MINISTRY OF DEFENCE OF UKRAINE
NATIONAL DEFENCE UNIVERSITY OF UKRAINE

BULLETIN

ofi ½a/ io»al Dsfis»cs U»ivs»si/ y ofi U¾»ai»s

Volume 21, No. 4

Year of foundation: 2006
Frequency: 6 times a year

Kyiv
2026

ISSN 2617-6858
e-ISSN 2617-6866
UDC 159.9

DOI: 10.33099/2617-6858-26-21-4

Founder:
National Defence University of Ukraine

State Registration:
Media identifier R30-01595.
Decision of the National Council of Television and Radio Broadcasting
of Ukraine No. 1214 dated October 31, 2023, Protocol No. 25

The journal is included in Category "B" of the List of Scientific Professional Publications of Ukraine in the field of Psychological Sciences, specialty 0313 Psychology
(Order of the Ministry of Education and Science of Ukraine No. 928 of 11 June 2026).

The journal is indexed in databases
Google Scholar, Vernadsky National Library of Ukraine (VNLU), Litmaps,
Open Ukrainian Citation Index (OUCI), WorldCat, BASE, Gale

Address for contacts:
National Defence University of Ukraine
03186, 30 Povitrianykh Syl Ave., Kyiv, Ukraine
E-mail: vnuou@nuou-visnyk.com.ua
E-mail: visnyk@edu.nuou.org.ua
https://nuou-visnyk.com.ua/en

Editorial Board

Content

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡Ƨsi»y ofi U¾¡Ƨai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 5-18
✦ ISSN 2617-6858
✦ E-ISSN 2617-6866
✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ UDC 378.14:355.23:355.232:37.091.3
✦ DOI: 10.33099/2617-6858-26-21-4-05-18

Psychological readiness of future officers as a factor of professional training effectiveness in the system of higher military education of Ukraine

Inessa Vizniuk*
Doctor of Psychological Sciences, Professor
Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University
21000, 32 Ostrozkyi Str., Vinnytsia, Ukraine
https://orcid.org/0000-0001-6538-7742

Serhii Dolynnyi
Doctor of Philosophy, Associate Professor
Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University
21000, 32 Ostrozkyi Str., Vinnytsia, Ukraine
https://orcid.org/0000-0003-3555-5818

Anna Dolynna
Doctor of Pedagogical Sciences, Associate Professor
Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University
21000, 32 Ostrozkyi Str., Vinnytsia, Ukraine
https://orcid.org/0000-0002-0559-1087

✦ Abstract. The purpose of the study was to theoretically substantiate the structure of psychological readiness of future officers and systematise psychological and pedagogical approaches to its development in the conditions of contemporary security challenges and transformation of higher military education in Ukraine. Analysis, synthesis, comparison, systematisation, and generalisation of scientific sources, content analysis, structural and functional, and system analysis were used to determine current approaches to the development of psychological readiness of future officers. The paper considered psychological and pedagogical approaches to the development of psychological readiness of future officers as an important component of their professional training in the system of higher military education of Ukraine. The necessity of updating the content of military education was substantiated based on contemporary security challenges and standards of the North Atlantic Treaty Organization (NATO) and the current needs of the security and defence sector of Ukraine. Special attention was paid to the development of leadership competencies, psychological stability, organisational identity, professional motivation, and the use of digital technologies, simulation, and interactive training, virtual and augmented reality tools. It was established that the complex use of these tools contributes to the development of the ability to effectively perform service and combat tasks, make managerial decisions in conditions of uncertainty, demonstrate emotional self-regulation, adaptability, professional responsibility, and team interaction. It was proved that the development of psychological readiness should be based on the integration of contemporary psychological and pedagogical technologies, digital teaching tools, practice-oriented training, and systematic psychological support. The practical significance of the research lies in the possibility of using its results to improve educational programmes, educational and methodological support, and the system of advanced training of scientific and pedagogical workers of higher military educational institutions. The proposed approaches create a scientific and methodological basis for the development of military education, improving the quality of professional training of officers, developing their general and professional

Suggested Citation:
Vizniuk, I., Dolynnyi, S., & Dolynna, A. (2026). Psychological readiness of future officers as a factor of professional training effectiveness in the system of higher military education of Ukraine. *Bulletin of National Defence University of Ukraine*, 21(4), 5-18. doi: 10.33099/2617-6858-26-21-4-05-18.

Article's History: Received: 29.03.2026; Revised: 02.08.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (innavisnyuk@gmail.com)

competencies, soft skills and hard skills, and ensuring readiness for professional activity in the contemporary security environment

✦ Keywords: innovative technologies; digitalisation; competence approach; self-regulation; leadership; cadets

✦ Introduction

The transformation of the higher military education system is conditioned by changes in the nature of military threats, digitalisation of professional activities, and increased requirements for the psychological and professional readiness of officers. Under these conditions, the professional training of the future officer should ensure not only the assimilation of military-special knowledge, but also the development of leadership, psychological stability, self-regulation, digital competence, and the ability to make decisions in conditions of uncertainty. A.V. Lytvyn & L.A. Rudenko (2024) considered psychological training of future officers as a systemic component of professional military education. The researchers substantiated the need to diversify the forms and technologies of psychological readiness development and emphasised the expediency of using the experience of training military specialists of the North Atlantic Treaty Organization (NATO) states in the Ukrainian educational environment. R. Zueger *et al*. (2023) in a study of 81 cadet officers focused on developing the emotional and volitional resilience of future security and defence sector officers. The results of the above-mentioned study actualised the need for purposeful development of cadets' ability to emotional self-regulation and maintain professional effectiveness in conditions of increased psychoemotional loads. R. Zueger *et al*. found that specialised resilience training contributed to a more positive perception of a stressful situation, higher motivation and positive affect, and faster recovery after an intense military load, which justified the integration of resilience development programmes into the basic and leadership training of future officers. A separate area of modernisation is the development of digital competence of military specialists. O. Sova *et al*. (2025), according to the results of the pedagogical experiment, recorded positive changes in the cognitive, operational and activity-based, and value and motivational components of military leaders' digital competence, demonstrating the need for the systematic integration of digital tools into professional military education rather than their use merely as auxiliary instruments.

Further development of this area is associated with the use of artificial intelligence (AI). R. Zueger *et al*. (2023) drew attention not only to the educational potential of AI, but also to the risks of its implementation in the training of cadets, in particular, related to the digitalisation of pedagogical technologies and the possibility of excessive algorithmisation of decision-making. In addition, digital modernisation requires a combination of technological training with the development of critical thinking and professional autonomy of the future officer. The simulation component of training also remains promising. O. Sova *et al*. (2025) substantiated the organisational and methodological foundations for the use of combat simulation tools in professional military education. Such technologies ensure that training tasks are brought closer to professional situations and create conditions for practical development of decision-making and team interaction. At the international level, the modernisation of professional military education is increasingly associated with the development of resilience, innovation, and technologically supported training. In the materials of NATO (2022), resiliency is considered as a competence that should be purposefully formed in the system of professional military education; among the promising means of its development, war-gaming and game-based learning are also distinguished. That is why contemporary research identified interrelated areas of modernisation of military education: psychological training, development of resilience and leadership, digital competence, the use of AI and simulation and scenario technologies. A holistic system of integration of these approaches into the professional training of future officers of Ukraine requires further theoretical substantiation, which determines the problem field of this research.

The study by V. Osyodlo *et al*. (2024) showed that the effectiveness of professional training of future officers directly depends on the level of their psychological readiness, psychological stability, leadership qualities, organisational identity, and the ability to act effectively in conditions of uncertainty and high psychoemotional load. A. Kucheriavyi *et al*. (2023) confirmed that long-term professional stress, intense service and combat loads, and extreme conditions for performing tasks negatively affect the mental health, adaptive capabilities, and effectiveness of professional activities of military personnel, which actualises the need to improve the system of professional training based on contemporary psychological and pedagogical technologies, the development of psychological stability, emotional self-regulation, leadership competencies, and psychological support of the educational process.

The integration of digital technologies, virtual and augmented reality tools into the professional training of officers is particularly relevant, which contributes to the modelling of real service and combat situations, the development of operational decision-making skills, team interaction, and the development of readiness to perform professional tasks in high-risk conditions. Despite a significant number of studies devoted to the development of military education, some issues of comprehensive modernisation of the educational process in higher military educational institutions based on the integration of digital technologies, competence approach, simulation training, and pedagogical innovations as a factor in improving the quality of professional training of officers require further

scientific substantiation, which determines the relevance of this study. The purpose of the study was to determine the main components of psychological readiness of future officers and generalise the psychological and pedagogical foundations of its development considering contemporary security conditions and changes in the system of higher military education in Ukraine. The objectives of the study were: to determine the main psychological and pedagogical factors for the development of psychological readiness of future officers; to substantiate contemporary approaches to its development; to systematise methodological tools for its assessment and generalise current trends in psychological training in the system of higher military education of Ukraine.

✦ Materials and Methods

The research was conducted in the format of a systematic integrative review using systematic, competence-based and comparative approaches, and elements of secondary analysis of the results of previous empirical studies. The object of the study was the professional training of future officers in the system of higher military education, the subject was innovative pedagogical approaches, psychological and pedagogical factors, and means of improving the quality of their professional training in the context of digital transformation and integration of NATO standards. The search for Ukrainian-and English-language sources was carried out in Google Scholar, Scopus, and Web of Science by keywords related to military education, psychological readiness, leadership, stress tolerance, professional training of officers, digital technologies, and NATO standards. The source base consisted of peer-reviewed scientific publications, methodological studies, regulatory and doctrinal documents of Ukraine, and NATO materials, in particular the DEEP programme. The inclusion criteria were thematic relevance, coverage of psychological readiness, leadership, stress tolerance, digital and practice-oriented training technologies, mainly publication in 2018-2026, and availability of the full text. Duplicates, irrelevant, and methodologically insufficiently substantiated materials were excluded. The selection procedure provided for initial screening of sources by names and abstracts, followed by a full-text assessment of their compliance with the purpose and criteria of the study. As a result of the search and screening, 25 sources were included in the final analysis, including peer-reviewed papers, methodological manuals by O.M. Kokun *et al*. (2022), V. Osyodlo *et al*. (2024) and V. Anishchenko (2024). The regulatory and doctrinal basis of the analysis was Law of Ukraine No. 2469-VIII (2018), and NATO documents and materials (2021; 2022).

To implement the goals and objectives of the study, analysis, synthesis, systematisation, and generalisation were applied to determine the essence and components of psychological readiness; content analysis – to work out the normative and doctrinal requirements for military education; comparative analysis – to contrast the Ukrainian and foreign experience of professional training of officers; system and structural and functional analysis – to systematise methodological tools and substantiate the components of psychological readiness of future officers. Information about the sample, design, methods used, and statistical indicators were extracted from primary empirical studies, considering the characteristics of participants and the conditions of the study. The data obtained were systematised into the following categories: psychological readiness, stress tolerance, adaptability, leadership competencies, soft skills and hard skills. Descriptive synthesis was performed without averaging the results obtained on different scales, and without calculating new integral indices; p-levels and correlation coefficients were given only in the framework of the corresponding primary studies. The results were summarised according to the principles of relevance, comparability, evidential validity, and reproducibility of results across independent sources.

✦ Results

The analysis showed that the psychological readiness of future officers is an integrative personal and professional education, which covers leadership competencies, psychological stability, organisational identity, and involvement in educational and professional activities. Its assessment requires a comprehensive application of psychodiagnostic, pedagogical, and psychological methods considering contemporary security challenges, digital transformation of military education, and integration of NATO standards. The assessment of the quality of professional training of officers should cover not only psychological, but also professional, technological, and practical components. The main approaches, relevant indicators and methodological tools for their assessment are summarised in Table 1.

Table 1. *Methodological tools for assessing the quality of professional training of officers*

Approach	Content of the approach	Indicators of improving the quality of psychological readiness	Methodological tools	Authors
Competence-based	Development of integrated professional, managerial and digital competencies of an officer	✦ level of competence development ✦ learning outcomes ✦ psychological readiness	✦ competence-based assessment ✦ expert assessment ✦ professional knowledge testing ✦ performance of complex practical tasks ✦ final qualification tests	A. Zelnytskyi & O. Zabolotnyi (2020)
Innovative and technological	Use of digital technologies, simulators, learning management systems, virtual and augmented reality, digital platforms	✦ efficiency of material assimilation ✦ decision-making speed ✦ digital competence	✦ assessment of work in simulators ✦ analysis of digital event logs in the Moodle learning management system ✦ VR simulators ✦ scenario testing	V. Anishchenko (2024)

Table 1. *Continued*

Approach	Content of the approach	Indicators of improving the quality of psychological readiness	Methodological tools	Authors
Practice-oriented	Training based on real combat scenarios and cases	✦ willingness to act in professional situations ✦ quality of tactical solutions ✦ team interaction	✦ situational tasks ✦ tactical decision games (TDG) ✦ command and staff exercises ✦ field exercises ✦ expert evaluation of practical exercises	O.S. Kapinus (2019), A. Kucheriavyi *et al*. (2023)
Psychologically directed	Development of psychological readiness, stress tolerance, adaptability, leadership	✦ level of stress tolerance ✦ mental health adaptability ✦ leadership qualities	✦ Connor-Davidson Resilience Scale (CD-RISC) ✦ Hardiness Survey (Maddi) ✦ Perceived Stress Scale (PSS-10) ✦ State-Trait Anxiety Inventory (STAI) ✦ Brief COPE ✦ Military Hardiness Scale ✦ expert assessment of leadership competencies	S. Shykovets & T. Karamushka (2024), O. Kokun *et al*. (2018; 2022), V. Osyodlo *et al*. (2024), I.M. Okhrimenko *et al*. (2023)

Source*: compiled by the authors*

Summary of the data in Table 1 showed that the main trends in the development of psychological readiness of future officers consist in the integration of psychological and pedagogical approaches into the system of professional training, the development of leadership competencies, psychological stability, organisational identity, motivational involvement in educational and professional activities, and the widespread use of digital educational technologies, simulation training, and psychological support of the educational process. The combination of these trends ensures the development of psychological readiness of future officers, increases the effectiveness of their professional training, promotes the development of adaptability, emotional self-regulation, team interaction, and the ability to act effectively in the face of security challenges, digital transformation of military education, and integration of NATO standards (Grydchyna, 2024). The development of psychological readiness of future officers is one of the priority areas for the development of the higher military education system of Ukraine in the context of a full-scale war, integration into the Euro-Atlantic security space, and the implementation of NATO standards (2021; 2022). Professional training of officers should ensure not only the acquisition of military-professional knowledge and special competencies, but also the development of psychological stability, leadership qualities, organisational identity, emotional self-regulation, adaptability, digital literacy, and the ability to act effectively in conditions of high uncertainty and significant psychoemotional load. It is psychological readiness that acts as an integrative characteristic of the future officer's personality, which ensures the effective performance of service and combat tasks, making managerial decisions, and maintaining professional efficiency in the security environment (Fig. 1).

Figure 1. *Main areas of psychological readiness development in future officers*

Source*: compiled by the authors based on A. Zelnytskyi & O. Zabolotnyi (2020), O.M. Kokun et al. (2022), I.M. Okhrimenko et al. (2023), A. Kucheriavyi et al. (2023), S. Shykovets & T. Karamushka (2024), V. Osyodlo et al. (2024), V. Anishchenko (2024)*

One of the leading areas of development of psychological readiness of future officers is the implementation of competence and psychological and pedagogical approaches that orient the educational process to the development of integral professional and psychological competencies of the individual. According to A. Zelnytskyi & O. Zabolotnyi (2020), quality assurance of higher military education is possible provided that the transition from a predominantly knowledge-based training model to a competence-based one that integrates professional

knowledge, practical skills, leadership qualities, psychological stability, responsibility, and readiness to make managerial decisions in accordance with contemporary requirements of the security and defence sector. Important components of this approach are the continuous updating of the content of military education, integration of international training standards, development of psychological readiness, leadership potential, and orientation of the educational process to achieve training results that ensure effective professional activity of future officers. The effectiveness of psychological readiness of officers largely depends on the integrity of the pedagogical system of a military educational institution. A. Zelnytskyi & O. Zabolotnyi identified the interrelationship among learning objectives, the content of educational programmes, innovative pedagogical technologies, staffing, material and technical resources, and mechanisms for assessing learning outcomes as system-forming factors of contemporary military education. This approach ensures the flexibility of the educational process, its adaptation to rapid changes in the operational environment, and continuous improvement of the quality of training of future officers. One of the leading areas of development of military education is the introduction of innovative digital technologies and pedagogical tools. Technologisation of the educational process provides integration of electronic educational resources, information and communication technologies, automated training systems and digital platforms, which significantly increases the efficiency of learning material and allows modelling the professional activities of military specialists in conditions as close as possible to real ones.

An important area of modernisation of military education is its adaptation to the principles and standards of NATO. The experience of the Alliance's member states, in particular the United States, Canada, Great Britain, Poland, and the Baltic states, testifies to the effectiveness of the competence approach, the development of military leadership, practice-oriented training, the use of simulation training, and digital educational technologies (Smith *et al*., 2025). A significant role in this process is played by the Defence Education Enhancement Programme (DEEP) NATO (2021), which provides for the renewal of educational programmes, the introduction of innovative teaching methods, the development of systems for ensuring the quality of education and professional development of scientific and pedagogical workers. According to O.S. Kapinus (2019), an officer must possess a high level of professional mobility, critical thinking, leadership competencies, and the ability to act in accordance with NATO procedures in a multinational environment. The implementation of these approaches in the higher military education system of Ukraine will contribute to the development of psychological readiness, improvement of practical training and increase the compatibility of Ukrainian officers with the Armed Forces of NATO (2021) member states. For comparison, the systems of training officers of the United States, Great Britain, and Poland are identified according to the criteria of psychological readiness and resilience, military leadership, team interaction, scenario-simulation training, and digitalisation. In the US, the priority is the development of leadership, resilience, self-regulation, and decision-making in difficult conditions; in the UK – leadership responsibility, psychological stability, and practice-oriented training; in Poland – competence approach, digitalisation, and compatibility of training with NATO standards. The Ukrainian system combines these areas with practical experience in training officers in war conditions (Grydchyna, 2024). Common features include leadership orientation, psychological resilience, team interaction, and practical readiness, while differences relate to the level of implementation of simulation and digital technologies and standardised assessment. For Ukraine, it is advisable to adapt resilience trainings, scenario and simulation training, digital simulators, and competence assessment of leadership, in particular within the framework of NATO (2021).

One of the key trends in contemporary military education is the transition to a practice-oriented training model. A. Kucheriavyi *et al*. (2023) noted that the use of problem-based training, situational analysis, case method, tactical exercises, command and staff training, and simulation of combat situations allows cadets to develop decision-making skills in conditions of time scarcity, uncertainty, and high level of risk. The use of international experience ensures more effective development of professional competencies of future officers. A promising area for the development of psychological readiness as an integral characteristic of a future officer is the use of virtual and augmented reality technologies. Based on the results of the study by V. Anishchenko (2024), the use of virtual and augmented reality helps to repeatedly practice professional actions in a safe environment, simulate complex combat situations, develop tactical thinking, team interaction, and professional readiness without significant material costs. Such technologies significantly increase the effectiveness of practical training of future officers. In the conditions of contemporary warfare, the psychological component of professional training is of particular importance. S. Shykovets & T. Karamushka (2024) proved that the mental health of military personnel is one of the key factors for successful performance of combat tasks, and the development of psychological readiness should be integrated into all stages of military education.

The need for systematic psychological training was emphasised by O.M. Kokun *et al*. (2018), who substantiated the importance of developing future officers' knowledge about mental disorders, methods of psychological assistance, self-regulation, and psychological support of personnel. The researchers paid special attention to the development of psychological resistance of military personnel to the effects of combat stress, which is an integral component of professional training. An important area of modernisation of military education is the development of psychological readiness of future officers to perform service and combat tasks. V. Osyodlo *et al*. (2024)

emphasised that a military leader must combine a high level of professional competence with developed leadership qualities, emotional stability, communication skills, and the ability to effectively manage subordinates in accordance with the principles of leadership adopted in NATO countries. The analysis showed that the professional training of an officer should ensure the development of social adaptability, stable behavioural strategies, and psychological mechanisms for overcoming the consequences of war. Such trends create the basis for the effective functioning of a serviceman in conditions of prolonged combat operations and high psychoemotional load. The findings of I.M. Okhrimenko *et al*. (2023) confirmed the negative impact of occupational stress on the mental health of representatives of the security sector, which makes it necessary to integrate programmes for the development of stress tolerance, psychological support, and prevention of professional burnout into the training system of future officers. That is why modernisation of the educational process in higher military educational institutions should be carried out using a competence-based approach, digitalisation, technologisation of training, integration of NATO (2021), practice-oriented training, the use of virtual and augmented reality technologies, the development of psychological stability, the development of leadership competencies, and the strengthening of psychological support for the educational process. Comprehensive implementation of these approaches ensures improving the quality of professional training of officers and forming their readiness to effectively perform service and combat tasks in the security environment.

Psychological readiness of future officers has been proposed to be understood as an integrative personal and professional construct formed in the course of professional training within the system of higher military education, combining psychological resilience, leadership qualities, organisational identity, motivational engagement in educational and professional activities, emotional self-regulation, adaptability, and the ability to make effective managerial decisions under conditions of uncertainty. The development of psychological readiness is ensured through the integration of competence-based, psychological and pedagogical, practice-oriented, digital, and innovative and technological approaches; the use of innovative teaching and psychological support tools; and the alignment of professional training with NATO (2021) standards, which contributes to the successful performance of service and combat tasks and the professional activities of future officers in the contemporary security environment. The need to transform the military education system is conditioned by a complex of interrelated factors that determine requirements for the professional training of officers. The analysis identified nine key factors for modernising the educational process (Table 2).

Table 2. *Key factors in the development of future officers' psychological readiness in the system of higher military education of Ukraine*

Factors	Characteristics
Security and defence of Ukraine	Full-scale war, a change in the nature of armed struggle, the emergence of new threats and hybrid forms of warfare require the training of officers who can act effectively in conditions of uncertainty, high risk, and rapid changes in the operational situation
Euro-Atlantic integration of Ukraine	Integration of Ukraine into the European educational space and the implementation of NATO standards require the harmonisation of educational programmes, the development of leadership, competence approach, compatibility of training systems, and the application of innovative teaching methods
Pedagogical factor	Transition from the conventional knowledge model to a competence-oriented system of professional training makes it necessary to update the content of education, teaching methods, and mechanisms for evaluating learning outcomes
Technological factor	Rapid development of digital technologies, AI, simulation training, distance education systems, and virtual and augmented reality technologies opens up new opportunities for improving the effectiveness of professional training of future officers
Practical and operational factor	Contemporary military education should be as close as possible to the real conditions of professional activity through the extensive use of scenario training, tactical modelling, case technologies, command and staff training, and complex simulations
Psychological factor	Significant psychoemotional load during the performance of service and combat tasks actualises the development of psychological readiness, stress tolerance, adaptability, self-regulation skills, and psychological support as integral components of an officer's professional competence
Leadership factor	Change the model of military management requires the development of a leading officer who can effectively manage personnel, make responsible decisions, ensure team interaction, and maintain a high moral and psychological state of subordinates
Organisational and system factor	Improvement of the quality of military education requires a comprehensive modernisation of the pedagogical system of higher military educational institutions, improvement of the educational environment, personnel support, resources and facilities, and the internal system of ensuring the quality of education
Professional and competence factor	Contemporary officer should combine a high level of military and professional, managerial, digital, communicative, and psychological competence that ensures readiness to perform service and combat tasks in a dynamic security environment

Source*: compiled by the authors based on O.M. Kokun et al. (2022), I.M. Okhrimenko et al. (2023), A. Kucheriavyi et al. (2023), V. Osyodlo et al. (2024)*

Thus, certain factors form the conceptual basis for modernising the educational process in higher military educational institutions and determine strategic areas for improving the system of professional training of officers. Their comprehensive consideration ensures the transition to a model of military education, combining competence-based, innovative and technological, practice-oriented, and psychologically-oriented approaches, contributing to improving the quality of professional training and the development of readiness of future officers to perform service and combat tasks in a dynamic security environment. The development of psychological

readiness of future officers is one of the priority areas for the development of the higher military education system in Ukraine. Current trends provide for the integration of competence-based, psychological and pedagogical, practice-oriented, and digital approaches aimed at developing psychological stability, leadership potential, organisational identity, emotional self-regulation, and readiness for professional activity in conditions of uncertainty. The implementation of these approaches corresponds to the strategic objectives of reforming military education, security challenges, and integration of Ukraine into the military education system of NATO countries. The most dynamic area of development of military education is its digital transformation. Within the framework of the DEEP NATO (2021) programme, military education is being modernised by introducing digital educational technologies, developing distance learning, updating educational programmes in accordance with NATO standards, and improving education quality assurance systems. As a result of the programme implementation, 542 international educational events were held in 2024 with the participation of 1,513 experts and more than 3,148 teachers and instructors from 15 partner countries (Tokarczyk, 2025).

An important trend is the harmonisation of professional military education with NATO (2021) standards. In particular, in Ukraine, within the framework of the DEEP programme, more than 200 educational programs of professional military education were synchronised, and more than 1,000 training events, internships, and advanced training programmes have been implemented. In 2024 alone, the number of Ukrainian participants in such events increased by 450%, exceeding 15,000 military personnel and teachers, which indicates a significant strengthening of international cooperation and professional development of personnel (Ukraine will apply to certify..., 2024). Another characteristic trend is the expansion of the use of innovative digital technologies, in particular modelling systems, simulation training, virtual and augmented reality technologies. Research by V. Anishchenko (2024) substantiated the expediency of using virtual and augmented reality as a means of forming professional competence and readiness of officers to perform complex service and combat tasks in a safe training environment, which allows repeatedly working out critical scenarios without additional material costs. Along with technological modernisation, there is an increase in the competence and practice-oriented course of the educational process, which is manifested in the transition to training based on the analysis of combat experience, scenario modelling, command and staff training, the development of critical thinking, decision-making, and military leadership, which corresponds to the current concept of professional military education of NATO. The role of psychological training as a component of an officer's professional competence is increasing significantly. Research by O.M. Kokun *et al*. (2022) and V. Osyodlo *et al*. (2024) proved that psychological readiness, stress tolerance, adaptability, leadership qualities, and psychological self-regulation skills are key factors for effective professional activity of military personnel in contemporary warfare (Table 3).

