methods to avoid accusations of bias regarding the conflicts within the world. Furthermore, the role of the news media in creating the consciousness of the public regarding the conflicts within the world indicates the importance of the findings of Q. Hao (2023). Q. Hao documented the importance of fairness and impartiality of the news media in the reporting of the crisis situations that unfolded around the world for the public and the great powers. The scholar's presented findings are fully aligned with the present study in the context that, during periods of hybrid threats, the integrity of correspondents serves as a safeguard against disinformation. The present study indicated that the Vatican, through its own channels (Vatican News), seeks to establish a standard of verified information, thereby enabling the neutralisation of manipulative narratives that emerge in commercial media resources.

The results of the analysis of linguistic strategies in the present study attested to the complexity of constructing the media image of war. J. Pawliszko (2025) demonstrated that the use of metaphors ("game", "path", "economy") and evaluative lexis in outlets such as The New York Times and The Guardian directly models the ideological perception of the war. The findings of the analysed study are contiguous with the present one regarding the influence of the socio-political context on media framing. Specifically, it was identified that the media representation of the Vatican also becomes an

object of linguistic framing, where the Pontiff's peace initiatives may be metaphorically described depending on the ideological stance of the media resource. Juxtaposing the data obtained in the present study with the work of J.M. Moreno-Mercado & J. García-Marín (2020) allowed for the identification of the dominance of geostrategic interests over journalistic standards in Iranian state media (HispanTV). The authors demonstrated that framing in media constitutes an instrument for legitimising the ambitions of the countries of origin, thereby creating fundamentally different informational worldviews. These conclusions are consonant with the results of the present study, insofar as the religious content of the Vatican may be subjected to deliberate instrumentalisation (as traced in HispanTV).

The analysis of the transformation of media ecology in the present study indicated the emergence of new digital practices that have altered the landscape of war journalism. F. Wilson *et al.* (2023) emphasised the importance of Open-Source Intelligence (OSINT) and the documentation of war on social media, which has shifted the balance between official institutions and civic actors. The findings of the aforementioned study are consonant with the present one, as a complex interaction was identified between the Vatican's digital platforms and networked communities. The Vatican successfully integrated elements of digital performativity into its pastoral activity, enabling it to become an active agent shaping the perception of the geopolitical conflict through the prism of the personal documentation of civilian suffering. The examination of mediation issues in the present study attested to the existence of a contradiction in media discourse, as noted in the work of C. Escudero (2024). Using the example of Spanish media, the researcher established that 85% of materials employ the lexicon of "war journalism", which directly contradicts the principles of mediation. The scholar's research substantiated the need for the implementation of "culture of peace" training in newsrooms to correct journalistic practices. These findings are entirely consistent with the present study, particularly in the context that media coverage of Vatican mediation introduces confusion due to the binary simplification of the conflict.

Consequently, the convergence of technological innovations and religious ethics is forming a new type of media strategy – a "digital pontificate of solidarity". A critical juxtaposition of the data obtained with international experience demonstrated that the viability of the Holy See as a global arbiter depends on a balance between operational humanitarian logistics, the defence of the autonomy of science and culture, and the professional verification of its own messages in the digital environment. The identified synergy between institutional strategies and the actual needs of the affected population creates the conditions for overcoming barriers to information accessibility and affirming the principles of a just peace.

CONCLUSIONS

The findings of the conducted research made it possible to conclude that the representation of activities of the Holy See in the framework of the Russo-Ukrainian war experienced a fundamental paradigmatic transformation. Thus, within the analysis of the humanitarian vector of the Holy See's activities, it was established that the image of the Vatican changed from that of a traditional philanthropic organisation to an organisation that contributed to the humanitarian security of the conflicts. The analysis of the media discourse on the activities of the Vatican revealed the shift from the concept of "financial transparency" in the phase of the war between 2016 and 2018 to the concepts of "infrastructural partnership" and the "ethics of presence" in the period between 2022 and 2026. It was determined that the strategy of positive neutrality enabled the Holy See to function as an operational logistics hub, where religious dogmatics are integrated into concrete technical and technological solutions – from the supply of medical equipment to overcoming the energy crisis. Thus, humanitarian activity became the primary instrument for legitimising the Vatican's international agency in the context of a global crisis of trust.

The analysis of the spiritual and socio-psychological dimensions attested to the complex adaptation of pastoral care to the conditions of the digital ecosystem. It was revealed that the spiritual vector in the media legitimises the concept of "positive neutrality" through the rhetoric of a "suffering people", whereby military aggression is interpreted as a violation of fundamental sacred norms. Drawing media parallels between contemporary events and historical tragedies (notably the Holodomor) allowed for the strengthening of the moral legitimacy of Ukraine's defence and shifted the discourse from a purely geopolitical plane into the category of protecting human dignity. It was identified that the Holy See's digital presence on platforms such as X and Instagram contributed to the formation of transnational solidarity networks; however, it simultaneously exposed the vulnerability of religious content to algorithmic decontextualisation. The Vatican acts as the organiser of a global solidarity network that counteracts hate speech in the digital space. Concurrently, the documented change in the media consumption patterns of the Ukrainian audience confirmed the necessity of verifying the Pontiff's official messages in order to neutralise destructive informational and psychological influences within the "echo chambers" of social media.

Within the investigation of the diplomatic vector, the conceptual transition of Vatican foreign policy from declarative peace-making to "institutional realism" was substantiated. It was established that the reorientation towards highly specialised mediation (the repatriation of deported children, prisoner-of-war exchanges) and the official endorsement of the Ukrainian "peace formula" harmonised religious ethics with the demands

of restoring the international legal order. The development of the media adaptation of the Vatican under the pontificate of Leo XIV contributed to the consolidation of the vision of the future architecture of security in the form of legal outcomes.

The limitations of this study were conditioned by the high dynamics of the military conflict, the rapid development of digital technologies, as well as a lack of access to the non-public protocols of the Vatican. Such limitations introduce certain barriers to the unification of the media in the perspective of the long-term development of the Vatican's communication with the digital world. Further scholarly inquiry should be structured along three key directions: the development of analytical tools to counter the instrumentalisation of religious

discourse under conditions of the post-truth era; the investigation of the impact of generative artificial intelligence on the transformation of sacred communication and the mediatisation of religion; and the analysis of the role of religious diplomacy in the processes of post-war reconstruction of Ukraine's social infrastructure.

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REFERENCES

- [1] Altam, S., & DKokane, G. (2023). White privilege in times of war: Media narratives of the conflict in Ukraine. *South Asian Journal of Social Sciences and Humanities*, 4(2), 151-164. doi: 10.48165/sajssh.2023.4209.
- [2] Braslavsky, D. (2023). *The Pope's envoy went to the USA to discuss the war in Ukraine*. Retrieved from <https://www.rbc.ua/rus/news/poslannik-papi-rimskogo-virushiv-ssha-obgovorennya-1689613938.html>.
- [3] Brockhaus, H. (2020). *One million people helped in Ukraine by Pope Francis' charitable project*. Retrieved from <https://surl.li/hjwjwv>.
- [4] Brücher, B.B. (2022). War against Ukraine: Humanitarian aid and how much morality can science bear. *4open*, 5, article number E3. doi: 10.1051/fopen/2022012.
- [5] Bylina, S. (2022). Actions of pope Francis in 2022 against the war in Ukraine. *Humanitarian Studies History and Pedagogy*, 1(2), 60-70. doi: 10.35774/gsip2022.02.060.
- [6] Capelli, B. (2025). *Pope Leo continues Vatican's solidarity with Ukraine*. Retrieved from <https://www.vaticannews.va/en/pope/news/2025-06/aid-solidarity-krajewski-papal-almoner-ukraine.html>.
- [7] Collins, C. (2025). *Pope Leo calls on "Digital Missionaries" to have real friendships, and not focus on "followers"*. Retrieved from <https://surl.li/coodmy>.
- [8] Costello, M., & West, D.J. (2022). Concerning the humanitarian crises in Ukraine. *Clinical Social Work Journal*, 13(2), 7-10. doi: 10.22359/cswj_13_2_01.
- [9] Crowl, J. (2018). *How the Vatican's social media strategy became a surprise success story*. Retrieved from <https://surl.li/dlaftl>.
- [10] Escudero, C. (2024). Media coverage of mediation: Before and during the Russian-Ukrainian War. *Horizons of Policy*, 15(51), 81-98. doi: 10.35765/hp.2509.
- [11] Frich, K. (2024). *Vatican advocates neutrality and humanitarian aid in Ukrainian conflict*. Retrieved from <https://www.dagens.com/war/vatican-advocates-neutrality-and-humanitarian-aid-in-ukrainian-conflict>.
- [12] Góra, S. (2025). *Pope Francis and the Russian-Ukrainian War (2014-2023)*. Krakow: Unum Publish House. doi: 10.21906/9788376432601.
- [13] Hao, Q. (2023). Using the Russian-Ukrainian war as an example, critically analyze the impact of war-type news and how it is produced, and critically reflect on the results. *Journal of Research in Social Science and Humanities*, 2(8), 61-67. doi: 10.56397/jrssh.2023.08.08.
- [14] Jubilee of Digital Missionaries and Catholic Influencers. (n.d.). Retrieved from <https://www.digitalissmissio.org/>.
- [15] Jureńczyk, Ł., Baranowska, A., & Wałdoch, M. (2025). Instrumentalization of Pope Francis's anti-war discourse in the cognitive warfare of the Russian Federation. *Pastoral Psychology*. doi: 10.1007/s11089-025-01252-0.
- [16] Klischuk, L. (2024). *Pope calls for prayers for Ukrainians, as there will be a "difficult winter"*. Retrieved from <https://novynarnia.com/2024/11/27/papa-rymskyj-zaklykav-molytysya-za-ukrayincziv-bo-bude-vazhka-zyma/>.
- [17] Kornian, R. (2024). Perspective of the Vatican's peace diplomacy in the region dispute. *Global Political Studies Journal*, 8(1), 51-69. doi: 10.34010/gpsjournal.v8i1.12826.
- [18] Koshiw, I., & Dixon, R. (2025). *Could Pope Leo mediate between Russia and Ukraine? Trump thinks so*. Retrieved from <https://www.washingtonpost.com/world/2025/05/21/pope-leo-russia-ukraine-trump/>.
- [19] Kostiuk, O. (2024). The Vatican's position on the Russian-Ukrainian war: An analysis of Pope Francis' statements. *Multiversum. Philosophical Almanac*, 1(1(179)), 153-175. doi: 10.35423/2078-8142.2024.1.1.9.
- [20] Kotsur, T. (2025). *Helping the church in need: 25 million euros to support the church in Ukraine*. Retrieved from <https://surl.li/xcecyt>.

- [21] Kotsur, T. (2021). "Papa for Ukraine": Medical equipment for a children's hospital in Mariupol. Retrieved from <https://www.vaticannews.va/uk/world/news/2021-02/medychne-obladnannya-dlya-mariupolya.html>.
- [22] Lateran Pacts. (1929). Retrieved from <https://www.uniset.ca/nold/lateran.htm>.
- [23] Mabilie, F. (2023). The Holy See and the war in Ukraine: A look back at the failures of Papa diplomacy. *International and Strategic Review*, 131(3), 47-57. doi: 10.3917/ris.131.0047.
- [24] McElwee, J. (2025). Vatican's foreign minister discusses Ukraine with Russia's Lavrov. Retrieved from <https://www.reuters.com/world/europe/vaticans-foreign-minister-discusses-ukraine-with-russias-lavrov-2025-04-04/>.
- [25] McLarren, K. (2023). The silence of the Roman Catholic Church on the Ukraine War. *Review of Faith & International Affairs*, 22(1), 97-101. doi: 10.1080/15570274.2023.2261711.
- [26] Melki, C., & Ritchie, A. (2022). Pope evokes Malta's welcome of St Paul in migrant appeal. Retrieved from <https://www.rfi.fr/en/pope-evokes-malta-s-welcome-of-st-paul-in-migrant-appeal>.
- [27] Moreno-Mercado, J.M., & García-Marín, J. (2020). Armed conflicts and media coverage: An approach to supervised machine learning. *Convergence Journal of Social Sciences*, 27, article number 1. doi: 10.29101/crcs.v27i0.12872.
- [28] Nadтока, H., & Horpynchenko, I. (2025). Vatican's stance on the Russo-Ukrainian War: Historical background and contemporary situation. *Ukrainian Historical Journal*, 4, 5-21. doi: 10.15407/uhj2025.04.005.
- [29] Pawliszko, J. (2025). Framing the Russian-Ukrainian conflict: The role of metaphor, nominalization, and appraisal in shaping media narratives. *GEMA Online Journal of Language Studies*, 25(1), 156-175. doi: 10.17576/gema-2025-2501-09.
- [30] Pope Leo XIV appeals for peace in Gaza and Ukraine, and between India and Pakistan. (2026). Retrieved from <https://x.com/VaticanNews/status/1921522147744166149>.
- [31] Pope's envoy to visit Moscow on peace mission. (2023). Retrieved from <https://surl.li/sqotza>.
- [32] Radio Free Europe. (2023). Pope Francis marks anniversary of "genocide" famine in Ukraine. Retrieved from <https://www.rferl.org/a/tormented-ukraine-holodomor-pope-francis/32700468.html>.
- [33] Reflection from Pope Leo XIV. (2026). Retrieved from <https://www.instagram.com/reel/DW1aGKhjNlc/>.
- [34] Rodriguez, E.V. (2024). Ukraine and Yemen: A comparative analysis of media treatment. *Mediaciones*, 20(32), 66-77. doi: 10.26620/uniminuto.mediaciones.20.32.2024.66-77.
- [35] Roman Catholic Church in Ukraine. (2024). Cardinal Krajewski on his eighth visit to Ukraine: "I experienced the most powerful retreat in my life". Retrieved from <https://surl.li/dxtxrw>.
- [36] Roman, N., Young, A., & Perkins, S.C. (2020). Displaced and invisible: Ukrainian refugee crisis coverage in the US, UK, Ukrainian, and Russian newspapers. *Negotiation and Conflict Management Research*. doi: 10.1111/ncmr.12193.
- [37] Saakov, V. (2023). Pope to send cardinal to help achieve ceasefire in Ukraine. Retrieved from <https://www.dw.com/uk/papa-rimskij-napravit-kardinala-dla-dosagnenna-peremira-v-ukraini/a-65687330>.
- [38] Shumylo, J. (2023). Caritas internationalis: Effective aid during a year of war. Retrieved from <https://www.vaticannews.va/uk/church/news/2023-02/caritas-i-rik-povnomasshtabnoji-vijny-v-ukrajini.html>.
- [39] Smytsnyuk, P. (2023b). The Catholic response to the Russia-Ukraine war. *Analecta of the UCU Theology*, 10, 193-224. doi: 10.47632/2075-4817-2023-10-193-224.
- [40] Smytsnyuk, P. (2023a). Pope Francis's humanitarian diplomacy for Ukraine: Between peacemaking and geopolitics. Retrieved from <https://talkabout.iclrs.org/2023/08/18/pope-franciss-humanitarian-diplomacy/>.
- [41] Storoška, M. (2025). Pope Leo XIV and the Holy See in the context of the war in Ukraine. In *International scientific-practical conference "The Russia-Ukraine war and the international community's reaction: Political, legal, and economic dimensions"* (pp. 219-234). Riga: Baltija Publishing.
- [42] Synchak, B., Ovchar, M., Shevchuk, V., & Tsurina, E. (2023). Media coverage of the peacekeeping activities of Pope Francis' support of Ukraine in the Russian-Ukrainian Full-Scale War. *Occasional Papers on Religion in Eastern Europe*, 43(1), 60-76. doi: 10.55221/2693-2148.2401.
- [43] Szalajko, K. (2026). Shevchuk: Faith endures as Ukraine's source of hope as full-scale war marks 4th anniversary. Retrieved from <https://surl.li/qfkabt>.
- [44] The Pope mentioned Ukraine in his Christmas message and sent 6 million euros for Donbas. (2016). Retrieved from <https://surl.li/nmypoct>.
- [45] The Vatican has allocated 16 million euros in two years to people affected by the war in Donbas. (2018). Retrieved from <https://surl.li/clynon>.
- [46] The Vatican will collect medicine and food for victims of the war in Ukraine. (2022). Retrieved from <https://www.vaticannews.va/uk/vatican-city/news/2022-03/zbirka-u-vatykani-dlya-dopomogy-ukrajini.html>.
- [47] Thureau, M. (2024). Just war – just peace? Christian voices on the war in Ukraine. *Theology and Morality*, 19(3(37)), 89-108. doi: 10.14746/tim.2024.37.3.8.

- [48] Turenko, V. (2023). Social mission of Orthodox churches in the conditions of 2022 Russian invasion of Ukraine. *Occasional Papers on Religion in Eastern Europe*, 43(2), article number 3. doi: 10.55221/2693-2148.2405.
- [49] Ukrinform. (2023). *The Vatican assured that it supports the Ukrainian Peace Formula*. Retrieved from <https://www.ukrinform.ua/rubric-politics/3780405-u-vatikani-zapevnili-so-pidtrimuut-ukrainsku-formulu-miru.html>.
- [50] Ukrinform. (2024). *Pope calls for diplomatic end to war in Ukraine*. Retrieved from <https://www.ukrinform.ua/rubric-society/3832009-papa-rimskij-zaklikav-do-diplomaticnogo-zaversenna-vijni-v-ukraini.html>.
- [51] Vatican: Three trucks carrying 80 electricity generators, medical supplies arrived in Fastiv, Kyiv. (2025). Retrieved from <https://english.nv.ua/nation/vatican-three-trucks-carrying-80-electricity-generators-medical-supplies-arrived-in-fastiv-kyiv-50582499.html>.
- [52] Wilson, F., Moses, J.M., & Umar, B.N. (2023). Media framing of the Russia-Ukraine War by Tass and Ukrinform during the first month of the invasion. *Current Trends in Mass Communication*, 2(1), 56-66. doi: 10.33140/ctmc.02.01.04.
- [53] Winfield, N., & Novikov, I. (2025). *Ukraine asks Vatican to formalize mediation role for return of citizens taken by Russia*. Retrieved from <https://surl.lu/dtknde>.
- [54] Zarembo, N. (2023). *Vatican's last attempt: Cardinal Matteo Zuppi leaves for Beijing for talks on Ukraine*. Retrieved from <https://surl.li/gackop>.
- [55] Zavadilová, T. (2023). Vatican's media strategy on war in Ukraine. *Culture Media Theology*, 56, 13-24. doi: 10.21697/2023.56.02.

Висвітлення гуманітарної допомоги Святого Престолу для України в період російсько-української війни у ЗМІ

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Аспірант

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Анотація. Метою дослідження було здійснити аналіз медійної репрезентації гуманітарного, духовного та дипломатичного дискурсів Святого Престолу в контексті російсько-української війни. Методологія роботи базувалася на синергії теоретичного аналізу міжнародно-правового статусу Ватикану, методу цільової релевантної вибірки та фрейм-аналізу масиву публікацій провідних світових та вітчизняних медіаресурсів (2016-2026), а також структурно-функціонального аналізу цифрової присутності Понтифікату в умовах інформаційного протистояння. У межах дослідження встановлено, що медійна репрезентація діяльності Святого Престолу зазнала докорінної парадигмальної трансформації, еволюціонувавши від традиційної філантропії до моделі інституційного реалізму та прагматичної гуманітарної безпеки. Зафіксовано послідовний перехід від абстрактних наративів (універсальної солідарності) до конкретних медійних конструкторів (інфраструктурного партнерства та етики присутності), що дозволило Ватикану функціонувати як оперативний логістичний вузол у подоланні енергетичних та медичних криз в Україні. Виявлено, що цифрова екосистема Понтифікату сприяла формуванню транснаціональних мереж солідарності, проте водночас викрила вразливість релігійного контенту до алгоритмічної деконтекстуалізації та інструменталізації в межах інформаційних воєн. Доведено, що стратегія позитивної нейтральності легітимізується у медіа через вузькоспеціалізовану медіацію (репатріація дітей, обмін полоненими), що гармонізує релігійну етику з вимогами відновлення міжнародного правопорядку та підтримкою української формули миру. Висновки підтвердили, що функціонування Ватикану як глобального морального арбітра в умовах багатополарності залежить від здатності конвертувати духовний авторитет у верифіковані інфраструктурні результати. Практичне значення результатів дослідження полягає у можливості їх використання фахівцями з міжнародних відносин, релігієзнавцями та медіааналітиками для розробки стратегій нейтралізації деструктивних інформаційних впливів та оптимізації комунікації між релігійними інституціями і світським суспільством у кризові періоди

Ключові слова: позитивна нейтральність; медіаресурс; соціальна солідарність; інституційний реалізм; цифрова екосистема; медіація

**Promotion of mental hygiene practices among educational participants
in the context of environmental and epidemic threats: A gender analysis****Yuliia Hundertailo***

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Abstract. The relevance of the study is conditioned by the growing number of stressful factors in the contemporary educational environment, in particular, environmental, epidemic, and military threats that negatively affect the psychological well-being of participants in the educational process. Under these conditions, the spread of mental hygiene practices as a means of maintaining mental health and developing the ability to self-regulate becomes particularly important. The purpose of the study was to identify gender features of mental hygiene practices (on the example of mindfulness) among participants in the educational process in the context of environmental and epidemic threats and substantiate the areas of gender-sensitive promotion. The methodological basis of the study was the integration of a gender-based and systematic approach and the concept of mindfulness. The theoretical basis was the author's model of mental hygiene practices, which includes basic practices (physical and mental) and derivative practices (communicative, informational, recreational). An empirical study (on the example of mindfulness practices) was conducted using the "Five-Factor Mindfulness Questionnaire". The study involved 502 respondents who are currently enrolled in higher education, the majority of whom are studying for a bachelor's degree, master's students, and postgraduate students. Representatives of both gender groups were dominated by the medium level of development of mindfulness components (in the range of 60-70%). Statistically significant gender differences were found on the "Observation" and "Conscious action" scales: women showed higher levels of sensory and emotional awareness, while men showed higher levels of conscious activity. No significant differences were recorded on other scales. The obtained data indicate the influence of socio-cultural factors on the development of awareness components. The practical significance of the study lies in the possibility of using its results by psychologists, teachers, and the administration of educational institutions to develop gender-sensitive programmes to support mental health, prevent stress, and introduce mindfulness practices in the system of psychological support for participants in the educational process in crisis and emergency situations

Keywords: mental well-being; psychological self-regulation practices; mindfulness; gender differences; educational environment

INTRODUCTION

Education operates in the face of an increasing number of stressful factors, among which environmental, epidemic, and military threats occupy a special place. These factors significantly affect the psychological well-being of participants in the educational process, increasing the level of anxiety and emotional exhaustion. In this regard, there is a problem of developing

a system for maintaining mental health in the educational environment. Psychological readiness of participants in the educational process to counteract environmental and epidemiological threats to human health includes specific skills of the individual to worry about their psychological health and skills of activity in crisis situations. An individual's ability to cope with

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environmental and epidemic threats lies in the realm of personal resilience, which is underpinned by a clear structure to one's daily routine – a phenomenon discussed by V. Frankl (2020). Due to constructive habits, a person remains in a stable emotional state, which significantly enhances their effectiveness in challenging situations. One of these effective routine actions is mental hygiene practices, in particular mindfulness. These practices are widely used in educational institutions around the world, but they are not widely used in Ukraine, so their study is just beginning. The issue of gender characteristics of mental hygiene practices in the context of the educational environment also remains insufficiently investigated.

According to the World Health Organisation, mental health in the educational environment is a key component of overall well-being, and its support requires the creation of preventive strategies (World Health Organisation, 2022). The COVID-19 pandemic has become a powerful stressful factor that has significantly affected the psychological well-being of the population, including participants in the educational process. Under these conditions, interest in mental hygiene approaches as a system for preventing mental disorders and maintaining mental health has significantly increased. Y. Fu *et al.* (2024) in a systematic review and meta-analysis examined the effects of mindfulness meditation on depressive symptoms during the COVID-19 pandemic. The researchers concluded that mindfulness practices contribute to a statistically significant reduction in depression and psychological distress, especially in conditions of social isolation and uncertainty. R.L. Miller-Chagnon *et al.* (2024) conducted a randomised controlled trial among adolescents exposed to chronic stressors. The results showed that mindfulness training increases the level of instant awareness and improves emotional regulation, reducing the intensity of impulsive emotional reactions. C. Daniel *et al.* (2024) examined the relationship between mindfulness, spiritual well-being, and environmental responsibility behaviour. Researchers have found that a higher level of awareness is associated with a more responsible attitude to consumption and maintaining sustainable behavioural practices. T. Larina (2024) analysed the role of mindfulness in overcoming war-related experiences.