Table 3. *Systematisation of the results of primary studies of the components of officers' psychological readiness*

Component of psychological readiness	Primary study and sample characteristics	Methodology	Main result of the primary study	Interpretation of the result for officer training
Professional and psychological readiness	S. Shykovets & T. Karamushka (2024), n = 120, military personnel; quasi-experimental design (EG-CG)	Psychological testing, peer review, stress scales	After psychological training, the change in the stress index was 4.3 points compared to 6.2 points in CG; stress tolerance – 2.6 vs. 3.9 points (p ≤ 0.05-0.01)	Indicates the importance of purposeful psychological training for maintaining readiness for activities with a high psychoemotional load
Stress tolerance	O.M. Kokun *et al*. (2022), n = 312, military personnel; comparative study	CD-RISC, Military Hardiness Scale	Negative changes in indicators were 2.9 points compared to 5.1 points (p ≤ 0.01)	Stress tolerance is considered as a resource component of readiness associated with maintaining functional efficiency under the influence of combat stressors
Psychological self-regulation	O.M. Kokun *et al*. (2022), n = 312, military personnel; quasi-experimental study	SAN, STAI, Brief COPE	Changes in indicators of well-being, activity and mood were 0.4-0.5 points	Emphasises the role of emotional self-regulation and coping strategies in maintaining psychological readiness
Professional adaptability	V. Osyodlo *et al*. (2024), n = 286, officers; cross-sectional study	Adaptation questionnaires, expert assessment	Statistically significant differences in mental health indicators were found depending on the length of service (p < 0.05-0.001)	Substantiates the need to consider adaptive resources and the duration of professional load during psychological training
Emotional resilience	S. Puhach *et al*. (2024), n = 354, military personnel; correlation study	STAI, PSS-10	As the length of service increased, the indicators of anxiety and emotional exhaustion also increased	Indicates the need to develop emotional stability and prevent the accumulation of occupational stress
Leadership and team readiness	O.M. Kokun *et al*. (2022), n = 312, cadets, trainees, and officers; correlation study	Expert assessment, TDG, command and staff exercises	Psychophysiological regulation is positively associated with professionally important qualities	Supports the inclusion of self-regulation, decision-making, and team interaction in the activity-leadership readiness component
Health-saving component	I.M. Okhrimenko *et al*. (2023), n = 450: 276 cadets, 71 trainees, 103 officers; comparative study	Mental health questionnaires, statistical analysis	In the group with sufficient motor activity, mental health indicators were statistically significantly better (p ≤ 0.01-0.001)	Emphasises the importance of maintaining mental health and functional resources for professional readiness

Table 3. *Continued*

Component of psychological readiness	Primary study and sample characteristics	Methodology	Main result of the primary study	Interpretation of the result for officer training
Professional efficiency	V. Osyodlo *et al.* (2024), n = 286; officers/ military personnel; correlation studies	Psychodiagnostic testing	Increase in professional stress was accompanied by a decrease in motivation and performance (p<0.05-0.001)	Indicates the connection of the psychoemotional state with the maintenance of professional performance and efficiency

Note*: EG – experimental group; CG – control group*
Source*: compiled by the authors*

Empirical studies confirm the effectiveness of targeted psychological training. In particular, after the introduction of psychocorrective influence in cadets, the indicators of psychological stress worsened by only 4.3 points compared to 6.2 points in the group without appropriate training, and the indicators of stress resistance changed by 2.6 and 3.9 points, respectively, which indicates a positive effect of psychological training on the ability to act in conditions of combat stress ($p \leq 0.05$-0.01). In addition, it was found that in military personnel with high stress resistance, three months after returning from the combat area, the number of people with normal indicators of anxiety and depression reached 100%, while among military personnel with a lower level of stress resistance, the number of cases of clinically expressed anxiety decreased by 5.2 times, and depression – by 7 times, which confirms the determining role of psychological stability in the professional activities of military personnel. The study by I.M. Okhrimenko *et al*. (2023) showed that with an increase in professional experience, indicators of anxiety, aggressiveness, motivation, emotional exhaustion, and professional effectiveness worsen statistically significantly ($p < 0.05$-0.001), which actualises the need for systematic psychological training and support throughout the officer's professional career.

The results summarised in Table 3 indicate that the priority competencies of applicants for higher military education are professional and psychological readiness, stress tolerance, psychological self-regulation, professional adaptability, emotional stability, leadership qualities, health-saving competence, and the ability to maintain high professional efficiency under martial law. Analysis of the results of previous empirical studies showed that the introduction of psychological training programmes is associated with statistically significant positive changes in the indicators of stress resistance, psychoemotional state, psychological readiness, and professional effectiveness of military personnel. In particular, quasi-experimental and comparative studies using control and experimental groups, psychodiagnostic methods CD-RISC, STAI, PSS-10, Military Hardness Scale, Brief COPE, expert assessment of leadership competencies, and the results of TDG, command and staff, and field exercises established statistically significant differences between the groups ($p < 0.05$; $p < 0.01$; $p < 0.001$) (Kokun *et al*., 2022; Shykovets & Karamushka, 2024; Osyodlo *et al*., 2024). The results obtained confirmed the expediency of including psychological training in the system of professional training of future officers as one of the factors for the development of psychological readiness and improving the effectiveness of professional activities. The analysis of contemporary research identified priority competencies, the development of which should be focused on the modernisation of the educational process in higher military educational institutions (Fig. 2).

Figure 2. *Key components of psychological readiness of future officers in the system of higher military education of Ukraine*

Source*: compiled by the authors based on O.M. Kokun et al. (2022), S. Shykovets & T. Karamushka (2024), V. Osyodlo et al. (2024)*

Common competencies include self-regulation, adaptability, critical thinking, team interaction, responsible decision-making, and health preservation. Professional competencies cover professional and psychological readiness to perform service and combat tasks, stress tolerance, leadership, personnel management, psychological self-regulation, the ability to act in conditions of uncertainty, and ensure high professional efficiency when performing tasks as intended. It is the development of these competencies that is one of the key goals of modernisation of military education in accordance with NATO standards (2021; 2022) and current security challenges. The general competencies of applicants for higher military education include the ability to act in conditions of uncertainty and high psychoemotional load, adapt to changes in the operational environment, exercise self-regulation and self-control, work in a team, communicate effectively, make responsible decisions, maintain physical and mental health, and carry out

professional self-development and continuous improvement of their own activities. The development of these competencies ensures the readiness of the future officer to perform professional tasks in difficult and extreme conditions of military service. Professional competencies cover the ability to maintain professional and psychological readiness to perform service and combat tasks, maintain stress tolerance and professional effectiveness under the influence of combat stressors, apply methods of psychological self-regulation, and prevention of professional burnout, quickly adapt to changes in the combat situation, exercise leadership influence and organise team interaction, make informed management decisions in conditions of risk and lack of information, use innovative technologies of psychological training and ensure psychological stability of personnel. The findings presented in Table 3 indicate that purposeful psychological training statistically significantly ($p \leq 0.05$-0.001) contributes to an increase in the level of professional and psychological readiness, stress tolerance and adaptability, and the effectiveness of performing service and combat tasks. The obtained data confirm the expediency of systematic integration of the psychological component into the professional training of future officers.

The study by S. Puhach *et al*. (2024) proved that the effectiveness of professional activity of military personnel is determined by a complex of psychological mechanisms of social adaptation, among which the leading place is occupied by psychological stability, adaptability, behavioural strategies for overcoming stress, and social interaction. The development of these characteristics is a necessary condition for successful professional activity in war conditions, which should begin at the stage of professional training in higher military educational institutions. Such trends confirm the expediency of integrating the psychological component into the system of training officers and using a comprehensive assessment of their professional and psychological readiness. Analysis of the results of previous empirical studies indicates the predominance of a high level of development of certain psychological characteristics (sociability, courage, expressiveness, dominance, emotional stability, etc.) in a significant part of the samples under study. Some studies have revealed the prevalence of manifestations of suspicion, aggressiveness, authoritarianism, and conflict, which negatively affect interpersonal interaction and cohesion of military collectives. Based on the results of the reviewed studies, including O. Kokun *et al*. (2022), S. Shykovets & T. Karamushka (2024) and V. Osyodlo *et al*. (2024), after the introduction of psychological training programmes, there was a tendency to reduce the severity of destructive behavioural manifestations and an increase in the proportion of respondents with constructive interaction models.

The results of previous empirical studies specify the relationship of individual components of psychological readiness with professional adaptation and effectiveness of military personnel. The study by S. Shykovets & T. Karamushka (2024) on a sample of 120 military personnel by quasi-experimental design (EG-CG) found that after psychological training, the deterioration of stress indicators was 4.3 points against 6.2 points in the control group, and stress resistance – 2.6 against 3.9 points ($p \leq 0.05$-0.01). According to the data by O.M. Kokun *et al*. (2022), obtained on a sample of 312 military personnel using CD-RISC, Military Hardness Scale, SAN, STAI and Brief COPE, negative changes in stress tolerance indicators were 2.9 points against 5.1 points ($p \leq 0.01$), and changes in well-being, activity, and mood – only 0.4-0.5 points. The adaptive component of psychological readiness is represented by the results of V. Osyodlo *et al*. (2024): in a sample of 286 officers, statistically significant differences in mental health indicators were found depending on the length of service ($p < 0.05$-0.001). Thus, the results presented are interpreted as empirical characteristics of individual interrelated components of psychological readiness, including stress resilience, self-regulation, adaptability, emotional stability, leadership and team interaction, and the ability to maintain professional effectiveness, rather than as a single integrated measure of psychological readiness. Their inclusion in the analysis is substantiated by the functional role of these characteristics in ensuring the officer's readiness to perform professional tasks in conditions of high psychoemotional load). Comparison of the results obtained with A. Kucheriavyi *et al*. (2023) showed that the identified manifestations of aggressiveness, suspicion, and authoritarianism are partially different from works that emphasise mainly a high level of cohesion of military collectives. The results of the study expand ideas about the socio-psychological adaptation of military personnel, confirming the decisive role of psychological defence mechanisms in the formation of adaptive behaviour models and outlining the prospects for further research on the development of psychological support, emotional intelligence, and team interaction in the conditions of military service.

The results obtained and their comparison with scientific research confirm that the development of psychological stability, adaptability, team interaction, and constructive behaviour models is a necessary prerequisite for effective professional activity of military personnel. In the context of innovative approaches to the modernisation of the educational process in higher military educational institutions, this necessitates the reorientation of the professional training of officers to a competence-based training model that combines the development of professional knowledge, practical skills, and psychological readiness to perform service and combat tasks in the context of contemporary security challenges. That is why one of the key results of the modernisation of military education is the purposeful development of two interrelated competence groups among applicants for higher military education – soft skills and hard skills, which ensure the improvement of the quality of professional training of future officers.

One of the key results of the modernisation of the educational process in higher military educational institutions is the purposeful development of a complex of soft skills

that ensure effective professional activity of future officers. The level of development of these competencies is determined using the competence-oriented assessment, CD-RISC, Hardness Survey (Maddi), PSS-10, STAI, Brief COPE, Military Hardness Scale, and expert assessment of leadership competencies and results of TDG, command and staff, and field exercises. Based on the results of generalisation of previous empirical studies, it was established (Fig. 3) that the closest statistical relationships with indicators of professional adaptation are observed for self-regulation and adaptability (r = 0.922), communication skills (r = 0.924), responsible management decision-making and leadership qualities (r = 0.916), and stress tolerance (r = 0.910). High values of correlation coefficients indicate a close statistical relationship between these soft skills and indicators of professional activity, but do not confirm the causal effect (Fig. 3).

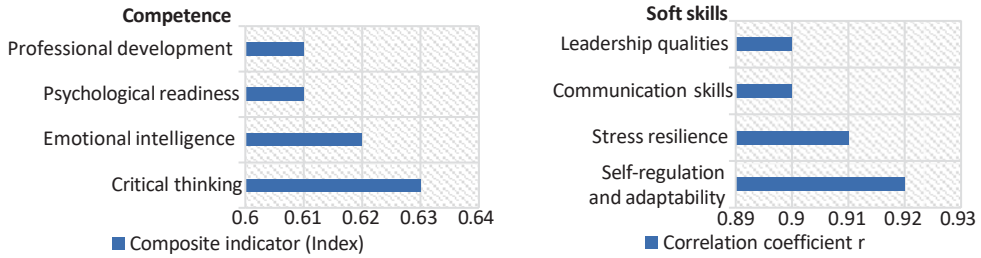

Figure 3. *Coefficients of correlation of socio-psychological competencies with indicators of professional training of future officers based on the results of previous studies*

Note*: correlation coefficients (0.61-0.63) summarise the results of individual studies on the level of competence development; values r = 0.90-0.92 are correlation coefficients that characterise the strength of the statistical relationship between individual soft skills and indicators of professional activity*

Source*: compiled by the authors based on O.M. Kokun et al. (2022), V. Osyodlo et al. (2024), I.M. Okhrimenko et al. (2023)*

The analysis of the results of previous empirical studies showed statistical connections of individual socio-psychological competencies with indicators of professional training of future officers (Fig. 3): critical thinking (r = 0.63), emotional intelligence (r = 0.62), psychological readiness for activity in conditions of uncertainty (r = 0.61), and the ability for continuous professional development (r = 0.61). For each indicator, the results of the corresponding primary study were considered; their generalisation was carried out descriptively, without normalisation, averaging, weighting, or calculation of the integral index. Therefore, these coefficients characterise the strength of statistical communication, and not the level of development of the corresponding competence. The synthesis of the results demonstrates the significance of psychological readiness, stress resilience, self-regulation, adaptability, emotional stability, and leadership and team interaction in officers' professional training. Hard skills reflect the professionally specialised competences required to perform service and combat tasks, including the ability to apply methods of psychological training and self-regulation, provide psychological support for unit activities, assess the psycho-emotional state of service personnel, manage personnel in crisis situations, make managerial decisions under conditions of risk, use innovative digital technologies, simulation systems, and training equipment, apply NATO standards (2021; 2022) in professional activities, organise the professional training of subordinates, and ensure the psychological resilience of military personnel. Thus, the proposed psychological and pedagogical approaches form an integral conceptual basis for the development of psychological readiness of future officers in the system of higher military education in Ukraine. Their integrated implementation will contribute to the development of leadership competencies, psychological stability, organisational identity, motivational involvement in educational and professional activities, emotional self-regulation, adaptability, and other components of psychological readiness that ensure the effectiveness of professional training of future officers. Such trends create prerequisites for improving the quality of military education, developing professionally significant soft skills and hard skills, and forming the readiness of graduates to make managerial decisions, effective team interaction, and perform service and combat tasks in the context of contemporary security challenges and the implementation of NATO standards.

✦ Discussion

The results of the generalisation showed that the modernisation of professional training of future officers requires a comprehensive combination of psychological training, leadership development, practice-oriented training, and digital technologies. In particular, J. Garcia Estrada *et al*. (2024) proved the potential of augmented reality technologies for organising immersive and experiential training in military education. The findings of M. Ocaña *et al*. (2023) also demonstrated the prospects of virtual and augmented reality technologies for modelling professional situations and practising the actions of military specialists. These provisions complement the results obtained on the feasibility of strengthening the practice-oriented and digital components of professional training of future officers. In the broader European context, F.J. Callado-Muñoz & N. Utrero-González (2019) focused on the integration of military education into the European higher education area, which provides for the coordination of academic and

professional training and improving the compatibility of educational systems. Such trends correspond to the need defined in the paper to combine the national experience of military education with modern international approaches.

The leadership component of psychological readiness becomes particularly important. M.C. Navas-Jiménez *et al*. (2024) found that Secure Base Leadership is associated with organisational identification and military resilience through professional engagement. According to this, leadership, resilience, organisational identity, and engagement is considered as interrelated characteristics of the professional development of a future officer. Thus, independent comparison with international studies supports the areas of modernisation of military education defined in the study: psychological training, development of leadership and resilience, practice-oriented training, and integration of digital and simulation technologies. The study by M.C. Navas-Jiménez *et al*. (2024) found that the application of Secure Base Leadership principles in military training is associated with increased organisational identity, involvement in professional activities, resilience, and psychological readiness of future officers. The presented research showed that the development of psychological readiness of future officers should be carried out based on a comprehensive integration of competence, psychological and pedagogical, practice-oriented, digital, and personality-oriented approaches.

The results obtained are consistent with conclusions of A. Zelnytskyi & O. Zabolotnyi (2020), who substantiated the need for a competence model of professional training of officers, development of leadership qualities, practical orientation of the educational process, and its compliance with contemporary requirements of the security and defence sector. The results of the study expand existing scientific ideas, proving that psychological readiness is an integrative characteristic of the future officer's personality, which is formed due to the development of psychological stability, organisational identity, leadership competencies, motivational involvement, and the ability to work effectively in conditions of uncertainty and high psychoemotional load. The development of psychological readiness of future officers is inextricably linked with the development of moral values, responsibility, self-regulation, and leadership qualities that ensure the effective performance of professional duties and decision-making in the context of contemporary security challenges (Pomytkin, 2024).

Conclusions on the effectiveness of practice-oriented learning are consistent with the results of research A. Kucheriavyi *et al*. (2023), which proved the advantages of scenario training, command and staff exercises, and modelling of real combat situations in the professional training of cadets. In addition, the proposed approaches are consistent with the findings of V. Anishchenko (2024), who substantiated the expediency of using virtual and augmented reality technologies to improve the effectiveness of professional training of officers in the security and defence sector of Ukraine. In general, the results of the study confirmed the current trends in the development of military education, which consist in a combination of digitalisation, competence training, practical training, and psychological support, ensuring the improvement of the quality of professional training of officers in the conditions of contemporary security challenges. I.M. Okhrimenko *et al*. (2023) proved that occupational stress significantly affects the mental health of security sector workers, justifying the need to develop psychological stability even at the stage of professional training.

V. Osyodlo *et al*. (2024) emphasised the importance of developing the psychological readiness of military leaders considering NATO standards, which corresponds to the results of a study on the feasibility of integrating competence-based, practice-oriented, and psychologically oriented approaches in officer training. The results obtained are consistent with a number of contemporary studies devoted to the development of psychological readiness of future officers and the development of military psychology. In particular, A. Zelnytskyi & O. Zabolotnyi (2020) substantiated the need to implement a competence-based approach in the professional training of officers, which creates the basis for the development of professionally significant psychological competencies and ensuring readiness to perform service and combat tasks. V. Osyodlo *et al*. (2024) focused on the development of psychological readiness, leadership qualities, and psychological resilience of future military leaders based on NATO standards. These trends are consistent with the findings of this study, which confirm that the effective development of future officers' psychological readiness requires the comprehensive development of leadership competences, psychological resilience, organisational identity, motivational engagement in educational and professional activities, and the use of innovative psychological and pedagogical technologies in the higher military education system.

✦ Conclusions

As a result of the study, the psychological readiness of future officers was theoretically substantiated as a complex characteristic that determines their ability to effectively perform professional and service-combat tasks in conditions of increased psychoemotional load, uncertainty, and dynamic security challenges. It was established that its development is associated with the improvement of psychological stability, emotional self-regulation, professional adaptability, motivational involvement, leadership and communication competencies, and the ability to work effectively in a team. The expediency of integrated application of competence-based, psychological and pedagogical, personality-oriented, practice-oriented, and digital approaches in the system of higher military education was shown. Scenario and simulation training, modelling of professional situations, trainings of psychological stability and self-regulation, and the use of digital technologies were identified as promising means of developing psychological readiness. Systematisation of scientific sources allowed

summarising the methodological tools for a comprehensive assessment of the psychological readiness of future officers.

The CD-RISC and the Military Hardiness Scale are appropriate for assessing psychological resilience and adaptive resources; the PSS-10 and the STAI – for assessing perceived stress and anxiety; and the Brief COPE – for assessing coping strategies. Leadership and command competencies can be assessed by expert methods, and the ability to make decisions, interact in a team, and realise psychological readiness in simulated and practical professional situations – through TDG, command and staff, and field exercises. The combination of these methods helps to encompass the resource and resilience, emotional and regulatory, coping and behavioural, leadership and communication, and operational and practical components of psychological readiness. The obtained theoretical generalisations form the basis for further empirical verification of certain factors of psychological readiness and experimental assessment of the effectiveness of its development programmes. Promising areas of further research are the testing of digital and simulation training tools, in particular virtual and augmented reality technologies, and determining their impact on psychological stability, self-regulation, professional adaptability, and readiness of future officers to perform professional tasks.

✦ Acknowledgements

None.

✦ Funding

None.

✦ Conflict of Interest

None.

✦ References

[1] Anishchenko, V. (2024). Innovative ways of improving the system of graduate professional training of officers of the security and defence sector of Ukraine through the prism of virtual and augmented reality. *UNESCO Chair Journal "Lifelong Professional Education in the XXI Century"*, 1(9), 104-114. doi: 10.35387/ucj.1(9).2024.0008.

[2] Callado-Muñoz, F.J., & Utrero-González, N. (2019). Integration in the European higher education area: The case of military education. *Defence Studies*, 19(4), 373-391. doi: 10.1080/14702436.2019.1681897.

[3] Doctrine of military leadership development in the Armed Forces of Ukraine. (2020). Retrieved from https://repository.gnpu.edu.ua/items/08ae1b48-6bf0-485f-ab86-a529e89e9328/full.

[4] Garcia Estrada, J., *et al*. (2024). Military education in extended reality (XR): Learning troublesome knowledge through immersive experiential application. *The Visual Computer*, 40, 7249-7278. doi: 10.1007/s00371-024-03339-w.

[5] Grydchyna, V. (2024). Implementation of NATO standards in military education. *Bulletin of Taras Shevchenko National University of Kyiv. Military-Special Sciences*, 4(60), 5-9. doi: 10.17721/1728-2217.2024.60.5-9.

[6] Kapinus, O.S. (2019). The use of contextual learning technology in the formation of professional subjectivity of a future officer. *Scientific Journal of National Pedagogical Dragomanov University. Series 5: Pedagogical Sciences: Realities and Perspectives*, 71, 124-129. doi: 10.31392/NPU-nc.series5.2019.71.29.

[7] Kokun, O.M., Klochkov, V.V., Moroz, V.M., Pishko, I.O., & Lozinska, N.S. (2022). *Ensuring the resilience of military personnel in combat operations*. Kyiv: Feniks.

[8] Kokun, O.M., Pishko, I.O., Ahaiev, N.A., & Lozinska, N.S. (2018). *Fundamentals of psychological knowledge of mental disorders for a military psychologist*. Kyiv: Research Centre for Humanitarian Problems of the Armed Forces of Ukraine.

[9] Kucheriavyi, A., Vanovska, I., & Pyrogov, K. (2023). Methodological principles of conducting educational classes with cadets of higher military educational institutions considering the experience of the world's leading countries. *Bulletin of Taras Shevchenko National University of Kyiv*. *Military-Special Sciences*, 55, 20-27. doi: 10.17721/1728-2217.2023.55.20-27.

[10] Law of Ukraine No. 2469-VIII "On National Security of Ukraine". (2018, June). Retrieved from https://zakon.rada.gov.ua/laws/show/2469-19#Text.

[11] Lytvyn, A.V., & Rudenko, L.A. (2024). Psychological training of future officers: Experience, proposals and recommendations. *Scientific Herald of Sivershchyna. Series: Education. Social and Behavioural Sciences*, 1(12), 169-186. doi: 10.32755/sjeducation.2024.01.169.

[12] NATO. (2021). *Defence Education Enhancement Programme (DEEP)*. Retrieved from https://www.nato.int/en/what-we-do/partnerships-and-cooperation/defence-education-enhancement-programme-deep.

[13] NATO. (2022). *Allied joint doctrine for land operations (AJP-3.2)*. Brussels: North Atlantic Treaty Organization.

[14] Navas-Jiménez, M.C., Laguía, A., Recio, P., García-Guiu, C., Pastor, A., Edú-Valsania, S., Molero, F., Mikulincer, M., & Moriano, J.A. (2024). Secure base leadership in military training: Enhancing organizational identification and resilience through work engagement. *Frontiers in Psychology*, 15, article number 1401574. doi: 10.3389/fpsyg.2024.1401574.

[15] Ocaña, M., Luna, A., Yarad Jeada, V., Cruz Carrillo, H., Alvear, F., & Rosales, M. (2023). Are VR and AR really viable in military education? A position paper. In Á. Rocha, C.H. Fajardo-Toro & J.M. Riola (Eds.), *Developments and advances in defense and security. Smart innovation, systems and technologies* (Vol. 328). Singapore: Springer. doi: 10.1007/978-981-19-7689-6_15.

[16] Okhrimenko, I.M., Barko, V.V., Vavryk, L.V., Chornous, V.D., Okhrimenko, S.S., Aleksandrov, Y.V., & Onishchuk, L.M. (2023). The impact of professional stress on the mental health of law enforcement officers. *Medical News*, 76(6), 1428-1435. doi: 10.36740/WLek202306115.

[17] Osyodlo, V., Krymets, L., & Hryliuk, S. (2024). Peculiarities of developing the psychological readiness of military leaders considering NATO experience. *Military Education*, 1(49), 180-193. doi: 10.33099/2617-1783/2024-49/180-193.

[18] Pomytkin, E. (2024). The peacebuilding role of education in preventing wars on the planet. *UNESCO Chair Journal Lifelong Professional Education in the XXI Century*, 1(9), 80-91. doi: 10.35387/ucj.1(9).2024.0006.

[19] Puhach, S., Vizniuk, I., Dolynnyi, S., & Drachuk, M. (2024). Lifestyle and psycho-social adaptation of servicemen. *Organizational Psychology. Economic Psychology*, 1(31), 70-78. doi: 10.31108/2.2024.1.31.6.

[20] Shykovets, S., & Karamushka, T. (2024). Mental health support of personnel in the Armed Forces of Ukraine: Characteristics of the current situation and prospects for improvement. *Kyiv Journal of Modern Psychology and Psychotherapy*, 7, 102-116. doi: 10.48020/mppj.2024.01.07.

[21] Smith, S.J., Crosbie, T., & Lindhardtsen, H. (2025). NATO professional military education at 75: Rethinking the competency-development process. *Defence Studies*, 25(3), 740-748. doi: 10.1080/14702436.2025.2474066.

[22] Sova, O., Zaika, L., & Tymoshenko, R. (2025). Organizational and methodological recommendations for training military specialists using combat simulation tools. *Military Education*, 2(52), 194-208. doi: 10.33099/2617-1783/2025-52/194-208.

[23] Tokarczyk, J. (2025). *Reflecting on 2024: Achievements and future opportunities*. Retrieved from https://deepportal.hq.nato.int/eacademy/main-page/reflecting-on-2024-achievements-and-future-opportunities/.

[24] Ukraine will apply to certify professional military education courses in accordance with NATO standards. (2024). Retrieved from https://mod.gov.ua/en/news/ukraine-will-apply-to-certify-professional-military-education-courses-in-accordance-with-nato-standards.

[25] Zelnytskyi, A., & Zabolotnyi, O. (2020). Quality of higher military education in the context of changes in Ukrainian legislation. *Military Education*, 1(43), 147-162. doi: 10.33099/2617-1783/2020-1/147-162.

[26] Zueger, R., Niederhauser, M., Utzinger, C., Annen, H., & Ehlert, U. (2023). Effects of resilience training on mental, emotional, and physical stress outcomes in military officer cadets. *Military Psychology*, 35(6), 566-576. doi: 10.1080/08995605.2022.2139948.

Психологічна готовність майбутніх офіцерів як чинник ефективності професійної підготовки у системі вищої військової освіти України

Інесса Візнюк
Доктор психологічних наук, професор
Вінницький державний педагогічний університет імені Михайла Коцюбинського
21000, вул. Острозького, 32, м. Вінниця, Україна
https://orcid.org/0000-0001-6538-7742

Сергій Долинний
Доктор філософії, доцент
Вінницький державний педагогічний університет імені Михайла Коцюбинського
21000, вул. Острозького, 32, м. Вінниця, Україна
https://orcid.org/0000-0003-3555-5818

Анна Долинна
Доктор педагогічних наук, доцент
Вінницький державний педагогічний університет імені Михайла Коцюбинського
21000, вул. Острозького, 32, м. Вінниця, Україна
https://orcid.org/0000-0002-0559-1087

✦ Анотація. Метою статті було теоретичне обґрунтування структури психологічної готовності майбутніх офіцерів та систематизація психолого-педагогічних підходів до її формування в умовах сучасних безпекових викликів і трансформації вищої військової освіти України. Використано аналіз, синтез, порівняння, систематизацію й узагальнення наукових джерел, контент-аналіз, а також структурно-функціональний і системний аналіз для визначення сучасних підходів до формування психологічної готовності майбутніх офіцерів. У статті розглянуто сучасні психолого-педагогічні підходи до формування психологічної готовності майбутніх офіцерів як важливої складової їх професійної підготовки у системі вищої військової освіти України. Обґрунтовано необхідність оновлення змісту військової освіти з урахуванням сучасних безпекових викликів, стандартів Організації Північноатлантичного договору (НАТО) та актуальних потреб сектору безпеки і оборони України. Особливу увагу приділено розвитку лідерських компетентностей, психологічної стійкості, організаційної ідентичності та професійної мотивації, а також використанню цифрових технологій, симуляційного й інтерактивного навчання, засобів віртуальної та доповненої реальності. Встановлено, що комплексне використання зазначених засобів сприяє розвитку здатності ефективно виконувати службово-бойові завдання, приймати управлінські рішення в умовах невизначеності, демонструвати емоційну саморегуляцію, адаптивність, професійну відповідальність і командну взаємодію. Доведено, що формування психологічної готовності має ґрунтуватися на інтеграції сучасних психолого-педагогічних технологій, цифрових засобів навчання, практикоорієнтованої підготовки та системного психологічного супроводу. Практична цінність дослідження полягає у можливості використання його результатів для вдосконалення освітніх програм, навчально-методичного забезпечення та системи підвищення кваліфікації науково-педагогічних працівників вищих військових навчальних закладів. Запропоновані підходи створюють науково-методичне підґрунтя для розвитку військової освіти, підвищення якості професійної підготовки офіцерів, розвитку їхніх загальних і фахових компетентностей, soft skills і hard skills, а також забезпечення готовності до професійної діяльності в сучасному безпековому середовищі

✦ Ключові слова: інноваційні технології; цифровізація; компетентнісний підхід; саморегуляція; лідерство; курсанти

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡si»y ofi U¾¡ai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 19-30
✦ ISSN 2617-6858
✦ E-ISSN 2617-6866
✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ UDC 159.9.616.89
✦ DOI: 10.33099/2617-6858-26-21-4-19-30

Art therapy methods for adjusting veterans to life in peacetime

Yelizaveta Hulak*
Student
Lviv Polytechnic National University
79000, 12 Stepan Bandera Str., Lviv, Ukraine
https://orcid.org/0009-0001-9959-2100

Olha Sushko
Senior Lecturer
Lviv Polytechnic National University
79000, 12 Stepan Bandera Str., Lviv, Ukraine
https://orcid.org/0000-0001-8739-0125

✦ Abstract. Research relevance is determined by the need to identify effective approaches to providing psychological support for veterans as they adapt to civilian life, in the context of increasing psychotraumatic consequences of war. The study aimed to provide a theoretical justification for the potential application of art therapy methods in the process of veterans' adaptation to civilian life and to examine the interrelationships between the psycho-emotional state, social adaptation and social well-being of individuals with combat experience. The study utilised a range of theoretical, empirical and mathematical-statistical methods. The study analysed and systematised contemporary scientific sources on the psychological consequences of combat experience and the potential for applying art therapy were conducted. The empirical study involved 15 male veterans aged between 23 and 61 and used psychodiagnostic techniques to assess their psycho-emotional state, social adaptation and social well-being. Descriptive statistics, correlation analysis and factor analysis were used to process the results. The findings revealed that most of the respondents exhibited symptoms of anxiety, depression and post-traumatic stress disorder, as well as difficulties with socio-psychological adaptation. This was quantitatively confirmed by the fact that primary symptoms of psycho-emotional disorders were identified in 80.0% of respondents, whilst a low level of social adaptation was found in 53.3% of study participants. A strong positive correlation between indicators of psycho-emotional state and the level of social adaptation has been established. At the same time, no significant correlations were found between most components of social well-being and manifestations of post-traumatic symptoms, which may indicate the relative autonomy of individual components of social functioning. Based on the results of factor analysis, two latent structures associated with social inclusion and the process of readaptation were identified. A theoretical analysis of the scientific literature has demonstrated the potential for applying art therapy methods within the system of psychological support for veterans. The practical significance of the study lies in the possibility of using the findings to improve programmes for psychological support and psychosocial care for veterans, as well as to justify the inclusion of art therapy methods in comprehensive rehabilitation measures

✦ Keywords: post-traumatic stress disorder; combat stress; psychological rehabilitation; psychosocial support; resilience; emotional regulation

✦ Introduction

The full-scale war in Ukraine has highlighted the issue of psychological and social readaptation of veterans to civilian life. Prolonged exposure to combat stress, life-threatening situations and loss is accompanied not only by physical injuries, but also by the development of post-traumatic reactions, emotional disturbances, difficulties in interpersonal relationships and a reduced quality of life. In this context, the search for effective approaches to psychological

Suggested Citation:
Hulak, Ye., & Sushko, O. (2026). Art therapy methods for adjusting veterans to life in peacetime. *Bulletin of National Defence University of Ukraine*, 21(4), 19-30. doi: 10.33099/2617-6858-26-21-4-19-30.

Article's History: Received: 18.03.2026; Revised: 31.07.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (yelizaveta.hulak.ps.2023@lpnu.ua)

support and the restoration of adaptive resources for those with combat experience has become particularly pressing. The World Mental Health Report… (2022) emphasises that the consequences of psychotraumatic events are complex in nature and require the implementation of a biopsychosocial approach that combines psychological medical, and social support. Restoration of individual's functioning and ensuring the conditions for their full integration into society following traumatic events was emphasised. A. Maercker (2022), summarising existing research on the consequences of psychological trauma, noted that the process of recovery following extreme events encompasses the emotional, cognitive and social aspects of an individual's functioning. The author emphasised that the success of readaptation is determined not only by an individual's personal resources, but also by the level of social support, interpersonal relationships and the availability of psychotherapeutic assistance. A study by C. Brewin *et al.* (2017) demonstrated that the psychotraumatic consequences of combat experience are manifested not only by symptoms of post-traumatic stress disorder, but also by impairments in emotional regulation, difficulties with social functioning and interpersonal interaction. This highlights the need for comprehensive psychological support approaches aimed at integrating traumatic experiences and restoring an individual's psychological well-being. Contemporary approaches to interpretation of veterans' readaptation are based on the biopsychosocial model, according to which the return to civilian life is viewed as a complex process of restoring an individual's mental, physical and social functioning. At the same time, the success of readaptation is determined not only by the nature of the psychotraumatic experience, but also by the level of resilience, the presence of a supportive social environment and the possibility of resuming familiar social roles. G. Rakesh *et al.* (2022), in investigating the relationship between traumatic experiences, social support and resilience among veterans, found that social support is one of the key factors in psychological recovery following combat experiences. The authors emphasised that supportive interpersonal relationships help to reduce the severity of post-traumatic symptoms and enhance an individual's ability to cope with stressful situations.

R.D. Gettings *et al.* (2022) highlighted the issue of social isolation among veterans, noting that the difficulties of transitioning from military to civilian life are often accompanied by a loss of familiar social connections, feelings of loneliness and a decline in subjective well-being. According to the researchers, incorporating elements of social interaction and support into psychological support programmes helps to improve social integration and efficiency of adaptation to civilian life. In contemporary psychology, art therapy is regarded as a form of psychotherapeutic support that involves the use of creative activity for the symbolic expression, awareness and integration of emotional experiences. Art-therapeutic methods are of particular importance when working with individuals who have experienced psychotraumatic events, as they can be used to process traumatic experiences indirectly, without the need to re-enact the psychotraumatic events in detail. A systematic review by M. Campbell *et al.* (2016) found that art therapy interventions are associated with a reduction in the severity of post-traumatic stress disorder symptoms, improved emotional regulation and enhanced social interaction among individuals with traumatic experiences. The researchers emphasised that the most promising forms of art therapy are group-based approaches, which combine individual processing of experiences with the restoration of social connections. K. Kudar *et al.* (2025) addressed the role of non-verbal methods in working with veterans, noting that art therapy practices can help reduce feelings of isolation, increase levels of self-reflection and restore a sense of personal integrity. According to the authors, the use of creative methods is a promising approach to providing psychosocial support for individuals with combat experience, though it requires further empirical research. In this regard, the recovery process involves not only alleviating symptoms but also restoring a person's ability to function fully in society and to construct new meanings in life. In contemporary research, readaptation is viewed as a dynamic process of restoring psychological well-being and social functioning following a traumatic experience.

Despite considerable academic interest in the psychological rehabilitation of individuals with combat experience, the use of art therapy methods in the context of the socio-psychological readaptation of veterans remains under-researched. Most contemporary studies focus on examining specific aspects of post-traumatic manifestations or analysing the effectiveness of individual psychotherapeutic approaches, whilst the interrelationship between veterans' psycho-emotional state, social adaptation and social well-being requires further empirical investigation. This highlights the need to investigate the specific characteristics of veterans' adaptation to civilian life and to provide a theoretical basis for the potential application of art-therapeutic methods within their psychological support system. The study aimed to identify the theoretical foundations for the application of art-therapeutic methods to support veterans in the process of readaptation to a peaceful environment and to analyse the links between their psycho-emotional state, social adaptation and sense of social well-being. Based on the stated aim, following research objectives were identified: to analyse current scientific approaches to interpretation the psychological consequences of combat experience and the characteristics of veterans' readaptation to civilian life; to investigate the characteristics of veterans' psycho-emotional state and social adaptation; to identify the interrelationship between indicators of psycho-emotional state, social adaptation and social well-being; to summarise contemporary approaches to the use of art therapy methods within the system of psychological support for veterans.

✦ Literature Review

Thus, research into art-therapeutic methods in the process of veterans' adaptation to civilian life is a relevant and

promising area of contemporary psychology, as it helps improve the effectiveness of rehabilitation programmes and promotes the full social integration of individuals with combat experience. Contemporary interpretation of psychological trauma is based on the view that it is an event or a series of events associated with a threat to life or to a person's physical or psychological integrity, and accompanied by the emergence of intense emotional experiences. B.A. van der Kolk (2014) notes that the consequences of psychotraumatic experiences extend beyond individual psychopathological symptoms and are manifested at the emotional, cognitive, behavioural and social levels of an individual's functioning. A person who has taken part, or is taking part, in combat operations is subject to serious consequences that affect their physiological and psychological state. The main factors in altering the characteristics of military personnel are: stress (combat stress), post-traumatic stress disorder, and acoustic trauma. The first factor, as noted by V.M. Felyk (2025), is participation in combat operations, which is regarded as one of the most potent psychotraumatic factors, associated with a constant threat to life, psycho-emotional strain and the disruption of basic physiological needs. Distress develops when a stressor is of excessive duration or intensity, affecting the mental sphere; and when the central nervous system's adaptive capacity is exceeded, this leads to mental disorders. At the same time, combat stress manifests itself in physical, emotional, cognitive or behavioural reactions. It arises even before a real threat to life arises and persists until the individual leaves the combat zone, mobilising all the body's systems (immune, defence, nervous and psychological) to overcome the danger, accompanied by changes in blood composition and hormonal surges that trigger anxiety, vigilance and aggression. According to the transactional model of stress, a person's psychological response is determined not by the event itself, but by their subjective assessment of it and the coping resources available to them (Kivak, 2024). These processes are also explained as the result of a person's interaction with their environment, where stress arises not from the event, but from their subjective assessment: primary (threat or challenge), secondary (coping resources) and reappraisal, which determines the strategies – problem-oriented (resolving the stressor) or emotion-oriented (reducing distress through distancing, meditation, etc.). In other words, if demands exceed resources, the situation is perceived as threatening, provoking distress; however, effective coping can transform it into a challenge, facilitating post-combat adaptation.

According to V.L. Zlyvkov *et al.* (2016), the risk of developing post-traumatic stress disorder (PTSD) as a result of traumatic events that exceed the bounds of ordinary human experience is associated with an extreme crisis, poses a threat to the life of the individual or their loved ones, and may complicate the course of the disorder. According to the International Classification of Diseases, 11th Revision (n.d.) (6B40), PTSD is characterised by three main groups of symptoms: the re-experiencing of a traumatic event or events in the form of vivid, intrusive memories, flashbacks or nightmares; avoidance of thoughts, memories or external stimuli associated with the traumatic experience; and a persistent sense of imminent danger, which may manifest as excessive vigilance or an exaggerated startle response to sudden stimuli, particularly loud noises. A substantial component of overcoming the effects of a traumatic experience is the presence of an individual's internal resources. Most studies show that art therapy techniques help to activate an individual's internal resources through creative self-expression, the development of reflection and emotional awareness, which in turn reduces intrusive thoughts, flashbacks, aggression and other symptoms of PTSD. Visualisation techniques and music therapy can be used to relax the body and relieve tension and anxiety and other symptoms. The third factor is acoustic barotrauma, which arises as a result of a shock wave and manifests as a kind of molecular concussion. I.D. Spirina *et al.* (2022) emphasised that concussion caused by exposure to a mine blast has different aetiological mechanisms and clinical characteristics compared to concussion caused by a blow, a sports injury or a road traffic accident. Traumatic brain injuries (TBI) associated with combat operations are caused by the effects of explosions. TBI is a common cause of neurological damage and disability among the civilian population and military personnel. According O.A. Nykyforova & M.V. Bidniak (2023), the following processes occur in the human body as a result of acoustic trauma: axonal rupture (headaches, panic attacks, aggression, loss of coordination, hallucinations, déjà vu, loss of touch with reality); circulatory disturbances (affecting the finest capillaries); disturbances in cerebrospinal fluid dynamics (intracranial pressure, headaches, panic attacks, water-electrolyte homeostasis, poor memory and so on); the formation of scars and adhesions in the brain (inhibition of mental activity); auto-neurosensitisation; loss of hearing and coordination, retinal detachment.

Emotional distress, an anxious perception of the world and a constant sense of impending danger pose a major obstacle for service personnel returning to civilian life after combat operations (discharge from service, rehabilitation, continued service in the rear). Experiencing a traumatic event has a negative impact on mental health; when a person is confronted with immoral acts that contradict personal moral values, they become disillusioned with society and their trust in those around them diminishes, whilst their emotional resources become depleted to the point where they can no longer cope with everyday life (Muller, 2014). In the context of psychotherapeutic support for individuals with traumatic experiences, it is necessary to address psychological trauma in stages. This involves recognising that it is impossible to continue avoiding traumatic experiences, mobilising the individual's internal and external resources, and restoring the integrity of their psycho-emotional experience. A significant role in this process is the development of a resourceful state, which encompasses the physical, emotional, cognitive and social resources necessary for

the safe processing of traumatic events. Psychotherapeutic treatment of trauma also involves a gradual engagement with the traumatic experience, with an emphasis on stabilising the emotional state, and on recognising and differentiating between strong emotional experiences, such as fear, shame, anger or helplessness. A significant component is restoring the connection with the personal body, reducing levels of psychophysiological tension and developing new adaptive behavioural patterns. As a result of re-examining traumatic events, there is a gradual acceptance of new life experiences, a transformation of one's self-perception and the development of new ways of psychological functioning. In this context, art therapy takes on particular significance as one of the effective methods of psychological support for individuals experiencing post-traumatic distress. Art therapy methods provide safe, non-verbal processing of traumatic experiences through visual arts, metaphorical imagery, body-oriented and creative techniques. Art therapy promotes emotional release, the development of self-regulation skills, a reduction in anxiety levels and the restoration of an individual's inner resources. At the same time, in the contemporary Ukrainian psychological landscape, there is a tendency to view art therapy simplistically as merely an entertainment-based practice. Such an approach may diminish the scientific and psychotherapeutic value of the method. It is therefore necessary to interpret art therapy specifically as a systemic psychocorrectional approach aimed at the in-depth processing of psychotraumatic experiences and the restoration of an individual's adaptive potential. N. Volotovska (2023) highlighted art therapy as a means of addressing PTSD. Author noted that art therapy is increasingly being used in the treatment of various psychological problems, in particular PTSD, and is a form of psychotherapy that utilises art as a means of promoting a person's physical and mental health. Furthermore, the results of its application demonstrate that it is a means of enhancing stress tolerance, resilience and post-traumatic growth. It is a form of therapeutic process in which a work of art is used to promote the patient's physical and emotional well-being. Art therapy may include drawing, sculpture and other artistic processes that help to express feelings and emotions. Bibliotherapy, music therapy and colour therapy are also noted for their positive effects.

It is also worth noting the role of bibliotherapy, which involves altering the reactivity of the peripheral division of the central nervous system as a result of the perception of the text in a book. In particular, in 2019, D. Cruse initiated a series of studies on people and identified marked changes in autonomic responses during electroencephalography and electrocardiography recordings, which also included pupil size and respiratory rate (Volotovska, 2023). As for stories that a person perceives aurally, the words heard activate the corresponding part of the listener's cerebral cortex (visual, auditory, motor, somatosensory). In the context of mental practices involving the use of another person's lived experience, storytelling takes on additional significance. For example, students listening to advice from a professional athlete may help to form electroencephalographic patterns similar to those observed in the athlete whilst recalling personal experiences. The most significant indicator of a loss of internal resources is one's state of health and sense of psychological well-being. It is precisely resilience, along with volitional, emotional and energetic characteristics, that are necessary (directly or indirectly) to overcome post-traumatic symptoms. A person exhibiting characteristic signs of PTSD feels as though the disorder is controlling their life, causing a sense of frustration that leads to anger towards oneself and others. This can be explained by the fact that when a person faces a problem and is under "pressure", the accumulated psychological and emotional tension can be expressed in the form of increased irritability and aggressive reactions. According to M.S. Lisnyak (2024), in this context, art therapy serves as an effective means of emotional release and the safe expression of repressed emotions. The extreme nature of combat conditions is characterised by the intensity of the stressor, its suddenness, the danger involved, its sweeping impact on large groups of people, as well as the prolonged and severe course of post-traumatic mental disorders. Extreme conditions may be: intense and one-off (the use of weapons); or intense and repeated, requiring a period of adaptation to ongoing sources of stress (participation in combat operations); in combat situations, a critical incident may occur – a situation that triggers exceptionally strong emotional reactions in an individual, which negatively affect the performance of duties at the scene or subsequently (Babayan & Grishman, 2014).

According to the theory of "learned helplessness" by M. Seligman, as explained by O.A. Dudnyk (2021), fear of a traumatic situation is, for a certain period of time, adaptive, motivating the body to seek an escape. If a way to escape is found, the fear subsides, and the body proceeds quite calmly to flee or avoid the situation. However, if the threat is uncontrollable – in the context of the present study, military events – fear becomes maladaptive. This leads to the fruitless expenditure of a great deal of energy. M. Seligman argued that when the body realises the situation is beyond its control, it ceases its search for an escape (Dudnyk, 2021). This theory explains the mechanism behind the difficulties in the reintegration of military personnel, where fear is lost whilst still at the front, but in a peaceful environment a "learned" pattern of helplessness is established, which reduces motivation (low initiative and perseverance), cognitive (inability to recognise favourable opportunities for controlling outcomes) and emotional (despair, reduced self-esteem, a depressed and despondent state, anxiety due to a lack of results) processes in the ability to employ adaptive strategies. Through the process of adaptation, the functioning of the body's systems is optimised, and a balance is achieved within the "human-environment" system. Adaptation is both a balance between the environment and the organism, and a process of adjusting to changing environmental conditions. An individual's adaptability is determined by the degree to which

their capacity for psychological regulation has developed. Every person has a unique adaptation threshold, that is, the maximum degree of extreme stress to which a person is capable of adapting through psychophysiological compensatory mechanisms without damaging the integrity of their personality. The higher the level of functioning of psychological regulatory mechanisms, the lower the probability of the adaptation process failing in extreme conditions, and, consequently, the higher the adaptation threshold (Sipko, 2015). Successful social adaptation is characterised by a well-balanced relationship between an individual's needs and the demands of the social environment. An individual with good social adaptability is characterised by equanimity, harmony, and a balance between self-actualisation and self-control, which ensures compliance with the generally accepted normative requirements of the environment. Deviant behaviour is an indicator of low social adaptability. As noted by V. Aleshchenko (2022), when the adaptation process is disrupted, such maladaptive reactions as anxiety, depression or even more serious manifestations – neurotic disorders, alcoholism and drug addiction – may be observed. These are possible reactions to psychosocial stress. The military environment is characterised by clearly structured social roles and behavioural norms. In civilian life, everything is chaotic; events are constantly changing; often something fails; people disappoint; state bodies do not function properly; for the most part, everything is "grey". As K.O. Zelenska (2023) emphasised, this irritates someone who has returned from war, throws them off balance and affects their heightened sense of justice.

Stigmatisation of people with mental health conditions can be defined as a sense of shame, disapproval or embarrassment, leading to self-avoidance or rejection by others. Stigma is associated with all forms of mental health conditions. The level of stigma increases in direct proportion to the extent to which a person's behaviour differs from what is generally accepted in society. The level of stigmatisation of people with mental health conditions remains high worldwide. In many cases, this is related to a lack of knowledge regarding mental disorders. The widespread social myth that people with mental disorders are dangerous to others and commit more crimes than healthy people is deeply ingrained in society. In addition to societal stigma, individual stigma also has a significant negative impact, particularly when self-stigma occurs among patients, which deepens their social isolation and contributes to a loss of working capacity. I.D. Spirina *et al.* (2022) noted that readaptation – readjustment to a peaceful life – becomes a substantial component of socio-psychological rehabilitation. Readaptation involves certain sequential stages, and the initial shock and confusion about what is happening around cause denial of reality, anger, irritation and a desire for solitude. Only later, with the support of their family and old friends, do people whose minds are overwhelmed with memories of the frontline learn to perceive a different, peaceful reality – one where weddings are held, children are born, plots of land are allocated, houses are built, and start-ups are launched. T.M. Tytarenko (2018) noted that the initial impressions upon returning from one world to another do not help demobilised soldiers to recover their strength; on the contrary, they exacerbate their trauma, pushing service personnel either towards voluntary isolation, a reluctance to socialise with former friends who were not at the front, or even a persistent desire to return to the front quickly, enlist on a contract basis, and find themselves once again where everyone understands them and they know exactly why they wake up in the morning and perform their dangerous duties. Full recovery from trauma involves building a new way of life that incorporates the experience of the trauma and reintroduces full control of life. The recovery process involves a certain period of shock, disorientation (a mental state in which a person loses the ability to adequately perceive their surroundings, time, space, and their relationship with themselves and others) and anxiety. As noted by V.I. Rozov (2024), the duration and intensity of the adjustment period vary from person to person, yet many aspects of this process are well-known and common to many people who have experienced trauma.