The researcher found that mindfulness practices help to reduce the level of anxiety, emotional stress, and help the individual to better adapt to the conditions of military stress. L. Karamushka *et al.* (2024) investigated technologies for ensuring the mental health and well-being of educational personnel in the context of war and post-war recovery. The researchers found that prolonged exposure to stress negatively affects the psychological state of teachers, and the introduction of psychological support programmes and mental hygiene practices contributes to increasing adaptability and professional effectiveness. The issue

of gender-based features of mental hygiene practices (in particular, mindfulness) among participants in the educational process remains insufficiently studied, especially in the context of contemporary environmental and epidemic threats. Promotion strategies can only be effective if gender-sensitive programmes can be created based on such intelligence. The purpose of the study was to identify gender features of mental hygiene practices (mindfulness) among participants in the educational process in the context of environmental and epidemic threats and to substantiate the areas of gender-sensitive promotion.

MATERIALS AND METHODS

The theoretical basis of the study was the model of mental hygiene practices by Yu.D. Hundertaylo (2025), which considered mental hygiene practices as routine forms of self-care and nervous system training aimed at maintaining psychoemotional stability and forming healthy cognitive models of personal well-being. Stabilisation of the psychoemotional state was defined as one of the key conditions for maintaining psychological well-being in situations of excessive stress and traumatic influences. Basic mental health practices include physical activities such as healthy sleep, a balanced diet, hydrotherapy and physical exercise, and mental practices such as meditation, breathing techniques, visualisation, narrative methods, and other forms of self-regulation. The systematic application of basic practices creates the basis for the effective use of derived mental hygiene practices, in particular, informational, communicative, and recreational. Information practices are associated with a conscious choice of content and interaction with information sources, communication practices – with a conscious organisation of interaction in an online and offline environment, and recreational practices – with creative activities, gaming activities, humour, and leisure. Regular use of such practices contributes to the development of self-regulation skills, critical attitude to information, and constructive behaviour in crisis conditions, which forms the psychological readiness of participants in the educational process to counteract environmental and epidemic threats to human health. For empirical research, the department staff developed a special diagnostic complex aimed at investigating the structural components of the psychological readiness of participants in the educational process to counteract environmental and epidemic threats. The study was approved by the Research Ethics Committee of the Institute of Social and Political Psychology of the National Academy of Pedagogical Sciences of Ukraine (Minutes No. 07/25 of 28 April 2025) and was conducted between April and September 2025 as part of the research project "Social and psychological techniques for promoting the readiness of participants in the educational process to counter environmental and

epidemic threats to human health” (2025-2026) under the supervision of Prof. O. Kredentser.

The sample was generated by distributing an online survey through the Google Forms platform. Participation in the study was voluntary and anonymous; all respondents gave informed consent to use the results for scientific purposes. The total sample consisted of 502 people, including 403 women (80.3%), 91 men (18.1%), and 8 non-binary individuals (1.6%). The participants' ages ranged from 17 to 44; 406 respondents (80.9%) were under 22, whilst 96 (19.1%) were aged 22 or over. In terms of educational status, 419 people (83.5%) were studying for a bachelor's degree, 78 people (15.5%) for a master's degree, and 5 people (1%) for a postgraduate degree. The study was carried out in compliance with international ethical standards for conducting scientific research with human participation. The respondents' participation was voluntary, and prior to the start of empirical data collection, all participants provided informed consent. Confidentiality and anonymity of the information received were guaranteed at all stages of the study. The organisation of the study was also based on the principles of respect for human dignity, charity, and ensuring the rights and well-being of participants (World Medical Association, 2013). To investigate mental hygiene practices using mindfulness as an example, the “Five-Factor Mindfulness Questionnaire” (FMQ-15), adapted by Ya.Yu. Kaplunenko & V.V. Kuchyna (2023) based on the approach of J. Kabat-Zinn (1991) was used. Mindfulness in this approach is defined as a special form of invaluable conscious focus on the current moment. The questionnaire contained 15 statements and was aimed at self-assessment of the level of awareness of thoughts, emotions, and behavioural responses in everyday activities. The tool covers five subscales: observation, description, conscious action, non-judgement of internal experience, and non-reactivity. According to the results of self-assessment, the low, medium, or high level of severity of each subscale was determined.

In the context of Western culture, individual cognitive and emotional processes associated with mindfulness practices remain insufficiently integrated into the daily experience of socialisation. In particular, the

ability to become aware of bodily sensations, sensory stimuli, and internal experiences is often not supported by educational practices focused primarily on external productivity and purposeful activity. As a result, focusing on inner experiences is often interpreted as absent-mindedness or a tendency to daydream. In addition, the problem of mindfulness is limited in popular culture, which makes it difficult to form an adequate understanding of mindfulness practices in society. The results were processed using descriptive statistical methods, in particular, the analysis of mean values (M), standard deviations (SD), and frequency distributions of indicators in gender groups. To assess the statistical significance of relationships between variables, contingency table analysis was performed using Pearson's χ^2 test. All statistical calculations were performed in the Jamovi software suite version 2.3.28.

RESULTS AND DISCUSSION

In the group of women on all scales, the medium level of manifestation of awareness components prevails (Table 1). On the scale “Observation”, the majority of respondents showed a medium level (66.7%, $n = 269$), while a high level was typical for 21.6% ($n = 87$), and a low level was typical for 11.7% ($n = 47$). A similar distribution is observed on the scale “Description”, where the medium level was 68.7% ($n = 277$), high – 16.6% ($n = 67$), low – 14.6% ($n = 59$). On the scale “Conscious action”, the medium level dominated (65%, $n = 262$), but compared to other scales and groups, there was a relatively higher percentage of the low level (22.6%, $n = 91$), while the high level was 12.4% ($n = 50$). Notably, even during the student years women have a great many routine tasks to perform. For example, face care 30 years ago consisted of two actions – washing and applying cream, and now cosmetologists offer five-step routine. Therefore, such actions often become automatic. On the scale “Non-judgement of internal experience”, the medium level was also leading (60.5%, $n = 244$), with a low level of 20.8% ($n = 84$) and a high level of 18.6% ($n = 75$). On the scale “Non-reactivity”, the medium level prevailed (70.5%, $n = 284$), while the low level was 13.2% ($n = 53$), and the high level was 16.4% ($n = 66$).

Table 1. Distribution of indicators of mindfulness components in the female group

	Low		Medium		High	
	amount	percentage	amount	percentage	amount	percentage
Level of observation	47	11.7	269	66.7	87	21.6
Level of description	59	14.6	277	68.7	67	16.6
Level of conscious action	91	22.6	262	65	50	12.4
Level of non-judgement of internal experience	84	20.8	244	60.5	75	18.6
Non-reactivity	53	13.2	284	70.5	66	16.4

Source: compiled by the author

In the group of men (Table 2) on the scale “Observation”, the majority of respondents show the medium level (66.7%, $n = 60$), while a low level was typical for 21.1% ($n = 19$), and a high level was typical for 12.2% ($n = 11$). A similar distribution is observed on the scale “Description”, where the medium level was 70.3% ($n = 64$), low -15.4% ($n = 14$), high -14.3% ($n = 13$). On the scale “Conscious action”, the medium level also prevailed (68.1%, $n = 62$), while the high level was

found in 19.8% ($n = 18$) and the low level was found in 12.1% ($n = 11$). A similar trend persisted for the scale “Non-judgement of internal experience”, where the majority of respondents had an average level (70.3%, $n = 64$), and low and high levels were represented to a lesser extent – 16.5% ($n = 15$) and 13.2% ($n = 12$), respectively. On the scale “Non-reactivity”, the medium level also dominated (70.3%, $n = 64$), while the low level was 9.9% ($n = 9$), and the high level was 19.8% ($n = 18$).

Table 2. Distribution of indicators of mindfulness components in the male group

	Low		Medium		High	
	amount	percentage	amount	percentage	amount	percentage
Level of observation	19	21.1	60	66.7	11	12.2
Level of description	14	15.4	64	70.3	13	14.3
Level of conscious action	11	12.1	62	68.1	18	19.8
Level of non-judgement of internal experience	15	16.5	64	70.3	12	13.2
Non-reactivity	9	9.9	64	70.3	18	19.8

Source: compiled by the author

In general, both groups are dominated by the medium level on all scales (mainly in the range of 60-70%). Mathematical analysis revealed statistically significant gender differences on two scales: “Observation” and “Conscious action” (Table 3). In the male sample, pronounced indicators of a high level were recorded in the “Conscious actions” scale (19.8%). In general, men’s daily experiences are often saturated with dynamic changes or unpredictable circumstances that require higher concentration of attention. For example, driving is an unpredictable situation where successful control requires a clear understanding of the current situation on the road. Women had higher scores on the “Observation” scale (21.6 %). This scale described the focus on their own feelings and experiences, which may be conditioned by socio-cultural factors: in the process of raising girls, such behaviour was more often allowed and interpreted as traditionally “feminine”. For males, on the contrary, culture is more likely to offer detachment

from their own experiences in order to maintain a masculine stereotype. Based on the obtained empirical data, the areas of gender-sensitive promotion of mental hygiene practices among participants in the educational process were substantiated. In the relevant programmes, it is advisable to integrate components that emphasise the value of new life experiences in the plane of thinking and experiencing as a way to increase own resilience in the face of constant threats. For men, this will open up new facets of observation as opposed to exclusively external activity supported by Western culture. For women, it is necessary to provide elements of programmes that will help to turn routine activities into a source of diverse impressions, reducing the impact of the monotony effect (the so-called “Groundhog Day”), since most of the care work is usually performed by women. Thus, it becomes possible to significantly expand the range of daily experiences, deepen and enrich it with new shades.

Table 3. The need for digital applications for psychological assistance

Scales	χ^2	p
Observation	8.15	0.017
Conscious actions	7	0.03

Source: compiled by the author

A more detailed analysis of the frequency distributions revealed the presence of a specific inversion at the poles of the minimum and maximum values on those scales where statistically significant gender differences were found. In particular, on the “Observation” scale, the proportion of men with a low level of severity of this component was 21.1%, which was almost twice as high as the corresponding indicator among women (11.7%). But a high level of ability to fix sensory and internal stimuli was recorded in 21.6%

of women and only in 12.2% of men. The results of Pearson’s χ^2 test ($\chi^2 = 8.15$; $p = 0.017$) indicate that the differences found are not random and reflect a stable gender specificity, in which women show higher sensitivity to internal and external sensory experience. The opposite trend was observed on the scale “Conscious action” ($\chi^2 = 7.00$; $p = 0.030$). A low level of conscious action, which characterises a tendency to automatized and insufficiently controlled behaviour, was more often recorded among women – 22.6% compared to

12.1% in men. High indicators of conscious concentration on the activity performed were more typical for men: 19.8% of men and 12.4% of women showed the corresponding level. However, no statistically significant gender differences were found for a number of components of mindfulness.

Indicators on the scales “Description”, “Non-judgement of internal experience” and “Non-reactivity” were characterised by a high degree of similarity between men and women. On the “Description” scale, the medium level dominated both groups and was 68.7% for women and 70.3% for men. The proportion of respondents with a low level was almost the same – 14.6% among women and 15.4% among men, while a high level was recorded in 16.6% of women and 14.3% of men. The results obtained suggest that the ability to verbalise own emotional and bodily experiences is formed mainly under the influence of universal socialisation mechanisms, and not gender factors. Similar uniformity was observed on the “Non-reactivity” scale. The medium level of this component was almost identical in the two groups and was 70.5% in women and 70.3% in men. This indicates a relatively uniform development of the ability to allow internal experiences to arise and disappear without excessive emotional reactivity. On the scale of “Non-judgement of internal experience”, both groups had a relatively high level of internal self-criticism. A low level of this indicator, which reflects a tendency to strictly assess their own emotions and experiences, was observed in 20.8% of women and 16.5% of men, which is quite a significant indicator for students.

In contemporary research, mindfulness is increasingly considered as an effective tool for supporting the mental health of students in conditions of chronic stress, high academic workload, and social crises. Simultaneously, the results of various studies show both general trends and certain differences in the interpretation of the mechanisms of influence of mindfulness practices on psychological well-being and stress tolerance. G. Gallo *et al.* (2023) in a randomised controlled trial found that mindfulness practices help to reduce psychological distress and improve the emotional state of university students. The researchers emphasise the positive effects of regular mindfulness practice on anxiety and symptoms of emotional exhaustion. The results obtained are consistent with the results of the study, in which mindfulness is also considered as a resource for stabilising the psychoemotional state in the context of environmental, epidemic, and military threats. However, unlike the researchers, the current study focused not only on the overall psychological effect of mindfulness, but also on the gender characteristics of individual components of mindfulness.

E. Sperling *et al.* (2023) in a systematic review and meta-analysis concluded that mindfulness interventions statistically significantly reduce stress levels in

medical students. The researchers noted that the most effective programmes are those that are systematic and long-term in nature. Similarly, the results of the study indicate the importance of regular mental hygiene practices for the development of self-regulation skills. Simultaneously, this study further emphasised the role of socio-cultural factors in the development of awareness models. S. Fagioli *et al.* (2023) investigated the effectiveness of a short-term online mindfulness programme for university students. Improved emotional well-being and reduced stress symptoms were found even after a short intervention. In contrast to this approach, the study did not evaluate the effectiveness of a particular programme, but analysed the already formed components of mindfulness as individual characteristics of participants in the educational process. T. Fazia *et al.* (2023) also confirmed the effectiveness of online mindfulness interventions for medical students, showing positive effects on anxiety, stress, and overall psychological well-being. In comparison with these results, the study shows that even in the absence of special training programs, individual components of awareness can be formed at the medium level in the majority of respondents. This may indicate the influence of everyday experience and socialisation on the development of mindfulness competencies.

A.M. González-Martín *et al.* (2023), in a systematic review and meta-analysis, concluded that mindfulness has a positive effect not only on stress levels, but also on depressive symptoms, emotional exhaustion, and student academic well-being. Similarly, the results of the study confirmed the importance of mindfulness as a resource of psychological stability. However, the study also found gender differences on the “Observation” and “Conscious action” scales, which was not a central aspect of the research. P.L. Gerbarg *et al.* (2023) focused on body-breathing techniques as a means of reducing stress in medical students. The researchers considered breathing practices as a mechanism for regulating the nervous system and emotional state. Such conclusions relate to the concept of mental hygiene practices, in which mental and physical techniques are considered as components of a system for maintaining psychological well-being. A. Siripongpan *et al.* (2023) found that mindfulness interventions increase students' stress tolerance and improve adaptation to an intense learning environment. The results obtained are consistent with the conclusions of the study on the role of awareness in the development of the ability to respond constructively in crisis situations. Simultaneously, the study considered resiliency more broadly – in the context of environmental, epidemic, and military threats.

A distinct theoretical framework was provided by M. Bonnett (2019), who emphasised the need to make education more environmentally conscious and to foster a more mindful attitude towards the natural environment. Unlike research focused primarily on

students' mental health, the researcher considered mindfulness as a prerequisite for environmentally responsible behaviour. In the conducted research, this idea is further developed through the consideration of mental hygiene practices as a factor in the development of individual readiness to respond to environmental threats. Thus, the results of contemporary research confirmed the effectiveness of mindfulness practices in maintaining mental health and developing stress tolerance among students. Simultaneously, the study expanded the existing scientific approaches by analysing the gender characteristics of awareness components, and considering mental hygiene practices in the context of environmental, epidemic, and military challenges of the contemporary educational environment.

CONCLUSIONS

As a result of the study, it was found that mental hygiene practices, in particular mindfulness, are an important resource for supporting the psychological well-being of participants in the educational process in the context of environmental, epidemic, and military threats. The theoretical analysis allowed substantiating the importance of mental hygiene practices as a system of routine actions aimed at stabilising the psychoemotional state, developing self-regulation, and increasing the readiness of the individual to respond constructively in crisis situations. It was determined that mindfulness practices contribute to a conscious attitude to own emotional and physical experience, the development of emotional regulation skills, and the development of psychological stability in conditions of prolonged stress. Empirical results showed the dominance of the medium level of development of most components of mindfulness in representatives of all gender groups. Statistically significant gender differences were observed on separate scales. Women showed higher scores on the "Observation" scale, indicating greater sensitivity to internal and sensory

experiences, and higher emotional awareness. Men, in turn, showed a higher level of "Conscious action", which may indicate better concentration on performing current activities and a lower tendency to automatic behaviour. No significant gender differences were found on the "Description", "Non-reactivity", and "Non-judgement of internal experience" scales, suggesting that certain components of mindfulness are relatively universal and less dependent on gender-specific patterns of socialisation. The results obtained also indicate the influence of socio-cultural factors on the development of mindfulness practices and methods of psychoemotional self-regulation. The relatively high level of self-criticism observed among student-aged respondents may indicate that young people are psychologically more vulnerable in the context of current societal crises, and that there is a need to develop the ability to view own experiences without judgement. The prospects for further research are related to the investigation of the impact of mindfulness practices on stress tolerance, adaptation to crisis conditions and academic well-being of different age and professional groups, and to the development and verification of the effectiveness of long-term mental hygiene support programmes in the context of contemporary social challenges. A promising area is also the investigation of the relationship between the level of awareness, psychological readiness for emergencies, and the development of environmentally responsible behaviour of participants in the educational process.

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REFERENCES

- [1] Bonnett, M. (2019). Towards an ecologization of education. *The Journal of Environmental Education*, 50(4-6), 251-258. [doi: 10.1080/00958964.2019.1687409](https://doi.org/10.1080/00958964.2019.1687409).
- [2] Daniel, C., Chowdhury, R.M.M.I., & Gentina, E. (2024). Mindfulness, spiritual well-being, and sustainable consumer behavior. *Journal of Cleaner Production*, 455, article number 142646. [doi: 10.1016/j.jclepro.2024.142293](https://doi.org/10.1016/j.jclepro.2024.142293).
- [3] Fagioli, S., Pallini, S., Mastandrea, S., & Barcaccia, B. (2023). Effectiveness of a brief online mindfulness-based intervention for university students. *Mindfulness*, 14, 1234-1245. [doi: 10.1007/s12671-023-02128-1](https://doi.org/10.1007/s12671-023-02128-1).
- [4] Fazia, T., et al. (2023). Improving stress management, anxiety, and mental well-being in medical students through an online mindfulness-based intervention: A randomized study. *Scientific Reports*, 13, article number 8214. [doi: 10.1038/s41598-023-35483-z](https://doi.org/10.1038/s41598-023-35483-z).
- [5] Frankl, V. (2020). *Man's search for meaning: A psychologist in a concentration camp*. Kyiv: KSD.
- [6] Fu, Y., Song, Y., Li, Y., Sanchez-Vidana, D.I., Zhang, J.J., Lau, W.K., Tan, D.G H., Ngai, S.P.C., & Lau, B.W. (2024). The effect of mindfulness meditation on depressive symptoms during the COVID-19 pandemic: A systematic review and meta-analysis. *Scientific Reports*, 14(1), article number 20189. [doi: 10.1038/s41598-024-71213-9](https://doi.org/10.1038/s41598-024-71213-9).
- [7] Gallo, G.G., Curado, D.F., Machado, M.P.A., Espindola, M.I., Scattone, V.V., & Noto, A.R. (2023). A randomized controlled trial of mindfulness: Effects on university students' mental health. *International Journal of Mental Health Systems*, 17, article number 32. [doi: 10.1186/s13033-023-00604-8](https://doi.org/10.1186/s13033-023-00604-8).

- [8] Gerbarg, P.L., Cruz-Cordero, Y.L., Conte, V.A., García, M.E., Braña, A., Estape, E.S., & Brown, R.P. (2023). Breath-body-mind core techniques to manage medical student stress. *Global Advances in Integrative Medicine and Health*, 10. doi: [10.1177/23821205231212056](https://doi.org/10.1177/23821205231212056).
- [9] González-Martín, A.M., Aibar-Almazán, A., Rivas-Campo, Y., Castellote-Caballero, Y., & Carcelén-Fraile, M.C. (2023). Mindfulness to improve the mental health of university students: A systematic review and meta-analysis. *Frontiers in Public Health*, 11, article number 1284632. doi: [10.3389/fpubh.2023.1284632](https://doi.org/10.3389/fpubh.2023.1284632).
- [10] Hundertaylo, Yu.D. (2025). Prospects for promoting psychohygiene practices among participants in the educational process in the context of counteracting environmental and epidemic threats to human health. *Habitus*, 78, 113-117. doi: [10.32782/hbts.78.2.21](https://doi.org/10.32782/hbts.78.2.21).
- [11] Kabat-Zinn, J. (1991). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York: Delta Trade Paperbacks.
- [12] Kaplunencko, Ya.Yu., & Kuchyna, V.V. (2023). Adaptation and validation of the short five-factor mindfulness questionnaire (FFMQ-15). *Organizational Psychology. Economic Psychology*, 1(28), 95-105. doi: [10.31108/2.2023.1.28.10](https://doi.org/10.31108/2.2023.1.28.10).
- [13] Karamushka, L.M., Kredentser, O.V., Tereshchenko, K.V., Lahodzinska, V.I., Ivkin, V.M., Klymenko, N.H., & Kovalchuk, O.S. (2024). *Technologies for ensuring the mental health and well-being of educational personnel under conditions of war and post-war recovery*. Kyiv: G.S. Kostyuk Institute of Psychology, National Academy of Pedagogical Sciences of Ukraine.
- [14] Larina, T. (2024). The role of mindfulness in coping with the experience of war: An analysis of empirical data. *Scientific Studios on Social and Political Psychology*, 30(2), 53-59. doi: [10.61727/ssppj/2.2024.53](https://doi.org/10.61727/ssppj/2.2024.53).
- [15] Miller-Chagnon, R.L., Shomaker, L.B., Prince, M.A., Krause, J.T., Rzonca, A., Haddock, S.A., Zimmerman, T.S., Lavender, J.M., Sibinga, E., & Lucas-Thompson, R.G. (2024). The benefits of mindfulness training for momentary mindfulness and emotion regulation: A randomized controlled trial for adolescents exposed to chronic stressors. *Journal of Consulting and Clinical Psychology*, 92(12), 800-813. doi: [10.1037/ccp0000910](https://doi.org/10.1037/ccp0000910).
- [16] Siripongpan, A., Niyamosot, S., & Srinuchasart, P. (2023). *Using mindfulness-based interventions for increasing medical students' resiliency to stress: Quasi-experimental study*. *Journal of the Psychiatric Association of Thailand*, 68(3), 295-304.
- [17] Sperling, E.L., Hulett, J.M., Sherwin, L.B., Thompson, S., Bettencourt, B.A., & Pietschnig, J. (2023). The effect of mindfulness interventions on stress in medical students: A systematic review and meta-analysis. *Plos One*, 18(10), article number e0286387. doi: [10.1371/journal.pone.0286387](https://doi.org/10.1371/journal.pone.0286387).
- [18] World Health Organization. (2022). *World mental health report: Transforming mental health for all*. Retrieved from <https://www.who.int/publications/i/item/9789240049338>.
- [19] World Medical Association. (2013). Declaration of Helsinki: Ethical principles for medical research involving human subjects. *JAMA*, 310(20), 2191-2194. doi: [10.1001/jama.2013.281053](https://doi.org/10.1001/jama.2013.281053).

Промоція психогієнічних практик серед учасників освітнього процесу в умовах екологічних та епідемічних загроз: гендерний аналіз

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Анотація. Актуальність дослідження зумовлена зростанням кількості стресогенних чинників у сучасному освітньому середовищі, зокрема екологічних, епідемічних та військових загроз, які негативно впливають на психологічне благополуччя учасників освітнього процесу. У цих умовах особливої ваги набуває поширення психогієнічних практик як засобу підтримки ментального здоров'я та формування здатності до саморегуляції. Метою дослідження було виявлення гендерних особливостей психогієнічних практик (на прикладі майндфулнес) серед учасників освітнього процесу в умовах екологічних та епідемічних загроз і обґрунтування напрямів гендерночутливої промоції. Методологічну основу дослідження становила інтеграція гендерного й системного підходу та концепції майндфулнес. Теоретичним підґрунтям виступає авторська модель практик психогієни, що включає базові практики (фізична та ментальна) та похідні (комунікативна, інформаційна, рекреаційна). Емпіричне дослідженням (на прикладі майндфулнес-практик) проведено із використанням «П'ятифакторного опитувальника майндфулнес». У дослідженні взяли участь 502 респонденти, які є учасниками навчального процесу, серед яких більшість здобувають освітній рівень бакалавра, а також взяли участь магістри та аспіранти. У представників обох гендерних груп домінує середній рівень розвитку компонентів майндфулнес (у межах 60-70 %). Виявлено статистично значущі гендерні відмінності за шкалами «спостереження» та «усвідомлена дія»: жінки демонструють вищі показники здатності до сенсорного та емоційного усвідомлення, тоді як чоловіки – вищий рівень усвідомленої діяльності. За іншими шкалами суттєвих відмінностей не зафіксовано. Отримані дані свідчать про вплив соціокультурних чинників на формування компонентів усвідомленості. Практична цінність дослідження полягає у можливості використання його результатів психологами, педагогами та адміністрацією закладів освіти для розроблення гендерночутливих програм підтримки ментального здоров'я, профілактики стресу та впровадження майндфулнес-практик у системі психологічного супроводу учасників освітнього процесу в умовах кризових і надзвичайних ситуацій

Ключові слова: психічне благополуччя; практики психологічної саморегуляції; майндфулнес; гендерні відмінності; освітнє середовище



Transformation of well-being values under digital and wartime challenges

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Abstract. The Russian Federation's full-scale invasion of Ukraine on 24 February 2022 has exacerbated the challenge not only of physical survival but also of maintaining mental health and strengthening the psychological resilience of the population. Cyberspace, having become one of the main channels for obtaining information, has simultaneously increased the risks of media trauma and infodemic, necessitating new mechanisms of psychological self-protection. This study aimed to analyse the dynamics of shifts in value orientations regarding well-being in the context of the digitalisation of Ukrainian society during wartime, and to provide a theoretical justification and empirical verification of the "Model of Subjective Regulation of Well-Being" as a response to the challenges of the contemporary Ukrainian cyberspace. The study employed a comprehensive approach involving the analysis of secondary data (World Happiness Report), big data from search queries (Google BigQuery 2022-2025), media headlines (Istio) and empirical methods (K. Riff scale, BASIC Ph, PERMA-Profil). The study covered approximately 5,000 people, including educators in frontline areas, and was conducted in two stages: a mass survey (N = 4,843) and an in-depth analysis of eudaimonic well-being (N = 300). It was found that university lecturers and school teachers demonstrated high scores for "Environmental Mastery" and "Purpose in Life" – 80%, whilst the overall level of well-being according to the PERMA-Profil was 7.8/10. It has been shown that traditional models of well-being are transformed into an active eudaimonic strategy of life-making. The evolution of the population's coping strategies has been identified: from shock adaptation to a demand for autonomy and new knowledge. The "Model of Subjective Regulation of Well-Being" was verified, in which the "axiological anchor" (Dignity and Meaning) serves as the basic stabiliser of the psyche. It was established that the professional fulfilment of educators in the frontline zone is a form of subjective resistance. The practical significance lies in the possibility of implementing the Model of Subjective Regulation of Well-Being into systems of preventive psychoeducation and psychological rehabilitation for Ukrainians, particularly educators

Keywords: digitalisation; mass media; media trauma; subjective regulation; life-making; value orientations; resilience

INTRODUCTION

The evolution of Ukrainians' value orientations during the third decade of the 21st century has happened under the influence of the twin processes of digitalisation on a global scale and local but geopolitical military aggression. The traditional understanding of well-being, which for decades was associated with stability, material accumulation and social comfort, is

undergoing a painful deconstruction under wartime conditions. Although in wartime talking about "happiness" is often considered taboo and unethical, psychological research proves the opposite: well-being in wartime is not a state of passivity, but a dynamic process of the internal restoration of resources necessary for social cohesion and victory. The problem lies in the

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need to reconsider well-being as a subjective category that enables individuals to preserve authorship of their own lives in an aggressive mediatised environment.

One of the concepts most relevant to media and academic discourse is the concept of well-being developed by the Gallup Institute. T. Rath & D. Harter (2010) developed an approach in which wellbeing was viewed as a multidimensional entity combining five components of life. In this study, each of these components acquired specific significance, characterising the transformation of Ukrainians' values. Professional well-being, for instance, acts as a key driver of post-traumatic growth: love for one's work and awareness of a professional mission become an "axiological anchor" that supports not only personal recovery, but also the improvement of the social climate during a crisis. Given the exceptional conditions of wartime, friendship, relationships and mutual help take on existential meaning as a component of social well-being. There has been a change in emphasis here: social support was no longer just a factor contributing to recovery; it became a necessary condition for stress resilience in Ukrainians. Financial and physical well-being are the fourth and fifth components in T. Rath & D. Harter's (2010) scheme. Although these components were not the object of research in this study, they will be the subject of future psychoeducational research as strategic components for the development of a new financial culture and a culture of preserving one's health in times of stress. Finally, community well-being is the most vulnerable domain for contemporary Ukrainians. Despite the negative pressure of the protracted war on the collective mental field, the capacity for critical analysis and an irrational belief in Victory create a kind of "advance" towards the future recovery of society (Kruger, 2010).

In this context, the study continues the work of the Department of Psychology of Mass Communication and Mass Media at the Institute for Social and Political Psychology of the National Academy of Educational Sciences of Ukraine, in particular the studies by L. Naidionova (2022; 2024) and L. Naidionova & M. Naidionov (2024), and M. Naidionov *et al.* (2024), which address mediapsychological ecology and community resilience under conditions of media trauma. The concept of life-making developed by T. Tytarenko (2017; 2018) also formed part of the theoretical foundation of the study. Within this concept, the individual is regarded as an active subject in constructing their own life situation. Studies by representatives of positive psychology, in particular D. Harward (2016), W. Tov (2018) and Y. Tang *et al.* (2019), are also important for the practical part of the study. In this research, eudaimonic well-being is analysed through the lens of C. Ryff's (2017) theory and M. Seligman's (2011) PERMA model of flourishing.

Despite the substantial body of research on stress resilience, the mechanism of subjective selfregulation

in an aggressive environment of media influences remains insufficiently studied. This mechanism enables individuals to filter the destructive effects of the digital infodemic and integrate traumatic wartime experience into a new, coherent system of value orientations. This study aimed to reveal the specific features of the transformation of Ukrainians' well-being values under wartime and digital challenges, as well as to provide a theoretical substantiation and empirical verification of the author's "Model of Subjective Regulation of Well-Being" as a technological tool for preserving psychological health in an aggressive cyberspace, supporting rehabilitation after possible media trauma, and stimulating post-traumatic growth. The research hypothesis is that the subject's ability to create autonomous spheres of influence, even in wartime, forms the foundation of the "formula for Ukrainian well-being".

MATERIALS AND METHODS

The methodological basis of the study was a comprehensive interdisciplinary approach that combined theoretical analysis, secondary data analysis, analysis of digital traces of user activity, semantic analysis of media content, and empirical psychodiagnostic methods. The research materials comprised data from the World happiness report (2026), which were used to determine the basic criteria for assessing well-being. To analyse current public concerns, big data on Google users' search activity was used and processed through Google BigQuery for the period 2022-2025. A separate part of the study involved an analysis of headlines from Ukrainian online media using Semantic text analysis online (n.d.) on the Istio platform.

The empirical part of the study was conducted in two main stages. At the first stage, a mass survey of Ukrainians' coping strategies was carried out using the BASIC Ph method. The sample consisted of 4,843 respondents. This stage aimed to identify the main ways of coping psychologically with stress under wartime conditions and digital information pressure. Based on the data obtained, coping factors were identified, including proactivity, positive emotions, engagement, relationships, meanings and faith. In the study, these factors were correlated with the components of M. Seligman's (2011) PERMA model: Positive Emotions, Engagement, Relationships, Meaning and Accomplishment. At the second stage, an in-depth analysis of eudaimonic well-being was conducted using C. Ryff's (2017) Psychological Well-Being Scale. The sample consisted of 300 respondents and covered different professional groups, including lecturers at higher education institutions, schoolteachers, psychologists and representatives of other non-teaching professions. The analysis was carried out according to the following components of psychological well-being: personal growth, positive relations, autonomy, environmental mastery, purpose in life and self-acceptance.

The PERMA-Profiler was additionally used to verify the “Model of Subjective Regulation of Well-Being”. The processing of the results involved descriptive statistics, comparative analysis of professional groups, factor analysis of coping strategies, semantic analysis of media texts, and interpretative comparison of the data obtained with theoretical models of well-being. Respondents’ participation in the empirical stages of the study followed the principles of voluntariness, confidentiality and anonymity. The ethical principles of the study were aligned with the principles of the American Psychological Association (2017). The study has certain limitations related to the dynamic nature of the war situation, which may have influenced respondents’ affective states at the time of the survey. In addition, the sample, consisting mainly of educators, may have

specific cognitive characteristics that require further verification in other professional groups.

RESULTS AND DISCUSSION

Dynamics of well-being:

From global rankings to Google Analytics

The World Happiness Index (n.d.) is based on six key criteria that reflect social and economic well-being: GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity and perceptions of corruption. An analysis of the prevalence of these criteria in the Ukrainian cyberspace during the period 2022-2024 reveals their profound transformation and reorientation in the face of an existential threat (Bohdan, 2024a). These transformations are reflected in Table 1.

Table 1. Transformational shifts in the criteria of the World Happiness Report in the Ukrainian segment of wartime cyberspace (2022-2024)

WHR criterion	Traditional interpretation	Representation in Ukrainian cyberspace (2022-2024)	Value shift
Social support	Reliable social networks and assistance from the state	Emphasis on horizontal ties and collective unity. The media present thousands of examples of mutual assistance, volunteering and support for the Armed Forces of Ukraine	From dependent support to active, mutual unity
Generosity	Charitable donations and help for strangers	Volunteering becomes a norm and a value orientation. The media construct a culture of “donations” as a form of self-realisation and patriotic duty	From altruism to collective subjectivity and a national ideal
Freedom to make life choices	Choice of career, consumption and place of residence	Reinterpreted as the freedom to be oneself, that is, to be Ukrainian; the freedom to resist and assert oneself. The value of choice acquires a higher axiological dimension	From individual choice to the struggle for dignity and autonomy
GDP per capita	Material security and economic stability	The material dimension is devalued as a primary value. The focus shifts to survival, psychological resilience and the preservation of human capital. Economic success is subordinated to Victory	From accumulation to resilience and the ability to create one's life
Healthy life expectancy	Physical health and longevity	Emphasis on psychological health and mental resilience. The media actively promotes practices of self-regulation, psychological first aid and critical thinking as means of protecting the psyche from informational toxicity	From physical to psychological well-being
Perception of corruption	Level of trust in institutions	Maximum sensitivity to justice and honesty. Any form of corruption is perceived as a direct threat to national unity and security	From toleration to an absolute demand for transparency

Source: author's development

Analysis of the data contained in the cyberspace of Ukraine in 2022-2024 revealed that Ukrainian society has undergone a value shift towards eudaimonic, i.e. morally oriented, well-being as opposed to hedonic or materialist concepts of happiness. The WHR criteria did not disappear, but acquired a new, heroic meaning. J. Scharbert *et al.* (2024) compared well-being data from 17 European countries after the start of the full-scale invasion of Ukraine. The researchers traced the dynamics of happiness and psychological state at the macro level and showed that the war and media coverage of the conflict had a significant negative effect on subjective well-being, although a partial recovery

of well-being was gradually observed. In the Ukrainian context, according to O. Bohdan (2025), social support was transformed into collective unity, freedom into dignity, and the mass media became a key instrument of society's self-reflection on its own values. The analysis confirmed Ukraine's fall in happiness rankings, although it has deeper roots than just the consequences of the war, as it concerns a person's adaptation to changes in the socio-technological environment. The lowest point, 138th place in 2018, indicates a systemic crisis of reference points. However, Google BigQuery data for 2022-2025 offers a different perspective: the evolution of subjectivity.

The pulse of the nation: Analysis of Google search queries as a mirror of subjectivity

To verify society's actual concerns, an analysis was conducted of big data from Google search queries, processed using Google BigQuery for 2022-2025. The dynamics of these queries demonstrate the evolution of the population's coping strategies from passive reaction to subjective management of life (Bohdan, 2024a).

Stage 1: Shock and external orientation (2022-2023). Search queries such as "air raid alert map" and "eDopomoga" indicate a search for external sources of support. At the same time, interest in ChatGPT and Openheimer (2023) points to the activation of cognitive mechanisms of distraction and the adoption of new tools.

Stage 2: Active subjective integration (2024-2025). A shift towards active solutions can be observed. The query "new knowledge" and growing interest in AI (+25% in 2025) indicate that digital competence is becoming part of the subject's internal cognitive model. The transition from queries such as "power outage schedules" to "electric battery" illustrates a transformation from the position of a "victim of circumstances" to that of a "creator of an autonomous environment" (Google's Year in Search, n.d.). Google search query data demonstrates the evolution of Ukrainians' subjectivity and, at the same time, emphasises that the media space can be a source of informational stress while also creating conditions for users to develop an active subjective position.

The media space is an aggressive external environment

According to Gradus (2024), 39% of Ukrainians cope with stress through the Internet, while 84% regularly consume news (Gradus, 2024). However, a semantic analysis of headlines from leading media outlets (Ukrainska Pravda, Radio Svoboda and Suspilne) for 2022-2024 revealed the dominance of "war narratives", marked by terms such as strike, shelling, attack and missiles (Богдан О., 2024a). Thus, the media space is filled with the "noise of war", which creates constant informational and cognitive distress. This gives rise to an urgent need to change the position of mass media users: from that of observers to an active subjective position. This correlates with the findings of W. Malecki *et al.* (2023), who analysed how Ukrainians' engagement with media content during the war affects levels of stress, anxiety and psychological resilience. They found that frequent consumption of news media, the consumption of emotional content, is associated with a higher level of psychological distress, but how the use of mass media contributes to psychological health, stress resilience and adaptive coping strategies. This process is first of all related to the development of media hygiene as a conscious subjective activity: under conditions of saturation with traumatic content,

the choice of ecologically safe information sources becomes an indicator of the individual's psychological maturity. At the same time, the role of the individual in social interaction, particularly in cyberspace, is changing: the well-being of society increasingly depends on the ability of every Ukrainian not only to observe catastrophic events, but also to create their own micro-reality, support others and participate in the collective development of resilience. In other words, the right to happiness during the war is not a form of escapism but a resource for internal self-preservation, an indication of dignity and freedom that will allow the country to save its potential for recovery.

Theoretical substantiation of the Model of Subjective Regulation of Well-Being

The war caused the pain of turbulence in the system of life orientations at both the personal and social levels (Harward, 2016). The usual perception of happiness as a passive condition of material wellbeing is losing its value in the conditions of war. Drawing on T.M. Tytarenko's concept of lifemaking, this study considers well-being as an individual's active capacity to create their own existence, overcome challenges and find new existential meanings (Tytarenko, 2018). In psychology, happiness is often perceived as "adaptation", as an adaptation to existing conditions. But in wartime, adaptation is a path to burnout. The concept of life-making proposed by T. Tytarenko (2024) was an alternative to passive adaptation in this study. Life-making is viewed as a continuous process whereby the individual constructs new, meaningful connections with the world, even when the familiar world is being destroyed. Under the conditions of a military challenge, happiness as "the state of satisfaction" has been transformed into "the capacity to construct". This means that the individual does not wait for favourable conditions but is the architect of his or her own reality and uses his or her own value potentials as the material to reconstruct their integrity.

The theoretical framework of the model is based on the distinction between hedonic and eudaimonic approaches to well-being. Whereas hedonism focuses on minimising suffering and obtaining pleasure, which is practically impossible in a combat zone, eudaimonia, according to C. Ryff (2017), is defined as the full realisation of human potential. According to M. Seligman's (2011) PERMA model, the key components of flourishing are not positive emotions in themselves, but engagement and meaning. This explains the phenomenon of "professional activity as resistance": for representatives of many professional groups in Ukrainian society, including military personnel, doctors, energy workers, rescuers, educators and volunteers, well-being is realised through the fulfilment of a professional mission that gives a sense of the significance of one's own existence despite external threat.

The transformation of well-being values cannot be understood without considering the mediatisation of the life space. Ukraine's contemporary media space operates in a mode of informational and cognitive distress, which, according to L. Naidionova's (2022) concept of media ecology, creates risks of secondary traumatisation. An infodemic – an excess of destructive information – destroys an individual's cognitive filters, leading to learned helplessness. Therefore, in this study, agency is interpreted as "cognitive immunity" of the individual that allows him or her to actively select information sources, critically interpret them and preserve their cognitive autonomy under the pressure of any kind of ideology. In this context, the media space functions not only as a source of information but also as a specific environment that requires new strategies of self-protection (Naidionova & Naidionov, 2024).

To understand the mechanisms for preserving psychological health in a mediatised environment, the "Model of Subjective Regulation of Well-Being" was developed and implemented. The model is based on the idea of subjectivity as an active filter that mediates the influence of the external environment. Its structure comprises three interrelated levels of subjective self-preservation. The cognitive level includes mechanisms for the reflective monitoring of one's own states arising under the influence of media content. The social level is based on the idea of intersubjectivity, that is, the creation of shared meanings, support and coordinated ways of responding within a group. The axiological level, or value anchor, performs the function of deep regulation: the values of dignity and freedom become internal boundaries that prevent external chaos from destroying the integrity of the personal self. The diagram of the Model of Subjective Regulation of Well-Being is represented in Figure 1. In the model, at the cognitive level, there is a filter of external media influences, at the social level, a bridge between the depth of the self-identification and a reflection on processes of information interaction, and at the axiological level, the anchor of the personality is the basis of the subjective regulation of happiness.

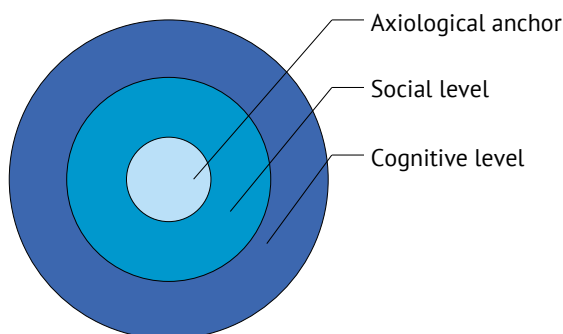


Figure 1. Model of Subjective Regulation of Well-Being in an aggressive media environment

Source: author's development

The cognitive level of subjective regulation is based on mechanisms of information filtering and reflective monitoring. In the proposed model, it functions as an intellectual barrier between the aggressive external environment and the internal levels of information exchange: social contacts, or the information bubble, and the individual's value core, including deep self-identification and the "inner self". Under conditions of digital mediatisation, where information flows acquire the features of an "infodemic", this level assumes the function of a cognitive censor. Its task is not only to filter out disinformation, but also to prevent the individual's emotional overload.

This mechanism is reflection: the subject's ability to detach from the information flow and reflect on their own responses to it. When a person becomes traumatised by media narratives, they tend to become stuck in the "infection with emotion", that is, to perceive the fear or anger that is conveyed on the computer or television screen as their own experience. Subjective regulation involves a shift from passive consumption to active observation: "What am I feeling now? Is this my own experience, or is it the result of the headline I have just read?". Such monitoring makes it possible to break the automatic "stimulus-response" link, which is a basic condition for maintaining mental well-being.

The cognitive level ensures the intellectual processing of traumatic content. Whereas the passive consumer "swallows" images of destruction and violence, leading to secondary traumatisation, the subject with developed regulation applies methods of deconstruction. Such methods may include the logical structuring of the information received, which allows the chaotic stream of horrors to be transformed into an ordered picture of events; a reduction in the level of emotional response, i.e. de-dramatisation, which becomes possible through the analysis of available information and the identification of cause-and-effect -consequential links, followed by a reduction in the level of existential anxiety regarding "unpredictable evil", as well as information hygiene – the conscious limitation of time spent in toxic media environments, which is a manifestation of cognitive will.

The transformation of well-being values at the cognitive level is realised through the mechanism of cognitive reappraisal. The subject learns to see a crisis not only as a threat, but also as a challenge. This is not "positive thinking" in a simplified sense, but a complex process of intellectual search for resources within traumatic experience. For example, shelling and power outages at the cognitive level of regulation are transformed from a "catastrophe" into a "task of energy autonomy". This is clearly visible in the dynamics of Google search queries for 2024-2025, where the demand for autonomy, such as batteries, illustrates the transition to the cognitive level of subjective regulation: from passive waiting to active restructuring of the environment.

Finally, the cognitive level creates a specific immunity to manipulation. It is based on critical thinking and media literacy, but extends further to the level of the subject's information ethics. This involves the ability not to spread panic and not to become a retransmitter of destructive narratives, which has a direct effect on collective well-being. Cognitive immunity, like the cognitive censor, is a dynamic process of filtering information. The subject becomes a "consumer-sovereign", that is, one who can independently establish the boundaries of their information diet and prevent their cognitive model from destruction. Thus, the cognitive level of subjective regulation is the first stage in the protection of happiness, which initially works to turn the chaos of external influences into an experience that can be integrated at the following stages of the social and axiological levels.

The social level of subjective regulation is responsible for the mediation of experience and the collective modelling of the space of well-being. In this model, this level plays the role of a mediator between the cognitive efforts of an individual and the general sociocultural context. If the cognitive level is responsible for "filtering" chaos, the social level is responsible for its "transformation" through joint action and shared experience. The central mechanism of this level is the method of collectively modelling a vision of the "space of well-being". In wartime, social disintegration is one of the greatest threats to mental health. Subjective regulation at this level consists of conscious transitions from personal strategies of survival to the development of collective protective environments. In different Ukrainian communities formed around professional fields, areas of civic activity, specific informational interests and other factors, cognitive models are synchronised, and a common language is created for describing wartime challenges: fear, burnout and uncertainty. This creates conditions for the collective design of resources, i.e. the joint invention of rituals of safety and mutual support, turning a formal organisation into a "community of resilience". Finally, this level involves the legitimisation of well-being: the collective recognition that the pursuit of happiness during war is not escapism, but an act of resistance and a way of preserving the human within the human being.

In the proposed model, the axiological level is the basic "anchor" that ensures the stability of the individual's entire psychological structure in conditions

of extreme turbulence. If the cognitive level filters information as a dynamic process, and the social level transforms experience through interaction, then the axiological anchor keeps the subject within the field of humanity and meaning when all external reference points, such as security, stability and predictability, have been destroyed. In other words, the axiological anchor is a certain static individual value. The central element of this level is dignity as the axiological basis of resilience. In the conditions of war, dignity is not only an abstract category, but a certain "axiological border" to which the subject does not surrender either the enemy or the circumstances.

The second component of the anchor is meaning as a mechanism for overcoming the "noise of war". This is in line with V. Frankl's (1946) well-known idea that a person is capable of enduring any "how" if they know the "why". In the conditions of media trauma and infodemic, when chaos and meaninglessness prevail, the axiological anchor makes it possible for the subject to construct a narrative of coherence. Death, destruction and suffering find their place in a higher-order system: "I am protecting the future of children", "my work is a form of resistance", "I am part of an unbreakable nation". This transforms cognitive dissonance into existential confidence. Finally, professional dignity as an "axiological anchor" for representatives of many professions, who together hold the front and work for victory in the rear, is a logical continuation of the social level of subjective selfregulation, where collective value orientations of professional well-being are internalised and perceived as one's own. Thus, the axiological anchor is the highest level of subjective regulation. It transforms a person from an "object of wartime influences" into a "subject of their own history". It is on this level that Ukrainian society is not only surviving but growing post-traumatically, where dignity and meaning become new norms of national well-being.

Empirical basis of the proposed

Model of Subjective Regulation of Well-Being

To test the effectiveness of the Model of Subjective Regulation of Well-Being, a study was conducted in 2024 (N = 300) based on the eudaimonic concept by C. Ryff (2017) (Bohdan, 2024b). The results (Table 2) confirmed that the highest level of well-being was demonstrated by professional groups with developed subjectivity, namely educators.

Table 2. Distribution of well-being components according to C. Ryff's scale, %

Professional group	Personal growth	Positive relations	Autonomy	Environmental mastery	Purpose in life	Self-acceptance
University lecturers	84	69	73	80	80	74
Schoolteachers	79	71	64	72	77	73
Psychologists	77	70	63	65	71	69
Others (nonteaching)	76	63	61	59	63	62

Source: author's development

The data indicate that the leading position of university lecturers and schoolteachers is due to their high scores for “Environmental Mastery” (80%) and “Purpose in Life” (80%). This confirms the author’s hypothesis – the subject’s ability to create autonomous spheres of influence even in wartime is the cornerstone of the “formula for Ukrainian prosperity”. The study conducted by Богдан (2024b) highlighted the role of coping

strategies as instruments of subjective regulation of well-being. The study of Ukrainians’ existing coping strategies in 2022-2024 (N = 4,843), based on the BA-SIC Ph model (Lahad *et al.*, 2012; Lahad, 2016), made it possible to identify a 9-factor model of coping. The key factors directly correlate with M. Seligman’s (2011) PERMA model of flourishing and with the proposed Model of Subjective Regulation, as shown in Table 3.

Table 3. Coping factors and their relationship with well-being according to PERMA

Factor	Respondent's actions (subjective manifestation)	PERMA component
Proactivity (10%)	Analysis of the problem; action plan	Accomplishment
Positive emotions (7%)	Imagination, art, memories	Positive emotions
Engagement (6%)	Physical activity, movement	Engagement
Relationships (6%)	Seeking social support	Relationships
Meanings and faith (5%)	The credo “What does not kill us makes us stronger”	Meaning

Source: author’s development

The factor model also revealed areas of vulnerability. In particular, teachers have been found to exhibit the highest levels of “cognitive imbalance” – a tendency to feel nostalgic for the past, which prevents them from accepting the new reality. Psychologists showed “Emotional imbalance”, indicating fatigue from professional containment. Thus, the empirical data confirm the relevance of the Model of Subjective Regulation of Well-Being. A proactive position, represented by “Planning” or Cognition, and value-based rootedness, represented by “Faith” or Belief, form the basis of mental health. Thus, the subject’s cognitive filter and axiological anchor are not only conceptual ideas, but practical tools for ensuring a transformation from learned helplessness to active creation of their life in a mediatised space of war.