In the academic literature, three areas of positive change resulting from life crises can be identified: the mobilisation of a person's latent potential, which alters their sense of self and helps them feel resilient when faced with current and future life challenges; the strengthening of meaningful, genuine interpersonal relationships as a result of traumatic events; and the acquisition of existential experience linked to changes in a person's philosophy of life, and a transformation of priorities and values regarding the present and the future. It is worth adding that, after overcoming psychological trauma, a person realises the value of life and interpersonal relationships, feels a sense of personal empowerment, and experiences an enrichment of the spiritual and existential aspects of life. R.G. Tedeschi & L.G. Calhoun (2004) viewed post-traumatic growth as a continuous process, rather than a static outcome of trauma, which enriches an individual's life story – their narrative. R.G. Tedeschi & L.G. Calhoun also emphasised that successful readaptation is linked not only to a reduction in the severity of psychotraumatic symptoms, but also to the formation of new adaptive strategies, the restoration of interpersonal relationships and the development of post-traumatic growth. At the same time, this process is individual in nature and is determined by a combination of psychological and social factors. Post-traumatic growth is not a return to a previous level of functioning after overcoming psychological trauma, but rather an experience of profound self-improvement, qualitative changes and personal transformation, the discovery of new meanings, and a sense of optimism. As a result of post-traumatic growth, significant changes occur in a person's behavioural patterns. Post-traumatic growth occurs through a person's overcoming of a traumatic event and adaptation to a new post-traumatic reality, and is determined by the effort expended in this process (Voznesenska, 2015). A theoretical

analysis of the issue suggests that art therapy can be regarded as a promising approach to providing psychological support for veterans as they readjust to civilian life. In this context, research into the psycho-emotional characteristics of veterans and the factors influencing their adaptation takes on particular significance.

✦ Materials and Methods

This study examines the characteristics of the psycho-emotional state and socio-psychological adaptation of veterans to civilian life, as well as identifying the potential for applying art therapy methods in their psychological recovery. The methodological basis of the study was a comprehensive approach, which involved a combination of theoretical, empirical and mathematical-statistical methods. The methodological basis of the study comprises general scientific methods of analysis, synthesis, comparison and generalisation of scientific sources; a systems approach; the biopsychosocial paradigm; and content analysis of recent scientific publications (2021-2025) devoted to the issues of post-traumatic conditions and the application of art-therapeutic methods in trauma treatment. The theoretical analysis covered scientific articles, monographs and official documents from international organisations, the content of which was directly related to the issues of psychological trauma, the adaptation of veterans and psychological support for individuals with combat experience. Modern studies released between 2021 and 2025 were preferred, whilst journalistic materials and sources whose content did not correspond to the research objectives were excluded from the analysis. The analysis of the potential applications of art therapy methods was conducted based on a synthesis of contemporary scientific works devoted to the use of art therapy in addressing psychotraumatic conditions and the psychological rehabilitation of veterans. In the first stage of the study, existing scientific approaches to interpretation of psychological consequences of combat experience were summarised; the main factors influencing veterans' reintegration into civilian life were identified; and scientific insights into the potential application of art therapy methods within the system of psychological support for individuals with combat experience were systematised.

The empirical study was conducted in March 2025 online using the Google Forms platform. Fifteen male veterans aged between 23 and 61 participated in the study. The sample was selected based on the principles of voluntary participation and anonymity; furthermore, all data were treated confidentially. The inclusion criteria included the following conditions: the respondent's gender and age, official veteran status (combatant – UBD), status (rehabilitation, demobilisation, service in the rear), and consent to participate in the study. Exclusion criteria were the absence of UBD status, non-participation in combat operations, and refusal to consent to the processing of anonymous data. Among the respondents, 11 were demobilised and living in civilian settlements, 3 were continuing their service in support units, and 1 was in a medical rehabilitation facility. All respondents had combat veteran status, regardless of their location following their participation in combat operations. To assess the psycho-emotional state of the study participants, the "Brief Scale of Anxiety, Depression and Post-Traumatic Stress Disorder" was used, translated and adapted into Ukrainian as presented in the methodological guide by N.A. Ahaiev *et al.* (2016). This methodology identified primary symptoms of anxiety, depression and post-traumatic stress disorder in individuals who had experienced psychological trauma. The questionnaire comprises 10 statements to which the respondent answers "yes" or "no". The results are analysed by counting the number of positive responses: the more "yes" responses there are, the higher the probability of negative psychological consequences of the trauma. A "threshold" value indicating possible mental health issues is more than 4 positive responses.

To determine the level of socio-psychological adaptation, a methodology for assessing social adaptation was employed, which can be used for an evaluation of the extent to which an individual has adapted to the conditions of their social environment, the nature of their interaction with those around them, and their level of integration into society. The methodology was presented in the handbook by M.V. Lemak & V.Yu. Petryshche (2016) and comprises 25 statements; it assesses adaptability based on the total score: 1-3 points indicate a high level of adaptability, 4-10 points – a moderate level, 11-20 points – a low level, and 21-25 points – a very low level of social adaptability. To assess the social well-being of the study participants, the questionnaire "Social Well-Being Scale" by K. Kiz, adapted for Ukraine by A.H. Chetveryk-Burchak (2014), was used. The questionnaire is based on a five-factor model of social well-being, which encompasses social acceptance, social actualisation, social harmony, social contribution and social integration. The methodology reflects the social dimension of an individual's psychological well-being and can be used for an assessment of a person's ability to maintain a balance between personal autonomy and sensitivity to the influence of the social environment. It was used for a comprehensive investigation of an individual's subjective perception of functioning within society, their level of engagement in social life, and their assessment of personal social significance. The questionnaire contains 15 statements, which are rated on a seven-point scale ranging from 1 ("strongly disagree") to 7 ("strongly agree"). The results were analysed by calculating the scores for each of the five sub-scales and determining the overall social well-being score. Higher scores indicate a higher level of social well-being and a more positive perception of personal social functioning. In this study, the method of V. Stern was implemented by constructing individual psychological profiles of respondents based on an integrated analysis of indicators of psycho-emotional state and social functioning. In particular, the results on the brief scale for anxiety, depression and PTSD were compared with data from the social adaptability assessment method. Based on the

approach, the levels of severity of PTSD, anxiety and depression symptoms were determined in relation to indicators of social well-being: social integration, social contribution, social actualisation, social harmony and social acceptance. The obtained data were interpreted in correlation, which was used to assess the characteristics of an individual's adaptive functioning as a holistic system.

Statistical analysis of the results was conducted using Jamovi and Microsoft Excel. Before the analysis, the normality of the data distribution was tested using the Shapiro-Wilk test. Subsequently, Pearson's correlation analysis was used to determine the relationships between variables, with a level of statistical significance set at $p < 0.05$. Correlations were analysed between indicators of PTSD symptoms, anxiety and depression (as measured by the Brief Scale of Anxiety, Depression and PTSD) and indicators of socio-psychological adaptation (social integration, social contribution, social actualisation, harmony with society, social acceptance). The study was conducted online. Participants were informed in advance of the study's aims, objectives and procedure, and were also provided with instructions on how to complete the psychodiagnostic assessments. Participation in the study was voluntary and anonymous; respondents had the right to withdraw from the study at any stage without any negative consequences. The confidentiality of the data obtained was ensured by coding it and subsequently using it exclusively in aggregated form. The ethical principles of the study complied with the provisions of the "Code of Ethics for Psychologists" of the Society of Psychologists of Ukraine (1990) and the Declaration of Helsinki of the World Medical Association (2025). Notably, the sample is limited; therefore, the results are of a pilot nature and require cautious interpretation without extrapolation to a wider population.

✦ Results and Discussion

The analysis of the first questionnaire yielded the following results: 12 individuals exhibited mental health issues – primary symptoms of anxiety, depression and post-traumatic stress disorder (four or more "yes" answers) – whilst three individuals were found to be in a stable condition. The data indicate that most of respondents exhibit symptoms characteristic of post-traumatic stress disorder. The results of the second questionnaire revealed that 1 person had a high level of social adaptation (1-3 points – high level of adaptation), indicating successful adjustment to a peaceful environment and that the person is not experiencing any difficulties; six people had an average level of social adaptation (4-10 points – average level), suggesting possible difficulties in adapting; though to a minor extent; and 8 individuals had low levels of social adaptation (11-20 points – low level); the data indicate difficulties in adapting to a peaceful environment due to traumatic events that affect both their mental and physical well-being. A correlation analysis between indicators of mental health and social adaptation (Pearson's $r = 0.922$; $p < 0.001$) revealed a strong positive statistical correlation within the sample. However, given the limited size of the sample, this result should be regarded as an empirical trend requiring further verification using larger samples. It is therefore possible to assume that veterans exhibiting initial symptoms experience difficulties in readapting, and that trauma sustained whilst performing military duties acts as a negative factor, reducing their quality of life. Further analysis revealed negative correlations between generalised indicators of psychological and emotional state and the overall level of social well-being (according to K. Kiz's scale). At the same time, the links between individual social well-being scales and PTSD symptoms are predominantly weak or absent, which may indicate that these processes are multifactorial within this sample. The data suggest that social well-being possesses a certain degree of autonomy rather than dependence on these factors, or that there may be a third factor influencing individuals' life satisfaction within society. Therefore, to examine this in greater detail, a statistical analysis was conducted to investigate the relationship between levels of anxiety, depression and PTSD, levels of social adaptation, and five scales of social well-being: "Social Acceptance", "Social Actualisation", "Harmony with Society", "Social Contribution" and "Social Integration" (Table 1).

Table 1. *Values of Pearson's r correlation coefficients between the summary measures and the subscales of social well-being*

Methods for assessing parallel forms	Social acceptance	Social actualisation	Alignment with society	Social contribution	Social integration	Overall indicator of social well-being
Levels of anxiety, depression and PTSD	-0.039	-0.108	-0.092	-0.061	-0.128	-0.118
Level of social adaptability	-0.045	-0.050	-0.051	0.035	-0.035	-0.034

Source*: compiled by the authors*

The empirically obtained data facilitate the prediction of a negative correlation between the five scales of social well-being (according to K. Kiz's methodology) and levels of anxiety, depression and PTSD; in other words, primary symptoms do not affect individuals' sense of harmony and satisfaction in their relationships with others. It is possible to hypothesise that the level of social well-being in this study may either decrease or increase under the influence of a person's psycho-emotional state, whilst simultaneously acting as a protective factor against negative symptoms. In addition to the above, there is no correlation between the overall indicator of social adaptability and the four scales: "Social Acceptance", "Social Actualisation", "Harmony with Society" and "Social Integration". However, the "Social Contribution" indicator shows a weak statistical correlation, with Pearson's $r = 0.035$ at $p < 0.001$. In this

case, a slight tendency for respondents with a high level of adaptation to rate their "social value" and their life activities more highly is notable. Consequently, the study's results indicate not only the absence of a correlation with the components of social well-being, but also that respondents possess a certain degree of autonomy in their ability to adapt, rather than a systematic interplay between the data.

The results obtained indicate the appropriateness of using art therapy methods when working with veterans, as the identified levels of anxiety, psycho-emotional stress and difficulties with social adaptation require the application of methods aimed at emotionally processing traumatic experiences and stabilising mental health. Factor analysis identified two structures: "Social Inclusion" and "Readaptation". The interpretation of these factors should be regarded as preliminary, as it is based on pilot data. The first factor reflects a generalised trend towards social integration and subjective social functioning within the sample. The second factor combines indicators of psycho-emotional state and adaptation, which may reflect the general structure of readaptation processes, but requires further confirmation (Table 2).

Table 2. *Factor structure of indicators of social adaptation and mental health among veterans*

Provisional factor name	Variables that determine the factor	Load factors	Sum of quadratic loads	Variance deviation	Sum, %
Factor 1: "Social inclusion"	Social acceptance	0.475	3.78	47.2	47.2
	Social actualisation	0.881			
	Social contribution	0.763			
	Social integration	0.833			
	Social welfare	1.015			
Factor 2: "Re-adaptation"	Alignment with society	-0.934	2.44	30.5	77.7
	Social acceptance	0.764			
	Social adaptability	0.608			
	Anxiety/depression/PTSD	0.751			

Source*: compiled by the authors*

Factor 1, "Social Inclusion" (contribution to total variance – 47.2%) is represented by a series of descriptors with statistically significant loadings: social acceptance (0.475), social actualisation (0.881), social contribution (0.763), social integration (0.763), social well-being (1.015). The results for Factor 1 indicate that, for some respondents, a sense of belonging to society, the ability to interact with others, to assume social roles and to feel useful in a peaceful environment are substantial; this represents one of the key stages towards the social inclusion of veterans. The relevance of this issue stems from the complexity of the transformation of military personnel's social roles and the uncertainty surrounding their future professional development in civilian life. Trust in one's social environment and a positive self-image as a member of society increase the probability of successful integration into civilian life and foster an inner readiness to expand social contact. Factor 2, "Readaptation" (contribution to total variance – 77.7%), is represented by a series of descriptors with statistically significant loadings: harmony with society (-0.934), social acceptance (0.764), social adaptability (0.608), anxiety/depression/PTSD (0.751). The results of the second factor integrate indicators of veterans' psycho-emotional state and their propensity for readaptation, reflecting the intensity of the process of psychological adjustment to civilian life following the end of their participation in combat operations. The extent to which maladaptive difficulties – the root cause of which is traumatic experience – are overcome is emphasised. The intensity and frequency of trauma correlate with the complexity of subsequent social adaptation in a peaceful environment, enabling a direct relationship to be established. An analysis of individual psychological profiles (using V. Stern's method) was conducted for illustrative purposes, with the aim of clarifying the variability of indicators within a small sample. The profiles obtained demonstrate the heterogeneity of the relationships between PTSD symptoms, social adaptation and social well-being; however, they cannot be used to draw generalised conclusions regarding cause-and-effect patterns (Fig. 1).

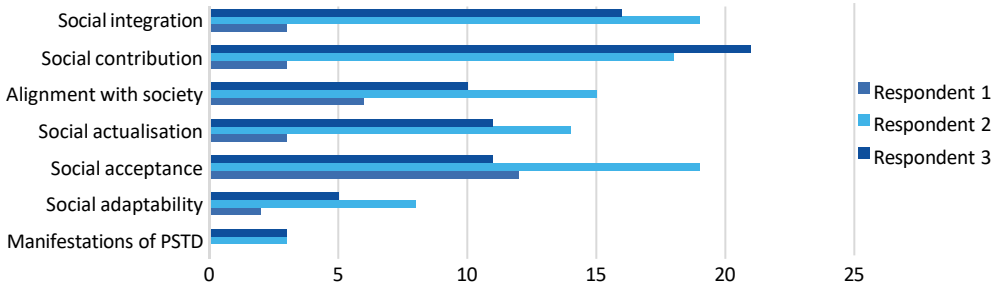

Figure 1. *Psychological profile according to the method by V. Stern*

Source*: compiled by the authors*

Psychological Profile 1. According to the results of the first questionnaire (Brief Scale of Anxiety, Depression and PTSD), the first respondent showed no signs of PTSD symptoms (0), indicating the absence of this emotional distress. According to the results of the second questionnaire (Social Adaptability Assessment Methodology), the individual exhibits a high capacity for social adaptability (2), indicating that the first factor does not influence the second. The respondent's psychological profile is characterised by a predominance of low scores across most indicators of social well-being. In particular, low levels are evident in: social integration (3), social contribution (3) and social actualisation (3), as well as harmony with society (6), which indicates detachment and difficulties in interacting with the surrounding environment. The "Social Acceptance" scale score (12) is at an average level, which may indicate a neutral attitude towards others, without any pronounced tendency. Consequently, symptoms of post-traumatic stress disorder are not the primary factor determining the characteristics of social adaptation and the level of social well-being of the first respondent. Thus, the results indicate that the individual demonstrates an ability to adapt effectively to the demands of their environment and to adhere to social norms; however, a sense of involvement and significance within social interactions is absent.

Psychological Profile 2. The results of the first questionnaire indicate that the second respondent shows a predisposition to PTSD symptoms (3), although these are not pronounced. According to the results of the second questionnaire, the individual exhibits average capacity for social adaptation (2), which may indicate generally effective functioning despite some adaptive stress, suggesting a moderate influence of emotional state on social adaptation. The respondent's profile demonstrates consistently high scores across all scales of social well-being: social acceptance (19), social actualisation (14), harmony with society (15), social contribution (18) and social integration (16). In summary, the results obtained indicate a high level of social inclusion, a positive perception of the social environment and a pronounced sense of personal significance within the system of social interactions; furthermore, the respondent's psycho-emotional state does not act as a determining factor, meaning that the level of social adaptation and social well-being is acceptable.

Psychological Profile 3. The data from the first questionnaire indicate that the third respondent has a moderately pronounced tendency towards PTSD symptoms (3 points), without signs of the condition being fully established. The results of the second questionnaire show that the respondent has a moderate level of social adaptability (5), indicating generally effective functioning. The obtained data may also indicate a moderate influence of emotional state on the process of social adaptation. The respondent's psychological profile is heterogeneous. High scores were identified for: social contribution (21) and social integration (16), indicating active participation in social life. Average scores were recorded for: social acceptance (11), social actualisation (11), and harmony with society (10). These data characterise the individual as socially active; however, their interest in interacting with those around them is reduced. Thus, PTSD symptoms moderately affect the shaping of the respondent's level of social adaptation and social well-being. A promising direction for further psychotherapeutic work with veterans is the introduction of art therapy programmes aimed at reducing the level of psycho-emotional stress, developing emotional self-regulation and improving social adaptation. Further analysis revealed a negative correlation between indicators of psycho-emotional state, social adaptation and the overall level of social well-being (according to K. Kiz's scale). At the same time, a weak or absent statistical correlation was found between individual social well-being scales and PTSD symptoms, which may indicate the presence of mediating factors. A similar view was expressed by C.L.M. Keyes (2013), who noted that social well-being has relative autonomy and is determined not only by mental state but also by the quality of social connections and a sense of social significance.

A comparison with the study by T.M. Tytarenko (2018) revealed common ground in the conclusions regarding the role of traumatic experiences as a factor disrupting life stability and an individual's adaptive resources. At the same time, T.M. Tytarenko emphasised the significance of personal meaning-making and resilience, whereas in the current study, the statistically significant association between PTSD symptoms and social adaptation is more pronounced. Furthermore, a weak correlation was found between the "social contribution" indicator and the level of adaptability (r = 0.035), which partially supports the hypothesis regarding the autonomy of individual components of social functioning. According to R.G. Tedeschi & L.G. Calhoun (2004), this may indicate that veterans, even when facing psychological difficulties, can maintain a subjective sense of personal social worth, which is consistent with the concept of post-traumatic growth. Factor analysis identified two key structures. The first factor – "Social Inclusion" – combines indicators of social acceptance, self-actualisation, integration and subjective well-being. Its interpretation is consistent with the findings of the study by S.E. Hobfoll *et al.* (2019), who emphasised the importance of social support as a fundamental resource for recovery from trauma. The second factor – "Re-adaptation" – integrates indicators of psycho-emotional state and social adaptability, reflecting the complex nature of the return to peaceful life. Similar ideas are present in the study by J.L. Herman (1997), which described recovery from trauma as a step-by-step process involving safety, processing the traumatic experience, and "reconnection" – the reintegration of the individual into interpersonal and social relationships. This approach is consistent with the view that traumatic experiences affect not only emotional well-being but also the ability to function socially and resume everyday roles. The findings also support the use of art therapy methods in working with veterans. High levels of anxiety,

depressive symptoms and difficulties with social adaptation indicate the need for interventions aimed at non-verbal processing of traumatic experiences. According to studies by N. Hass-Cohen & R. Carr (2008) and C.A. Malchiodi (2020), art therapy is an effective method for reducing PTSD symptoms, as it provides a safe channel for emotional expression and facilitates the integration of traumatic experiences. Thus, the study's findings are consistent with both domestic and international scientific data, confirming the key role of psychological and emotional well-being in the process of veterans' social adaptation. At the same time, the identified characteristics of social well-being indicate the multi-level nature of readaptation, which requires further study, covering individual and contextual factors.

✦ Conclusions

The study showed that indicators of psychological and emotional well-being (in particular, levels of anxiety, depressive symptoms and manifestations of PTSD) are strongly associated with veterans' reintegration into civilian life. At the same time, no statistically significant correlation was found between individual social well-being scales and PTSD symptoms. The results of the correlation analysis suggest that emotional state is a more sensitive indicator of adaptation processes in the study sample compared with measures of social well-being. Factor analysis revealed a structure in which readiness to interact with the social environment is a significant component, which may reflect the importance of socio-behavioural aspects of adaptation. The quantitative data obtained confirm that initial symptoms of anxiety, depression and PTSD were identified in 12 out of 15 respondents, whilst a low level of social adaptation was recorded in 8 individuals. The strongest correlation was found between psycho-emotional state and social adaptation (Pearson's $r = 0.922$; $p < 0.001$), indicating the importance of taking veterans' emotional state into account during their readaptation to civilian life. Interpreting the results within the framework of a holistic approach to the individual (V. Stern) suggests that veterans' adaptation can be viewed as a multi-component process, involving individual differences in how traumatic experiences are processed and in the use of various coping strategies. An analysis of individual psychological profiles also revealed heterogeneity in the relationships between PTSD symptoms, social adaptation and social well-being, which means that the process of readaptation cannot be reduced solely to the presence or absence of traumatic symptoms. The use of art therapy methods in this context was considered a potential avenue for providing psychological support to veterans. In theoretical terms, art therapy is described as an approach that can facilitate the non-verbal processing of emotional experiences and reduce psychological and emotional stress; however, its effectiveness was not empirically tested within the scope of this study. Prospects for further research include expanding the sample size, involving veterans from different age groups, and conducting separate empirical studies on the effectiveness of psychocorrectional and art therapy programmes. A comparative analysis of various methods of psychological support and their combined application would also be beneficial.

✦ Acknowledgements

The authors would like to express their sincere gratitude to the war veterans for their courage, resilience in the face of crisis, and their willingness to share their personal experiences. Special thanks go to A.V. Hulak, a combat veteran of the Russian-Ukrainian war and a Senior Sergeant (Type "C") of the State Border Guard Service of Ukraine, for his initiative and for conceiving the idea, as well as for making the empirical research possible.

✦ Funding

None.

✦ Conflict of Interest

None.

✦ References

[1] Ahaiev, N.A., Kokun, O.M., Pishko, I.O., Lozinska, N.S., Ostapchuk, V.V., & Tkachenko, V.V. (2016). *Collection of methods for diagnosing negative mental states in military personnel: Methodological manual*. Kyiv: Research Centre for Humanitarian Problems of the Armed Forces of Ukraine.

[2] Aleshchenko, V. (2022). Socio-psychological adaptation of combatants. *Psychological Journal*, 8, 6-16. doi: 10.31499/2617-2100.8.2022.258305.

[3] Babayan, Yu.O., & Grishman, L.O. (2014). Peculiarities of psychological readiness of military personnel to act in extreme conditions. *Scientific Bulletin of Mykolaiv National University named after Sukhomlynskyi. Series: Psychological Sciences*, 13, 17-21.

[4] Brewin, C.R., *et al*. (2017). A review of current evidence regarding the ICD-11 proposals for diagnosing PTSD and complex PTSD. *Clinical Psychology Review*, 58. doi: 10.1016/j.cpr.2017.09.001.

[5] Campbell, M., Decker, K.P., Kruk, K., & Deaver, S.P. (2016). Art therapy and cognitive processing therapy for combat-related PTSD: A randomized controlled trial. *Art Therapy*, 33(4), 169-177. doi: 10.1080/07421656.2016.1226643.

[6] Chetveryk-Burchak, A.H. (2014). Description and adaptation of the questionnaire "Social Well-Being Scale" by C. Keyes. *The Journal of V.N. Karazin Kharkiv National University. Series: Psychology*, 1099(54), 28-33.

[7] Dudnyk, O.A. (2021). Acquired helplessness and depression: Characteristics of the relationship. *Psychological Journal*, 7, 37-45. doi: 10.31499/2617-2100.7.2021.234571.