At the same time, as shown in a study by E. Kušen & M. Strembeck (2023), repeated exposure to emotionally charged digital content at the beginning of the war changes the emotional tone of social media users, increasing their anxiety and reducing positive emotions. An analysis of the mechanisms of their influence complements the results of the current study, as it not only fixes emotional manifestations, but also measures the structure of well-being and coping strategies of real-life people who managed to make the transition from the passive reaction to the active subjective position and to maintain well-being despite the information, media and daily stresses.

Verification of the Model of Subjective Regulation of Well-Being

The effectiveness of the model was tested through interaction with educators: a series of face-to-face meetings with the teaching staff of a lyceum in the capital (Bohdan, 2024a) and online sessions for educators in the Kherson region (Bohdan, 2024b). It was found that educator respondents with a high level of social

subjectivity more often used the strategy of “Caring for Others”. This creates a therapeutic effect: when the educator focuses attention on the well-being of the objects of their activity (including schoolchildren and colleagues), their own level of trauma intensity decreases. The data on collective efficacy also became interesting: high levels of “Relationships” PERMA (7.8 points for the lyceum in the capital) show that personal well-being in wartime becomes “networked”. The subject regulates their own state, based on the quality of relationships, so that supporting another person is a way of stabilising one’s own state. This demonstrates the interaction between the axiological anchor in the Model of Subjective Regulation of Well-Being and the social level of regulation. The application of the method of collective modelling in this lyceum demonstrated the effectiveness of forming a shared vision of well-being (Bohdan, 2025). The PERMA-Profler results, measured on a scale from 0 to 10, indicate the high adaptability of the teaching staff:

♦ Meaning (8.1): the highest score confirms that the pedagogical mission serves as the main stabiliser of the psyche.

♦ Relationships (7.8): the high score is a direct result of collective modelling and mutual support.

♦ Engagement (7.5): the educational process is used as a means of constructive distraction from the anxious background of the metropolis.

♦ Positive emotions (7.0): this is the lowest score, reflecting an objective shortage of the resource of joy; nevertheless, the overall level of well-being (7.8) remains stable.

The case of educators in the Kherson region (N=263) provided an extreme verification of the model (Bohdan, 2025b). Despite a critically low level of control over the external environment (5.41 points out of 10), the educators maintained a high score on the “Meaning” scale (7.37) and demonstrated examples of

personal dignity, as shown by the questionnaire item ratings and focus-oriented interviews. This confirms that professional activity during war is transformed into a form of subjective resistance, and that the axiological anchor is indeed the core of such a subjective attitude towards wartime challenges, including physical, security-related and informational threats. The developed Model of Subjective Regulation of Well-Being in an aggressive media environment can primarily be used to create programmes of psychological support and psychoeducation for educators. Members of the teaching community are direct carriers of information hygiene and are able to foster pupils' immunity to manipulation, based on critical thinking and media literacy. Its social significance lies in the formation of society's media-ecological consciousness, which serves as a safeguard against manipulative influences and as a basis for the nation's post-traumatic growth.

CONCLUSIONSS

The transformation of well-being values in Ukraine is shifting from consumer-oriented models towards subjective and activity-based models. The Model of Subjective Regulation of Well-Being has proved effective as an instrument for stabilising the psyche through axiological rootedness. The concepts of dignity and meaning are becoming key parameters of psychological well-being under wartime conditions. The empirical data confirm the effectiveness of the Model of Subjective Regulation of Well-Being. University lecturers showed the highest level of well-being on C. Ryff's scale: "Environmental Mastery" – 80%, "Purpose in Life" – 80%, and "Personal Growth" – 84%. For

teachers, the scores ranged from 72% to 79%, and for psychologists and other respondents, from 59% to 77%. The factor model of coping, based on BASIC Ph, correlated with PERMA: Proactivity – 10%, Positive emotions – 7%, Engagement – 6%, Relationships – 6%, Meaning and faith – 5%. Areas of vulnerability are manifested among schoolteachers as "Cognitive Imbalance" and among psychologists as "Emotional Imbalance". The data show that the cognitive filter and value anchors support the transition from passivity to an active subjective position and help maintain wellbeing during war. Thus, the Model of Subjective Regulation of Well-Being proved its effectiveness as an instrument for stabilising the psyche, where the cognitive filter, the axiological anchor and active subjective position are interconnected. The concepts of dignity and meaning are key parameters of psychological well-being, whilst the subject's collective and individual resources enable them to withstand informational, media and life-related stress. Prospects for further research lie in studying the mechanisms of digital personal rehabilitation and developing methods of preventive psychoeducation to overcome the consequences of the infodemic.

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REFERENCES

- [1] American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct*. Retrieved from <https://www.apa.org/ethics/code>.
- [2] Bohdan, O. (2024a). Mass media influence on the value orientations of happiness and well-being of Ukrainians. *Image of the Modern Educator*, 6(219), 16-22. doi: 10.33272/2522-9729-2024-6(219)-16-22.
- [3] Bohdan, O. (2024b). Strategies for psychological well-being of Ukrainians in interaction with coping strategies in war conditions. *Problems of Political Psychology*, 16(30), 60-83. doi: 10.33120/popp-Vol16-Year2024-164.
- [4] Bohdan, O.L. (2025). [Value orientations of humanism, unity, and well-being](#). In L.A. Naidionova (Ed.), *Media psychological strategies for digital transformation of society and education in war conditions* (pp. 115-142). Kyiv: Institute of Social and Political Psychology of National Academy of Pedagogical Sciences of Ukraine.
- [5] Frankl, V.E. (1946). *Man's search for meaning*. Boston: Beacon Press.
- [6] Harward, D.W. (Ed.). (2016). *Well-being and higher education: A strategy for change and the realization of education's greater purposes*. Washington: Bringing Theory to Practice.
- [7] Kruger, P.S. (2010). Wellbeing – the five essential elements. *Applied Research in Quality of Life*, 6, 325-328. doi: 10.1007/s11482-010-9127-1.
- [8] Kušen, E., & Strembeck, M. (2023). The effects of multiple exposure to highly emotional social media content during the early stages of the 2022 war in Ukraine. *SN Computer Science*, 4, article number 663. doi: 10.1007/s42979-023-02080-w.
- [9] Lahad, M. (2016). From victim to victor: The development of the BASIC PH model of coping and resiliency. *Traumatology: An International Journal*, 23(1), 27-34. doi: 10.1037/trm0000105.
- [10] Lahad, M., Shacham, M., & Ayalon, O. (2012). *The BASIC Ph model of coping and resiliency: Theory, research and cross-cultural application*. London: Jessica Kingsley Publishers.

- [11] Malecki, W.P., Bilandzic, H., Kowal, M., & Sorokowski, P. (2023). Media experiences during the Ukraine war and their relationships with distress, anxiety, and resilience. *Journal of Psychiatric Research*, 165, 273-281. doi: [10.1016/j.jpsychires.2023.07.037](https://doi.org/10.1016/j.jpsychires.2023.07.037).
- [12] Naidionov, M.I., Hryhorovska, L.V., & Naidionova, L.A. (2024). Attitude towards media as a component of life quality in a media-technological society: A reflexive analysis. *Journal of Contemporary Psychology*, 1, 88-98. doi: [10.26661/2310-4368/2024-1-10](https://doi.org/10.26661/2310-4368/2024-1-10).
- [13] Naidionova, L. (2022). Media psychology of war as a basis for conceptual transformations of media education: From media trauma to trauma-informed practices. *Problems of Political Psychology*, 12(26), 173-197. doi: [10.33120/popp-vol26-year2022-109](https://doi.org/10.33120/popp-vol26-year2022-109).
- [14] Naidionova, L., & Naidionov, M. (2024). The concept of digital media education: Justifying the need for changes in long-term war conditions. *Problems of Political Psychology*, 15(29), 96-135. doi: [10.33120/popp-vol15-year2024-154](https://doi.org/10.33120/popp-vol15-year2024-154).
- [15] Rath, T., & Harter, J. (2010). *Wellbeing: The five essential elements*. Retrieved from <https://www.gallup.com/workplace/237020/five-essential-elements.aspx>.
- [16] Ryff, C. (2017). Eudaimonic well-being, inequality, and health: Recent findings and future directions. *International Review of Economics*, 64, 159-178. doi: [10.1007/s12232-017-0277-4](https://doi.org/10.1007/s12232-017-0277-4).
- [17] Scharbert, J., et al. (2024). Psychological well-being in Europe after the outbreak of war in Ukraine. *Nature Communications*, 15, article number 1202. doi: [10.1038/s41467-024-44693-6](https://doi.org/10.1038/s41467-024-44693-6).
- [18] Seligman, M. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York: Atria Books.
- [19] Semantic text analysis online. (n.d.). Retrieved from https://istio.com/uk/text/analyz#google_vignette.
- [20] Tang, Y.-Y., Tang, R., & Gross, J.J. (2019). Promoting psychological well-being through an evidence-based mindfulness training program. *Frontiers in Human Neuroscience*, 13, article number 237. doi: [10.3389/fnhum.2019.00237](https://doi.org/10.3389/fnhum.2019.00237).
- [21] Tov, W. (2018). [Well-being concepts and components](#). In E. Diener, S. Oishi & L. Tay (Eds.), *Handbook of well-being* (pp. 43-57). Salt Lake City: Noba Scholar.
- [22] Tytarenko, T. (2017). [Happiness, health, well-being: Reaching the unreachable](#). In *Perspectives on the psychological well-being of a person* (pp. 7-11). Kyiv: ISPP.
- [23] Tytarenko, T.M. (2018). Ways of increasing the psychological well-being of a person who survived trauma. *Psychology: Theory and Practice*, 1(1), 112-119. doi: [10.31339/2617-9598-2018-1\(1\)-112-119](https://doi.org/10.31339/2617-9598-2018-1(1)-112-119).
- [24] Tytarenko, T.M. (2024). [My future depends on me: Practices of healthy communication in military and post-war conditions](#). Kropyvnytsky: Imeks-LTD.
- [25] World happiness report. (2026). Retrieved from <https://www.gallup.com/analytics/349487/world-happiness-report.aspx>.

Трансформація цінностей добробуту в умовах цифрових та воєнних викликів

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Анотація. Повномасштабне вторгнення Російської Федерації в Україну 24 лютого 2022 року загострило проблему не лише фізичного виживання, а й збереження психічного здоров'я та зміцнення психологічної резильєнтності населення. Кіберпростір, ставши одним з основних каналів отримання інформації, водночас посилив ризики медіатравматизації та інфodemії, що зумовлює потребу в нових механізмах психологічного самозахисту. Метою статті був аналіз динаміки зміщень ціннісних орієнтирів добробуту в умовах цифровізації українського суспільства часів війни та теоретичне обґрунтування й емпірична верифікація «Моделі суб'єктної регуляції добробуту» як відповіді на виклики сучасного українського кіберпростору. У дослідженні застосовано комплексний підхід із аналізом вторинних даних (World Happiness Report), великих даних пошукових запитів (Google BigQuery 2022-2025), медіа-заголовків (Istio) та емпіричних методів (шкала К.Ріфф, BASIC Ph, PERMA-Profler). Дослідження охопило близько 5 000 осіб, включно з педагогами прифронтових територій, та проводилося у два етапи: масове опитування (N = 4 843) і поглиблений аналіз евдемонічного добробуту (N = 300). Виявлено, що викладачі ВНЗ та вчителі демонструють високі показники «Управління середовищем» та «Цілей у житті» – 80 %, а загальний рівень добробуту за PERMA-Profler – 7,8/10. Доведено, що традиційні моделі добробуту трансформуються в активну евдемонічну стратегію життєтворення. Виявлено еволюцію копінг-стратегій населення: від шокової адаптації до запиту на автономію та нові знання. Верифіковано «Модель суб'єктної регуляції добробуту», де «аксіологічний якір» (Гідність та Сенс) виступає базовим стабілізатором психіки. Встановлено, що професійна реалізація освітян у прифронтовій зоні є формою суб'єктного спротиву. Практичне значення полягає у можливості впровадження моделі суб'єктної регуляції добробуту в системи профілактичної психоедукації та психологічної реабілітації українців, зокрема освітян

Ключові слова: цифровізація, масмедіа; медіатравма; суб'єктна регуляція; життєтворення; ціннісні орієнтири; резильєнтність

**Cognitive predictors of students' perception
of environmental and epidemic health threats during wartime****Tetiana Larina***

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Abstract. The aim of the study was to examine the influence of cognitive predictors on students' perception of environmental and epidemic health threats during wartime. The following methods were used to identify cognitive predictors: the "Questionnaire on Worldview Plasticity", the "Post-traumatic Cognitions Questionnaire", and the short version of the "Sense of coherence" questionnaire. A specialised diagnostic framework was developed to investigate specific structural components of the psychological readiness of participants in the educational process to counter environmental and epidemic threats. The study sample consisted of 502 respondents, with a mean age of 20 years: women (80.3%), men (18.1%), and other genders (1.6%). Data collection was conducted using Google Forms during the spring-autumn period of 2025. Regression analysis was applied for statistical data processing. It was found that worldview and cognitive-emotional predictors play a significant role in shaping students' attitudes towards environmental and epidemic challenges. The results of the regression analysis demonstrated that negative beliefs about the world are the dominant factor affecting mental health ($R^2 = 0.46$; $t = 0.51$; $p < 0.001$), whereas a sense of coherence ($t = -0.04$; $p = 0.026$) functions as a protective factor. The perception of environmental threats is more strongly mediated by such cognitive predictors as critical thinking and plasticity. The leading role of additional cognitive filters through which students assess the level of danger posed by epidemic challenges is played by worldview predictors such as idealism and principledness. The resulting regression model demonstrated the complex dynamics of interaction between cognitive and resource-related parameters of students' psychological resilience to global challenges. A tendency towards self-reproach may act as a mediator that intensifies anxiety concerning one's physical condition in adverse environmental and epidemic circumstances. It was established that negative beliefs about the world are a key factor increasing the vulnerability of young people's mental health to environmental challenges, while a sense of coherence serves as a "protective" factor in counteracting environmental and epidemic threats among participants in the educational process

Keywords: cognitive beliefs; worldview; individual psychological readiness; worldview plasticity; post-traumatic cognitions

INTRODUCTION

The prolonged experience of war among the Ukrainian population inevitably transforms the entire structure of an individual's inner world, including their beliefs about the world and about themselves. Coping with the losses caused by war exhausts both the physical and psychological resources of the individual. One of

the most vulnerable groups within the population is young people, who are experiencing and constructing their own life paths under conditions of resistance, struggle, and the relentless drive for survival. The deconstruction of the fundamental foundations of safety, which has become increasingly apparent in

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the fifth year of the Russian-Ukrainian war, is shaping a new perception of uncertainty. Individuals continue to strive for a sense of security, which is increasingly becoming an echo of memories of the past, a life that was understandable and more or less stable; yet the reality of the present, as F. Hahn (2024) emphasised, is a culture of "uncertainty".

An alarmingly high level of uncertainty regarding oneself and the surrounding world has a destructive impact on the cognitive sphere of the individual, giving rise to cognitive biases and patterns of paradoxical and lateral thinking. Traumatic negative cognitive beliefs and biases regarding oneself and the world in general can affect the criticality of self-awareness, research and creative commitment, and resilience to uncertainty. In exploring the possibilities of constructive engagement with hazardous living conditions, J. Foster (2011) focused on the model of environmental responsibility as a tool for responsible behaviour towards future generations, at the level of everyday life and environmental consequences. Thus, studying the role of students' cognitive predictors in shaping the younger generation's mental resilience to counter unstable environmental and epidemic conditions of survival during wartime is highly relevant.

Research by A. Kuzmina (2024) demonstrated that it is of the utmost importance to foster the younger generation's sustainable competencies in combating the effects of climate change, a deeper understanding of environmental issues, an understanding of the interconnection between natural processes and human activity, responsibility for the environment, and the development of critical, problem-solving and global thinking. Education, as the leading instrument in a young person's development on the path to their formation and personal fulfilment, often acts as a driving force for change. Consequently, in the research on the characteristics of the perception of environmental issues and attitudes towards nature, M. Bonnett (2019) emphasised the need to develop pathways for the "ecologisation" of education. Author emphasised that the development of a receptive and sensitive relationship with nature, and the cultivation of a value-based attitude towards the environment in people's thinking, is key to human well-being. However, under wartime conditions, when implementing changes within the education system, it is necessary to take into account the traumatic factor associated with the experiences of Ukrainian youth in coping with the disruption of stable forms of life and the satisfaction of basic needs for protection.

Despite a wide range of studies on preparing young people to take a responsible approach to their own survival in the face of global environmental and epidemic threats, the cognitive predictors shaping students' attitudes towards environmental challenges have not been sufficiently explored. The aim of this

article was to investigate how cognitive predictors influence students' perceptions of environmental and epidemic threats to health during wartime.

MATERIALS AND METHODS

The theoretical and conceptual basis for this empirical study was the concept of an individual's psychological readiness to counter environmental and epidemic threats, developed by O. Kredentser (2025) as part of the planned research project "Social and psychological technologies for promoting the readiness of participants in the educational process to counter environmental and epidemic threats to human health" (2025-2026). Within this concept, an individual's psychological readiness to counter environmental and epidemic threats is viewed as a system of cognitions, motives, values, skills and personal qualities that ensure a person's psychological ability to adequately perceive and assess threats and act effectively in the face of environmental and epidemic risks. Cognitive resilience is one of the five structural components of preparedness, reflecting the level of awareness, intellectual flexibility and an individual's ability to adequately process information about environmental and epidemic threats. Cognitive resilience ensures a rational perception of crisis events, the ability to think critically and to form well-founded decisions in situations of heightened uncertainty (Kredentser, 2025).

The following methods were used to identify cognitive predictors: the "Questionnaire on Worldview Plasticity" (Hruzynova, 2022), the "Post-traumatic Cognitions Questionnaire" (Zlyvkov *et al.*, 2016), and the short version of the "Sense of Coherence" questionnaire (Khomulenko & Hres, 2023). A special diagnostic complex has been developed to investigate specific structural components of the psychological readiness of participants in the educational process to counter environmental and epidemic threats; it was approved by the Commission on Research Ethics of the Institute of Social and Political Psychology of the National Academy of Pedagogical Sciences of Ukraine (Minutes No. 07/25, dated 28 April 2025). The study sample comprised 502 respondents, students of various specialisations from different higher education institutions in Ukraine, predominantly from Kyiv (73.1%), Rivne (16.3%) and other cities (10.6%). The respondents' ages ranged from 17 to 44 years, with an average age of 20 years; women (80.3%), men (18.1%), and other genders (1.6%). The majority of respondents were studying at bachelor's level (83.5%), master's level (15.5%) and postgraduate level (1%). Data collection was carried out using Google Forms during the spring and autumn of 2025. Regression analysis using the jamovi software (version 2.3.28) was employed for statistical processing. Respondents' participation in the empirical stages of the study was based on the principles of voluntariness, confidentiality and anonymity. The ethical principles

of the study were in line with those of the American Psychological Association (2017).

RESULTS AND DISCUSSION

According to the results of the constructed linear regression model ($R^2 = 0.28$), which explains 28% of the variance in the subjective perception of the impact of environmental threats on physical health, it was established that “worldview plasticity” ($t = 0.1$; $p = 0.001$)

and “worldview criticality” ($t = 0.12$; $p = 0.011$) are positive predictors of constructive interaction with hazardous living conditions. In contrast, “self-criticism” exhibits the highest coefficient of influence ($t = 0.2$; $p = 0.017$) among all variables. This indicates that a tendency towards internal autoaggression and excessive self-criticism intensifies the subjective sense of physical health vulnerability to external environmental factors (Table 1).

Table 1. Results of the regression analysis of the influence of students' worldview sphere and cognitive-emotional self-regulation on the perception of environmental threats to physical health

Predictors	Estimate (B)	SE	t	p
Intercept / Constant	1.8	0.73	2.46	0.014
Worldview plasticity	0.1	0.03	3.2	0.001
Worldview criticality	0.12	0.05	2.56	0.011
Self-criticism	0.2	0.08	2.39	0.017

Source: author's own work

Analysis of the regression model shows that worldview and cognitive-emotional predictors play a significant role in shaping students' attitudes towards environmental challenges. Thus, the perception of environmental threats is, on the one hand, mediated by such cognitive predictors as criticality and plasticity, and on the other, by a tendency towards self-criticism and self-blame. In particular, a tendency towards self-criticism may act as a mediator that intensifies anxiety regarding one's own physical condition in adverse environmental conditions.

The regression model for predictors of the perception of the impact of epidemic threats on physical health ($R^2 = 0.34$) explains 34% of the variation in how students assess the impact of epidemics on their physical health. In the constructed model, the indicator “self-criticism” ($t = 0.31$; $p < 0.001$) demonstrated the highest level of statistical significance, indicating

that students' tendency towards self-blame and auto-aggression intensifies the subjective perception of vulnerability to epidemic threats. In other words, students transfer their internal psychological discomfort onto their perception of external biological risks. It was found that greater commitment to one's own moral, ethical and worldview attitudes, “worldview principledness” ($t = 0.10$; $p = 0.036$), generates greater anxiety among students regarding the impact of epidemics on health. This may indicate that, among students, principledness correlates with a greater sense of responsibility for one's own life and physical condition. Such a predictor as “worldview idealism” also demonstrated a statistically significant influence ($t = 0.07$; $p = 0.043$). A tendency towards an idealistic perception of the world is a factor that increases students' sensitivity to epidemics, which disrupt their idealised image of safe and harmonious existence (Table 2).

Table 2. Results of the regression analysis of the influence of students' worldview sphere and cognitive-emotional self-regulation on the perception of epidemic threats to physical health

Predictors	Estimate (B)	SE	t	p
Intercept / Constant	3.03	0.65	4.66	<0.001
Worldview idealism	0.07	0.04	2.03	0.043
Worldview principledness	0.10	0.04	2.01	0.036
Self-criticism	0.31	0.08	3.64	<0.001

Source: author's own work

Comparing these two models, it can be concluded that epidemic threats are perceived by students as more sensitive and more closely connected with internal psychological states, particularly with the level of self-criticism. Thus, in the cognitive assessment of epidemic threats, the most significant factor is self-criticism, which in some way intensifies anxiety regarding students' somatic condition. At the same time, such worldview predictors as idealism and principledness function as additional cognitive filters through which students assess

the level of danger posed by epidemic challenges. At the next stage of the empirical data analysis, regression models of the subjective perception of the impact of environmental and epidemic threats on students' mental health were constructed.

According to the results of the constructed linear regression model ($R^2 = 0.41$), which explains 41% of the variability in students' subjective perception of the impact of environmental threats on mental health, it was established that “negative beliefs about

the world" ($t = 0.45$; $p < 0.001$) constitute the strongest predictor within the model. This indicates that a pessimistic perception of surrounding reality and expectations of global threats intensify concerns regarding one's own mental well-being. Thus, general cognitive biases concerning the hostility of the surrounding world form the foundation for the development of environmental anxiety. A negative statistically significant relationship was also identified for the sense of coherence ($t = -0.04$; $p = 0.02$). The higher the sense of coherence (the capacity to perceive the world as

comprehensible, manageable, and meaningful), the lower the perception of the negative impact of environmental factors on students' mental state. In this context, coherence functions as a resource of cognitive resilience that mitigates anxiety. A tendency towards idealistic cognitive beliefs, namely "worldview idealism" ($t = -0.09$; $p = 0.02$), increases students' sensitivity to environmental adversities, since such adversities are perceived as the destruction of a harmonious world order and negatively affect the mental state of young people (Table 3).

Table 3. Results of the regression analysis of the influence of students' worldview sphere and cognitive-emotional self-regulation on the perception of environmental threats to mental health

Predictors	Estimate (B)	SE	t	p
Intercept / Constant	3.93	0.79	4.96	<0.001
Worldview idealism	0.09	0.04	2.32	0.021
Negative beliefs about the world	0.45	0.11	4.14	<0.001
Sense of coherence	-0.04	0.02	-2.33	0.020

Source: author's own work

Thus, unlike the previous models, the combination of negative beliefs about the world and sense of coherence explains attitudes towards mental health considerably better than attitudes towards physical health. The resulting regression model demonstrates the complex dynamics of interaction between cognitive and resource-related parameters of students' resilience to global challenges. It was established that negative beliefs about the world are a key factor increasing the vulnerability of young people's mental health to environmental challenges. At the same time, the identified role of sense of coherence as a negative predictor demonstrates that students' capacity to interpret and structure life experience performs a buffering function, reducing their level of environmental stress. This model introduces the indicator of coherence as a "protective" factor in counteracting environmental and epidemic threats among participants in the educational process.