[8] Felyk, V.M. (2025). *Peculiarities of manifestations of combat stress in military personnel in wartime conditions*. (Master's thesis, Luhansk Taras Shevchenko National University, Poltava, Ukraine).
[9] Gettings, R.D., McGuire, A.P., de Arellano, M.A., Bakhshaie, J., & Storch, E.A. (2022). Exploring the role of social connection in interventions with military veterans diagnosed with PTSD: A systematic narrative review. *Frontiers in Psychology*, 13, article number 873885. doi: 10.3389/fpsyg.2022.873885.
[10] Hass-Cohen, N., & Carr, R. (Eds.). (2008). *Art therapy and clinical neuroscience*. London: Jessica Kingsley Publishers.
[11] Herman, J.L. (1997). *Trauma and recovery: The aftermath of violence – from domestic abuse to political terror*. New York, NY: Basic Books.
[12] Hobfoll, S.E., Stevens, N.R., & Zalta, A.K. (2019). Expanding the science of resilience: Conserving resources in the aid of adaptation. *Current Opinion in Psychology*, 14, 139-143. doi: 10.1016/j.copsyc.2019.06.002.
[13] International Classification of Diseases 11th Revision. (n.d.). Retrieved from https://icd.who.int/en/.
[14] Keyes, C.L.M. (2013). Mental well-being. In *Mental well-being: International contributions to the study of positive mental health* (pp. 11-29). Dordrecht: Springer. doi: 10.1007/978-94-007-5195-8.
[15] Kivak, R. (2024). Transactional model of stress and coping. *EBSCO Research Starters.*
[16] Kudar, K., Nsingi, N., Seager, M.J., Weavers, M., & Piotrowski, C.C. (2025). Therapeutic use of art with active duty military members and veterans with PTSD: A scoping review. *Journal of Military, Veteran and Family Health*, 11(4), 72-86. doi: 10.3138/jmvfh-2024-0063.
[17] Lemak, M.V., & Petryshche, V.Yu. (2016). *Psychologist for work: Diagnostic methods*. Uzhhorod: Oleksandra Harkusha Publishing House.
[18] Lisnyak, M.S. (2024). *Peculiarities of psychological adaptation of the military to the conditions of hostilities*. (Master's thesis, Nizhyn Mykola Gogol State University, Nizhyn, Ukraine).
[19] Maercker, A. (2022). *Trauma sequelae*. Berlin: Springer. doi: 10.1007/978-3-662-64057-9.
[20] Malchiodi, C.A. (2020). *Trauma and expressive arts therapy: Brain, body, and imagination in the healing process*. New York, NY: Guilford Press.
[21] Muller, M. (2014). *If you have experienced a psychotraumatic event*. Lviv: Svichado.
[22] Nykyforova, O.A., & Bidniak, M.V. (2023). Acoustic barotrauma in present-day conditions: Physiological characteristics of the mechanism of contusions. In *Modern challenges and current issues of ensuring international and national security: Trends, problems and ways to solve them: Proceedings of the International Scientific and Practical Conference, Dnipro, December 2, 2022* (pp. 360-363). Dnipro: Dnipropetrovsk State University of Internal Affairs.
[23] Rakesh, G., Clausen, A.N., Buckley, M.N., Clarke-Rubright, E., Fairbank, J.A., Wagner, H.R., & Morey, R.A. (2022). The role of trauma, social support, and demography on veteran resilience. *European Journal of Psychotraumatology*, 13(1), article number 2058267. doi: 10.1080/20008198.2022.2058267.
[24] Rozov, V.I. (2024). Methods and techniques of psychological work with processing traumatic experience. *Scientific Bulletin of Uzhhorod National University. Series: Psychology*, 2, 46-52. doi: 10.32782/psy-visnyk/2024.2.9.
[25] Sipko, L.O. (2015). Overcoming combat stress and its psychological consequences. *Scientific Bulletin of Mykolaiv National University named after Sukhomlynskyi. Series: Psychological Sciences*, 2(15), 129-134.
[26] Society of Psychologists of Ukraine. (1990). *Ethical code of the psychologist*. Retrieved from https://clipr.cc/ZWx4Y.
[27] Spirina, I.D., Pyliagina, H.Ya., Chugunov, V.V., Fauzi, Ye.S., Zhyvilova, Ya.S., & Shevchenko, Yu.M. (2022). *Medical psychology: Textbook*. Dnipro: Lira.
[28] Tedeschi, R.G., & Calhoun, L.G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1). doi: 10.1207/s15327965pli1501_01.
[29] Tytarenko, T.M. (2018). *Psychological health of personality: Self-help tools in conditions of prolonged traumatization*. Kropyvnytskyi: Imex-LTD.
[30] van der Kolk, B.A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, NY: Viking.
[31] Volotovska, N. (2023). Prospects for the use of art therapy as a means of counteracting post-traumatic stress disorder. *Psychosomatic Medicine and General Practice*, 8(4). doi: 10.26766/pmgp.v8i4.464.
[32] Voznesenska, O.L. (2015). Possibilities of art therapy in overcoming psychological trauma. In *Psychological assistance to a person experiencing the consequences of traumatic events: Collection of articles* (pp. 98-110). Kyiv: Milenium.
[33] World Medical Association. (2025). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human participants. *JAMA*, 333(1), 71-74. doi: 10.1001/jama.2024.21972.
[34] World mental health report: Transforming mental health for all. (2022). Retrieved from https://www.who.int/publications/i/item/9789240049338.
[35] Zelenska, K.O. (2023). Personalized system of therapy for stress-associated disorders in persons affected by combat operations. *Medicine Today and Tomorrow*, 92(2), 54-61. doi: 10.35339/msz.2023.92.2.zel.
[36] Zlyvkov, V.L., Lukomska, S.O., & Fedan, O.V. (2016). *Psychodiagnostics of personality in crisis life situations*. Kyiv: Pedagogical Thought.

Арт-терапевтичні методи в адаптації ветеранів до мирного життя

Єлізавета Гулак
Студент
Національний університет «Львівська політехніка»
79000, вул. Степана Бандери, 12, м. Львів, Україна
https://orcid.org/0009-0001-9959-2100
Ольга Сушко
Старший викладач
Національний університет «Львівська політехніка»
79000, вул. Степана Бандери, 12, м. Львів, Україна
https://orcid.org/0000-0001-8739-0125

✦ Анотація. Актуальність дослідження зумовлена необхідністю пошуку ефективних підходів психологічної підтримки ветеранів у процесі їхньої адаптації до мирного життя в умовах зростання психотравматичних наслідків війни. Метою дослідження було теоретичне обґрунтування можливостей застосування арттерапевтичних методів у процесі адаптації ветеранів до мирного життя та вивчення взаємозв'язку психоемоційного стану, соціальної адаптованості й соціального благополуччя осіб із бойовим досвідом. У дослідженні використано комплекс теоретичних, емпіричних та математико-статистичних методів. Здійснено аналіз і систематизацію сучасних наукових джерел щодо психологічних наслідків бойового досвіду та можливостей застосування арттерапії. Емпіричне дослідження проведено за участю 15 ветеранів чоловічої статі віком від 23 до 61 року із використанням психодіагностичних методик оцінювання психоемоційного стану, соціальної адаптованості та соціального благополуччя. Для обробки результатів застосовано описову статистику, кореляційний та факторний аналіз. Результати дослідження засвідчили наявність у більшості респондентів симптоматики тривоги, депресії та посттравматичного стресового розладу, а також труднощів соціально-психологічної адаптації. Кількісно це підтверджується тим, що первинну симптоматику психоемоційних порушень виявлено у 80,0 % респондентів, а низький рівень соціальної адаптованості – у 53,3 % учасників дослідження. Встановлено сильний прямий кореляційний зв'язок між показниками психоемоційного стану та рівнем соціальної адаптованості. Водночас не виявлено виражених взаємозв'язків між більшістю компонентів соціального благополуччя та проявами посттравматичної симптоматики, що може свідчити про відносну автономність окремих складових соціального функціонування. За результатами факторного аналізу виділено дві латентні структури, пов'язані із соціальною включеністю та процесом реадаптації. Теоретичний аналіз наукових джерел засвідчив перспективність застосування арт-терапевтичних методів у системі психологічної підтримки ветеранів. Практичне значення дослідження полягає у можливості використання отриманих результатів для вдосконалення програм психологічного супроводу та психосоціальної підтримки ветеранів, а також обґрунтування доцільності включення арт-терапевтичних методів до комплексних реабілітаційних заходів

✦ Ключові слова: посттравматичний стресовий розлад; бойовий стрес; психологічна реабілітація; психосоціальна підтримка; резильєнтність; емоційна регуляція

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡si»y ofi U¾¡ai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 31-41
✦ ISSN 2617-6858
✦ E-ISSN 2617-6866
✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ UDC 159.9:355
✦ DOI: 10.33099/2617-6858-26-21-4-31-41

Features of maladaptation and resilience manifestations in response to combat psychological trauma among mobilised service members after participation in hostilities

Nataliia Kucherenko*
PhD in Psychology, Associate Professor
V.N. Karazin Kharkiv National University
61022, 4 Maidan Svobody Sq., Kharkiv, Ukraine
https://orcid.org/0000-0002-6644-3117

✦ **Abstract.** The prolonged Russian-Ukrainian war highlighted the need to understand the psychological impact of intense combat experiences on mobilised service personnel, and to identify the factors that contribute to successful post-combat adaptation. This study aimed to determine the specific manifestations of maladaptation and resilience among mobilised service members after participating in intense combat. A psychodiagnostic assessment was conducted using the combat experience intensity scale, the post-traumatic stress disorder differentiation questionnaire, the methodology for assessing negative mental reactions and states in service members, the maladaptation scale and the combat psychological trauma resilience scale. These methods enabled combat experience intensity, post-traumatic stress symptoms, negative mental states, maladaptation and resilience to be assessed, and demonstrated satisfactory internal consistency (Cronbach's α = 0.84-0.91). Cluster analysis revealed two distinct psychological profiles. The first group was characterised by high maladaptation and low resilience (n = 148; M = 19.76, standard deviation (SD) = 5.95; M = 124.33, SD = 19.77, respectively). The second group was characterised by lower maladaptation and higher resilience (n = 102; M = 9.75, SD = 4.76; M = 138.72, SD = 25.87). The difference between the two groups was statistically significant (t = 4.74, $p < 0.001$). Service members in the first group demonstrated significantly greater difficulties with behavioural regulation, suicidal risk, cognitive dysfunction and negative emotional states. Conversely, resilience components were negatively correlated with maladaptive manifestations. The findings highlight the importance of a tailored approach to psychological rehabilitation, considering resilience levels, combat experience and psychological state when determining the scope and content of interventions. The results of the study can be used to identify risk groups early on, provide personalised psychological support and develop targeted rehabilitation and psychological recovery programmes in military rehabilitation centres and psychological support services within Ukraine's security and defence sector

✦ **Keywords:** extreme conditions; post-traumatic stress disorder; emotional regulation; negative mental states; suicidal risk

✦ Introduction

The Russian Federation's full-scale invasion of Ukraine on 24 February 2022 led to prolonged high-intensity hostilities and the deployment of a substantial number of service members. As V.V. Kalnysh *et al.* (2025) have noted, injuries sustained by Ukrainian military personnel are characterised by particular severity, as well as multiple and combined patterns of damage. Furthermore, exposure to intensive combat stressors can result in various negative psychological responses and states, such as acute stress reactions, affective and anxiety disorders, adjustment disorders, addictive and delinquent behaviours, and suicidal tendencies. O. Kokun *et al.* (2022) emphasised that the duration, specificity and complexity of combat rotations significantly increase the demands placed on the physical and mental health of service members. According to the authors, these factors substantially affect resilience,

Suggested Citation:
Kucherenko, N. (2026). Features of maladaptation and resilience manifestations in response to combat psychological trauma among mobilised service members after participation in hostilities. *Bulletin of National Defence University of Ukraine*, 21(4), 31-41. doi: 10.33099/2617-6858-26-21-4-31-41.

Article's History: Received: 06.04.2026; Revised: 22.07.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (natalyakucherenko1989@gmail.com)

behaviour under extreme conditions, coping mechanisms and subsequent recovery from trauma. I.I. Prykhodko *et al.* (2025) have emphasised that the duration and intensity of the war have brought issues related to population mobilisation, personnel training and psychological adaptation to military service conditions to the forefront. A substantial proportion of personnel involved in combat operations are mobilised citizens, who had no prior professional experience of military activity and limited experience of functioning under conditions of prolonged combat exposure before entering service. The transition from civilian life to performing duties under intensive combat conditions requires rapid adaptation. This is to the specific demands of the military environment. There is also constant threat to life. In addition, there are high levels of responsibility. There is also physical and psycho-emotional strain. This may increase the risk of maladaptive reactions and negative psychological states. After completing basic military training, mobilised service members must adapt quickly to combat conditions, drawing on their personal life experience and psychological resources. Prolonged exposure to combat stress can increase the risk of such reactions and violations of military discipline (Shevchuk & Mitlosh, 2025).

The biological rhythm is disrupted by prolonged deployment in positions, particularly in conditions of "trench warfare". According to A.O. Fedyk *et al.* (2025), over 52% of service members on the front line suffer from chronic sleep deprivation. Sleeping for less than four hours per day for a week can reduce reaction speed and shooting accuracy by 50% (Nieminskyi, 2023). The body's somatic resources are depleted by extreme cold and damp conditions, which contribute to the development of "trench foot", as well as limited access to sufficient quantities of quality drinking water and hot food. As emphasised by K. Charlot *et al.* (2021), this factor becomes critical much more rapidly for mobilised personnel who lived under comfortable civilian conditions only a few months earlier than for career contract soldiers. O. Kokun *et al.* (2022) showed that combat readiness is directly proportional to the effectiveness of rotation planning, with scientific evidence confirming that the peak combat effectiveness of a mobilised soldier occurs during the 10th-14th day of deployment in a position, after which rapid psychophysiological exhaustion begins. Absence of timely unit replacement and delays in providing ammunition or protective equipment are perceived by mobilised personnel as organisational betrayal, immediately reducing their combat readiness (Nieminskyi, 2023). In this regard, it is highly relevant to study the specific features of psychological adaptation and functioning of mobilised service members under conditions of prolonged combat exposure. The article's objective was to assess the psychological well-being of mobilised service members in the aftermath of high-intensity combat operations.

✦ Literature Review

The contemporary Russian-Ukrainian war is characterised by the unprecedented intensity with which conventional weapons, unmanned systems and electronic warfare capabilities are being used. Mobilised service members bear the main burden of direct combat operations, constituting a significant proportion of the Armed Forces of Ukraine (AFU)'s personnel. In contrast to contract service members, mobilised citizens experience a swift shift from civilian life to the harsh realities of combat operations. A study by S. Hanaba & A. Munenko (2025) demonstrated that the loss of combat effectiveness among this group of combatants is determined by a combination of external and internal factors. Examples of external factors include the parameters of the combat environment, enemy tactics and the material and technical conditions of frontline deployment. For mobilised service members, these factors act as an initial shock trigger as they differ radically from their previous life experience (Hanaba & Munenko, 2025). The modern combat environment is marked by the widespread use of guided aerial bombs (GABs), artillery, and unmanned aerial vehicles (UAVs). V.V. Kalnysh *et al.* (2025) demonstrated that a "transparent battlefield effect" is created by the constant presence of reconnaissance and strike UAVs in the air, in which service members perceive themselves as continuous targets. The high density of artillery fire results in widespread blast injuries and contusions. O. Fitkalo (2024) notes that acoustic trauma physically damages the auditory system and disrupts the functioning of the central nervous system, causing cognitive deficits. Ye.V. Puzyrov & V.V. Izviekov (2023) state that, in contrast to professional soldiers, who see shelling as just part of their job, mobilised personnel are more likely to experience severe stress and negative psychological effects due to the lack of established behavioural patterns when under fire.

Internal factors are associated with personality structure, motivation, somatic health and the age- and social-related characteristics of mobilised citizens. The key distinction between a mobilised soldier and a contract service member lies in the existence of a consistent "civilian identity". A mobilised individual often perceives themselves as a "civilian person in uniform" who is temporarily fulfilling a military obligation (Hanaba & Munenko, 2025). At the start of their service, motivation levels tend to be high, with the main driving forces being patriotism, the protection of family and defence of one's "homeland" or local community. However, under the influence of prolonged combat stress, the motivational sphere of service members may undergo negative changes. These are manifested through reduced trust in command, an increased subjective perception of unfairness in the distribution of mobilisation burdens, and decreased personal involvement. I.I. Sydorenko & O.H. Marchenko (2022) observed that slowing frontline dynamics and positional warfare contribute to the development of a "learned helplessness" syndrome among mobilised personnel. This syndrome occurs when soldiers do not perceive the final outcome of their efforts and consequently lose motivation to engage actively. According to I.I. Prykhodko *et al.* (2025), mobilised service personnel show significantly lower levels of

psychological resilience in combat situations than professional military personnel. When they encounter the death of comrades or severe injuries for the first time, mobilised personnel often experience stupor, psychomotor agitation or panic. O.A. Blinov (2020) states that up to 30% of newly arrived soldiers temporarily lose combat effectiveness during their first battles due to psychogenic reactions. Chronic combat stress without adequate psychological recovery can lead to combat-related psychological exhaustion (Prykhodko *et al*., 2025). This condition manifests as cognitive impairment, including reduced concentration, a decreased ability to make rapid decisions in critical situations and impaired motor coordination.

An important external factor is the general health status of mobilised service members. In Ukraine, the age of a significant proportion of mobilised personnel often exceeds 40 years. A publication by S.O. Chyzhevskyi (2023) demonstrated that chronic diseases of the cardiovascular, musculoskeletal (e.g. hernias and radiculitis) and gastrointestinal systems rapidly worsen under the influence of adrenaline-induced stress, hypothermia and severe physical exertion, such as carrying body armour and ammunition weighing more than 30 kg. Young mobilised personnel (under 25 years of age) demonstrate greater physical endurance, but are more susceptible to negative psychological states and destructive coping mechanisms, such as substance misuse and disciplinary violations. Conversely, older soldiers possess higher psychological resilience, but lose combat effectiveness more rapidly due to the physical deterioration of their bodies (Prykhodko *et al.*, 2025). Therefore, the main factors contributing to the loss of combat effectiveness among mobilised service members can be categorised as either internal or external. External factors include:

1) combat stress caused by modern means of destruction, such as UAVs and guided aerial bombs, which can result in temporary disorientation on the battlefield;

2) poor living conditions and adverse service environments, which can lead to somatic decompensation and non-combat medical losses;

3) uncertainty regarding rotation schedules, which can intensify acute stress reactions and physical and psychological exhaustion, potentially resulting in a refusal to follow orders.

Internal factors include:

1) predominance of a civilian identity over an established military identity, which may weaken combat motivation;

2) development of learned helplessness, which is associated with an increased risk of psychogenic reactions, including panic and stupor;

3) exacerbation of age-related and chronic diseases, which may limit the ability to perform combat tasks physically.

Thus, analysis of scientific publications demonstrates that loss of combat effectiveness among mobilised service members during the Russian-Ukrainian war results from the combined effect of extreme external stressors and individuals' limited internal resources for adapting to the transition from civilian life. The primary risk period for mobilised personnel is initial entry into the combat environment, as well as prolonged periods of continuous deployment beyond standard limits on the line of contact. Acute stress reactions and negative psychological states emerging among mobilised service personnel require psychological first aid and recovery in rehabilitation centres.

To eliminate conceptual ambiguity and ensure the study's methodological clarity, key concepts were operationalised. In this study, resilience was considered a general, multi-component personal resource determining an individual's ability to adapt flexibly to challenges, restore psychological functioning and maintain emotional balance after exposure to destructive factors and stressors of various origins. In contrast, resistance to combat psychological trauma is a specialised, dynamic and integral characteristic of service members that reflects their readiness and ability to perform military and combat tasks effectively under battlefield conditions, withstand the extreme conditions of wartime and prevent pathological disorders from developing. Unlike general resilience, resistance to combat psychological trauma is specifically focused on combat-related stressors (e.g. shelling, losses, deprivation). Maladaptation is an integral systemic state characterised by the disruption of self-regulatory processes, moral and normative behaviour, social-communicative functioning and professional performance. It arises from the depletion of the body's and psyche's adaptive reserves under prolonged stress. Negative psychological reactions and states are situational, acute or subacute emotional (e.g. anxiety, depressed mood, irritability), cognitive (e.g. difficulty concentrating) and behavioural manifestations that represent a direct response to intensive combat exposure. These differ from maladaptation due to their greater situational variability and the absence of profound disruption to behavioural norms. Post-traumatic stress is considered a specific complex of clinical and psychological symptoms (including intrusions, hyperarousal, avoidance, and negative cognitive changes) that develop as a result of experiencing life-threatening or personally threatening combat-related events.

✦ Materials and Methods

The study was cross-sectional and observational. It examined the psychological state of mobilised service members after they had participated in intense combat. It examined the specific characteristics of maladaptation and resilience to combat-related psychological trauma among mobilised service members. A psychodiagnostic assessment was conducted at a rehabilitation centre during 2024-2025. For reasons of service members' safety and to preserve state secrecy, the exact name and geographical location of the centre are not disclosed. Testing was performed once, within 24-48 hours of service members' arrival directly from combat positions (the first line of defence), before they participated in psychological recovery activities. The

study sample examined the impact of combat stress on psychological functioning and included Armed Forces of Ukraine (AFU) personnel (n = 261) who had been conscripted for military service through mobilisation. All participants were referred to the rehabilitation centre directly from combat positions to undergo psychological recovery following their participation in hostilities. This time interval was selected to allow soldiers the first day for basic physical rest and initial adaptation to safe conditions, while also enabling the recording of baseline indicators of maladaptation, combat stress and resilience before the initiation of primary psychotherapeutic and restorative interventions. The study was carried out in accordance with the ethical principles of the WMA Declaration of Helsinki (2024), and all participants gave their voluntary informed consent to take part in the study.

The sample was formed using purposive (non-probability) sampling at a rehabilitation centre, during the period in which service members underwent planned psychological recovery following combat missions on the line of contact. The inclusion criteria were: mobilisation into military service during the period of the full-scale invasion; direct participation in hostilities (performance of tasks on the front line) during the most recent rotation; presence at the rehabilitation centre as part of a psychological recovery programme; provision of voluntary informed consent to participate in a psychodiagnostic assessment. The exclusion criteria were: severe organic brain injuries; acute psychotic states; severe traumatic brain injuries during the acute phase that prevented productive verbal contact and completion of psychodiagnostic instruments; withdrawal from participation at any stage of the survey. All participants were male. The mean age of respondents was 39 years. The duration of mobilisation-based military service among participants ranged from six months to three years. All service members had direct combat experience involving deployment to the front line. The majority of participants had a history of combat injuries, acoustic trauma or a combination of these, as well as mild gunshot or fragmentation wounds. Psychodiagnostic method was used to identify the characteristics of combat stress and its influence on the psychological state of service members. The following instruments were included in this method: “Combat experience intensity assessment scale” by O.S. Kolesnichenko *et al.* (2017); the “Post-traumatic stress differentiation questionnaire” by I.I. Prykhodko *et al.* (2025); the Assessment of negative psychological reactions and states in service members methodology by Y. Matsegora *et al.* (2023). Critical thresholds were defined as follows: 3.5 points for stress response and 5.5 points for risk of maladaptation.

Internal consistency: α = 0.91. The “Maladaptation” methodology, developed by I.I. Prykhodko *et al.* (2017), consists of 45 items and five scales (behavioural regulation, suicidal risk, moral normativity, communicative potential, and sincerity). The total indicator is calculated using these items, and ranges from 0 to 24 points. The threshold level of maladaptation is 16 points. Internal consistency within the sample: α = 0.84. The “Resistance to combat psychological trauma” methodology, developed by O.S. Kolesnichenko *et al.* (2020), is a 45-item scale that uses a five-point Likert scale to assess three stage-based scales (expectations, coping, and experience implementation) and five additional scales (helplessness, cognitive dysfunction, etc.). The possible total score ranges from 40 to 200 points: low level – <135; medium level – 135-165; high level – >165. Internal consistency: α = 0.89. Cluster analysis was used to group service members. These members were demonstrating signs of accumulated combat stress. The main variables that were included were indicators of combat experience, perception of traumatic events, and resilience (based on the results obtained from the aforementioned methodologies). A two-stage clustering procedure was applied: hierarchical analysis using Ward’s method (squared Euclidean distance) followed by k-means refinement. The model included z-standardised scores for eight subscales (4 “Maladaptation” and 4 “Resistance”).

Correlation analysis was used to determine the relationships between the indicators obtained from the psychodiagnostic methods employed in the study. The results obtained using the “Combat experience intensity assessment scale” and the “Post-traumatic stress differentiation questionnaire”, as well as their interpretation and discussion, are outlined in the scientific article by N.S. Kucherenko (2025). Mathematical processing and data analysis were performed using IBM SPSS Statistics software (version 26.0). The preliminary analysis of the dataset included verifying the completeness of the questionnaires and removing atypical observations (outliers/extreme values). To establish the suitability of using parametric analytical methods, the symmetry and distribution characteristics of the measured variables were evaluated. The homogeneity of variance within the compared groups was also analysed. Statistical significance was evaluated at the conventional level of α = 0.05. To confirm the reliability of the identified differences, 95% confidence intervals were calculated, and the magnitude of the statistical effect was assessed. Psychodiagnostic instruments and measured indicators:

1. Assessment of resistance to combat psychological trauma: the “Resistance to combat psychological trauma” methodology (45 items). Indicators were assessed using the following scales: “Expectations from participation in combat”, “Coping with stressful situation”, “Implementation of acquired experience”, as well as the subscales “Sense of helplessness”, “Cognitive dysfunction”, “Ability to acquire experience”, and “Attitude towards military duty”.

2. Assessment of maladaptation: express questionnaire “Maladaptation” (45 items). The integrated “Overall maladaptation indicator” was assessed, as well as levels of impairment according to the following scales: “Behavioural regulation impairment”, “Suicidal risk indicator”, “Violation of moral normativity”, “Loss of communicative potential”, and “Sincerity scale”.

3. Assessment of negative psychological reactions: the methodology “Assessment of negative psychological

reactions and states in service members" (16 items, 10-point scale).

4. Assessment of the severity of reactions: the intensity of anxiety, concern, feelings of helplessness, irritability, distrust towards command, and the overall average indicator of negative psychological states were assessed.

✦ Results

Following the results of the cluster analysis, three groups of study participants were identified. The two largest groups were included in the subsequent analysis: the first group (n = 148; 56.70%) and the second group (n = 102; 39.08%). The third group (4.21%) was excluded from further analysis due to insufficient sample size. A comparative analysis of socio-demographic characteristics revealed a high degree of similarity between the first and second groups with regard to indicators such as military rank, length of service, presence of injuries, age and marital status. Notably, around 70% of participants in each group were enlisted personnel, approximately 60% had military service experience ranging from one to three years, and around 30% had served between six and twelve months. Service members with service periods of up to six months accounted for 14.2% of the first group and 7.8% of the second group, which may indicate adaptation difficulties and the need for enhanced rehabilitation support. The presence of injuries was recorded in almost 60% of service members in both groups. The only statistically significant difference was found in the prevalence of sleep disturbances (χ^2 = 7.839; p = 0.005): only 35.1% of participants in the first group had no sleep problems, compared to 52.9% in the second group. This indicates that the first group is more sensitive to combat stress. Table 1 presents comparative data for the identified groups according to maladaptation indicators obtained using the "Maladaptation" express questionnaire.

Table 1. *Comparison of maladaptation manifestations in the identified groups (conventional units, t-test)*

Scale	Groups		Significance of differences	
	Group 1 (M ± SD)	Group 2 (M ± SD)	t	p
Response sincerity	3.50 ± 1.18	3.03 ± 1.40	2.865	0.005
Behavioural regulation impairment	5.86 ± 2.05	2.75 ± 1.88	12.150	0.001
Probability of suicide attempts	4.17 ± 2.12	1.23 ± 1.55	12.685	0.001
Violation of moral normativity	4.73 ± 1.82	3.37 ± 1.86	5.779	0.001
Loss of communicative potential	4.99 ± 2.13	2.38 ± 1.72	10.285	0.001
Overall maladaptation indicator	19.76 ± 5.95	9.75 ± 4.76	14.173	0.001

Source*: compiled by the author*

As shown in Table 1, there were statistically significant differences between the groups across all scales of the "Maladaptation" methodology, including the response sincerity indicator. Thus, the sincerity of responses to the questionnaire items was sufficient in both study groups. However, service members in the first group demonstrated higher scores (3.50 ± 1.18) than those in the second group (3.03 ± 1.40; t = 2.865, p = 0.005). The scores on the "Response sincerity" scale in both groups were in line with the normative range of data validity (above 2.0 points), indicating a high level of openness and willingness of service members to disclose personal experiences during the assessment, without any indication of dishonesty or fakery. A comparative analysis showed that the first group was more willing to honestly evaluate their problematic experiences and internal states. In contrast, while the second group's indicators remained within the psychometric validity range, they reflected comparatively greater restraint in self-disclosure. This may be associated with a tendency to maintain a high level of self-control and adhere to socially desirable behaviour. The scale with the highest mean score in the first group was "Behavioural regulation impairment" (5.86 ± 2.05). Slightly less pronounced manifestations of maladaptation included "loss of communicative potential" (4.99 ± 2.13) and "violation of moral normativity" (4.73 ± 1.82). The first group also demonstrated highly concerning indicators of suicidal risk (4.17 ± 2.12). As noted above, the intensity of various maladaptive manifestations was significantly lower in the second group. However, this group was most affected by the perceived discrepancy between their established moral system and situations that required them to participate in hostilities (3.37 ± 1.86). Conversely, the risk of suicide attempts was almost non-existent in this group (1.23 ± 1.55). Conversely, these lower scores may indicate a lower severity of subjectively reported symptoms at the time of assessment. Psychometrically, this suggests a low level of identified symptom complexes, with no reason to assume that respondents were deliberately concealing or distorting their psychological states. According to maladaptation indicators, therefore, service members in the first group were more vulnerable to the influence of combat-related stress factors than those in the second group. These findings suggest that the two groups differ in their resilience to combat-related psychological trauma.

This study used the "Resistance to combat psychological trauma" questionnaire. It was developed based on the concept that resilience to combat stress factors involves several stages of formation and implementation. These stages begin with expectations, continue with direct coping with stress exposure and end with the ability to comprehend and utilise acquired experience. This is particularly critical given that a hallmark feature of post-traumatic stress disorder (PTSD) is the inability to process traumatic experiences and resume normal functioning, as individuals become psychologically fixated on the traumatic event, failing to

integrate or overcome it. Resilience in this sense involves effective psychological preparation for combat operations, acquiring successful combat experience from fellow service members within the combat zone, and the capacity to reflect on experience and apply knowledge in similar situations to reduce the traumatic impact. Table 2 presents the indicators obtained using the "Resistance to combat psychological trauma" methodology in the identified groups.

Table 2. *Indicators of resilience to combat psychological trauma in the identified groups (conventional units, t-test)*

Scales	Groups		Significance of differences	
	Group 1 (M ± SD)	Group 2 (M ± SD)	t	p
Expectations from participation in combat operations	39.96 ± 9.19	45.12 ± 10.59	3.989	0.001
Coping with stressful situations	44.89 ± 8.49	50.93 ± 10.67	4.771	0.001
Implementation of acquired combat experience	39.48 ± 6.27	42.67 ± 8.48	3.233	0.001
Overall resilience to combat psychological trauma	124.33 ± 19.77	138.72 ± 25.87	4.742	0.001
Additional indicators of resilience to combat psychological trauma				
Helplessness	16.61 ± 5.81	13.13 ± 6.73	4.254	0.001
Conscious attitude towards professional training	21.18 ± 4.91	22.33 ± 4.91	1.833	0.068
Ability to acquire experience	19.98 ± 4.23	21.95 ± 5.02	3.247	0.001
Cognitive dysfunction	12.22 ± 4.85	8.88 ± 5.99	4.671	0.001
Attitude towards military duty	17.49 ± 4.83	17.87 ± 4.72	0.627	0.531

Source*: compiled by the author*

Statistically significant differences were demonstrated by the groups across all major scales of the methodology describing the stages of forming and implementing resilience to combat psychological trauma. Representatives of the second group demonstrated higher indicators at each stage: forming expectations of participation in combat operations (45.12 ± 10.59 compared to 39.96 ± 9.19 in the first group; t = 3.989, p = 0.001), coping (50.93 ± 10.67 compared to 44.89 ± 8.49; t = 4.771, p = 0.001), and implementing experience (42.67 ± 8.48 compared to 39.48 ± 6.27; t = 3.233, p = 0.001). For both groups, the most demanding and relevant stage was dealing with stressful situations. This may be explained by the fact that most of the study's participants had been withdrawn from areas of intensive combat operations and referred to psychological recovery programmes. Two groups also differed significantly in terms of the overall resilience indicator for combat-related psychological trauma, with substantially higher scores observed in the second group (138.72 ± 25.87, t = 4.742, p = 0.001). However, it should be noted that the mean values of this overall indicator for both groups of mobilised service members who entered military service after the full-scale invasion began correspond to a low level compared with normative indicators for contract service members. Additional scales of the methodology demonstrated that the first group experienced a greater destructive impact of combat stress. This was manifested by a stronger sense of personal helplessness (16.61 ± 5.81 compared to 13.13 ± 6.73 in the second group, t = 4.254, p = 0.001), greater cognitive dysfunction (12.22 ± 4.85 compared to 8.88 ± 5.99 in the second group, t = 4.671, p = 0.001) and a lower ability to acquire and transfer experience (19.98 ± 4.23 compared to 21.95 ± 5.02 in the second group, t = 3.247, p = 0.001). This occurred despite the fact that the identified groups showed almost no differ-ence in their attitude towards military duty. According to the standards established for contract service members, this corresponded to an average level in both groups. The only difference between the two groups was a statistical trend on the "Conscious attitude towards professional training" scale (21.18 ± 4.91 and 22.33 ± 4.91, t = 1.833, p = 0.068). These indicators also correspond-ed to an average level according to the norms for contract service members.

Such findings suggest that, although both groups generally have a positive attitude towards fulfilling military duty and take a conscious approach to professional training, service members in the first group appear less capable of developing the level of resilience required to avoid a sense of complete helplessness, regulate their emotions sufficiently to analyse the combat situation adequately, identify significant indicators within it, act accordingly, acquire personal experience and utilise the experience of fellow combatants within the limited time allocated for preparing mobilised personnel for participation in hostilities. While service members in the second group demonstrated greater resilience to combat psychological trauma, both groups had low overall resilience indicators, as noted above, which was one of the reasons for their participation in a psychological recovery programme. However, those in the second group are better equipped to regain their combat effectiveness thanks to their superior self-regulation skills. This allows them to maintain situational awareness and maintain their personal agency. They also possess the capacity to acquire and transfer knowledge when it comes to dealing with combat stressors, respond appropriately to them, act in a professional manner, and effectively collaborate with their fellow service members. The findings regarding maladaptation and resilience to combat psychological trauma among mobilised service members were confirmed by conducting an additional comparison of the identified groups. This comparison was based on indicators of the intensity of negative experiences diagnosed before the beginning of the recovery programme (Table 3).

Table 3. *Intensity of negative experiences among service members in the identified groups (conventional units, t-test)*

Negative emotional reactions and states	Groups		Significance of differences	
	Group 1 (M ± SD)	Group 2 (M ± SD)	t	p
Irritability	5.48 ± 2.58	3.85 ± 2.71	4.803	0.001
Anxiety	6.23 ± 2.45	4.34 ± 2.59	5.812	0.001
Aggressiveness	4.65 ± 2.67	2.81 ± 2.38	5.577	0.001
Anger	4.85 ± 2.61	3.05 ± 2.31	5.621	0.001
Inattention	5.06 ± 2.52	3.42 ± 2.45	5.120	0.001
Self-doubt	5.27 ± 2.61	2.85 ± 2.46	7.359	0.001
Emptiness	5.09 ± 2.78	2.72 ± 2.48	6.948	0.001
Apathy	5.11 ± 2.79	2.83 ± 2.67	6.454	0.001
Concern	6.05 ± 2.44	3.47 ± 2.55	8.069	0.001
Guilt	4.45 ± 2.91	2.30 ± 2.57	5.994	0.001
Lack of concentration	5.35 ± 2.48	3.02 ± 2.49	7.263	0.001
Reluctance to communicate	5.51 ± 2.89	2.96 ± 2.74	7.005	0.001
Distrust towards fellow service members	4.02 ± 2.88	2.17 ± 2.50	5.376	0.001
Distrust towards commanders	5.71 ± 3.15	3.97 ± 3.24	4.244	0.001
Inability to perform assigned tasks	5.61 ± 2.65	3.54 ± 2.86	5.892	0.001
Mean indicator of negative emotional reactions and states	5.26 ± 1.57	3.17 ± 2.02	8.781	0.001
Irritability	5.48 ± 2.58	3.85 ± 2.71	4.803	0.001

Source*: compiled by the author*

The data presented demonstrate that, according to the methodology "Assessment of negative psychological reactions and states in service members", representatives of the first group showed a higher intensity of all negative emotions and states assessed (p = 0.001 for all indicators). In particular, the highest intensity indicators in the first group were observed for following: anxiety (6.23 ± 2.45); concern (6.05 ± 2.44); distrust of commanders (5.71 ± 3.15); helplessness (5.71 ± 2.50); inability to perform assigned tasks (5.61 ± 2.65). The lowest indicators in this group were identified for: guilt (4.45 ± 2.91) and distrust towards service members (4.02 ± 2.88). The low intensity of these indicators in both groups suggests that basic interpersonal trust is maintained within units ("brotherhood") and that there is an absence of pronounced self-directed aggression (guilt). This is an important adaptive resource for maintaining social cohesion under combat stress. In the second group, the most intense negative emotional reactions and states were: anxiety (4.34 ± 2.59); distrust towards commanders (3.97 ± 3.24); irritability (3.85 ± 2.71); inability to perform assigned tasks (3.54 ± 2.86); and concern (3.47 ± 2.55). The high intensity of irritability among service members in the second group reflects the predominance of an active (sthenic) spectrum of emotional responses to stressors, accompanied by increased psychosomatic tension. Conversely, the predominance of concern and feelings of helplessness in the first group indicates an asthenic emotional response and pronounced signs of psychophysiological exhaustion. Regarding the overall indicator obtained using the "Assessment of negative psychological reactions and states in service members" methodology, it was established at 5.26 ± 1.57 among representatives of the first group, approaching the second critical threshold of 5.5 points. This suggests a high likelihood of exceeding the normative maladaptation threshold (according to the "Maladaptation" methodology) and low resilience to com-bat psychological trauma (according to the "Resistance to combat psychological trauma" methodology). In the second group, the overall indicator was significantly lower (3.17 ± 2.02, t = 8.781, p = 0.001) and did not exceed the first critical threshold of 3.5 points. This is associated with an increased probability of experiencing severe stress reactions. The results of the correlation analysis confirmed the presence of statistically significant inverse relationships between behavioural regulation and most maladaptation indicators: loss of communicative potential (r = -0.512, p < 0.001), asthenisation (r = -0.468, p < 0.001) and suicidal risk (r = -0.574, p < 0.001). At the same time, the relationship with "violation of moral normativity" was insignificant (r = -0.114; p = 0.072), showing that military-value orientation acquisition is relatively independent from general processes of behavioural self-regulation.

✦ Discussion

The relationships between "Resistance to combat psychological trauma" and other study variables among service members in the first group were analysed, and the following was demonstrated. The skills developed during professional and psychological training form the basis for resilience to combat stress factors and the complex conditions of military service. These skills enable service members in the first group to pay greater attention to important indicators of the combat situation, accept assistance, interact adequately with fellow service members, remain confident in correctness and appropriateness of their actions and maintain confidence in their ability to perform assigned tasks. The overall intensity of negative psychological experiences is reduced by these factors. The findings reveal a counterintuitive relationship: the more resilient service members are, the less likely they are to experience psychological trauma. This suggests that a strong resistance to trauma can actually protect individuals from developing destructive experiences. These relationships support the idea that psychological recovery should be included in the

psychological preparation system aimed at maintaining the motivation and personal resources of combatants, which aligns with the conclusions of I. Frankova *et al.* (2025). For service members in the second group, as well as for those in the first group, acquired resilience to combat psychological trauma acts as a non-specific factor that reduces the severity of negative experiences and psychological states. The identified relationships demonstrate that higher resilience to combat psychological trauma is negatively correlated with the intensity of negative emotional states among service members in both groups. This suggests an inverse relationship between higher psychological resilience and the severity of negative emotional responses.

At the same time, among service members in the second group, higher resilience indicators were associated with a stronger commitment to participating in recovery activities. This included a greater willingness to interact with rehabilitation centre specialists and a more positive outlook on the psychological rehabilitation process. The findings showed that lower resilience to psychological trauma associated with combat was linked to higher levels of suicidal risk and other signs of maladaptation, particularly in terms of behavioural functioning and communication. The identified correlations confirm that resilience indicators and suicidal risk are inversely related, with greater resilience corresponding to less severe destructive intentions. The analysis also showed that maladaptive manifestations (especially problems with behavioural regulation, communication limitations, and suicidal thoughts) are closely linked to a wider range of negative emotional states. This suggests that negative emotional states among service members are related to both awareness of personal maladaptation and existing psychosocial difficulties, and the direct influence of extreme combat factors and experienced combat stress. This is also observed in the study by R. Kanapeckaitė & D. Bagdžiūnienė (2024). Elevated suicidal risk, which manifests through the emergence of suicidal thoughts and intentions, is negatively associated with internal resources necessary for psychological recovery. In particular, an increase in suicidal risk is accompanied by reduced motivation and increased feelings of helplessness, as reflected in findings of R.H. Pietrzak *et al.* (2025). Similarly, a loss of communicative potential and an inability to maintain constructive relationships with others are associated with limited resources for psychological recovery. Lower resilience to stress factors is associated with more pronounced maladaptive manifestations, particularly in terms of behaviour, communication and suicidal thoughts. One factor that may contribute to these manifestations is the insufficient development of psychological self-regulation abilities, which are necessary for service members to function effectively in everyday and combat situations. O.Y. Furs (2025) considered this aspect to be an important component of professional psychological readiness.

Among representatives of the second group, maladaptation as a manifestation of combat stress, particularly the inability to regulate one's own behaviour, may be associated with an insufficiently developed capacity to overcome stressful situations in professional activity. This capacity constitutes a component of resilience to combat psychological trauma, specifically the ability to prevent manifestations of cognitive dysfunction. Therefore, counteracting cognitive dysfunction could mitigate the risk of maladaptive responses, particularly difficulties in behavioural control under stress, which aligns with A. Flood & R.J. Keegan's (2022) perspective on the role of cognitive resilience in alleviating psychological stress in military personnel. Lower levels of resilience to combat psychological trauma were associated with more pronounced manifestations of maladaptation. This was particularly evident in behaviour, communication, and the presence of suicidal thoughts and intentions. The correlations identified confirm that resilience levels and suicidal risk indicators are inversely related. Manifestations of maladaptation are closely associated with a broader spectrum of negative emotional states. This indicates their connection with awareness of personal psycho-emotional difficulty. It also indicates their connection with the direct impact of combat stress. Conversely, in the higher resilience group, a greater readiness to interact with specialists and a more optimistic attitude towards psychological recovery were observed. Elevated suicidal risk is negatively associated with psychological recovery resources, being accompanied by reduced motivation and increased feelings of helplessness. A similar pattern of relationships was described by Y.S. Lee *et al.* (2025). Similarly, limitations in communicative potential can hinder the maintenance of constructive interpersonal relationships (Nerubasska *et al.*, 2023; Grover *et al.*, 2024). Conscious, external manifestations of personal maladaptation, such as an inability to control one's behaviour, interaction difficulties and suicidal thoughts, provoke a non-specific emotional response among service members in the second group (showing a moderate association with almost the entire range of negative experiences). Behavioural problems evoke the strongest response among these manifestations, whereas other aspects of maladaptation are less pronounced and cause less concern. However, "behavioural regulation impairment" represents a factor that has a broad and non-specific negative impact on the resources required for participation in the recovery programme. At the same time, however, suicidal thoughts go against the idea of being willing to get help from doctors and psychologists. They are also linked to a lack of optimism.

✦ Conclusions

The psychodiagnostic assessment complex used in the study, when combined with cluster and correlation analysis methods, made it possible to identify distinct psychological profiles among the mobilised service members who had participated in intensive hostilities. The division of the sample into two contrasting groups according to resilience and maladaptation levels made it

possible to move beyond average assessments and substantiate the relevance of a differentiated approach to the psychological rehabilitation of combatants. The identified psychological profiles differed quantitatively in terms of an overall higher level of maladaptation (19.76 ± 5.95 compared to 9.75 ± 4.76), lower resilience to combat-related psychological trauma (124.33 ± 19.77 compared to 138.72 ± 25.87) and a greater intensity of negative psychological reactions and states (5.26 ± 1.57 compared to 3.17 ± 2.02) among service members in the first group compared to the second group ($p < 0.001$). Specialised express assessment methods enabled risk areas with polar characteristics to be identified: from acute behavioural regulation impairments and critical suicidal tendencies among psychologically decompensated service members in the first group, to deeper value conflicts and potential moral normativity violations among the second group. These results confirm that rehabilitation measures imple-mented in recovery centres should be targeted and indi-vidualised. Service members with low resilience require priority crisis intervention, reduction of helplessness and correction of cognitive dysfunctions. In contrast, work with more resilient service members should focus on reflection on combat experience, processing moral dilemmas and activation of self-regulation coping resources.

The results of the analysis enabled a practical assumption to be made about the suitability of introducing short-term psychological recovery programmes (especially 14-day programmes) for service members who have been mobilised and are withdrawing from combat zones. However, the effectiveness of such recovery interventions must be confirmed, their outcomes assessed for sustainability over time, and the optimal intervention duration determined. This requires separate experimental and longitudinal studies involving control groups and repeated measurements. Additionally, when planning rotations and distributing the combat workload, commanders should consider age-related and somatic factors. Older soldiers (over 40 years of age) are subject to more rapid physical exhaustion, whereas younger mobilised personnel may be more vulnerable to destructive psychological states.

✦ Acknowledgements

None.

✦ Funding

None.

✦ Conflict of Interest

None.

✦ References

[1] Blinov, O.A. (2020). *Psychology of combat stress*. (Doctoral dissertation, G.S. Kostiuk Institute of Psychology of the National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine).

[2] Charlot, K., Chapelot, D., Siracusa, J., Lavoué, C., Colin, P., Oustric, P., Thivel, D., Finlayson, G., & Bourrilhon, C. (2021). An augmented food strategy leads to complete energy compensation during a 15-day military training expedition in the cold. *Physiological Reports*, 9(11), article number e14591. doi: 10.14814/phy2.14591.

[3] Chyzhevskyi, S.O. (2023). Peculiarities of psychological recovery of military personnel in the context of a full-scale Russian invasion: Scientific report at the methodological seminar of NAES of Ukraine "Actual problems of mental health protection of the Ukrainian people under martial law and post-war times", November 16, 2023. *Herald of the National Academy of Educational Sciences of Ukraine*, 5(2), 1-5. doi: 10.37472/v.naes.2023.5229.

[4] Fedyk, A.O., Valchuk, O.A., Okhrimenko, I.M., Danylchenko, T.V., Bets, I.O., Balahur, L.O., & Brykovskyi, A.G. (2025). Socio-psychological causes and consequences of combat stress in armed conflict participants. *Medical Advances*, 78(1), 82-89. doi: 10.36740/WLek/197120.

[5] Fitkalo, O. (2024). Post-traumatic stress disorder after suffering acubarotrauma: A clinical case. *Psychosomatic Medicine and General Practice*, 9(1). doi: 10.26766/pmgp.v9i1.478.

[6] Flood, A., & Keegan, R.J. (2022). Cognitive resilience to psychological stress in military personnel. *Frontiers in Psychology*, 13, article number 809003. doi: 10.3389/fpsyg.2022.809003.

[7] Frankova, I., Klochkov, V., Pyvovarenko, M., Hukovskyy, O., Zohar, J., & Vermetten, E. (2025). Psychological resilience in trench warfare: Leveraging mental health frameworks for Ukrainian soldiers. *Neuroscience Applied*, 4, article number 105528. doi: 10.1016/j.nsa.2025.105528.

[8] Furs, O.Y. (2025). The problem of mental self-regulation of military professionals in psychological theory and practice. *Organizational Psychology. Economic Psychology*, 37(4), 188-195. doi: 10.31108/2.2025.4.37.17.

[9] Grover, L.E., Williamson, C., Burdett, H., Palmer, L., & Fear, N.T. (2024). Level of perceived social support, and associated factors, in combat-exposed (ex-)military personnel: A systematic review and meta-analysis. *Social Psychiatry and Psychiatric Epidemiology*, 59(12), 2119-2143. doi: 10.1007/s00127-024-02685-3.

[10] Hanaba, S., & Munenko, A. (2025). Psychological readiness of servicemen: Theoretical foundations of a preventive approach to resilience. *Scientific Innovations and Advanced Technologies*, 10(50), 1433-1444. doi: 10.52058/2786-5274-2025-10(50)-1433-1444.

[11] Kalnysh, V.V., Shvets, A.V., Nahorna, A.M., & Trinka, I.S. (2025). Structure and consequences of combat stress of combatants in different periods of 2024. *Ukrainian Journal of Military Medicine*, 6(1), 6-16. doi: 10.46847/ujmm.2025.1(6)-006.

[12] Kanapeckaitė, R., & Bagdžiūnienė, D. (2024). Relationships between team characteristics and soldiers' organizational commitment and well-being: The mediating role of psychological resilience. *Frontiers in Psychology*, 15, article number 1353793. doi: 10.3389/fpsyg.2024.1353793.

[13] Kokun, O., Pischko, I., & Lozinska, N. (2022). Examination of military personnel's changed psychological states during long-term deployment in a war zone. *Annals of Psychology*, 38(1), 191-200. doi: 10.6018/analesps.475041.

[14] Kolesnichenko, O.S., Matsegora, Y.V., & Prykhodko, I.I. (2017). Method of assessing traumatic combat experiences in servicemen participating in hostilities. *Black Sea Scientific Studies*, 5, 149-154.

[15] Kolesnichenko, O.S., Prykhodko, I.I., Matsehora, Y.V., Yurieva, N.V., Lyman, A.A., & Baida, M.S. (2020). *Applied psychodiagnostics in the National Guard of Ukraine*. Kharkiv: National Academy of the National Guard of Ukraine.

[16] Kucherenko, N.S. (2025). Features of the manifestation of post-traumatic stress in mobilized military servicemen after participation in combat operations. *The Bulletin of National Defence University of Ukraine*, 87(5), 101-111. doi: 10.33099/2617-6858-2025-87-5-101-111.

[17] Lee, Y.S., Lee, Y., & Lim, M.H. (2025). Suicidal ideation, depression, anxiety, impulsivity, self-esteem, emotional regulation, child trauma and hopelessness in Korean military soldiers. *Healthcare*, 13(18), article number 2356. doi: 10.3390/healthcare13182356.

[18] Matsegora, Y., Prikhodko, I., Kolesnychenko, O., & Bayda, M. (2023). Psychometric properties of the method "Assessment of negative mental reactions and states in military servicemen" and experience of its use in short-term psychological recovery. *Honor and Law*, 1(84), 114-124. doi: 10.33405/2078-7480/2023/1/84/276858.

[19] Nerubasska, A.O., Moskalova, V.A., & Fesiuk, A.I. (2023). Modern aspects of psychological adaptation of military personnel in combat conditions. *Habitus*, 51, 229-233. doi: 10.32782/2663-5208.2023.51.39.

[20] Nieminskyi, I.V., *et al*. (2023). *Organization of psychological training in the Armed Forces of Ukraine: Training and methodological manual*. Kyiv: Research Center for Humanitarian Problems of the Armed Forces of Ukraine.

[21] Pietrzak, R.H., Bryan, C.J., Fischer, I.C., Nichter, B., & Trachik, B. (2025). Resilience and vulnerability: Suicide-specific cognitions in a nationally representative sample of US military veterans. *Primary Care Companion for CNS Disorders*, 27(1), article number 24m03821. doi: 10.4088/PCC.24m03821.

[22] Prykhodko, I.I., Matsehora, Y.V., Kolesnichenko, O.S., & Bayda, M.S. (2017). Express-questionnaire "Desadaptitivity": Development, approbation, psychometric indicators. *Bulletin of the National Academy of the State Border Guard Service of Ukraine. Series: Psychology*, 3, 53-78.