The following regression model identifies cognitive predictors of students' subjective perception of

the impact of epidemic threats on their own mental health ($R^2 = 0.46$). It explains 46% of the variability in how university students assess the impact of epidemics on their mental health. The dominant indicator is "negative beliefs about the world" ($t = 0.51$; $p < 0.001$). Thus, attitudes characterised by negative perceptions of epidemic threats and expectations of catastrophic events most strongly determine students' sense of psychological vulnerability in the face of epidemics. Sense of coherence, as in the previous model, demonstrates a statistically significant negative effect ($t = -0.04$; $p = 0.026$). This confirms the role of coherence as an anti-stress buffer. Students' capacity to integrate difficult experiences and perceive meaning in events helps reduce the destructive impact of epidemic threats on their mental health. Worldview idealism correlates with heightened sensitivity among young people to epidemic challenges ($t = 0.10$; $p = 0.01$). The disruption of the usual order of things caused by illness is perceived by idealists as a substantial threat to their internal psychological balance (Table 4).

Table 4. Results of the regression analysis of the influence of students' worldview sphere and cognitive-emotional self-regulation on the perception of epidemic threats to mental health

Predictors	Estimate (B)	SE	t	p
Intercept / Constant	3.35	0.77	4.37	<0.001
Worldview idealism	0.10	0.04	2.59	0.010
Negative beliefs about the world	0.51	0.10	4.88	<0.001
Sense of coherence	-0.04	0.02	-2.24	0.026

Source: author's own work

Thus, the results of the regression analysis indicate that the perception of epidemic threats as a factor influencing mental health is largely determined by the cognitive schema of the "world as a threat". At the same time, sense of coherence may be regarded as a key coping

resource for students, contributing to their psychological stabilisation under conditions of epidemiological instability. Thus, negative beliefs and coherence are most strongly manifested in the increase of students' concerns regarding their own mental state. It should be

noted that this model demonstrates the highest explanatory power among all previously identified parameters, indicating the critical importance of these cognitive factors specifically within the context of epidemics.

Similarly, researchers such as M. Błaszczuk *et al.* (2025) investigated students' psychological and educational resilience during wartime and demonstrated that wartime destruction and stress become integrated with everyday academic difficulties, generating a "complex failure" that students are compelled to overcome. H. Meshko (2026), in a quantitative study, found that resilience and peer social support are significant predictors of students' psychological well-being, with internal adaptive resources exerting a stronger influence, while peer group support further enhanced the effect. Researchers such as F. Giordano *et al.* (2024) revealed how internal resources (positive thinking, emotional regulation, sense of control) and external support (social connections and communities) contribute to adaptation and the maintenance of students' mental well-being under wartime conditions. In studies dedicated to the psychosocial experiences of Ukrainians living through the war, researchers M. Mezhenka *et al.* (2015) emphasised that prolonged war trauma acts as a distinct factor in the disruption of core beliefs, worldview and identity. According to the study by I. Bloshchynskyi *et al.* (2025), the specific nature of the situational impact of war lies in the fact that in extreme crisis situations, people primarily rely on past experience, their worldview and value systems, which do not always correspond to reality. Thus, the findings of these international studies are consistent with the present research, confirming that cognitive resources and social support are key factors determining students' resilience and psychological well-being under conditions of war and environmental-epidemic threats, thereby substantiating the necessity for the further development of cognitive and socio-psychological technologies to support young people.

CONCLUSIONS

It was established that worldview and cognitive-emotional predictors play a significant role in shaping students' attitudes towards environmental and epidemic challenges. It was found that negative beliefs about the world are a key factor increasing the vulnerability of students' mental health to environmental and epidemic threats ($R^2 = 0.46$; $t = 0.51$; $p < 0.001$). The perception of environmental threats is more strongly mediated by such cognitive predictors as criticality and plasticity ($t = 0.1$; $p = 0.001$; $R^2 = 0.28$). Epidemic threats, however,

are perceived by students as more sensitive and more closely associated with internal psychological states, particularly with the level of self-criticism ($t = 0.2-0.31$; $p < 0.05$). Such worldview predictors as idealism and principledness play a leading role as additional cognitive filters through which university students assess the level of danger posed by epidemic challenges. It was determined that a tendency towards self-criticism may function as a mediator that intensifies anxiety regarding one's physical condition under adverse environmental circumstances, as well as during the cognitive assessment of epidemic threats, thereby further intensifying concerns regarding students' somatic condition.

The resulting regression model demonstrates the complex dynamics of interaction between cognitive and resource-related parameters of students' psychological resilience to global challenges. It was established that negative beliefs about the world are a key factor increasing the vulnerability of young people's mental health to environmental challenges. At the same time, the identified role of sense of coherence as a negative predictor demonstrates that students' capacity to interpret and structure life experience performs a buffering function, reducing their level of environmental stress ($t = -0.04$; $p = 0.026$). Thus, sense of coherence functions as a "protective" factor in counteracting environmental and epidemic threats among participants in the educational process.

The results of the regression analysis indicate the critical importance of cognitive factors within the context of epidemics. The perception of epidemic threats as a factor influencing mental health is largely determined by the cognitive schema of the "world as a threat". Meanwhile, sense of coherence may be regarded as a key coping resource for students, contributing to their psychological stabilisation under conditions of epidemiological instability. Prospects for further research include the development of cognitive technologies aimed at enhancing the psychological readiness of participants in the educational process to counter environmental and epidemic threats to health.

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None.

REFERENCES

- [1] American Psychological Association. (2017). *Ethical principles of psychologists and code of conduct*. Retrieved from <https://www.apa.org/ethics/code>.
- [2] Błaszczuk, M., Kovalisko, N., Pieńkowski, P., Pachkovskyy, Y., & Ryniejska-Kiełdanowicz, M. (2025). Coping with adversity: Mechanisms of resilience in Ukrainian universities during the Russian-Ukrainian War – a perspective from Lviv University students. *Higher Education*. doi: 10.1007/s10734-025-01506-z.

- [3] Bloshchynskiy, I., Hanaba, S., Kovalska, I., & Mostovyi, A. (2025). Teaching staff's metacognitive beliefs in coping with war-related stress and searching for internal resources. *BRAIN. Broad Research In Artificial Intelligence And Neuroscience*, 16(3), 307-316. [doi: 10.70594/brain/16.3/22](https://doi.org/10.70594/brain/16.3/22).
- [4] Bonnett, M. (2019). Towards an ecologization of education. *Journal of Environmental Education*, 50(4-6), 251-258. [doi: 10.1080/00958964.2019.1687409](https://doi.org/10.1080/00958964.2019.1687409).
- [5] Foster, J. (2011). Sustainability and the learning virtues. *Journal of Curriculum Studies*, 43(3), 383-402. [doi: 10.1080/00220272.2010.521260](https://doi.org/10.1080/00220272.2010.521260).
- [6] Giordano, F., Lipscomb, S., Jefferies, P., Kwon, K-A., & Giammarchi, M. (2024). Resilience processes among Ukrainian youth preparing to build resilience with peers during the Ukraine-Russia war. *Frontiers in Psychology*, 15, article number 1331886. [doi: 10.3389/fpsyg.2024.1331886](https://doi.org/10.3389/fpsyg.2024.1331886).
- [7] Hahn, F. (2024). More trouble for a troubled geist: Finding certainty in the uncertain through creative unknowing. *The European Legacy*, 29(3-4), 350-360. [doi: 10.1080/10848770.2024.2312673](https://doi.org/10.1080/10848770.2024.2312673).
- [8] Hruzynova, K.M. (2022). [Questionnaire of worldview plasticity of the personality](#). *Habitus*, 42, 124-131.
- [9] Khomulenko, T., & Hres, Yu. (2023). Short version of A. Antonovsky's sense of coherence scale. *Bulletin of H.S. Skovoroda Kharkiv National Pedagogical University. Psychology*, 68, 374-385. [doi: 10.34142/23129387.2023.68.24](https://doi.org/10.34142/23129387.2023.68.24).
- [10] Kredentser, O.V. (Ed.). (2025). [Psychological readiness to counter environmental and epidemic threats: promotion in the educational space: Guidelines](#). Kropyvnytskyi: Imeks-LTD.
- [11] Kuzmina, A.V. (2024). [Modern directions, ways and means of improving the process of specialized training of high school students in strategies for social combating the consequences of climate change](#). In M.V. Hrynova (Ed.), *Materials of the 1st international scientific and practical forum "Main goals of the sustainable development strategy: Problems and prospects"* (pp. 595-597). Poltava: V.G. Korolenko Poltava National Pedagogical University.
- [12] Meshko, H., Meshko, O., Mamychenko, S., & Dievochkina, N. (2026). The influence of resilience and peer social support on students' psychological well-being during the war in Ukraine. *International Journal of Counseling and Psychotherapy*, 3(1), 89-99. [doi: 10.64420/ijcp.v3i1.500](https://doi.org/10.64420/ijcp.v3i1.500).
- [13] Mezheritska, M., Dunbar, N., & Noll, L.K. (2025). Living in the war: Living in two realities-A grounded theory of the psychosocial experience of Ukrainians enduring ongoing war in 2022-2024. *Traumatology*. [doi: 10.1037/trm0000603](https://doi.org/10.1037/trm0000603).
- [14] Zlyvkov, V.L., Lukomska, S.O., & Fedan, O.V. (2016). [Psychodiagnostics of personality in crisis life situations](#). Kyiv: Pedahohichna dumka.

Когнітивні предиктори сприйняття студентами екологічних та епідемічних загроз здоров'ю під час війни

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Анотація. Метою дослідження було вивчення впливу когнітивних предикторів сприйняття студентами екологічних та епідемічних загроз здоров'ю під час війни. Для визначення когнітивних предикторів використовувались наступні методи: «Опитувальник світоглядної пластичності особистості», «Опитувальник посттравматичних когніцій», коротка версія опитувальника «Почуття когерентності». Розроблено спеціальний діагностичний комплекс, спрямований на дослідження окремих структурних компонентів психологічної готовності учасників освітнього процесу протидіяти екологічним та епідемічним загрозам. Вибірку дослідження склали 502 респонденти, середній вік респондентів – 20 років, жінки (80,3 %), чоловіки (18,1 %), інший гендер (1,6 %). Збір даних проводився за допомогою Google Forms протягом весни-осені 2025 року. Для статистичної обробки даних було застосовано регресійний аналіз. Було з'ясовано, що світоглядні та когнітивно-емоційні предиктори відіграють значущу роль у формуванні ставлення студентів до екологічних та епідемічних викликів. Результати регресійного аналізу показали, що негативні думки щодо світу є домінуючим чинником для психічного здоров'я ($R^2 = 0,46$; $t = 0,51$; $p < 0,001$), тоді як почуття когерентності ($t = -0,04$; $p = 0,026$) виступає захисним фактором. Сприйняття екологічних загроз більшою мірою опосередковується такими когнітивними предикторами як критичність та пластичність. Провідну роль додаткових когнітивних фільтрів, крізь які студентська молодь оцінює рівень небезпеки епідемічних викликів відіграють такі світоглядні предиктори, як ідеалізм та принциповість. Отримана регресійна модель продемонструвала складну динаміку взаємодії когнітивних та ресурсних параметрів психологічної стійкості студентів до глобальних викликів. Схильність до самоїдства може виступати медіатором, який посилює тривогу щодо власного фізичного стану в несприятливих екологічних та епідемічних умовах. Встановлено, що негативні думки стосовно світу є ключовим чинником, що посилює вразливість психічного здоров'я молоді до екологічних викликів, а почуття когерентності виступає «захисним» фактором протидії екологічним та епідемічним загрозам у учасників освітнього процесу

Ключові слова: когнітивні переконання; світогляд; психологічна готовність особистості; світоглядна пластичність; посттравматичні когніції

**Factor structure of the component characteristics
of mental health among high-security penitentiary staff
by diagnosed levels of resilience****Iuliia Paskevskia***

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Abstract. The preservation of mental health among penitentiary staff working in high-security institutions is a critical issue due to sustained exposure to professional stressors, elevated responsibility, and psychologically demanding working conditions. The study aimed to empirically explore the level of resilience as a key resource for maintaining mental health among penitentiary personnel employed in high-security environments. The study involved 2,518 employees of high-security penitentiary institutions of the State Criminal-Executive Service of Ukraine; data were collected online via Google Forms using 16 standardised psychodiagnostic instruments, and 77 psychometric indicators were analysed in SPSS 24.0 using standardisation procedures, non-parametric tests, discriminant analysis, and factor analysis. The results of factor analysis revealed a differentiated structure of mental health characteristics depending on the level of resilience. In the low-resilience group, the dominant factors were reflective evaluation of activity (10.249%), emotional lability (7.152%), and psychological defence through regression (6.339%). In the medium-resilience group, the leading factors included persistence (9.652%), emotional exhaustion (9.085%), psychological defence through regression (6.011%), and internality in the domain of failures (4.708%). In the high-resilience group, the key factors were emotional exhaustion (9.045%), professional persistence (8.653%), and psychological defence through denial (6.454%). The findings demonstrate that resilience functions as a differentiating parameter that shapes specific configurations of mental health, psychological defence mechanisms, psychological well-being, and professional persistence under conditions of high professional risk. The conducted study provides a comprehensive assessment of the structural organisation of mental health characteristics among penitentiary staff, revealing key patterns of psychological functioning under conditions of increased professional risk. The findings may serve as a basis for developing mental health support and burnout prevention strategies for penitentiary staff in Ukraine

Keywords: high-security institutions; emotional exhaustion; burnout; psychological defence; psychological well-being; professional persistence

INTRODUCTION

The issue of preserving the mental health of penitentiary staff has become increasingly relevant in the context of growing professional, organisational, and security-related demands. The professional activity of

penitentiary personnel is carried out under conditions of heightened risk, characterised by strict regulation, constant responsibility for safety, exposure to crisis situations, emotionally intense interactions, and a high

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likelihood of professional traumatisation. Under such conditions, mental health should not be viewed solely as an individual psychological characteristic, but rather as a multidimensional construct shaped by the interaction between personal resources and the institutional environment. In contemporary scientific discourse, mental health is conceptualised as an integrative state of psychological functioning, encompassing emotional regulation, adaptive capacity, subjective well-being, and the ability to maintain professional effectiveness under stress. Within this framework, resilience is considered a key resource component that enables individuals to withstand stress, adapt to adverse conditions, recover from traumatic experiences, and sustain functional performance.

Recent studies have increasingly focused on the psychological resilience and mental well-being of professionals working under conditions of chronic stress and traumatic exposure. Researchers V.H. Dykun *et al.* (2023) examined methodological approaches to assessing the moral and psychological state of military personnel and concluded that systematic psychological diagnostics are essential for maintaining professional effectiveness and psychological stability in high-risk environments. Scientists L. Zasiakina & V. Burtzman (2023) investigated collective resilience among psychologists living and working within the shared traumatic reality of the war in Ukraine and found that professional support, social cohesion, and the integration of European psychological practices significantly contribute to sustaining resilience under prolonged crisis conditions. According to L.M. Karamushka *et al.* (2023), comprehensive psychodiagnostic instruments play an important role in assessing staff mental health and well-being, particularly in identifying emotional exhaustion, stress, and maladaptive coping strategies in occupational settings. Researchers O.M. Kokun & T.I. Melnychuk (2023) focused on practical approaches to resilience development and concluded that resilience can be strengthened through targeted psychological interventions, self-regulation techniques, and adaptive coping strategies. In addition, D. George & P. Mallery (2021) provided methodological guidance on the application of IBM SPSS Statistics in behavioural and social science research, emphasising the importance of appropriate statistical procedures for ensuring the reliability and validity of empirical findings.

In the context of the present study, resilience is understood as a psychological resource that supports adaptation, stress coping, and the maintenance of psychological well-being among penitentiary staff. Importantly, resilience is not considered a fixed trait but rather a dynamic capacity that can be developed through individual and organisational strategies. However, despite the growing body of research on resilience and mental health, the problem of identifying the structural

organisation of psychological characteristics underlying mental health in penitentiary personnel remains insufficiently explored. In particular, there is a lack of empirical models that would allow for the interpretation of mental health not only through isolated indicators, but through their latent structural relationships. This gap is especially critical in the case of penitentiary institutions with a high level of security, where the intensity of stressors and professional risks is significantly higher. Therefore, understanding how different psychological characteristics combine into integrated patterns of functioning is essential for both theoretical advancement and practical application.

The aim of this study was to identify and interpret the factor structure of mental health characteristics among penitentiary staff working in high-security institutions, taking into account their diagnosed levels of resilience. To achieve this aim, the study addresses the following objectives: to conceptualise resilience as a resource component of mental health and differentiate groups of penitentiary staff according to resilience levels; to examine the statistical validity of the applied psychodiagnostic framework and identify latent factor structures of psychological characteristics within groups with different levels of resilience; to interpret the identified factors as indicators of adaptive, compensatory, and risk-related patterns of psychological functioning. The scientific novelty of the study lies in the development of an empirically grounded factor model of mental health characteristics among penitentiary staff in high-security conditions. Unlike approaches that treat resilience as an isolated variable, this study considers it as a differentiating parameter that reveals distinct configurations of psychological resources, emotional risks, coping strategies, and behavioural patterns.

MATERIALS AND METHODS

In this study, a confirmatory quantitative research design was employed to empirically validate the theoretical assumptions and to assess the appropriateness of the selected psychodiagnostic instruments and scales for studying mental health characteristics among penitentiary staff. To empirically substantiate the theoretical provisions and to determine the validity of the application of the proposed psychodiagnostic instruments and scales, a study was conducted among employees of penitentiary institutions, taking into account the level of occupational security of their positions in accordance with the official classification of professions. The total sample of the study consisted of 8,444 employees of the penitentiary system of Ukraine, representing various categories of personnel of correctional institutions, pre-trial detention centres, and specialised institutions (including camps for prisoners of war). The study covered the North-Eastern, South-Eastern, Western, and Central-Western interregional departments of

the State Criminal-Executive Service of Ukraine. Within the scope of this article, the results of the analysis of a subsample of employees of high-security penitentiary institutions ($N = 2,518$) are presented, which corresponds to the subject of the study and allows for an in-depth analysis of mental health characteristics under conditions of increased professional risk. During the formation of the sample, the requirements for its relevance were ensured through the selection of participants corresponding to the research subject and the stated research hypotheses. The study was conducted in accordance with internationally recognised ethical standards for research involving human participants. Participation in the study was voluntary, informed consent was obtained from all respondents prior to data collection, and the confidentiality and anonymity of participants were ensured throughout all stages of the research process. The study also complied with the ethical principles of respect for human dignity, beneficence, and the protection of participants' rights and well-being (World Medical Association, 2013).

The survey results were analysed, in particular, according to the following criteria and subsamples: work with convicted individuals in correctional institutions (Prison), characterised by three levels of occupational security (minimum, medium, and high), $N = 7,938$; work in pre-detention institutions (Pre-prison), including employees of pre-trial detention centres, prisoner-of-war camps, and optimised institutions, $N = 506$. The key differentiating criterion in the study was the level of resilience, which was considered as an integral indicator of psychological stability and a fundamental resource for maintaining the mental health of personnel. According to the obtained diagnostic results, respondents were divided into groups with low, medium, and high levels of resilience.

For the empirical study, a complex of standardised psychodiagnostic methods was used: the Health Locus of Control Questionnaire (Karamushka *et al.*, 2023); the Self-Assessment of Anxiety, Frustration, Aggression, and Rigidity; the Positive Mental Health Scale (PMH-Scale) (Karamushka *et al.*, 2023); Ryff's Psychological Well-Being Scales; the Freiburg Personality Inventory (FPI); the Organisational Stress Scale; the Emotional State Assessment; the Interpersonal Relations Questionnaire (FIRO-B); the Professional Motivation Diagnostic Method; the Volitional Self-Regulation Method; the Hardiness Test; the Life Style Index; the Stress Coping Strategies Questionnaire SACS; the Subjective Control Scale; and the Connor-Davidson Resilience Scale (CD-RISC-10). The CD-RISC-10 was used as the main instrument for differentiating the sample according to resilience level. To ensure an objective classification of respondents ($N = 2518$) into low, medium, and high resilience groups, score standardisation based on the mean value ($M = 28.4$) and standard deviation ($SD = 5.8$) across the entire sample was applied. The cut-off

scores were determined as follows: respondents with scores $\leq M - 1SD$ were assigned to the low-resilience group (0-22 points; $n = 403$), participants with scores within the range of $M \pm 1SD$ were classified into the medium-resilience group (23-34 points; $n = 1712$), and respondents with scores $\geq M + 1SD$ were included in the high-resilience group (35 points and above; $n = 403$). Since the sample had been divided into three equal groups using tertiles, the group sizes has been nearly identical: low resilience – $n = 839$, medium resilience – $n = 840$, and high resilience – $n = 839$ participants.

In total, within the study, data were obtained across 84 psychometric scales using the psychodiagnostic instruments; in the statistical analysis, 77 indicators were used after excluding aggregated scales representing the sum of component scales within specific methods (e.g., the overall index of volitional regulation or the general indicator of emotional state). As a result of the empirical study, an extremely large dataset was obtained, which necessitated the use of a range of mathematical statistical methods for its analysis and generalisation: the procedure of standardisation of variables (to reduce discrepancies between quantitative results obtained from different methods with varying scales and measurement ranges; standardisation was performed using mean values and standard deviations for each scale); the Kolmogorov-Smirnov normality test (to determine the degree of correspondence of the empirical data distribution to the normal distribution in order to justify the selection of further parametric or nonparametric methods of analysis); discriminant analysis (to confirm and visualise the differentiation of the sample into subsamples depending on the identified level of resilience among respondents with different levels of occupational security); factor analysis (to reduce the number of variables and concentrate information on the main psychological characteristics and mechanisms of maintaining mental health in a compact form). To confirm the differentiation of the sample and to visualise inter-group differences, discriminant analysis was applied, in which the level of resilience served as the grouping variable, while the independent variables were the indicators of the psychodiagnostic scales. Statistical data processing was carried out using SPSS software for Windows (version 24.0) (George & Mallery, 2021).

RESULTS AND DISCUSSION

To test the statistical hypothesis regarding the presence of differences in mental health characteristics among employees of penitentiary institutions with different levels of occupational security and resilience, a multivariate statistical analysis of the obtained empirical data was conducted. To visualise the territorial distribution and the substantive relationships among the identified subsamples of penitentiary staff, discriminant analysis was applied as a type of multivariate

analysis designed for data classification and grouping. In discriminant analysis, the dependent variable is typically a single nominal scale (in this study, the "Level of Resilience" scale), which differentiates respondents into subsamples corresponding to its different categories; the independent variables are quantitative indicators derived from the diagnostic scales for all objects

of classification (with the exception of those scales for which no statistically significant differences were identified). During the analysis, the contribution of each variable to the final discriminant model was determined based on Fisher's F criterion, tolerance, and the F-to-remove statistic. The main results of the discriminant analysis calculations are presented in Table 1.

Table 1. Wilks' Lambda (λ) and χ^2 values based on the results of discriminant analysis

Test of Functions	Wilks' Lambda	Xi-square	Degree of freedom	Sig.
1 through 2	.575	4.610,702	138	.000
2	.942	491,9026	68	.000

Source: developed by the author

The first row presents the value of Wilks' lambda ($\lambda = 0.575$) and statistical significance ($p = 0.000$) for the full set of canonical functions, while the second row contains data on the discriminant ability of the set after excluding the first function. As can be observed, the full set of functions demonstrates a very high discriminant capacity, which slightly decreases after the exclusion of the first function but remains within the threshold of statistical significance ($p \leq 0.05$). The obtained results allow for the interpretative analysis of discriminant data. Thus, statistically significant indicators and the χ^2 test at the level of $p \leq 0.05$ visualise and confirm the feasibility of studying the patterns and determinants of mental health among penitentiary staff based on their level of resilience and considering the type of penitentiary institution. The next step in constructing the overall model of mental health was the process of reducing the number of variables and concentrating the information into a smaller set of characteristics. For this purpose, factor analysis was applied, as it allows for reducing the dimensionality of the initial space of intercorrelated variables and ensures a more economical representation of the data with minimal loss of information. The result of factor analysis is the transition from a large number of initial variables to a smaller number of new variables forming so-called factors, which are interpreted as the underlying sources of shared variance among the original variables. Through this approach, a set of factor-based symptom complexes of mental health among penitentiary staff was obtained.

The factorisation of the matrix of psychological scales (variables) in terms of the psychological components of mental health criterion was carried out using the Principal Components method followed by Varimax rotation. The number of factors was determined using Cattell's scree test, which involves plotting the eigenvalues (scree plot) of all diagnostic indicators included in the analysis. When analysing the factor matrix, the signs and magnitudes of factor loadings for each component were taken into account. The factor matrix also indicates which variables form each factor. The factor extracted as a result of Varimax rotation represents a

set of variables with significant loadings. Accordingly, a factor can be considered an artificial analytical unit for grouping variables based on the relationships existing among them. The appropriateness of applying factor analysis to the sample was also tested using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy: correlations between the factor and the variables included in its structure below 0.5 were excluded from the analysis, as well as Bartlett's test of sphericity ($p \leq 0.001$). The factorisation procedure was applied stepwise to all three subsamples of penitentiary staff, taking into account the diagnosed level of resilience. This article presents the results obtained for the subsample of employees of high-security penitentiary institutions with three levels of resilience (low, medium, high).