[23] Prykhodko, I.I., Matsehora, Y.V., & Kucherenko, N.S. (2025). "Posttraumatic stress differentiation questionnaire": Modification, validation, psychometric indicators. *Honor and Law*, 1(92), 107-126. doi: 10.33405/2078-7480/2025/1/92/332048.

[24] Puzyrov, Ye.V., & Izviekov, V.V. (2023). Combat stress and its consequences for military servants. *Scientific Notes of Taurida National V.I. Vernadsky University. Series: Psychology*, 34(73), 203-209. doi: 10.32782/2709-3093/2023.1/33.

[25] Shevchuk, O., & Mitlosh, A. (2025). Psychological features of interpersonal interaction among military personnel. *Research Bulletin. Series: Psychology*, 2, 177-182. doi: 10.32782/cusu-psy-2025-2-25.

[26] Sydorenko, I.I., & Marchenko, O.H. (2022). Learned helplessness as a consequence of the war in Ukraine. In *Mental health of the individual in a crisis society: Proceedings of the VII all-Ukrainian scientific and practical conference* (pp. 331-333). Lviv: Lviv State University of Internal Affairs.

[27] WMA. (2024). *WMA Declaration of Helsinki – ethical principles for medical research involving human participants.* Retrieved from https://www.wma.net/policies-post/wma-declaration-of-helsinki/.

Особливості проявлення дезадаптивності та резильєнтності до бойової психологічної травматизації у мобілізованих військовослужбовців після участі в бойових діях

Наталія Кучеренко
Кандидат психологічних наук, доцент
Харківський національний університет імені В. Н. Каразіна
61022, майдан Свободи, 4, м. Харків, Україна
https://orcid.org/0000-0002-6644-3117

✦ Анотація. Тривала російсько-українська війна посилила потребу в розумінні психологічних наслідків інтенсивного бойового досвіду для мобілізованих військовослужбовців та визначенні чинників, пов'язаних з успішною післябойовою адаптацією. Метою дослідження було визначити особливості проявів дезадаптивності та резильєнтності у мобілізованих військовослужбовців після участі в інтенсивних бойових діях. Психодіагностичне оцінювання проводилося з використанням шкали інтенсивності бойового досвіду, опитувальника диференціації посттравматичного стресу, методики оцінювання негативних психічних реакцій і станів у військовослужбовців, шкали дезадаптивності та шкали стійкості до бойової психологічної травматизації. Зазначені методики дали змогу оцінити інтенсивність бойового досвіду, симптоми посттравматичного стресу, негативні психічні стани, дезадаптивність і резильєнтність та продемонстрували задовільну внутрішню узгодженість (α Кронбаха = 0,84-0,91). Кластерний аналіз дозволив виокремити два контрастні психологічні профілі: групу з високою дезадаптивністю та низькою резильєнтністю (n = 148; M = 19,76, SD = 5,95; M = 124,33, SD = 19,77 відповідно) і групу з нижчим рівнем дезадаптивності та вищою резильєнтністю (n = 102; M = 9,75, SD = 4,76; M = 138,72, SD = 25,87; t = 4,74, p < 0,001). У військовослужбовців першої групи виявлено значно більш виражені труднощі поведінкової регуляції, суїцидальний ризик, когнітивну дисфункцію та негативні емоційні стани, тоді як компоненти резильєнтності негативно корелювали з проявами дезадаптивності. Отримані дані обґрунтували доцільність диференційованого підходу до психологічної реабілітації з урахуванням рівня резильєнтності, специфіки бойового досвіду та актуального психічного стану під час визначення обсягу і змісту психологічних втручань. Результати дослідження можуть бути використані для раннього виявлення груп ризику, індивідуалізації психологічної підтримки та розроблення цільових програм реабілітації й психологічного відновлення у військових реабілітаційних центрах і службах психологічного забезпечення сектору безпеки і оборони України

✦ Ключові слова: екстремальні умови; посттравматичний стресовий розлад; емоційна регуляція; негативні психічні стани; суїцидальний ризик

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡si»y ofi U¾¡ai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 42-51
✦ ISSN 2617-6858
✦ E-ISSN 2617-6866
✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ UDC 159.9:159.944.4:159.072
✦ DOI: 10.33099/2617-6858-26-21-4-42-51

Professional decision-making by psychologists under stress: Psychological mechanisms and influencing factors

Liubov Pomytkina*
Doctor of Psychological Sciences, Professor
Nationality University "Kyiv Aviation Institute"
03058, 1 Lyubomyr Husar Ave., Kyiv, Ukraine
https://orcid.org/0000-0002-2148-9728

Eduard Pomytkin
Doctor of Psychological Sciences, Professor
Ukrainian Humanitarian Institute
08292, 14 Instytutska Str., Bucha, Ukraine
https://orcid.org/0000-0001-8416-7067

✦ Abstract. This article presents a theoretical analysis of the psychological mechanisms underlying professional decision-making by psychologists under stressful conditions, particularly in the context of military operations and combat stress. The aim of the article was to identify the main psychological factors and mechanisms influencing the process of professional decision-making by psychologists in situations of heightened psychological strain, including crisis and combat conditions. The methodological basis of the study consisted of methods of theoretical analysis, generalisation and systematisation of contemporary scientific works on the issue of decision-making under stressful conditions. The results of contemporary studies on the influence of emotional, cognitive and personality factors on the decision-making process were analysed. The main groups of factors influencing a psychologist's professional decision-making were identified: cognitive, emotional, moral and value-based, professional and situational. An original model of professional decision-making by psychologists under stressful conditions is proposed, which reflects the interaction between external stress factors (in particular, combat situations) and the specialist's internal psychological mechanisms. A classification of the types of professional decisions made by psychologists in crisis situations (diagnostic, interventional, ethical, situationally operational and reflective-corrective) has been developed, enabling a systematic description of professional activity in the military sphere. Particular attention has been paid to the role of professional experience, empathy, conscience, reflection and the specialist's sense of personal responsibility in the decision-making process under crisis and combat conditions. It was emphasised that the combination of analytical and intuitive thinking contributes to enhancing the effectiveness of a psychologist's professional activity and to providing psychological support to military personnel. The practical significance of the findings lies in their potential application to improving the system of psychological support in wartime, and to developing programmes to enhance psychologists' stress resilience and professional reliability

✦ Keywords: professional activity; wartime conditions; combat operations; empathy; conscience

✦ Introduction

Contemporary social realities are characterised by an increase in the number of crisis and stress-inducing situations caused by military events, socio-economic instability, emergencies and a general rise in the psychological strain

Suggested Citation:
Pomytkina, L., & Pomytkin, E. (2026). Professional decision-making by psychologists under stress: Psychological mechanisms and influencing factors. *Bulletin of National Defence University of Ukraine*, 21(4), 42-51. doi: 10.33099/2617-6858-26-21-3-42-51.

Article's History: Received: 27.03.2026; Revised: 03.08.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (sophist@nau.edu.ua)

on professionals in support roles. Under such conditions, the professional activity of psychologists becomes particularly relevant, as they are required to work with people who have experienced psychological trauma, are in a state of acute stress or are facing crisis life circumstances. The military-psychological context of a psychologist's professional activity deserves special attention. Studies by C. Sousa & G. Veronese (2022), I.C.Z.Y. Lim *et al*. (2022) and M. Palace *et al*. (2024) have highlighted that the conditions of war and combat operations create specific stressors that significantly affect the cognitive processes, emotional regulation and professional functioning of specialists. In particular, they highlight an increased vulnerability to professional burnout, the need to develop stress resilience, and the use of adaptive decision-making mechanisms in crisis situations. Military psychological research, notably that of O. Martsyniak-Dorosh *et al*. (2025), emphasises the importance of integrating knowledge of psychological trauma and post-traumatic stress disorder into the practice of psychologists working with military personnel and civilians who have survived combat.

A psychologist's professional activity involves the need to make responsible decisions regarding the choice of psychodiagnostic methods, forms of psychological support, and psychocorrectional or counselling strategies. In crisis situations, this process is significantly complicated by the influence of emotional strain, time constraints, a high level of responsibility for the client's psychological state, and the risk of professional burnout. Stress can significantly affect a specialist's cognitive processes, in particular attention, memory, the speed of information processing and the ability to analyse a situation rationally. Under such conditions, understanding the psychological mechanisms of professional decision-making, which combine analytical thinking, professional experience, intuitive strategies and the ability to self-regulate, becomes particularly important. O. Martsyniak-Dorosh *et al*. (2025) identified psychological flexibility as a key psychological mechanism for effective decision-making under stressful conditions; this is actively researched within the framework of Acceptance and Commitment Therapy (ACT). This therapy is a contemporary branch of cognitive-behavioural therapy aimed at developing psychological flexibility by fostering the ability to accept one's inner experience (thoughts, emotions, feelings) without avoidance, whilst acting in accordance with personal and professional values. This is particularly relevant to the work of psychologists in emergency situations, where high levels of emotional stress can impair decision-making and lead to the use of ineffective coping strategies. As noted by O. Martsyniak-Dorosh *et al.,* the application of ACT principles helps to minimise the impact of stress by overcoming experiential avoidance and increasing awareness of professional choices.

Another important factor determining the effectiveness of decision-making under stressful conditions is the nature of an individual's coping strategies. Research by N. Mateiko *et al*. (2025) demonstrated that the use of constructive coping strategies, in particular a problem-focused approach, emotional regulation and seeking social support, helps to maintain psychological well-being and enhances the ability to respond appropriately in extreme situations. In contrast, destructive strategies, such as avoidance or denial, have a negative impact on cognitive processes and may lead to a decline in the quality of decision-making. Although these patterns were investigated by N. Mateiko *et al*. in a sample of military personnel, they are also relevant to the professional activity of psychologists working in high-stress environments. A key factor influencing the decision-making process in complex and stressful conditions is the subject's motivational and personality characteristics. V.V. Predko *et al.* (2023) confirmed that the level of intrinsic motivation, responsibility and psychological resilience determines the effectiveness of behaviour under high pressure. In particular, the development of internal resources contributes to more conscious and purposeful decision-making, whilst a lack of such resources may lead to avoidance of responsibility or a reduction in the quality of professional choices. An analysis of psychologists' performance under stress, conducted by H. Varina & I. Medvid (2025), highlighted the decisive role of personal and motivational factors, which are integral components of selecting a successful intervention strategy.

Significant attention is also paid to the ethical aspects of professional decision-making by psychologists. Researchers S. Knapp *et al.* (2013) emphasised that an effective professional decision requires a combination of scientific knowledge, professional experience and the specialist's moral and value-based orientations. The work by H.M. Levitt *et al*. (2025) demonstrates that in complex professional situations, psychologists often rely not only on formal ethical standards, but also on professional judgement and reflection on their own responsibility. Similarly, researchers W.B. Johnson *et al.* (2024) noted that models of ethical decision-making in psychology must take into account both cognitive and moral mechanisms regulating a professional's behaviour. Furthermore, contemporary theoretical approaches to decision-making under risk, particularly in the work of X. Wu (2025), have emphasised the significant influence of cognitive biases, subjective perceptions of uncertainty and emotional factors, which determine the specific nature of choices made in stressful conditions. The aim of this article was to provide a theoretical analysis of the psychological mechanisms underlying psychologists' professional decision-making under stressful conditions and to identify the main factors influencing the effectiveness of this process. Research objectives: to analyse scientific approaches to the problem of professional decision-making in psychological practice; to identify the psychological mechanisms of decision-making under stressful conditions; to outline the main factors influencing a psychologist's professional decisions; to examine the role of professional reflection and self-regulation in the decision-making process.

✦ Materials and Methods

The study was theoretical and analytical in nature and aimed to summarise contemporary scientific approaches to the issue of professional decision-making by psychologists in crisis situations. The object of the study was the process of professional decision-making in the work of psychologists. The subject of the study was the psychological mechanisms and factors influencing psychologists' professional decision-making under stressful conditions. The methodological basis of the study was formed by contemporary theoretical approaches to the study of the psychological mechanisms of decision-making and the characteristics of professionals' work under stressful conditions. In particular, the study employed the method of theoretical analysis and synthesis of academic sources on decision-making, the method of comparative analysis of contemporary research, and the method of systematising academic approaches to studying the impact of stress on cognitive and emotional processes. The theoretical framework was based on the transactional model of stress and coping by R.S. Lazarus & S. Folkman (1984), the concept of professional burnout and stress resilience by C. Maslach & M.P. Leiter (2017), as well as contemporary research into the military-psychological context, in particular the publication by M. Palace *et al*. (2024). These approaches were selected due to their relevance to the analysis of cognitive and emotional processes in crisis situations. To synthesise the results of the scientific research, the method of structural-logical modelling was employed, which enabled the development of an original model of professional decision-making by psychologists under stressful conditions. The research procedure was carried out in stages:

1) analytical stage – searching for and selecting academic sources according to defined criteria;

2) comparative stage – comparing different approaches to decision-making under stressful conditions;

3) systematisation stage – summarising the results and identifying key psychological mechanisms;

4) modelling stage – developing an original structural-logical model of professional decision-making by psychologists under stressful conditions.

In the process of systematising scientific approaches, principles were established for classifying the factors influencing a psychologist's professional decision-making under stressful conditions. The classification was based on three main criteria: cognitive factors – characteristics of thinking, attention and memory that determine the speed and accuracy of situation assessment; emotional factors – the level of emotional sensitivity, stress resilience and the capacity for emotional regulation; socio-professional factors – work experience, professional competence, support from colleagues and organisational conditions of work. The criteria for distinguishing types of decisions were: the degree of certainty of the situation (clearly structured/uncertain, crisis conditions); the level of stress (moderate/high); and the nature of the consequences (short-term/long-term for the client and the psychologist). Based on these criteria, the following types of professional decisions were identified: diagnostic, intervention, ethical, situational-operational and reflective-corrective, which reflect different strategies employed by psychologists in stressful conditions. The application of these methods has made it possible to systematise contemporary scientific approaches to the problem under investigation and to identify the main factors influencing the effectiveness of a psychologist's professional decision-making in complex professional contexts.

✦ Results

The problem of decision-making under complex and stressful conditions is an active area of research in contemporary psychology. The foundations for analysing decision-making under stress were laid by the approach set out in the model by L. Mann *et al*. (1998), as implemented in the Melbourne Decision Making Questionnaire. The authors identified four main patterns of response to decision-making situations: vigilance, avoidance of responsibility, procrastination and hypervigilance. Vigilance is regarded as the most adaptive strategy, involving a systematic analysis of alternatives and consequences, whilst the other styles are associated with maladaptive forms of response under conditions of heightened stress. In particular, hypervigilance is characterised by impulsivity and hasty decision-making, whilst avoidance and procrastination lead to the postponement or delegation of responsibility. Thus, stress levels significantly influence which style predominates, which directly determines the effectiveness of a psychologist's professional decisions.

As the contemporary conditions of a psychologist's professional activity are characterised by increasing levels of stress, uncertainty and responsibility for decisions made, this has led to heightened attention from researchers towards the psychological mechanisms underpinning professional choice. An analysis of academic literature has demonstrated the complex nature of this process. In contemporary research, considerable attention is paid to studying the impact of stress on cognitive processes, in particular on the ability to analyse information, assess risks and select behavioural strategies. Researchers R.S. Lazarus & S. Folkman (1984), J.S. Lerner *et al.* (2015) and A.J. Porcelli & M.R. Delgado (2017) have emphasised that stressors can alter the nature of decision-making, leading both to a reduction in the rationality of situational assessment and to an intensification of intuitive thinking mechanisms. Psychological research also highlights the role of emotional and neuropsychological mechanisms in the decision-making process. In particular, C. Sandi (2013) found that stress can influence the process of evaluating alternatives and risk-taking propensity, as well as alter the nature of an individual's behavioural strategies. Some studies, including a study by L.F. Sarmiento *et al.* (2024), have demonstrated that physiological responses to stress, particularly hormonal changes, may be associated with an increase or decrease in the propensity for risky decisions. L. Pruessner & C.N.M. Ortner (2025) demonstrated that the effectiveness

of decision-making depends to a large extent on the flexibility of emotional regulation and the capacity for cognitive reappraisal, which ensure an adaptive response to stressful conditions and the maintenance of mental well-being.

Metacognitive processes also play an important role, ensuring awareness, control and correction of cognitive activity in conditions of uncertainty and emotional stress (Wang *et al*., 2024). Alongside this, researchers S. Schubert *et al*. (2023), E. Quinlan *et al*. (2024) and A. Shymanskyi (2024) have emphasised the importance of professional and personal factors, in particular the level of professional identity development, competence and psychological readiness for the role, which act as internal regulators of a professional's behaviour in complex situations. M.H. Rønnestad *et al*. (2024) specifically emphasised the role of supervision as a resource for professional development and for reducing uncertainty in decision-making. At the same time, A. Nordahl-Hansen *et al*. (2024) emphasised the need for critical reflection on research findings and the contextualisation of their interpretation, which enhances the soundness of professional decisions.

A separate area of contemporary research concerns the study of individual psychological characteristics of decision-making in complex situations. S. Yilmaz & H. Kafadar (2024) found that the nature of decision-making is influenced by cognitive abilities, personality traits, the level of development of executive functions, and the maturity of self-regulation mechanisms. H.M. Levitt *et al*. (2025) also emphasised the importance of intuition and professional experience in the decision-making process under conditions of heightened operational stress. Contemporary Ukrainian research also devotes considerable attention to the study of the psychological mechanisms of decision-making in complex and crisis situations. In particular, V.Y. Artemov & I.V. Synhaivska (2022) demonstrated that, in conditions of uncertainty and information scarcity, individuals are more likely to employ intuitive and heuristic decision-making strategies, thereby reducing the role of rational analysis of the situation. The study by T.D. Shcherban *et al*. (2025) focuses on the psychological characteristics of managerial decisions in crisis socio-economic conditions, emphasising the influence of emotional factors and cognitive simplifications on the choice of behavioural strategies. It has been established that elevated levels of stress, particularly under martial law, can lead to a decline in the quality of strategic analysis and an increase in impulsive decision-making. Similar results were obtained in a study by A.O. Kononenko (2025), which showed that emotional states and levels of psychological resilience are directly linked to decision-making styles, determining a preference for rational or impulsive behavioural strategies. It has been established that emotional states significantly influence decision-making styles: increased anxiety is associated with impulsivity and a reduction in cognitive control. The findings of V.V. Plokhikh & D.O. Koverdyuk (2025) demonstrated that even moderate levels of stress alter behavioural decision-making strategies and intensify emotionally oriented reactions in individuals. Furthermore, the work by L.V. Zasiekina & A.O. Martyniuk (2025) emphasised that prolonged wartime stress is associated with moral distress, secondary traumatisation and professional burnout among support staff. At the same time, studies by Ukrainian researchers highlight the role of psychological resilience as a key resource for adapting to stress and for effective professional performance.

The issue of moral and value-based decision-making mechanisms is examined in the work by L. Pomytkina *et al*. (2020). The researchers emphasised that the process of making important life decisions is linked not only to cognitive analysis of the situation, but also to the operation of an integral psychological mechanism – conscience – which ensures an individual's internal assessment of their responsibility for their own choices. In a psychologist's professional practice, this mechanism is closely linked to empathy, which enables the specialist to gain a deeper understanding of the client's emotional state and to recognise the moral implications of their own professional decisions. L. Pomytkina *et al*. (2024) also drew attention to the role of professionally significant qualities in the decision-making process under challenging professional conditions. In particular, it has been shown that the development of professional competencies, emotional resilience and the capacity for reflection can significantly influence the decision-making strategies of professionals working in situations of heightened responsibility. Consequently, in contemporary psychological science, there are several approaches to studying the phenomenon of decision-making, which focus on different psychological mechanisms underlying this process. A synthesis of the findings of contemporary research allows to view a psychologist's professional decision-making under stress as a multi-level process that integrates emotional-regulatory, cognitive, metacognitive and professional-personality mechanisms. Based on an analysis of contemporary scientific research, the main theoretical approaches to understanding decision-making in a psychologist's professional activity have been identified; a summary of these is presented in Table 1.

Table 1. *Main scientific approaches to the study of decision-making in psychology*

Approach	Main provisions	Representatives	Significance for psychologists' professional activity
Cognitive	Decision-making is regarded as a process of processing information, analysing alternatives and predicting consequences	C. Sandi (2013)	Enables an explanation of the rational mechanisms underlying choice and the assessment of a situation
Emotional regulation	Emotional states and stress levels influence the speed and nature of decision-making	A.J. Porcelli & M.R. Delgado (2017), A.O. Kononenko (2025)	Explains the impact of anxiety, stress and emotional strain on professional decisions

Table 1. *Continued*

Approach	Main provisions	Representatives	Significance for psychologists' professional activity
Personal	Decision-making style depends on individual personality traits	L. Mann *et al.* (1998), V.V. Predko *et al.* (2023), V.V. Plokhikh & D.O. Koverdyuk (2025)	Identifies the role of experience, individual strategies and psychological resilience
Ethical (moral and values-based)	Decisions are made with due regard to moral standards, professional ethics and responsibility	L. Mann *et al.* (1998), S. Knapp *et al.* (2013), W.B. Johnson *et al.* (2024), L. Pomytkina *et al.* (2020; 2024)	Identifies the psychologist's ethical responsibility regarding professional choices
Integrative	The combination of cognitive, emotional and moral factors in the decision-making process	C. Sousa & G. Veronese (2022), I.C.Z.Y. Lim *et al.* (2022) та M. Palace *et al.* (2024)	Enables a comprehensive explanation of professional decision-making in crisis situations

Source*: compiled by the authors*

As can be seen from Table 1, contemporary academic discourse views decision-making as a multi-component process that combines cognitive, emotional and moral-value-based mechanisms of behavioural regulation. Consequently, the results of the analysis indicate the multifactorial nature of the decision-making process under stressful conditions. At the same time, the specific features of professional decision-making by psychologists who work directly with people in crisis situations require further theoretical exploration. This is precisely why it is important to investigate the psychological mechanisms and factors that determine the effectiveness of a psychologist's professional decisions under stressful conditions. Professional decision-making is a crucial component of a psychologist's work, as the effectiveness of the psychological support provided to a client depends to a large extent on the appropriateness and timeliness of the chosen intervention strategies. In professional practice, psychologists are constantly faced with the need to assess a person's psychological state, determine appropriate psychodiagnostic methods, select suitable forms of psychological support, and predict the possible outcomes of psychocorrectional intervention. In the academic literature, the decision-making process is regarded as a complex cognitive process involving the analysis of a situation, the evaluation of alternatives and the selection of the most optimal course of action. In the work of a psychologist, this process has its own specific characteristics, as decisions are made under conditions of uncertainty, time constraints and a high level of responsibility for another person's psychological state.

The issue of professional decision-making takes on particular significance in stressful conditions. Stressful conditions can significantly affect a specialist's cognitive and emotional processes, reduce their ability to analyse information rationally, cause cognitive distortions and complicate the process of selecting optimal solutions. At the same time, under such conditions, intuitive thinking mechanisms based on professional experience and established professional skills may be activated. Based on a synthesis of scientific and practical findings, a psychological model of professional decision-making by psychologists under stressful conditions is proposed (Fig. 1).

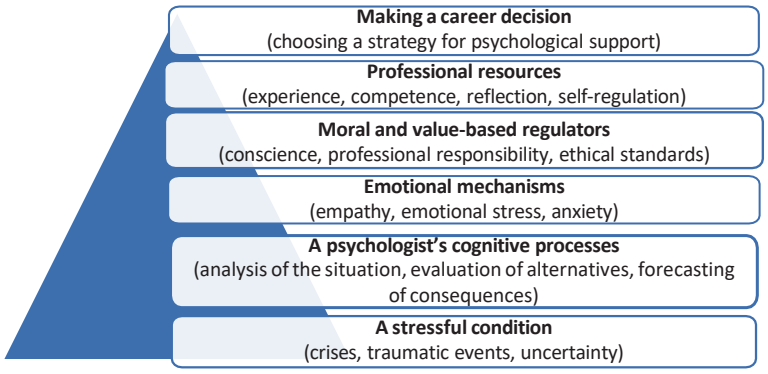

Figure 1. *A psychological model of professional decision-making by psychologists under stressful conditions*

Source*: compiled by the authors*

The proposed model reflects the key psychological mechanisms underlying a psychologist's professional decision-making under stressful conditions. It demonstrates the interrelationship between external stressors and the specialist's internal psychological processes. The decision-making process is viewed as the result of the interaction between cognitive processes of situation analysis, emotional experiences, moral and value-based regulators, and the psychologist's professional resources. Such an integrative model allows for a more comprehensive understanding of the specific nature of a psychologist's professional activity under conditions of heightened psychological strain. To illustrate the proposed model, examples are provided relating to wartime conditions, combat stress and the work of military psychologists:

1. Stressful condition: a military psychologist is working with a soldier who has just survived an artillery attack and is experiencing an acute stress reaction.

2. The psychologist's cognitive processes: the psychologist rapidly assesses the service member's condition, evaluates alternative support strategies (crisis counselling, stabilisation techniques) and predicts possible consequences for his mental health.

3. Emotional mechanisms: whilst working, the psychologist feels empathy for the client, but at the same time must control their own anxiety and emotional tension in order to remain effective.

4. Moral and value-based regulators: an example is a situation where the psychologist decides on the priority of assistance for several service personnel simultaneously, guided by professional responsibility and ethical standards.

5. Professional resources: the use of specific crisis intervention protocols, experience of working with PTSD, self-regulation skills and support from colleagues in the military unit.

6. Professional decision-making: based on analysis and available resources, the psychologist selects a strategy – for example, conducting a brief stabilisation conversation with a soldier and then referring them to a specialist centre for further support.