During the construction of the factor models, the initial set of 77 psychometric indicators underwent a statistical dimensionality reduction procedure. At the preparatory stage of the analysis, based on the results of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the intercorrelation matrix, 8 variables demonstrating unsatisfactory indicators or multicollinearity were excluded from further analysis. Consequently, the factorisation procedure for each group included 69 variables, which was confirmed by the identical number of degrees of freedom in Bartlett's test of sphericity ($df = 2346$, $p = 0.000$). To ensure the mathematical reliability of the models, only variables demonstrating factor loadings ≥ 0.50 after Varimax rotation were included in the final factor-loading tables. Variables with loadings below this threshold did not form stable symptom complexes and were therefore excluded from the final structure. Thus, the appropriateness of applying factor analysis to the selected set of diagnostic scales in the subsample of high-security penitentiary staff with a diagnosed low level of resilience was confirmed using the Kaiser-Meyer-Olkin measure ($KMO = 0.875$) and Bartlett's test of sphericity (approximate value $\chi^2 = 20,865.611$; $df = 2346$; $p = 0.000$), which indicates the suitability of the data for this type of analysis. The factor model of the components of mental health characteristics for the selected subsample is presented in Figure 1.

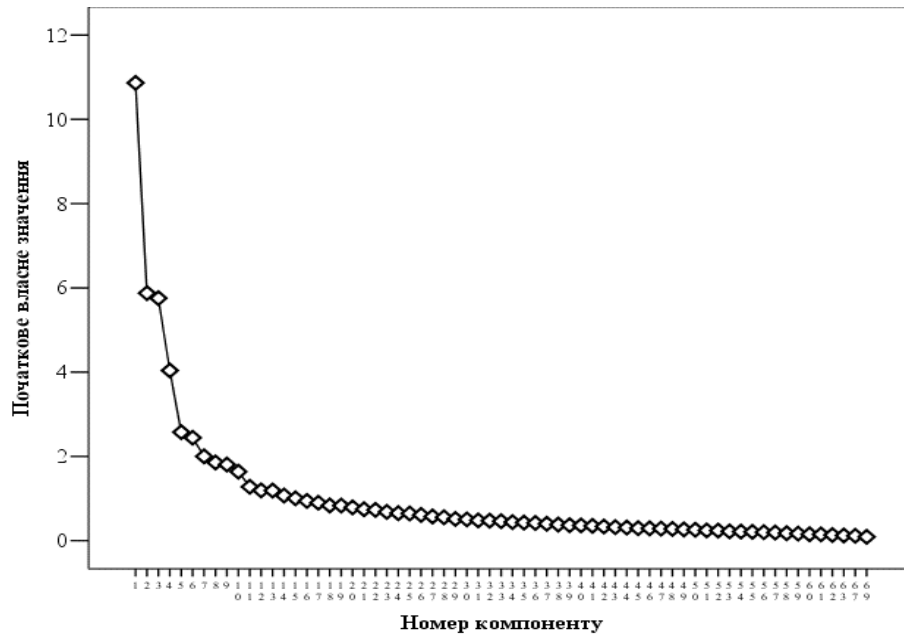


Figure 1. Results of the application of Cattell's scree test to the diagnostic data of penitentiary staff working in high-security institutions with a diagnosed low level of resilience

Source: developed by the author

Table 2 presents the results of the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity, which were used to assess the suitability of the obtained data for factor analysis among penitentiary staff with a low level of resilience. During the analysis of the obtained data, it is necessary to specify the cumulative percentage of variance explained by the extracted factors, as this indicator reflects the extent to which the empirical dataset is

adequately represented by the factor solution: the higher this value, the greater the proportion of the data that has been successfully factorised. Following Varimax rotation, the factor loading matrix appeared to be well-structured, with ten clearly defined factors explaining nearly 60% of the variance in the empirical dataset. The identification of the most significant factors is confirmed by correspondingly high factor loading coefficients (Table 3).

Table 2. Measure of sampling adequacy and Bartlett's Test for factor analysis of penitentiary staff in high-security institutions with a low level of resilience

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.875
Bartlett's Test of Sphericity	Approx. Chi-square	20865,611
	df (degrees of freedom)	2346
	Sig.	.000

Source: developed by the author

Table 3. Eigenvalues of extracted factors

Factors	Factor Loadings after Rotation		
	Total (factor weight)	% of Variance	(Cumulative variance %)
1	6,662	10,249	10,249
2	4,649	7,152	17,401
3	4,120	6,339	23,740
4	4,065	6,254	29,994
5	3,593	5,527	35,521
6	3,542	5,450	40,971
7	3,499	5,382	46,353
8	3,442	5,295	51,648
9	3,181	4,895	56,543
10	2,108	3,243	59,785

Source: developed by the author

In the current case, the first factor explains 10.2% of the variance, the second 7%, the third 6.3%, the fourth 6.2%, the fifth 5.5%, the sixth 5.4%, the seventh 5.3%, the eighth 5.2%, the ninth 4.8%, and the tenth 3.2% of the total variance of the empirical dataset. The obtained factor model further requires a detailed description of the component structure of each extracted factor and the assignment of generalised factor labels. It should be noted that factor names are assigned based on the analysis of the variables that constitute them or on the basis of the leading component (which typically has the highest loading and explains a substantial proportion of the variance within the factor). The substantive analysis of each identified factor and their generalised labelling are presented below. The magnitude of factor loadings is indicated in parentheses next to each factor component, reflecting the strength of the relationship between the given variable and the respective factor. The first factor includes the following variables: evaluation of performance outcomes (.730), endorsement of others' values (–.671), life goals (.666), involvement (.657), professional interests and values (.598), professional aspirations (.593), activity and productivity (–.573), breadth of interests (–.565), self-control (.551), persistence (.540), and internality in the domain of professional achievements (.525). The substantive analysis of the diagnostic scales with the highest variance determines the factor label as “Reflective Evaluation of Activity Outcomes”. The second factor includes the following components: emotional lability (.840), depression (–.822), shyness (.792), neuroticism (.723), and irritability (.680). It is labelled based on the variable with the highest positive loading as “Emotional Lability”.

The third factor includes the following variables: regression (.881), denial (.873), rationalisation (.865), projection (.863), compensation (.842), and displacement (.834). We propose to generalise the content of this factor under the label “Psychological defence through regression”. The fourth factor is defined by the

following components: indirect actions (.884), asocial actions (.817), impulsive actions (.791), aggressive actions (.780), seeking social contact (.745), cautious actions (.720), and seeking social support (.684). Based on the included variables, It is proposed to label this factor as “Constructive Coping Behaviour”. The fifth factor is characterised by the following scales: general internality (.769), internality in the domain of failures (.696), internality regarding health and illness (.642), internality in occupational relations (.579), internality in family relations (.565), and internality in the domain of achievements (.548). The content of this factor allows it to be interpreted as “Subjective Control”. The sixth factor symptom complex includes: Ce (real control) (.754), Le (real inclusion) (.730), Lw (expected inclusion) (.721), Aw (expected affect) (.718), Ae (real affect) (.678), and Cw (expected control) (.677). It is labelled according to the content of the leading component as “Responsibility”.

The seventh factor summarises the following characteristics: energy – fatigue (.851), self-confidence – helplessness (.819), elevation – depression (.815), calmness – anxiety (.777). The positive correlations for these scales indicate the predominance of energy, self-confidence, and calmness, which allows this factor to be labelled as “Energy”. The eighth factor includes the following variables: emotional stability (.748), masculinity-femininity (.736), extraversion-introversion (.659), spontaneous aggression (.568), and openness (.560). It is labelled according to the variable with the highest positive loading as “Emotional Stability”. The ninth factor includes the scales of anxiety (.695), aggression (.689), rigidity (.661), and frustration (.581), which determine its label as “Defensive Emotional Reactions”. The tenth factor includes the variables: internal locus of control (.774), control by powerful others (.635), and chance control (–.598). It is labelled based on the first component as “Internal Health Locus of Control”. The generalised nominative factor structure of this subsample is presented in Figure 2.

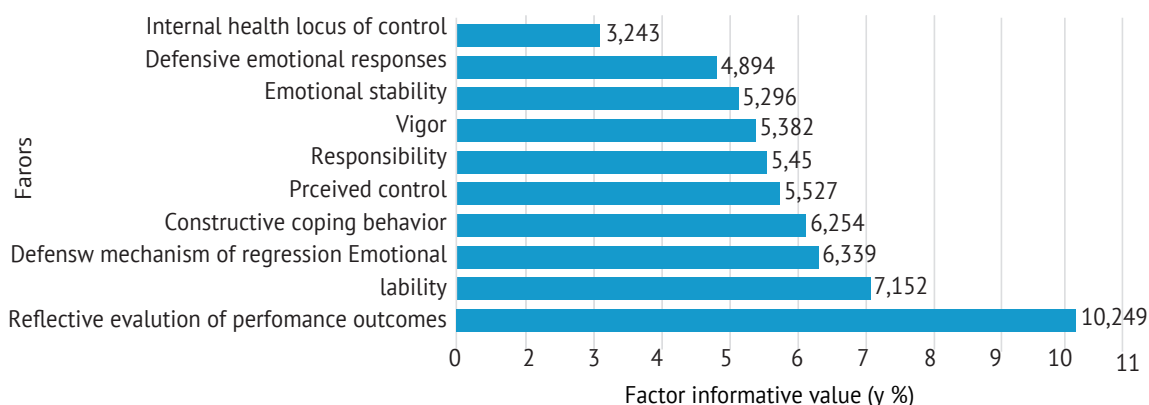


Figure 2. Nominal and informative factor structure of the component characteristics of mental health among penitentiary staff working in high-security institutions with a diagnosed low level of resilience

Source: developed by the author

The next stage of the analysis aims to specify the factor structure of mental health characteristics in the subsample of penitentiary staff working in high-security institutions with a medium level of resilience. The values of the Kaiser-Meyer-Olkin measure ($KMO=0.924$), as well as Bartlett's test of sphericity (approximate value

$\chi^2 = 39,695.093$; $df = 2346$; $p = 0.000$), indicate the suitability of the data for further analysis. Factor rotation resulted in a structure explaining more than 55% of the variance of the empirical dataset. The identification of the most significant factors is confirmed by correspondingly high factor loading coefficients (Table 4).

Table 4. Eigenvalues of extracted factors

Factors	Factor Loadings after Rotation		
	Total (factor weight)	% of Variance	Cumulative variance %
1	6,660	9,652	9,652
2	6,269	9,085	18,738
3	4,148	6,011	24,749
4	3,249	4,708	29,457
5	3,209	4,650	34,108
6	3,008	4,359	38,467
7	2,947	4,272	42,739
8	2,748	3,983	46,722
9	2,665	3,862	50,584
10	1,779	2,579	53,163
11	1,492	2,162	55,325

Source: developed by the author

In this case, the first factor explains 9.6% of the variance, the second 9%, the third 6%, the fourth 4.7%, the fifth 4.6%, the sixth 4.3%, the seventh 4.2%, the eighth nearly 4%, the ninth 3.8%, the tenth 2.5%, and the eleventh 2.1% of the total variance of the empirical dataset. It is necessary to then proceed to a detailed substantive analysis of each of the identified factors. The first factor includes the following variables: persistence (.767), control (.657), professional aspirations (.628), involvement (.620), professional interests and values (.610), evaluation of performance outcomes (.595), self-control (.577), life goals (.572), social desirability (–.538), and risk acceptance (.501). It is labeled according to the component with the highest factor loading as “Persistence”. The second factor includes the following indicators: aggressiveness (.771), anxiety (.754), rigidity (.715), emotional lability (.707), depression (.688), neuroticism (.617), shyness (.612), and irritability (.542). The content of this factor allows it to be generalised under the label “Emotional exhaustion”. The third factor is defined by psychological defence mechanisms: regression (.785), rationalisation (.760), denial (.752), projection (.743), compensation (.740), and displacement (.675). Therefore, it is logically labeled as “Psychological Defence through Regression”. The fourth factor includes the following variables: internality in the domain of failures (.710), internality in occupational relations (.652), internality in family relations (.648), internality regarding health and illness (.617), and internality in the domain of achievements (.605). This factor integrates indicators of respondents’ internality; however, the variable with the highest loading determines its label as “Internality in the Domain of Failures”.

The fifth factor includes the following variables: elevation – depression (.789), energy – fatigue (.776), self-confidence – helplessness (.752), and calmness – anxiety (.729). The analysis of responses across these dichotomous scales allows the factor to be generalised under the label “Situational Emotional Suppression”. The sixth factor is defined by the following variables: extraversion-introversion (.798), masculinity-femininity (.693), and emotional stability (.594). The distribution of responses on the extraversion-introversion scale indicates an average score, which determines the factor label as “Ambiversion”. The seventh factor includes the following scales: asocial actions (.748), indirect actions (.692), aggressive actions (.610), and impulsive actions (.506). The factor is labeled according to the variable with the highest loading as “Asocial Actions”. The eighth factor includes the following variables: seeking social support (.743), establishing social contact (.685), and cautious actions (.619). The factor is labeled according to the variable with the highest loading as “Seeking Social Support”. The ninth factor integrates the following variables: Le (real inclusion) (.710), Ce (real control) (.640), Lw (expected inclusion) (.620), Cw (expected control) (.589), Ae (real affect) (.550), and Aw (expected affect) (.535). This composition determines its label as “Professional Proactivity”. The tenth factor reflects an “External Health Locus of Control”, as it includes variables such as control by powerful others (.752) and internal locus of control (–.705). The eleventh factor reflects the characteristics of interaction with the surrounding social environment: positive relations with others (.836) and autonomy (.835). It is labeled according to the first variable as “Positive

Relations with Others". The generalised nominative factor structure of this subsample is presented in Figure 3. The next stage of the analysis aims to specify the factor structure of mental health characteristics in the subsample of penitentiary staff working in high-security institutions with a high level of resilience. The values of the Kaiser-Meyer-Olkin measure ($KMO = 0.909$),

as well as Bartlett's test of sphericity (approximate value $\chi^2 = 26,693.263$; $df = 2346$; $p = 0.000$), indicate the suitability of the data for further analysis. Factor rotation resulted in a structure explaining nearly 60% of the variance of the empirical dataset. The identification of the most significant factors is confirmed by correspondingly high factor loading coefficients (Table 5).

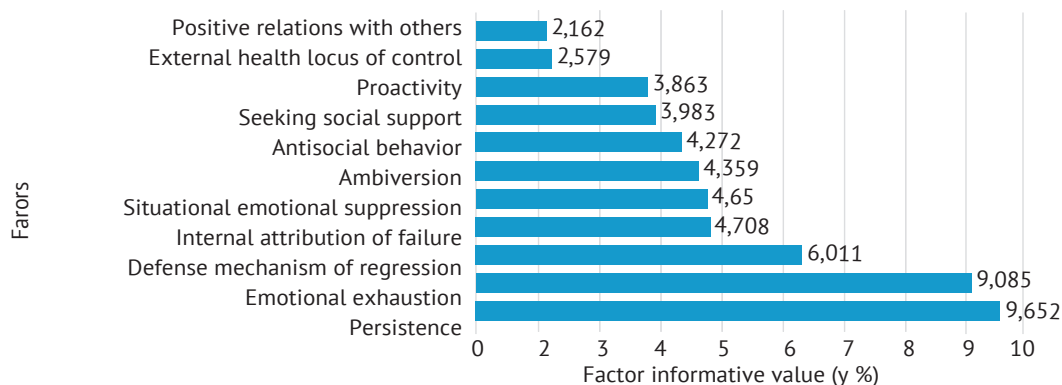


Figure 3. Nominal and informative factor structure of the component characteristics of mental health among penitentiary staff working in high-security institutions with a diagnosed medium level of resilience

Source: developed by the author

Table 5. Eigenvalues of extracted factors

Factors	Factor Loadings after Rotation		
	Total (factor weight)	% of Variance	Cumulative variance%
1	6,241	9,045	9,045
2	5,970	8,653	17,697
3	4,453	6,454	24,151
4	3,628	5,257	29,409
5	3,486	5,052	34,460
6	3,201	4,640	39,100
7	3,143	4,555	43,655
8	3,096	4,487	48,142
9	2,825	4,095	52,237
10	1,988	2,881	55,118
11	1,519	2,202	57,320

Source: developed by the author

In this case, the first factor explains more than 9% of the variance, the second 8.6%, the third 6.4%, the fourth 5.2%, the fifth 5%, the sixth 4.6%, the seventh 4.5%, the eighth 4.4%, the ninth 4%, the tenth nearly 3%, and the eleventh 2.2% of the total variance of the empirical dataset. The first factor includes the following variables: aggressiveness (.768), anxiety (.766), emotional lability (.763), depression (.726), rigidity (.656), neuroticism (.641), shyness (.627), and irritability (.547). It is labelled, as in the previous subsample, "Emotional exhaustion". The second factor includes the following variables: professional aspirations (.741), persistence (.673), life goals (.654), evaluation of performance outcomes (.642), self-control (.633),

professional interests and values (.630), control (.609), internality in the domain of professional achievements (.603), and involvement (.590). Based on the included variables, it is proposed to generalise this factor as "Professional persistence".

The third factor includes: denial (.802), regression (.800), projection (.765), rationalisation (.751), compensation (.739), and displacement (.724). We generalise it under the label "Psychological defence through denial". The fourth factor includes: social desirability (.808), internality in the domain of failures (.670), internality in occupational relations (.655), internality in family relations (.634), internality in the domain of achievements (.620), internality regarding health and illness

(.604), and internality in interpersonal relations (.547). It is labelled according to the first variable as “Social Desirability”. The fifth factor includes: asocial actions (.748), indirect actions (.657), aggressive actions (.612), and endorsement of others’ values (.505). The factor is labelled according to the variable with the highest loading as “Asocial Actions”. The sixth factor includes: extraversion-introversion (.807), masculinity-femininity (.673), emotional stability (.643), spontaneous aggression (.551), openness (.530), and frustration (.504). Based on the included variables, it is proposed to generalise this factor as “Aspiration for Leadership”. The seventh factor includes: energy – fatigue (.832), self-confidence – helplessness (.805), calmness – anxiety (.764), and elevation – depression (.751). The analysis of these variables indicates that the factor can be labelled as “Positive Emotional Self-Evaluation”. The eighth factor reflects the following set of characteristics:

Le (real inclusion) (.756), Ce (real control) (.708), Lw (expected inclusion) (.653), Ae (real affect) (.612), Cw (expected control) (.604), and Aw (expected affect) (.562). This composition determines its label as “Active Life Position”. The ninth factor includes the following scales: establishing social contact (.802), seeking social support (.776), cautious actions (.684), and assertive actions (.562). It is labelled according to the first variable as “Establishing Social Contact”. The tenth factor includes: control by powerful others (.737), internal locus of control (–.546), and chance control (.527). This combination of scales indicates the label “Need for External Health Control”. The eleventh factor includes indicators of well-being: positive relations with others (.794) and autonomy (.763). It can be labeled as “Psychological Well-Being”. The generalised nominative factor structure of this subsample is presented in Figure 4.

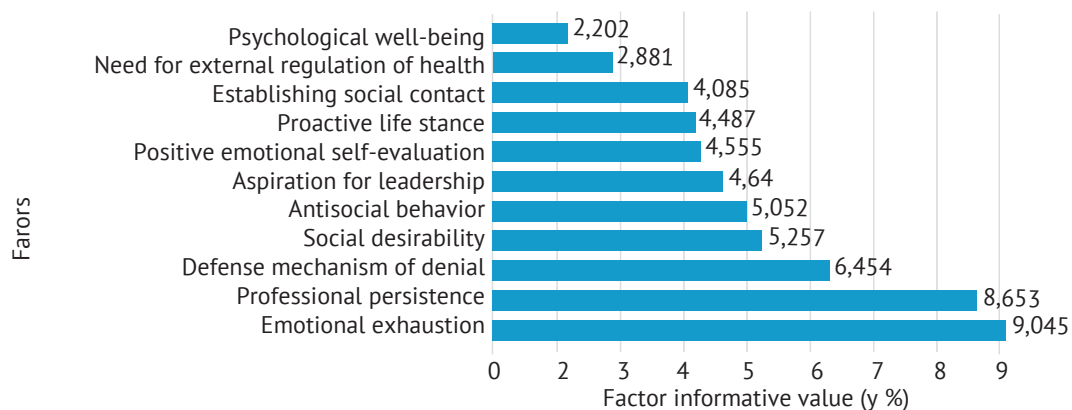


Figure 4. Nominal and informative factor structure of the component characteristics of mental health among penitentiary staff working in high-security institutions with a diagnosed high level of resilience

Source: developed by the author

Thus, the application of factor analysis to the subsample of penitentiary staff working in high-security institutions with a diagnosed level of resilience made it possible to generalise a set of factor-based symptom complexes describing the characteristics of their mental

health. A comprehensive list of all factor sets, taking into account the specific features of respondents’ professional activity, is presented in Table 6. The percentage of the total variance of the dataset accounted for by each factor is indicated alongside each factor.

Table 6. Factor symptom complexes in the subsample of penitentiary staff working in high-security institutions with a diagnosed level of resilience

Characteristics of work conditions	Nº	Resilience level (RL)		
		Low RL	Medium RL	High RL
High-security staff	1	Reflective evaluation of activity (10,249) *	Persistence (9,652)	Emotional exhaustion (9,045)
	2	Emotional lability (7,152)	Emotional exhaustion (9,085)	Professional persistence (8,653)
	3	Psychological defence through regression (6,339)	Psychological defence through regression (6,011)	Psychological defence through denial (6,454)
	4	Constructive coping behaviour (6,254)	Internality in the domain of failures (4,708)	Social desirability (5,257)

Table 6, Continued

Characteristics of work conditions	№	Resilience level (RL)		
		Low RL	Medium RL	High RL
High-security staff	5	Subjective control (5,527)	Situational emotional suppression (4,650)	Asocial actions (5,052)
	6	Responsibility (5,450)	Ambiversion (4,359)	Aspiration for leadership (4,640)
	7	Energy (5,382)	Asocial actions (4,272)	Positive emotional self-evaluation (4,555)
	8	Emotional stability (5,295)	Seeking social support (3,983)	Active life position (4,487)
	9	Defensive emotional reactions (4,895)	Proactivity (3,862)	Establishing social contact (4,095)
	10	Internal health locus of control (3,243)	External health locus of control (2,579)	Need for external health control (2,881)
	11		Positive relations with others (2,162)	Psychological well-being (2,202)

Note: Reflective evaluation of activity – percentage of the total variance of the dataset (%)

Source: developed by the author

Thus, the results of the conducted factor analysis made it possible to identify the structural organisation of the psychological characteristics of mental health among penitentiary staff working in high-security institutions depending on their level of resilience. It has been established that the mental health of personnel has a multidimensional nature and is represented through a system of interrelated factors reflecting both resource-based and destructive components of psychological functioning. The identified factor-based symptom complexes demonstrate different configurations of psychological characteristics, which makes it possible to differentiate adaptive, compensatory, and risk-related patterns of personnel functioning under conditions of increased professional workload. The obtained results provide an empirical basis for further interpretation of the patterns of mental health preservation and the role of resilience as a key regulatory resource.

The findings of the present study are consistent with contemporary theoretical and empirical approaches to resilience as a key psychological resource for maintaining mental health under conditions of prolonged occupational stress. L.S. Adamenko (2020) analysed modern approaches to understanding mental resilience and concluded that resilience should be interpreted as a multidimensional construct integrating emotional stability, adaptive coping, and the ability to preserve psychological functioning under adverse conditions. These conclusions correspond with the results of the current study, in which resilience differentiated specific configurations of emotional exhaustion, psychological defence mechanisms, and professional persistence among penitentiary personnel. D. Assonov & O. Khaustova (2019) examined the evolution of the concept of resilience in contemporary scientific literature and emphasised its dynamic and context-dependent nature. Their work demonstrated

that resilience is not a static personality trait but rather a flexible system of adaptive mechanisms shaped by environmental demands. This position is supported by the present findings, which revealed different factor structures of mental health characteristics depending on the level of resilience among employees working in high-security penitentiary institutions. A.P. Horbachyk & S.A. Salnikova (2008) focused on methodological approaches to sociological data analysis using SPSS and highlighted the importance of multivariate statistical procedures for identifying latent psychological structures. The current study expanded these methodological principles through the application of discriminant and factor analysis to a large-scale sample of penitentiary personnel, allowing the identification of adaptive and risk-related psychological patterns associated with resilience levels. Researchers V.H. Dykun *et al.* (2023) investigated methodological approaches to assessing the moral and psychological state of military personnel and concluded that systematic psychodiagnostic assessment is essential for maintaining effectiveness in high-risk professional environments. Similar conclusions were obtained in the present study, where comprehensive psychodiagnostic assessment enabled the identification of significant differences in psychological functioning among groups with low, medium, and high resilience. Scientists L. Zasiakina & V. Burtzman (2023) explored collective resilience among psychologists living in the traumatic context of war in Ukraine and demonstrated the importance of social support, professional solidarity, and adaptive coping for sustaining mental stability. In comparison, the present research extends these findings to penitentiary personnel and confirms that resilience also plays a central role in preserving psychological well-being in highly stressful institutional environments. O.M. Kokun *et al.* (2012) developed diagnostic

techniques for assessing leadership qualities among military personnel and emphasised the significance of psychological readiness, self-regulation, and persistence in professional performance. The results of the current study support these conclusions, as persistence emerged as one of the dominant factors within groups demonstrating medium and high resilience. G.P. Lasos (2018) conceptualised resilience as a complex psychological phenomenon integrating adaptive, compensatory, and developmental mechanisms. The author concluded that resilience facilitates psychological recovery and supports effective functioning under stressful conditions. These theoretical assumptions align with the findings of the current study, which demonstrated that resilience structures the balance between adaptive resources and maladaptive defence mechanisms in penitentiary staff. O.H. Uhryn (2017) analysed psychological aspects of management and stressed the importance of emotional regulation, responsibility, and adaptive leadership in organisational settings. The present study confirms these ideas by demonstrating that emotional exhaustion and internality significantly influence the psychological functioning of penitentiary personnel under conditions of increased professional risk.

G.A. Bonanno *et al.* (2011) examined resilience following trauma and loss and concluded that many individuals maintain stable psychological functioning despite exposure to highly stressful experiences. The findings of the present study similarly indicate that employees with high resilience preserve professional persistence despite the presence of emotional exhaustion and occupational stressors. S. Joseph & P. Linley (2008) investigated post-traumatic growth from the perspective of positive psychology and argued that traumatic experiences may stimulate personal development and psychological strengthening. Although the current study focused primarily on mental health preservation rather than post-traumatic growth, the identified adaptive patterns among highly resilient staff partially support the idea that stressful professional conditions may facilitate the development of compensatory psychological resources. S.J. Lepore & T.A. Revenson (2006) analysed the relationship between resilience and post-traumatic growth and concluded that adaptive coping strategies and cognitive processing are essential for positive adjustment following adversity. Similar mechanisms may explain the dominance of reflective evaluation and persistence identified in the present study among different resilience groups. S.S. Luthar *et al.* (2000) defined resilience as a dynamic process of positive adaptation despite significant adversity and highlighted the interaction between risk and protective factors. The present study empirically supports this conceptualisation by demonstrating that resilience differentiates adaptive and maladaptive psychological structures among penitentiary staff exposed to chronic occupational stress. F. Luthans *et al.* (2006) introduced

the concept of psychological capital, emphasising resilience, optimism, efficacy, and hope as resources promoting professional effectiveness. The current findings complement this framework by showing that resilience is closely associated with professional persistence and psychological stability among employees of high-security penitentiary institutions.

R. Neman (2005) described the APA resilience initiative and emphasised the importance of resilience-building programmes for maintaining psychological health under stressful conditions. The practical implications of the present study correspond with this approach, as the obtained results may serve as a basis for developing mental health support and burnout prevention strategies for penitentiary personnel in Ukraine. M. Rutter (1990) analysed psychosocial resilience and protective mechanisms, concluding that resilience depends on the interaction between individual psychological resources and environmental influences. The current study supports this perspective by demonstrating that psychological defence mechanisms, emotional stability, and persistence form interconnected systems influencing mental health outcomes in penitentiary staff. G.E. Richardson (2002) proposed the metatheory of resilience, according to which individuals reconstruct psychological balance following disruption through adaptive reintegration processes. The present findings partially confirm this model, particularly in relation to highly resilient employees who demonstrated adaptive combinations of persistence and psychological defence mechanisms despite emotional exhaustion.

Overall, the findings of the present study substantially expand existing theoretical and empirical understandings of resilience as a central psychological resource for maintaining mental health under conditions of increased professional risk. In contrast to previous studies that primarily examined resilience either conceptually or within military and clinical contexts, the current research provides a comprehensive structural analysis of psychological functioning among penitentiary personnel employed in high-security institutions. The identified factor structures demonstrate that resilience not only contributes to emotional stability and professional persistence but also determines the configuration of psychological defence mechanisms and adaptive resources under chronic occupational stress. Consequently, the obtained results confirm the practical importance of resilience-oriented psychological support programmes and highlight the necessity of systematic mental health monitoring and burnout prevention strategies for penitentiary staff in Ukraine.

CONCLUSIONS

As a result of the study, the factor structure of the mental health characteristics of penitentiary staff working in high-security institutions was empirically determined, taking into account the diagnosed level of

resilience. In the group of staff with a low level of resilience, the leading factors are: "Reflective Evaluation of Activity Outcomes" (10.249%), "Emotional Lability" (7.152%), and "Psychological defence through regression" (6.339%). This structure indicates that under conditions of low resilience, the mental health of personnel is characterised by a combination of increased focus on evaluating one's own performance outcomes, emotional instability, and the activation of regressive psychological defence mechanisms.

In the group of staff with a medium level of resilience, the leading factors are: "Persistence" (9.652%), "Emotional exhaustion" (9.085%), "Psychological defence through regression" (6.011%), and "Internality in the Domain of Failures" (4.708%). The obtained results indicate an ambivalent structure of mental health in this group: on the one hand, there is pronounced professional persistence and the ability to maintain activity, while on the other hand, signs of emotional exhaustion and regressive responses remain. The factor "Internality in the Domain of Failures" reflects a tendency among personnel to associate professional difficulties and failures with personal responsibility, which may have both adaptive and risk-related psychological implications depending on the level of environmental support and available resources. In the high-resilience group, the leading factors were emotional exhaustion (9.045%), professional persistence (8.653%), and psychological defence through denial (6.454%), indicating that professional stress remains significant even among the most resilient staff. At the same time, high resilience was associated with the ability to maintain

professional effectiveness through persistence and compensatory psychological distancing from emotional strain. Thus, the level of resilience serves as an important differentiating criterion that makes it possible to identify different structural configurations of mental health among penitentiary staff working in high-security institutions, and it should not be interpreted as a simple indicator of the absence of psychological risks, but rather as a determinant of how these risks are experienced, compensated, and professionally processed. Prospects for further research are associated with deepening the analysis of the dynamic changes in the factor structure of mental health, particularly in the context of implementing targeted intervention programs, as well as with the development of predictive models of psychological risks based on the identified factor-based symptom complexes.

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REFERENCES

- [1] Adamenko, L.S. (2020). Current approaches to the problem of researching mental resilience. *Bulletin of the National University of Defence of Ukraine*, 5(58), 5-13. doi: 10.33099/2617-6858-2020-58-5-5-13.
- [2] Assonov, D., & Khaustova, O. (2019). [Development of the concept of resilience in scientific literature in recent years](#). *Psychosomatic Medicine and General Practice*, 4(4), article number e0404219.
- [3] Bonanno, G.A., Westphal, M., & Mancini, A.D. (2011). Resilience to loss and potential trauma. *Annual Review of Clinical Psychology*, 7, 511-535. doi: 10.1146/annurev-clinpsy-032210-104526.
- [4] Dykun, V.H., Moroz, V.M., & Stasiuk, V.V. (2023). [Methodology for studying the moral and psychological state of military personnel](#). Kyiv: 7BC.
- [5] George, D., & Mallery, P. (2021). *IBM SPSS statistics 27 step by step*. New York: Taylor & Francis. doi: 10.4324/9781003205333.
- [6] Horbachyk, A.P., & Salnikova, S.A. (2008). [Data analysis in sociological research using SPSS](#). Lutsk: Vezha.
- [7] Joseph, S., & Linley, P. (Eds.). (2008). [Trauma, recovery and growth: Positive psychological perspectives on posttraumatic stress](#). Hoboken: Wiley.
- [8] Karamushka, L.M., Kredentser, O.V., Tereshchenko, K.V., Lagodzinska, V.I., Ivkin, V.M., & Kovalchuk, O.S. (2023). [Instruments for assessing staff's mental health and well-being](#). Kyiv: Institute of Psychology named after G.S. Kostiuk.
- [9] Kokun, O.M., & Melnychuk, T.I. (2023). [Resilience handbook: Practical guide](#). Kyiv: Institute of Psychology named after G.S. Kostiuk.
- [10] Kokun, O.M., Pishko, I.O., Lozinska, N.S., Kopanytsia, O.V., Herasymenko, M.V., & Tkachenko, V.V. (2012). [Collection of techniques for diagnosis of leadership skills of military students, sergeants and officers](#). Kyiv: Research Centre of Humanitarian Problems of the Armed Forces of Ukraine.
- [11] Lazos, G.P. (2018). [Resilience: Conceptualisation of concepts and review of modern research](#). *Actual Problems of Psychology*, 3(14), 26-64.
- [12] Lepore, S.J., & Revenson, T.A. (2006). [Resilience and posttraumatic growth](#). In L.G. Calhoun & R.G. Tedeschi (Eds.), *Handbook of posttraumatic growth* (pp. 24-46). New York: Routledge.

- [13] Luthans, F., Vogelgesang, G.R., & Lester, P.B. (2006). Developing psychological capital. *Human Resource Development Review*, 5(1), 25-44. doi: [10.1177/1534484305285335](https://doi.org/10.1177/1534484305285335).
- [14] Luthar, S.S., Cicchetti, D., & Becker, B. (2000). The construct of resilience. *Development and Psychopathology*, 12(4), 857- 885. doi: [10.1017/S0954579400004156](https://doi.org/10.1017/S0954579400004156).
- [15] Neman, R. (2005). APA's resilience initiative. *Professional Psychology: Research and Practice*, 36, 227. doi: [10.1037/0735-7028.36.3.227](https://doi.org/10.1037/0735-7028.36.3.227).
- [16] Richardson, G.E. (2002). The metatheory of resilience. *Journal of Clinical Psychology*, 58(3), 307-321. doi: [10.1002/jclp.10020](https://doi.org/10.1002/jclp.10020).
- [17] Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. Masten, D. Cicchetti, K.H. Nuechterlein & S. Weintraub (Eds.), *Risk and protective factors in psychopathology* (pp. 181-214). New York: Cambridge University Press. doi: [10.1017/CBO9780511752872.013](https://doi.org/10.1017/CBO9780511752872.013).
- [18] Tedeschi, R.G., & Calhoun, L.G. (2004). Posttraumatic growth. *Psychological Inquiry*, 15(1), 1-18. doi: [10.1207/s15327965pli1501_01](https://doi.org/10.1207/s15327965pli1501_01).
- [19] Uhryn, O.H. (2017). *Psychology of management: Practical guide*. Lviv: Lviv State University of Internal Affairs.
- [20] World Medical Association. (2013). Declaration of Helsinki: Ethical principles for medical research involving human subjects. *JAMA*, 310(20), 2191-2194. doi: [10.1001/jama.2013.281053](https://doi.org/10.1001/jama.2013.281053).
- [21] Zasiukina, L., & Burtzman, V. (2023). Collective resilience in a shared traumatic reality of psychologists: Experience of Ukraine and best practices of the European Union. *Psychological Perspectives*, 42, 55-67. doi: [10.29038/2227-1376-2023-42-zas](https://doi.org/10.29038/2227-1376-2023-42-zas).

Факторна структура складових характеристик психічного здоров'я працівників пенітенціарних установ з високим рівнем безпеки та діагностованим рівнем резильєнтності

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Анотація. Збереження психічного здоров'я серед працівників пенітенціарних установ, що працюють у закладах суворого режиму, є надзвичайно важливим питанням через постійний вплив професійних стресогенних факторів, підвищену відповідальність та психологічно напружені умови праці. Мета дослідження полягала в емпіричному вивченні рівня резистентності як ключового ресурсу для підтримання психічного здоров'я серед пенітенціарного персоналу, зайнятого в умовах суворого режиму. У дослідженні взяли участь 2 518 працівників виправних установ з високим рівнем безпеки Державної служби виконання покарань України; дані збиралися онлайн за допомогою Google Forms із використанням 16 стандартизованих психодіагностичних інструментів, а 77 психометричних показників було проаналізовано в SPSS 24.0 із застосуванням процедур стандартизації, непараметричних тестів, дискримінантного аналізу та факторного аналізу. Результати факторного аналізу виявили диференційовану структуру характеристик психічного здоров'я залежно від рівня резистентності. У групі з низькою резистентністю домінуючими факторами були рефлексивна оцінка діяльності (10,249 %), емоційна лабільність (7,152 %) та психологічний захист через регресію (6,339 %). У групі середньої резистентності провідними факторами були наполегливість (9,652%), емоційне виснаження (9,085%), психологічний захист через регресію (6,011%) та інтерналізація у сфері невдач (4,708%). У групі з високим рівнем резистентності ключовими факторами були емоційне виснаження (9,045 %), професійна стійкість (8,653 %) та психологічний захист шляхом заперечення (6,454 %). Отримані результати свідчать про те, що резистентність виступає як диференціюючий параметр, який визначає специфічні конфігурації психічного здоров'я, механізмів психологічного захисту, психологічного благополуччя та професійної стійкості в умовах високого професійного ризику. Проведене дослідження надає комплексну оцінку структурної організації характеристик психічного здоров'я серед працівників пенітенціарної системи, виявляючи ключові закономірності психологічного функціонування в умовах підвищеного професійного ризику. Отримані результати можуть слугувати основою для розробки стратегій підтримки психічного здоров'я та профілактики вигорання для працівників пенітенціарної системи в Україні.

Ключові слова: установи з посиленням режимом безпеки; емоційне виснаження; вигорання; психологічний захист; психологічне благополуччя; професійна стійкість

**Factor structure of the psychological well-being
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Abstract. Investigating pupils' psychological well-being as a multidimensional phenomenon is of considerable importance for the development of psychological and educational science, particularly in the context of analysing its structure and supporting the practical implementation of the New Ukrainian School reform, which is aimed at creating a favourable environment for learning and development. The aim of this article was to present the findings of an empirical study of the factor structure of the psychological well-being of pupils in general secondary education institutions. The study was conducted using a sample of Year 5 and Year 6 pupils. Data were collected through an author-designed online questionnaire containing statements intended to assess pupils' perceptions of how well their psychological well-being was supported within the educational environment. Responses were rated on a 10-point scale (1 = "strongly disagree", 10 = "strongly agree"). Empirical data were analysed using factor analysis with principal component extraction and Varimax rotation. The suitability of the data for factor analysis was confirmed by the KMO measure (0.972) and a statistically significant result of Bartlett's test of sphericity ($p < 0.001$). The analysis identified four factors that together explained 68.5% of the total variance: personal development and attitudes towards learning; the quality of interaction between pupils and teachers; the socio-psychological climate of the pupil group; and pupils' engagement in school life. Pupils' psychological well-being was conceptualised as an integrative phenomenon reflecting the distinctive features of their psychological functioning within the educational environment. It is manifested through the fulfilment of pupils' needs for personal growth and successful social interaction and is subjectively expressed through satisfaction with learning in general secondary education institutions. Its development is facilitated by the enhancement of pupils' personal potential, trusting relationships with teachers, the cohesion of the pupil group, and active participation in school events and student self-government activities

Keywords: pupils' psychological well-being; personal development; social interaction; socio-psychological climate; pupil engagement; democratisation of the educational environment; New Ukrainian School

INTRODUCTION

The implementation of the New Ukrainian School (NUS) reform has highlighted the need to create a safe, supportive, and inclusive educational environment in which high-quality learning is combined with the promotion of pupils' well-being. The reform seeks to modernise general secondary education through the democratisation of the educational environment, the

implementation of a competence-based approach, and the development of cultural and moral values, civic awareness, responsibility, patriotism, readiness for innovation, and positive attitudes towards education and lifelong learning. At the same time, considerable emphasis is placed on fostering pupils' personal potential, successful socialisation, and self-realisation, which are

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regarded in the scholarly literature as fundamental to psychological well-being. The limited number of empirical studies examining this phenomenon in educational settings highlights the need for more comprehensive investigation. A deeper understanding of pupils' psychological well-being as a multidimensional construct therefore represents an important task for contemporary educational and psychological research, contributing to the development of a learning environment that supports both education and personal development in line with the principles of the NUS reform.

The research literature demonstrates a wide range of approaches to the study of psychological well-being; however, personal and socio-psychological dimensions remain central to its conceptualisation. C. Ryff & B. Singer (2008), O. Polivanova & O. Huliaieva (2015), and R. Ryan & E. Deci (2017) argued that psychological well-being is closely associated with positive psychological functioning within the social environment. N. Karagina (2019) emphasised the importance of integrating hedonic and eudaimonic perspectives to achieve a comprehensive understanding of psychological well-being by combining emotional satisfaction with the development of personal potential and agency. F. Martela *et al.* (2022) highlighted the role of inner coherence supported by personal resources, while A. Waterman (1993) emphasised the importance of agency and the pursuit of personal development alongside harmonious interaction with the surrounding world. E. Diener *et al.* (1999) associated psychological well-being with subjective life satisfaction and satisfaction with oneself, whereas K. Sanko (2016) linked it to successful social functioning, reflected in a sense of belonging to a community and awareness of one's contribution to social processes. The study of psychological well-being has become particularly relevant within educational contexts, as educational attainment constitutes an important condition for its development, as noted by S. Chaudhry *et al.* (2024). Research on the psychological well-being of learners frequently employs Ryff's multidimensional model, which conceptualises well-being through six dimensions: self-acceptance, autonomy, environmental mastery, purpose in life, personal growth, and positive relationships with others (Guamanga *et al.*, 2024). Studies by P. Klainin Yobas *et al.* (2016), M. Shpak (2016), and G. Sarzhanova & A. Nurgabdeshev (2025) further emphasise the decisive role of individual factors, including emotional intelligence, mindfulness, self-efficacy, motivation, and resilience, together with support from the social environment, including family, friends, and other significant individuals.

The period of general secondary education is characterised by intensive personal development and socialisation, both of which play a crucial role in shaping and promoting pupils' psychological well-being. The literature review confirmed the multidimensional

nature of pupils' psychological well-being and identified two principal groups of influencing factors: personal and socio-psychological. The empirical operationalisation and validation of these factors are essential for gaining a deeper understanding of the structure of pupils' psychological well-being and for developing practical approaches to its promotion, particularly within the context of the ongoing implementation of the New Ukrainian School reform. Accordingly, the aim of this article was to present the findings of an empirical study examining the factor structure of the psychological well-being of pupils in general secondary education institutions.

MATERIALS AND METHOD

Pupils' psychological well-being is conceptualised as a multidimensional, integrative phenomenon grounded in the development of personal potential and positive interpersonal relationships within the school environment. The development of personal potential forms the internal foundation of well-being by satisfying the need for personal growth, which is reflected in the development of autonomy, environmental mastery, purpose in life, self-acceptance, psychological resilience, mindfulness, self-care, and optimism. The development of interpersonal relationships provides the social foundation of psychological well-being through positive relationships with others, social contribution, social integration, social acceptance, and congruence with the values of the educational environment (Dziubenko, 2024). To clarify the structure of pupils' psychological well-being, an empirical study was conducted to identify the latent factors representing its principal components.

The study involved 499 Year 5 and Year 6 pupils from general secondary education institutions in the Zaporizhzhia and Volyn regions and the city of Kyiv. Empirical data were collected using an online questionnaire created in Google Forms, comprising statements developed in accordance with two key criteria for assessing psychological well-being: the development of personal potential and interpersonal relationships. Respondents rated each statement on a ten-point scale, where 1 indicated strongly disagree and 10 indicated strongly agree. Data were analysed using factor analysis with principal component extraction and Varimax rotation with Kaiser normalisation. Sampling adequacy was assessed using the Kaiser-Meyer-Olkin (KMO) measure, while the sphericity of the correlation matrix was evaluated using Bartlett's test of sphericity. Statistical analyses were performed using SPSS Statistics 21.0 and Microsoft Excel 365. Participation in the empirical stages of the study was voluntary, confidential, and anonymous. The ethical principles of the research were consistent with the American Psychological Association's Ethical Principles of Psychologists and Code of Conduct (2017).

RESULTS AND DISCUSSION

Factor analysis identified four factors that together explained 68.54% of the total variance. The first factor (21.896%) – “Pupils’ personal development and attitudes to learning”, the second (14.790%) – “Quality of pupils’ relationships with teachers”, the third (11.740%) – “The socio-psychological climate of the student group”, and the fourth (11.704%) – “Pupils’ involvement in the life of the educational institution”. Factor rotation using the Varimax method with Kaiser normalisation converged after 8 iterations, ensuring the clarity of interpretation of the factor loadings (FL). A high Kaiser-Meyer-Olkin (KMO = 0.972) value

confirmed the suitability of the data for factor analysis, whilst Bartlett’s sphericity test ($\chi^2 = 16,519.273$; $df = 946$; $p < 0.000$) confirmed the presence of statistically significant correlations between the variables. Taken together, these indicators confirmed that the data met the requirements for factor analysis and that the resulting structure was reliable. For the purposes of interpretation, only items with factor loadings (FL) > 0.4 were considered, in line with the significance criterion accepted in psychological research (Klymchuk, 2006). The items and their factor loadings characterising the first factor, “Pupils’ personal development and attitude to learning”, are presented in Table 1.

Table 1. Factor: “Pupils’ personal development and attitudes to learning”

Factor 1	Statement	FL
Pupils’ personal development and attitudes towards learning	1. At school, I am learning to understand myself, my feelings and my actions better	0.758
	2. School helps me to have a more positive outlook on life	0.735
	3. School gives me confidence in my potential and abilities	0.729
	4. At school, I am learning to cope with life’s challenges	0.719
	5. I enjoy learning at school and attend with pleasure	0.714
	6. At school, I am becoming more determined and learning to achieve my goals	0.686
	7. At school, I am becoming more independent	0.685
	8. At school, I am learning to accept myself and to feel that I matter and am valued	0.685
	9. At school, I am learning to look after myself	0.646
	10. I believe that school truly prepares me for independent life	0.586
	11. At school, I become responsible and confident in my actions	0.579
	12. During the holidays, I miss school	0.492
	13. I believe that my school provides everything I need to develop my abilities	0.465
	14. At school, I support those who need help	0.423

Source: the author’s own work

The factor “Pupils’ personal development and attitude to learning” brings together components that reflect the development of personal qualities and psychological resources important for pupils’ psychological well-being, as well as a positive attitude to learning as an integral part of ensuring this well-being within the educational environment. This factor

has the highest coefficient of variation – 21.896%, which confirms its leading role in the factor structure of schoolchildren’s psychological well-being and demonstrates the importance of personal development in shaping it. The substantive components of the factor are summarised and schematically presented in Figure 1.

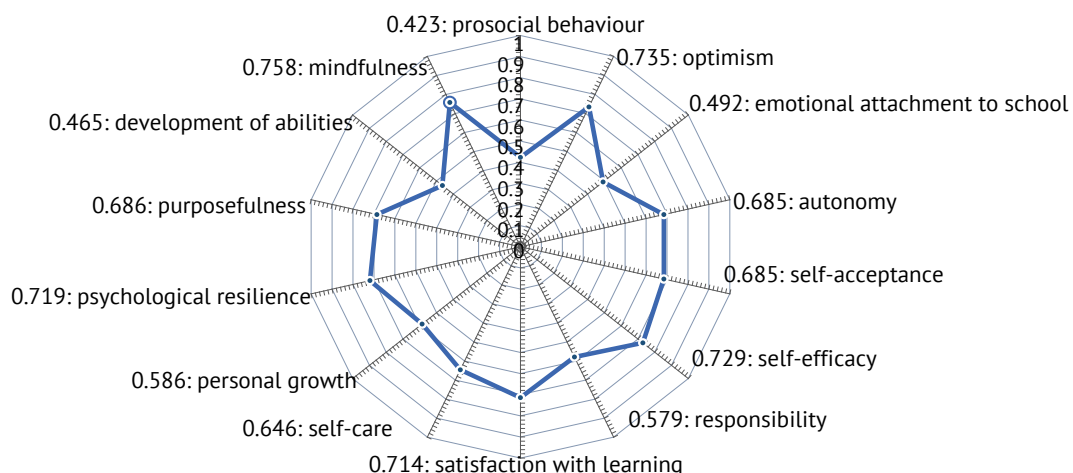


Figure 1. Components of the factor “Pupils’ personal development and attitudes to learning”

Source: the author’s own work

The first factor (Fig. 1) is composed of the components with the highest factor loadings: self-awareness (0.758), optimism (0.735), self-efficacy (0.729), psychological resilience (0.719) and satisfaction with learning (0.714). Characteristics with moderate loadings (0.69-0.50) support its structure: goal-orientation (0.686), autonomy (0.685), self-acceptance (0.685), self-care (0.646), responsibility (0.579) and personal growth (0.586). Lower loadings (< 0.50) reflect emotional attachment to school (0.492), development of abilities (0.465) and prosocial behaviour (0.423). Overall, this factor demonstrates the comprehensive impact of

education on the development of schoolchildren's personal potential: from the formation of psychological resources and qualities to social orientations and emotional and value-based attachment to school. The combination of its components forms the internal foundation of psychological well-being, helping pupils to be confident in their own abilities, prepared for independent life, to have a positive attitude towards learning and the world, and to continually grow as individuals. Table 2 presents the statements and their factor loadings for the second factor, "Quality of pupils' relationships with teachers".

Table 2. Factor: "Quality of pupils' relationships with teachers"

Factor 2	Statement	FL
The quality of the relationship between pupils and teachers	1. If I make a mistake or do not know how to solve a problem, I can always get help from a teacher.	0.760
	2. When I ask a question, teachers always find the time to answer it	0.732
	3. I can always turn to my form tutor with any questions I may have	0.702
	4. I can always ask a teacher about a task or problem I do not understand and get a thorough explanation	0.697
	5. Teachers check whether we have understood the material, explain difficult examples and go over things again if anyone is unsure	0.697
	6. I can turn to my teachers for advice and help on any matter	0.637
	7. Teachers explain the subject matter clearly and in a way that is easy to understand	0.601
	8. I find communicating with teachers comfortable and pleasant	0.562
	9. Communication at school is respectful	0.494
	10. I feel safe when interacting with teachers	0.475
	11. My point of view is taken into account at school	0.472

Source: the author's own work

The second factor, with a coefficient of variation of 14.5%, highlights the importance of pedagogical support, teachers' availability and a culture of communication

in the "pupil-teacher" relationship for the psychological well-being of learners. The content components of this factor are presented in Figure 2.

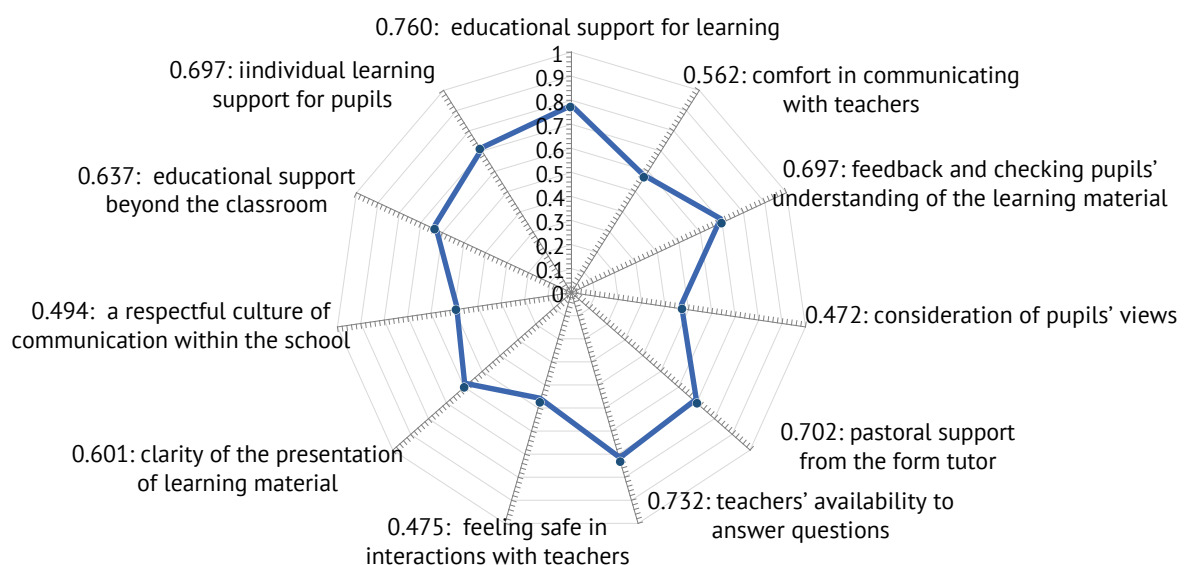


Figure 2. Components of the factor "Quality of pupil-teacher relationships"

Source: the author's own work

Factor 2, “Quality of pupil-teacher relationships”, is characterised by components with high factor loadings (0.760-0.697), highlighting the central role of teachers in providing learning support and fostering trust: educational support for learning (0.760), teachers’ availability to answer questions (0.732), mentoring support from the form tutor (0.702), individual learning support for pupils (0.697), and feedback and checking pupils’ understanding of the learning material (0.697). Components with moderate factor loadings (0.637-0.562) reflect the quality of pedagogical interaction and communication: educational support beyond the classroom (0.637), clarity of the presentation of learning material (0.601), and comfort in communicating with teachers (0.562). Components with lower factor loadings (< 0.50) complement the overall structure of the factor: a respectful culture of communication

within the school (0.494), feeling safe in interactions with teachers (0.475), and consideration of pupils’ views (0.472). This factor demonstrates the significant influence of pedagogical support and the culture of communication on pupils’ psychological well-being. The quality of pupils’ relationships with teachers extends beyond purely academic support, encompassing a broader spectrum of interactions that foster an atmosphere of trust, openness and psychological safety at school. It combines cognitive aspects (clarity of explanations, provision of feedback) with socio-emotional ones (comfort in communication, consideration of pupils’ views, culture of interaction), forming a holistic system of high-quality “pupil-teacher” interaction. Table 3 presents the FL indicators and statements characterising the third factor, “The socio-psychological climate of the student group”.

Table 3. Factor: “The socio-psychological climate of the student group”

Factor 3	Statement	FL
The socio-psychological climate of the pupil group	1. I have friendly relationships with my classmates.	0.724
	2. My views are taken into account at school.	0.643
	3. At school, I manage to convince others that I am right	0.635
	4. Relationships at school are characterised by mutual understanding and trust	0.619
	5. At school, I am open and sincere	0.538
	6. At school, I can always freely express my opinion	0.518
	7. I am usually in a good mood at school	0.482
	8. There is no violence, humiliation or bullying at school	0.469

Source: the author’s own work

The third factor (Table 3) characterises the quality of interpersonal relationships, trust, openness, emotional comfort and the absence of violence in the school environment. It encompasses friendly relationships, sincerity, mutual understanding, freedom of self-expression and a sense of security, which together create a positive atmosphere of communication, provide support and a sense of belonging, prevent manifestations of violence

and humiliation, and contribute to pupils’ psychological well-being in the educational environment. The coefficient of variation is 11.4%, which confirms its significance within the overall structure of pupils’ psychological well-being, although its contribution is somewhat lower compared with factors related to personal development and the quality of relationships with teachers. The components of this factor are shown in Figure 3.

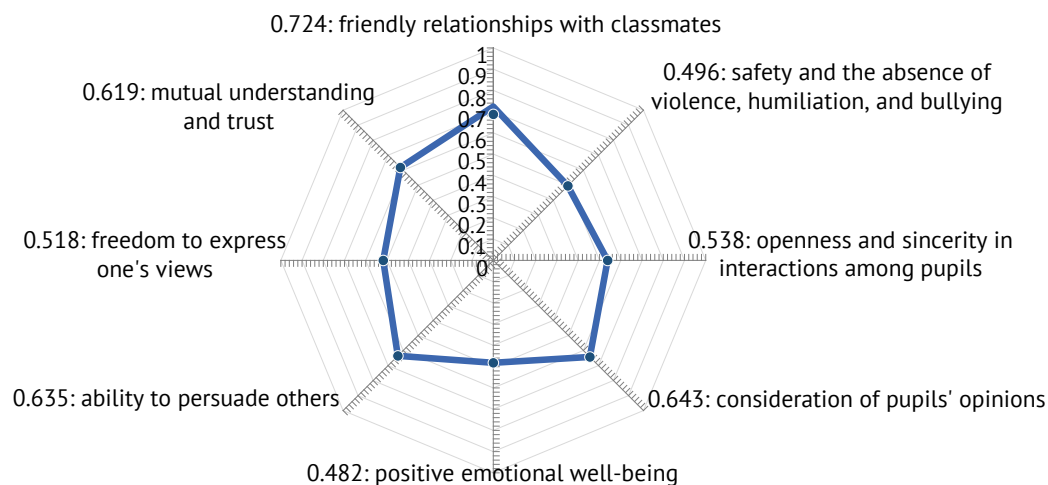


Figure 3. Components of the factor “Socio-psychological climate of the pupil group”

Source: the author’s own work

The factor “Socio-psychological climate of the pupil group” is primarily defined by components with high factor loadings (0.724-0.619): friendly relationships with classmates (0.724), consideration of pupils’ views (0.643), the ability to persuade others (0.635), and mutual understanding and trust (0.619). Components with moderate factor loadings (0.538-0.518) emphasise the importance of openness and freedom of self-expression: openness and sincerity in interactions among pupils (0.538) and freedom to express one’s views (0.518). Components with lower factor loadings (< 0.50) complement the structure of the factor by reflecting pupils’

emotional well-being and sense of safety within the educational environment: positive emotional well-being (0.482) and safety and the absence of violence, humiliation, and bullying (0.469). Taken together, this factor integrates friendly relationships, trust, openness and a sense of safety, which ensure a positive classroom atmosphere and reflect the key components of pupils’ psychological well-being – a sense of belonging to the group, mutual support, a positive emotional state and the importance of friendly relationships. Table 4 presents the statements and their factor loadings, grouped according to the fourth factor, “Pupils’ involvement in school life”.

Table 4. The need for digital applications for psychological assistance

Factor 4	Statement	FL
Pupils’ involvement in school life	1. I would be happy to take part in discussions about school issues	0.820
	2. I would like to be part of the group of people who make important decisions about school life	0.748
	3. I enjoy discussing school-related issues with others	0.674
	4. I enjoy taking part in events organised at school	0.670
	5. I feel part of the class and enjoy taking part in group activities	0.547
	6. At school, I am happy to share my thoughts and impressions with others	0.513
	7. At school, I listen to those whose views differ from my own	0.444

Source: the author’s own work

Factor 4, “Pupils’ involvement in school life”, characterises pupils’ level of activity and integration within the school community. It reflects their willingness to influence the organisation of school life, participate in decision-making, express their own opinions and

interact with others as equals. The coefficient of variation is 11.704%, which demonstrates its significant contribution to the overall structure of pupils’ psychological well-being. The content components of this factor are shown in Figure 4.

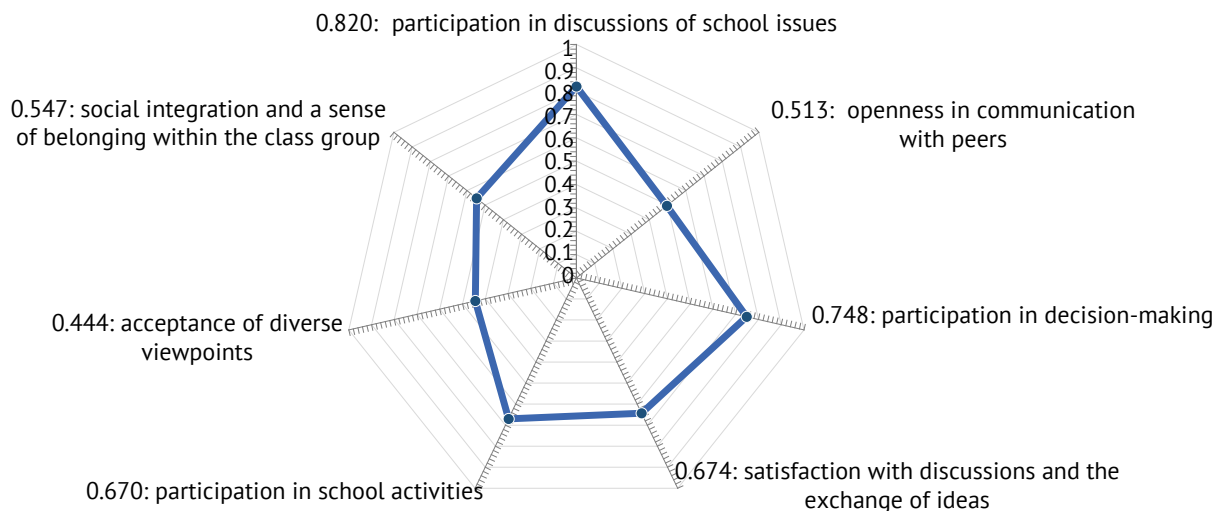


Figure 4. Components of the factor “Pupils’ engagement in school life”

Source: the author’s own work

The components of this factor (Fig. 4) with high factor loadings (FL = 0.820-0.670) indicate pupils’ active engagement in school life, reflected in their willingness to participate in discussions of school-related issues (0.820), take part in decision-making concerning important aspects of school life (0.748), derive satisfaction from discussions and the exchange of ideas

(0.674), and actively participate in school activities (0.670). Components with moderate factor loadings (0.547-0.513) emphasise the importance of social integration and communicative openness: social integration and a sense of belonging within the class group (0.547) and openness in communication with peers (0.513). A component with a lower factor loading

($FL < 0.50$) complements the factor structure by reflecting tolerance and openness to different perspectives: acceptance of diverse viewpoints ($FL = 0.444$). Overall, pupils' engagement in school life reflects their psychological well-being through active participation in and a sense of belonging to the school community. This is expressed in the enjoyment pupils derive from participating in shared activities, recognising the importance of contributing to discussions and decision-making, appreciating opportunities to share their thoughts and experiences, showing interest in discussions and the exchange of ideas, and being open to different perspectives – in other words, through characteristics of democratic interaction within the educational environment. The study by O. Dziubenko (2023) demonstrated that pupils' well-being is a multidimensional phenomenon that combines satisfaction with learning and optimal psychological and social functioning within the educational environment. The development of pupils' psychological well-being is promoted by emotional safety, support for autonomy, the absence of excessively formalised assessment practices, trusting relationships, and a positive classroom climate. Conversely, lower levels of well-being are associated with excessive academic demands, teaching methods that do not correspond to pupils' age and individual characteristics, a persistent sense of failure, and insufficient professional competence among teachers (Meshko, 2007; Yakovenko, 2025).

Research by J. Stang-Rabrig *et al.* (2023) has shown that the fulfilment of basic psychological needs (autonomy, competence, a sense of connectedness) and a positive perception of one's own learning potential enhance the psychological well-being of secondary school pupils, which correlates with the findings of this study. A key factor in well-being is personal development and attitude towards learning, which includes self-awareness, confidence in one's own abilities, responsibility and active participation in school life. Furthermore, in line with the findings of J. Stang-Rabrig *et al.* (2023), this study found that the quality of relationships with teachers and the socio-psychological climate of the class have a significant impact on pupils' well-being, emphasising the importance of support, trust and interaction in fostering a positive school environment. A study by T. Klapp *et al.* (2024) confirmed the importance of the relationship between psychological well-being and academic outcomes in the school environment: in a cohort of Swedish pupils, it was found that higher levels of well-being are associated with better academic achievement, whilst there are statistically significant differences between cohorts and gender differences. This is consistent with the present study, in which the factor "pupils' personal development and attitude to learning" significantly reflects the components of school well-being, which in turn may contribute to academic performance.

A study by M. Courtney *et al.* (2023), based on PISA 2018, proposed an integrative five-factor model of school well-being, which includes the following dimensions: emotional well-being, social interactions and support, academic experiences and achievements, socio-economic conditions, and physical health and safety. This study is significant in that it brings together various aspects of adolescents' lives at school into a single structural model, demonstrating that well-being is not one-dimensional but is shaped by emotional, academic, social and contextual factors. In the context of this study, these findings highlight the complexity of pupils' psychological well-being: similar to the multifactorial model proposed by M. Courtney *et al.* (2023), the results of this study also point to a range of interrelated factors – from attitudes towards learning and personal development to the quality of social relationships and engagement with school life – which collectively determine adolescents' well-being in the educational environment. This alignment confirms that school well-being should be viewed as a combination of psychosocial components, and emphasises the importance of a multidimensional approach to its measurement and support.

CONCLUSIONS

It has been established that the structure of pupils' psychological well-being is determined by four key factors: personal development and attitudes towards learning, the quality of relationships with teachers, the socio-psychological climate of the pupil group, and engagement with school life. Personal development and attitudes towards learning reflect the comprehensive influence of the educational environment on the development of pupils' personal potential, including their mindfulness, optimism, psychological resilience, responsibility, autonomy, confidence in their own abilities, capacity to overcome difficulties, self-care, willingness to support others, and overall satisfaction with school learning. The quality of pupils' relationships with teachers is characterised by an atmosphere of trust, partnership and openness, which ensures psychological safety, takes pupils' views into account and fosters a sense of self-worth through pedagogical support and a culture of mutual respect.

The socio-psychological climate of the pupil group is founded on friendly relationships, mutual understanding, and trust among pupils. Its key components include openness and sincerity in communication, freedom of self-expression, and safety in interpersonal interactions. A particularly important element is pupils' sense of belonging to their class group, which supports positive emotional well-being and shapes the quality of their interpersonal relationships. Pupils' engagement in school life reflects the importance of social integration, acceptance, cohesion, active participation, and openness in communication, collectively representing

democratic interaction within the educational environment. Taken together, these factors define the multidimensional structure of pupils' psychological well-being, which is conceptualised as an integrative phenomenon reflecting the distinctive characteristics of their socio-psychological functioning within the educational environment. It is manifested through the fulfilment of pupils' needs for personal growth and successful social interaction and is subjectively expressed through satisfaction with learning in a general secondary education institution.

Future research should examine age- and gender-related differences in the structure of pupils' psychological well-being, broaden the analysis of the factors that influence it, and develop and implement practical approaches to its promotion. Such approaches

should focus on strengthening pupils' personal potential and positive attitudes towards learning, fostering trusting relationships between pupils and teachers, creating a supportive socio-psychological climate of the pupil group, encouraging pupils' active participation in school life, and promoting the democratisation of the educational environment.

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REFERENCES

- [1] American Psychological Association. (2017). Ethical principles of psychologists and code of conduct. Retrieved from <https://www.apa.org/ethics/code>.
- [2] Chaudhry, S., Tandon, A., Shinde, S., & Bhattacharya, A. (2024). Student psychological well-being in higher education: The role of internal team environment, institutional, friends and family support and academic engagement. *PLoS ONE*, 19(1), article number e0297508. doi: [10.1371/journal.pone.0297508](https://doi.org/10.1371/journal.pone.0297508).
- [3] Courtney, M.G.R., Hernández-Torrano, D., Karakus, M., & Singh, N. (2023). Measuring student well-being in adolescence: Proposal of a five-factor integrative model based on PISA 2018 survey data. *Large-scale Assessments in Education*, 11, article number 20. doi: [10.1186/s40536-023-00170-y](https://doi.org/10.1186/s40536-023-00170-y).
- [4] Diener, E., Suh, E.M., Lucas, R.E., & Smith, H.L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302. doi: [10.1037/0033-2909.125.2.276](https://doi.org/10.1037/0033-2909.125.2.276).
- [5] Dziubenko, O. (2023). Psychological well-being of schoolchildren: Conceptualization of the phenomenon. *Journal of Contemporary Psychology*, 3(30), 23-29. doi: [10.26661/2310-4368/2023-3-3](https://doi.org/10.26661/2310-4368/2023-3-3).
- [6] Dziubenko, O. (2024). Assessment of socio-psychological well-being of schoolchildren by subjects of the educational process. *Problems of Political Psychology*, 15(29), 151-164. doi: [10.33120/popp-Vol15-Year2024-149](https://doi.org/10.33120/popp-Vol15-Year2024-149).
- [7] Guamanga, M.H., Saiz, C., Rivas, S.F., & Almeida, L.S. (2024). Analysis of the contribution of critical thinking and psychological well-being to academic performance. *Frontiers in Education*, 9, article number 1423441. doi: [10.3389/feduc.2024.1423441](https://doi.org/10.3389/feduc.2024.1423441).
- [8] Karagina, N.V. (2019). Hedonic and eudaimonic understanding of psychological well-being: Advantages and disadvantages. *Theory and Practice of Contemporary Psychology*, 4(1), 27-31. doi: [10.32840/2663-6026.2019.4-1.5](https://doi.org/10.32840/2663-6026.2019.4-1.5).
- [9] Klainin-Yobas, P., Ramirez, D., Fernandez, Z., Sarmiento, J., Thanoi, W., Ignacio, J., & Lau, Y. (2016). Examining the predicting effect of mindfulness on psychological well-being among undergraduate students: A structural equation modelling approach. *Personality and Individual Differences*, 91, 63-68. doi: [10.1016/j.paid.2015.11.034](https://doi.org/10.1016/j.paid.2015.11.034).
- [10] Klapp, T., Klapp, A., & Gustafsson, J.-E. (2024). Relations between students' well-being and academic achievement: Evidence from Swedish compulsory school. *European Journal of Psychology of Education*, 39, 275-296. doi: [10.1007/s10212-023-00690-9](https://doi.org/10.1007/s10212-023-00690-9).
- [11] Klymchuk, V.O. (2006). [Factor analysis: Application in psychological research](#). *Practical Psychology and Social Work*, 8, 43-48.
- [12] Martela, F., Delle Fave, A., Nikolova, M., Knies, G., & Fabian, M. (2022). *Personal and social wellbeing. Proposal for a repeat wellbeing module in the European social survey 2025*. Retrieved from <https://www.europeansocialsurvey.org/sites/default/files/2023-06/Wellbeing-module-Round-12-final.pdf>.
- [13] Meshko, H. (2007). [Emotional well-being of students in modern school](#). *Scientific Notes. Series: Pedagogy*, 4, 52-59.
- [14] Polivanova, O.Ye., & Huliaieva, O.V. (2015). [On the problem of defining the psychological content of the concept of "psychological well-being"](#). *Visnyk of V.N. Karazin Kharkiv National University. Series Psychology*, 1150, 34-39.
- [15] Ryan, R.M., & Deci, E.L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York and London: The Guilford Press. doi: [10.1521/978.14625/28806](https://doi.org/10.1521/978.14625/28806).
- [16] Ryff, C.D., & Singer, B. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9, 13-39. doi: [10.1007/s10902-006-9019-0](https://doi.org/10.1007/s10902-006-9019-0).

- [17] Sanko, K.O. (2016). [Psychological well-being as the basis of full-fledged and psychologically healthy functioning of personality](#). *Visnyk of V.N. Karazin Kharkiv National University*, 59, 42-45.
- [18] Sarzhanova, G., & Nurgabdeshev, A. (2025). Mapping psychological well-being in education: A systematic review of key dimensions and an integrative conceptual framework. *Journal of Pedagogical Research*, 9(3), 327-349. doi: 10.33902/JPR.202534832.
- [19] Shpak, M.M. (2016). [Emotional intelligence as a personal resource for ensuring psychological well-being of younger schoolchildren](#). *Science and Education*, 5, 266-270.
- [20] Stang-Rabrig, J., Schwerter, J., Witmer, M., & McElvany, N. (2023). Beneficial and negative factors for the development of students' well-being in educational context. *Current Psychology*, 42, 31294-31308. doi: 10.1007/s12144-022-04067-x.
- [21] Waterman, A.S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64(4), 678-691. doi: 10.1037/0022-3514.64.4.678.
- [22] Yakovenko, A. (2025). [Psychological well-being of primary school students in a democratic educational system](#). (Master's thesis, National University of Kyiv-Mohyla Academy, Kyiv, Ukraine).

Факторна структура психологічного добробуту учнів закладів загальної середньої освіти

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Анотація. Дослідження психологічного добробуту учнів як багатовимірного феномена має важливе значення для розвитку психолого-педагогічної науки у контексті аналізу його структури та практичної реалізації реформи «Нова українська школа», спрямованої на створення сприятливого простору для навчання й розвитку. Метою статті було висвітлення результатів емпіричного дослідження факторної структури психологічного добробуту учнів закладів загальної середньої освіти. Дослідження проведено на вибірці учнів 5-6 класів. Для збору даних використано авторський онлайн-опитувальник із твердженнями, спрямованими на оцінювання учнями забезпечення їхнього психологічного добробуту в освітньому середовищі, які вони оцінювали за 10-бальною шкалою (1 – «абсолютна незгода», 10 – «абсолютна згода»). Аналіз емпіричних даних здійснювався методом факторизації із застосуванням екстракції головних компонент та обертання Varimax. Придатність даних для факторного аналізу підтверджено значенням показника КМО (0,972) та статистично значущим результатом тесту Бартлетта ($p < 0,001$). Аналіз дав змогу виокремити чотири фактори, які сукупно пояснюють 68,5 % дисперсії: особистісний розвиток і ставлення до навчання; якість взаємодії учнів з учителями; соціально-психологічний клімат учнівського колективу; залученість учнів у життя закладу освіти. Психологічний добробут учнів розглянуто як інтегративний феномен, що розкриває специфіку їхнього психологічного функціонування в освітньому середовищі, проявляється через задоволення їхніх потреб в особистісному зростанні, успішній соціальній взаємодії і суб'єктивно виражається у задоволеності навчанням в закладі загальної середньої освіти. Його формуванню сприяє розвиток особистісного потенціалу, довірча взаємодія з учителями, згуртованість учнівського колективу та активна участь у шкільних заходах і діяльності учнівського самоврядування.

Ключові слова: психологічний добробут учнів; особистісний розвиток; соціальна взаємодія; соціально-психологічний клімат; учнівська залученість; демократизація освітнього простору; Нова українська школа

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