The process of professional decision-making by a psychologist in stressful conditions is determined by a combination of various factors, which can either contribute to the effectiveness of professional activity or complicate it. Cognitive factors include characteristics of thinking, attention and the ability to analyse information. In stressful conditions, there may be a reduction in concentration and a simplification of the process of analysing the situation. Emotional factors are linked to the processes of empathy, anxiety and responsibility for the outcomes of psychological support. In some cases, this may lead to secondary traumatisation or professional burnout. Professional factors include the specialist's level of training, practical experience, the development of professional competencies and self-regulation skills. Situational factors are linked to the specific conditions of professional activity: time constraints, the complexity of the psychological situation and the level of responsibility for the consequences of professional intervention. The combination of factors and the nature of their influence on a psychologist's decision-making are summarised in Table 2.

Table 2. *Factors influencing psychologists' professional decision-making under stressful conditions*

Factor group	Characteristics	Influence on the decision-making process
Cognitive	Thinking patterns, analysis of information, evaluation of alternatives, forecasting of consequences	They determine a psychologist's ability to analyse a situation rationally and select the optimal strategy for providing support
Emotional	Empathy, emotional strain, anxiety, empathy with the client	They can both enhance understanding of the client's psychological state and compromise the objectivity of the assessment of the situation
Moral and value-based	Conscience, professional ethics, accountability for the outcomes of support	Ensure the ethical regulation of professional decisions and an awareness of their possible consequences
Professional	Level of training, practical experience, professional competencies	Facilitate faster and more informed decision-making in complex psychological situations
Situational	Time constraints, complexity of the case, level of risk and uncertainty	May limit the scope for in-depth analysis of a situation and require rapid decisions
Psychological resources	Stress resilience, self-regulation, professional reflection	Help maintain the effectiveness of professional activity even in crisis situations

Source*: compiled by the authors*

Thus, the process of professional decision-making by a psychologist in stressful conditions is determined by the complex interplay of cognitive, emotional, moral and value-based, and professional factors. It is important to take into account that the effectiveness of this process largely depends on the professional's level of training, psychological resilience and ability to self-regulate under conditions of heightened psychological strain. Based on an analysis of contemporary research and a generalisation of psychological approaches to the problem of decision-making, a provisional classification of the types of psychologists' professional decisions under stressful conditions is proposed (Table 3).

Table 3. *Classification of the types of professional decisions made by psychologists under stressful conditions*

Type of professional decision	Content of the decision	Examples in a psychologist's practice
Diagnostic	Aimed at assessing the client's psychological state, identifying the problem and determining the direction of psychological support	Initial assessment of psychological and emotional state; determining the level of stress or trauma; for example, assessing the condition of a service member following artillery attack
Interventional	Relate to the selection of methods, techniques and strategies for psychological support, depending on the situation	Selection of crisis intervention; application of stabilisation or support techniques; for example, a stabilisation conversation with a soldier following a combat engagement
Ethical	Involve the selection of professionally and ethically acceptable actions, taking into account ethical standards and the principles of professional activity	Decisions regarding the limits of confidentiality; balancing client support with professional responsibility; for example, informing the command of a soldier's critical condition whilst upholding ethical standards
Situational-operative	Made under conditions of time pressure and a high level of uncertainty, when a rapid response is required	Responding to a crisis event; decision-making during a client's acute psychological reaction; for example, providing rapid assistance during a panic attack in a military unit

Table 3. *Continued*

Type of professional decision	Content of the decision	Examples in a psychologist's practice
Reflective-corrective	Aimed at analysing one's own professional activity and adjusting future actions	Reviewing the chosen support strategy; changing the approach to working with the client; for example, adjusting methods after working with a group of military personnel who have survived a combat incident

Source*: compiled by the authors*

The classification of types of professional decisions made by a psychologist in stressful conditions presented here allows for the systematisation of various aspects of their work and highlights the specific nature of their role. Diagnostic decisions are fundamental, as the effectiveness of subsequent support depends on the accuracy of the initial assessment. In a military context, this may involve the rapid determination of the level of combat stress or the identification of signs of an acute stress reaction in a service member. Intervention decisions reflect the choice of specific methods and techniques for psychological support, in particular the use of stabilisation techniques immediately following a combat incident or the provision of crisis counselling to prevent the development of PTSD. Ethical decisions take on particular significance in military contexts, as psychologists often face a dilemma between maintaining confidentiality and the need to inform the command of a service member's critical mental state. Situational and operational decisions demonstrate the psychologist's ability to act quickly under conditions of uncertainty, for example, by responding promptly to a panic attack in a military unit during combat operations. At the same time, reflective and corrective decisions ensure the psychologist's professional growth and adaptation, involving an analysis of the effectiveness of the techniques used after working with a group of military personnel and the corresponding adjustment of approaches in future practice. The proposed classification reflects various aspects of a psychologist's professional activity and demonstrates that the decision-making process in crisis situations involves not only cognitive analysis of the situation, but also ethical, emotional and reflective mechanisms of behavioural regulation. The practical significance of the study lies in the potential to use the proposed model and classification of professional decisions in the training of psychologists, as well as in the practice of psychological support in crisis and stressful conditions.

✦ Discussion

The results of the theoretical analysis revealed the complex and multi-faceted nature of the process by which psychologists make professional decisions under stressful conditions. The analysis of scientific research carried out suggests that the effectiveness of decision-making in crisis situations is determined by the interaction of cognitive, emotional and personality factors. The data obtained are consistent with the findings of recent studies, which have confirmed that stress can significantly influence human cognitive processes, in particular the ability to analyse information rationally and evaluate alternatives. In particular, the works of J.S. Lerner *et al.* (2015) and A.J. Porcelli & M.R. Delgado (2017) show that elevated stress levels can alter decision-making patterns, leading to an increase in intuitive or impulsive behavioural strategies. These findings are consistent with the data obtained, as well as with conclusions regarding the impact of stress on risk-taking and the assessment of uncertainty.

The present study has demonstrated consistency with contemporary Ukrainian research, which emphasises the importance of emotional and personality factors in the decision-making process. In particular, the findings of A.O. Kononenko (2025) indicated a close relationship between emotional states and decision-making styles, whereby heightened anxiety may contribute to the formation of impulsive behavioural strategies. The work of V.V. Plokhikh & D.O. Koverdyuk (2025) established that stress alters the nature of decision-making, can intensify emotional reactions and reduce the effectiveness of rational analysis of a situation. Research by T.D. Shcherban *et al.* (2025) has shown that heightened levels of uncertainty and risk can alter behavioural decision-making strategies and contribute to the development of more cautious or conservative patterns of behaviour.

The model of professional decision-making by psychologists under stressful conditions proposed in this article reflects the integrative nature of this process and demonstrates the interconnection between external stressors and the internal psychological mechanisms underlying the specialist's activity. Unlike the approaches of E.J. Kim & J.J. Kim (2023), W.B. Johnson *et al.* (2024) and L.F. Sarmiento *et al.* (2024), the proposed model places particular emphasis on moral and value-based mechanisms of behavioural regulation, specifically the role of professional responsibility and conscience in the psychologist's decision-making process. The classification of types of professional decisions made by psychologists in crisis situations, developed in this study, allows for a more systematic description of the structure of a specialist's professional activity and is consistent with contemporary approaches to the analysis of cognitive, emotional and moral-value-based decision-making mechanisms. The model of a psychologist's professional decision-making under stressful conditions could form the basis for the development of training programmes for military psychologists, with particular emphasis on developing cognitive skills for rapid situation analysis, building stress resilience and emotional regulation, as well as raising awareness of the moral and value-based aspects of professional activity. The classification of types of professional decisions has made it possible to structure the practical work of a military psychologist and to identify priority areas of work in crisis situations – ranging

from assessing a service member's condition to making operational decisions in a combat environment. This helps to improve the effectiveness of psychological support, reduce the risk of professional burnout and ensure greater coherence between the psychologist's individual actions and the overall system of psychological support within military units. Thus, the results of the theoretical analysis conducted confirmed that the effectiveness of a psychologist's professional decisions under stressful conditions depends not only on the cognitive processes involved in analysing a situation, but also on the level of emotional resilience, the development of professional competencies, and the moral and value-based regulators of behaviour.

✦ Conclusions

The theoretical analysis carried out has led to the conclusion that professional decision-making by psychologists under stressful conditions is a complex, multi-level process determined by the interaction of cognitive, emotional and moral-value mechanisms. It was found that stress factors can significantly influence a specialist's cognitive processes, reducing their ability to analyse a situation rationally. At the same time, professional experience, along with established skills in self-regulation and reflection, contributed to enhancing the effectiveness of the psychologist's professional activity even in complex crisis situations. A synthesis of contemporary scientific approaches has made it possible to identify the key factors determining the effectiveness of decision-making: cognitive (analysis, forecasting, evaluation of alternatives), emotional (empathy, anxiety, emotional regulation), moral and value-based (conscience, professional responsibility, ethical standards) and professional resources (experience, competence, self-regulation skills). Based on these factors, an original classification of types of professional decisions made by psychologists in crisis situations was developed: diagnostic, intervention, ethical, situational-operational and reflective-corrective. Each of these types reflected the specific nature of the psychologist's work and demonstrated different strategies for responding to stressful conditions. The proposed psychological model of a psychologist's professional decision-making under stressful conditions reflected the integrative nature of this process. It demonstrated the interconnection between external stressors and the specialist's internal psychological mechanisms, as well as the phased nature of decision-making: from the initial assessment of the situation to the selection of the optimal strategy for providing assistance. Particular attention was paid to moral and value-based regulators, which ensured the psychologist's professional responsibility and ethical conduct even under extreme conditions, particularly in the military sphere. A promising direction for further research has been identified as a more in-depth study of specialists' psychological resources and the development of intervention programmes aimed at supporting their effectiveness in crisis situations.

✦ Acknowledgements

None.

✦ Funding

None.

✦ Conflict of Interest

There is no conflict of interest. The authors of the article did not take part in the peer-review process or in editorial decisions regarding their own manuscript.

✦ References

[1] Artemov, V.Y., & Synhaivska, I.V. (2022). Features of decision-making processes under uncertainty. *Economy and State*, 65, 149-163. doi: 10.31732/2663-2209-2022-65-149-163.

[2] Johnson, W.B., Barnett, J.E., & Elman, N.S. (2024). Ethical decision-making models in psychology: Applications to contemporary professional challenges. *American Psychologist*, 79(1), 52-64. doi: 10.1037/amp0001194.

[3] Kim, E.J., & Kim, J.J. (2023). Neurocognitive effects of stress: A metaparadigm perspective. *Molecular Psychiatry*, 28, 2750-2763. doi: 10.1038/s41380-023-01986-4.

[4] Knapp, S., Gottlieb, M., & Handelsman, M. (2013). Ethical decision making for practicing psychologists. *Professional Psychology: Research and Practice*, 44(5), 307-313. doi: 10.1037/a0033541.

[5] Kononenko, A.O. (2025). Psychological characteristics of the interrelationship between emotional states and decision-making styles in youth. *Bulletin of Taras Shevchenko National University of Kyiv. Psychology*, 1(21), 58-63. doi: 10.17721/BPSY.2025.1(21).7.

[6] Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.

[7] Lerner, J.S., Li, Y., Valdesolo, P., & Kassam, K.S. (2015). Emotion and decision making. *Annual Review Psychology*, 66, 799-823. doi: 10.1146/annurev-psych-010213-115043.

[8] Levitt, H.M., *et al.* (2025). Broadening the evidentiary basis for clinical practice guidelines: Recommendations from qualitative psychotherapy researchers. *American Psychologist*, 80(3), 389-410. doi: 10.1037/amp0001363.

[9] Lim, I.C.Z.Y., Tam, W.S., Chudzicka-Czupała, A., McIntyre, R.S., Teopiz, K.M., Ho, R.C., & Ho, C.S.H. (2022). Prevalence of depression, anxiety and post-traumatic stress in war- and conflict-afflicted areas: A meta-analysis. *Frontiers in Psychiatry*, 13, article number 978703. doi: 10.3389/fpsyt.2022.978703.

[10] Mann, L., Burnett, P., Radford, M., & Ford, S. (1998). The Melbourne Decision Making Questionnaire: An instrument for measuring patterns for coping with decisional conflict. *Journal of Behavioral Decision Making*, 10(1). doi: 10.1002/(SICI)1099-0771(199703)10:1<1::AID-BDM242>3.0.CO;2-X.

[11] Martsyniak-Dorosh, O., Shykula, O., Medvid, I., & Oliinyk, A. (2025). Psychological assistance using the acceptance and commitment therapy (ACT) method for victims in emergency situations. *Scientific Innovations and Advanced Technologies*, 11(51), 1639-1654. doi: 10.52058/2786-5274-2025-11(51)-1639-1654.
[12] Maslach, C., & Leiter, M.P. (2017). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103-111. doi: 10.1002/wps.20311.
[13] Mateiko, N., Ivantsev, L., Hasiuk, M., Krykun, L., Medvid, I., & Kashpur, Y. (2025). The role of constructive coping strategies in the psychological well-being of military personnel in extreme situations. *BRAIN: Broad Research in Artificial Intelligence and Neuroscience*, 16(3). doi: 10.70594/brain/16.3/21.
[14] Nordahl-Hansen, A., Cogo-Moreira, H., Panjeh, S., & Quintana, D.S. (2024). Redefining effect size interpretations for psychotherapy RCTs in depression. *Journal of Psychiatric Research*, 169, 38-41. doi: 10.1016/j.jpsychires.2023.11.009.
[15] Palace, M., Zamazii, O., Terbeck, S., Bokszczanin, A., Berezovski, T., Gurbisz, D., & Szwejka, L. (2024). Mapping the factors behind ongoing war stress in Ukraine-based young civilian adults. *Applied Psychology: Health and Well-Being*, 16(3), 868-885. doi: 10.1111/aphw.12493.
[16] Plokhikh, V.V., & Koverdyuk, D.O. (2025). Peculiarities of decision-making by students in a state of moderate stress. *Science and Education*, 1. doi: 10.24195/2414-4665-2025-1-4.
[17] Pomytkina, L., Gudmanian, A., Kovtun, O., & Yahodzinskyi, S. (2020). Personal choice: Strategic life decision-making and conscience. *E3S Web of Conferences*, 164, article number 10021. doi: 10.1051/e3sconf/202016410021.
[18] Pomytkina, L.V., Pomytkin, Y.O., & Yakovytska, L.S. (2024). Impact of professionally important qualities of patrol police officers on decision-making strategies. *Insight: The Psychological Dimensions of Society*, 11, 321-341. doi: 10.32999/2663-970X/2024-11-17.
[19] Porcelli, A.J., & Delgado, M.R. (2017). Stress and decision-making: Effects on valuation and risk preferences. *Current Opinion in Behavioral Sciences*, 14, 33-39. doi: 10.1016/j.cobeha.2016.11.015.
[20] Predko, V.V., Danyliuk, I.V., & Schabus, M. (2023). Psychological characteristics of the relationship between mental health and hardiness of Ukrainians during the war. *Frontiers in Psychology*, 14, article number 1282326. doi: 10.3389/fpsyg.2023.1282326.
[21] Pruessner, L., & Ortner, C.N.M. (2025). Adaptiveness of emotion regulation flexibility according to long-term implications. *Journal of Affective Disorders*, 379. doi: 10.1016/j.jad.2025.02.114.
[22] Quinlan, E., Collison, J., Deane, F.P., Gooi, C.H., & Paparo, J. (2024). Educator experiences with postgraduate psychology students exhibiting professional competence issues. *Ethics & Behavior*, 35(4), 277-295. doi: 10.1080/10508422.2024.2370780.
[23] Riepenhausen, A., Wackerhagen, C., Reppmann, Z.C., Deter, H.-C., Kalisch, R., Veer, I.M., & Walter, H. (2022). Positive cognitive reappraisal in stress resilience, mental health, and well-being: A comprehensive systematic review. *Emotion Review*, 14(4), 310-331. doi: 10.1177/17540739221114642.
[24] Rønnestad, M.H., Orlinsky, D.E., & Willutzki, U. (2025). Exploring influences of supervision on psychotherapists' professional development: Correlates across career-level cohorts. *Counselling Psychology Quarterly*, 38(2), 297-319. doi: 10.1080/09515070.2024.2378879.
[25] Sandi, C. (2013). Stress and cognition. *Wiley Interdisciplinary Reviews. Cognitive Science*, 4(3), 245-261. doi: 10.1002/wcs.1222.
[26] Sarmiento, L.F., Lopes da Cunha, P., Tabares, S., Tafet, G., & Gouveia Jr, A. (2024). Decision-making under stress: A psychological and neurobiological integrative model. *Brain, Behavior, & Immunity – Health*, 38, article number 100766 doi: 10.1016/j.bbih.2024.100766.
[27] Schubert, S., Buus, N., Monrouxe, L.V., & Hunt, C. (2023). The development of professional identity in clinical psychologists: A scoping review. *Medical Education*, 57(7), 612-626. doi: 10.1111/medu.15082.
[28] Shcherban, T.D., Bretsko, I.I., & Korolovych, O.O. (2025). Psychology of risk in economic decision-making under martial law: Evidence from Ukraine. *Problems of Economics and Political Economy*, 31(3), 337-363. doi: 10.1515/peps-2024-0053.
[29] Shymanskyi, A. (2024). Contemporary psychological perspectives on personal readiness for professional activity. *Personality and Environmental Issues*, 3(1), 31-37. doi: 10.31652/2786-6033-2024-3(1)-31-37.
[30] Sousa, C., & Veronese, G. (2022). "No safe place": Applying the transactional stress and coping model to active warfare. *Psychological Trauma: Theory, Research, Practice, and Policy*, 14(4), 558-567. doi: 10.1037/tra0001023.
[31] Varina, H., & Medvid, I. (2025). The impact of motivational and personality factors on the rehabilitation process of patients with musculoskeletal injuries. *Problems of the Humanitarian Sciences: Psychology*. doi: 10.32782/2312-8437.55.2025-1.4.
[32] Wang, F., Liu, D., & Zhang, M. (2024). Metacognitive processes, situational factors, and clinical decision-making in nursing education: A quantitative longitudinal study. *BMC Medical Education*, 24, article number 1530. doi: 10.1186/s12909-024-06467-y.
[33] Wu, X. (2025). Review of risk decision-making theory. *International Journal of Finance and Investment*, 3(1), 46-50. doi: 10.54097/7bd1z416.

[34] Yilmaz, S., & Kafadar, H. (2024). Decision-making under stress: Executive functions, analytical intelligence, somatic markers, and personality traits in young adults. *Applied Neuropsychology: Adult*, 31(6), 1313-1327. doi: 10.1080/23279095.2022.2122829.
[35] Zasiekina, L.V., & Martyniuk, A.O. (2025). War-related continuous traumatic stress as a mediator of moral distress and professional quality of life in nurses. *BMC Nursing*. doi: 10.1186/s12912-024-02668-4.

Прийняття професійних рішень психологом в умовах стресу: психологічні механізми та фактори впливу

Любов Помиткіна
Доктор психологічних наук, професор
Національний університет «Київський авіаційний інститут»
03058, проспект Любомира Гузара, 1, м. Київ, Україна
https://orcid.org/0000-0002-2148-9728
Едуард Помиткін
Доктор психологічних наук, професор,
Український гуманітарний інститут
08292, вул. Інститутська, 14, м. Буча, Україна
https://orcid.org/0000-0001-8416-7067

✦ Анотація. У статті здійснено теоретичний аналіз психологічних механізмів прийняття професійних рішень психологом у стресових умовах, зокрема у контексті військової діяльності та бойового стресу. Метою статті було визначення основних психологічних чинників та механізмів, що впливають на процес прийняття професійних рішень психологом у ситуаціях підвищеного психологічного навантаження, включаючи кризові та бойові умови. Методологічну основу дослідження становили методи теоретичного аналізу, узагальнення та систематизації сучасних наукових праць з проблеми прийняття рішень у стресових умовах. Проаналізовано результати сучасних досліджень, присвячених впливу емоційних, когнітивних і особистісних чинників на процес прийняття рішень. Визначено основні групи факторів, що впливають на прийняття професійних рішень психологом: когнітивні, емоційні, морально ціннісні, професійні та ситуативні. Запропоновано авторську модель прийняття професійних рішень психологом у стресових умовах, яка відображає взаємодію зовнішніх стресових чинників (зокрема бойових ситуацій) та внутрішніх психологічних механізмів діяльності фахівця. Розроблено класифікацію типів професійних рішень психолога у кризових умовах (діагностичних, інтервенційних, етичних, ситуативно оперативних та рефлексивно корекційних), що дозволяє системно описати професійну діяльність у військовій сфері. Особливу увагу приділено ролі професійного досвіду, емпатії, совісті, рефлексії та внутрішньої відповідальності фахівця у процесі прийняття рішень у кризових та бойових умовах. Підкреслено, що поєднання аналітичного та інтуїтивного мислення сприяє підвищенню ефективності професійної діяльності психолога та забезпеченню психологічної підтримки військовослужбовців. Практичне значення отриманих результатів полягає у можливості їх використання для вдосконалення системи психологічного забезпечення в умовах війни, розроблення програм розвитку стресостійкості та професійної надійності психологів

✦ Ключові слова: професійна діяльність; умови війни; бойові дії; емпатія; совість

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡si»y ofi U¾¡ai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 52-61
✦ ISSN 2617-6858
✦ E-ISSN 2617-6866
✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ UDC 159.9:355.23:623.764
✦ DOI: 10.33099/2617-6858-26-21-4-52-61

Structure and content of special psychological training programme for anti-aircraft missile forces personnel in the context of countering massive combined strikes by the Russian Federation

Kostiantyn Sydorov
Adjunct
National Defence University of Ukraine
03049, 28 Povitrianykh Syl Ave., Kyiv, Ukraine
https://orcid.org/0009-0009-4753-5292

Hanna Stashevska*
Course Participant
National Defence University of Ukraine
03049, 28 Povitrianykh Syl Ave., Kyiv, Ukraine
https://orcid.org/0009-0002-3200-7226

Artem Filippskyi
Adjunct
National Defence University of Ukraine
03049, 28 Povitrianykh Syl Ave., Kyiv, Ukraine
https://orcid.org/0009-0008-3725-1643

✦ Abstract. The paper substantiated the structure and content of the programme of special psychological training of anti-aircraft missile forces specialists of the Air Forces of the Armed Forces of Ukraine in the conditions of countering massive combined enemy strikes. The relevance of the study is conditioned by the discrepancy between conventional approaches to psychological training and the destructive load of contemporary high-tech warfare: intensive use of unmanned aerial vehicles and various types of missile weapons by the enemy, continuous combat operations for 5-8 hours, lack of time for decision-making, and awareness of the consequence of error cause cognitive inhibition, physiological exhaustion and the risk of psychological disruption of operators of anti-aircraft missile systems. The transition to control systems with elements of artificial intelligence additionally requires digital stress tolerance and critical thinking from combat services. The purpose of the study was to substantiate the integral structure and content of the programme of special psychological training of anti-aircraft missile forces specialists, aimed at improving the combat capability of combat services of anti-aircraft missile systems and preserving the mental health of military personnel. The methods of analysis were theoretical analysis, systematisation, and generalisation of Ukrainian and international scientific sources of military psychology, analysis of the experience of combat operations of air defence units of Ukraine in 2022-2026, comparative analysis, structural and functional modelling. A five-stage model of specialised psychological training has been developed, based on the principles of dynamic adaptation and a person-centred approach. It covered: professional and psychological selection with input screening of psychophysiological and cognitive indicators; basic training that combines psycho-education on the neurobiology of combat stress, stress hardening by dosed modelling of loads within the optimal stimulus range and cognitive immersion by means of virtual reality; psychological coordination of combat services and the fostering of group resilience through a common mental model, vertical trust, and horizontal cohesion; mutual monitoring of performance on the principle of "peer-to-peer" based on somatic, sensory and visual, communicative and speech fatigue markers using Express micro-

Suggested Citation:
Sydorov, K., Stashevska, H., & Filippskyi, A. (2026). Structure and content of special psychological training programme for anti-aircraft missile forces personnel in the context of countering massive combined strikes by the Russian Federation. *Bulletin of National Defence University of Ukraine*, 21(4), 52-61. doi: 10.33099/2617-6858-26-21-4-52-61.

Article's History: Received: 05.04.2026; Revised: 24.07.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (annyshka.cadet@gmail.com)

interventions; post-combat decompression with group debriefing, psychological recovery of personnel by means of virtual reality and output screening, which closes the feedback loop of the programme. The practical significance of the study consists in the possibility of introducing the proposed model into the combat training system of anti-aircraft missile forces units, which will ensure the development of stable psychological readiness of personnel, maintaining professional reliability of combat services, preventing post-traumatic stress disorders, and preserving the combat potential of air defence units

✦ Keywords: psychological readiness; combat stress; group resilience; stress hardening; cognitive stability; anti-aircraft complex service; virtual reality technologies

✦ Introduction

The full-scale aggression of the Russian Federation against Ukraine has created a qualitatively new type of combat environment for the air defence forces: massive combined strikes, which are aimed at overloading the air defence system with simultaneous, different types and different heights of air targets, and combine the layered use of unmanned aerial vehicles, cruise, ballistic and aeroballistic missiles against the backdrop of intense electronic warfare. During combat operations to repel such an attack, the operator of an anti-aircraft missile system operates in a state that combines high alert and extreme stress, lack of time for decision-making, and awareness of the extremely high cost of error, because the lives of the civilian population and the preservation of the state's critical infrastructure depend directly on the precision of their actions. The experience of contemporary wars shows that the effectiveness of air defence is determined not only by the tactical and technical characteristics of weapons, but also by the psychological readiness of personnel: the human factor becomes the most critical and sensitive component of the state's air defence system. An additional challenge is the transition of anti-aircraft missile systems to control systems with elements of artificial intelligence, which generates a new type of professional stress – algorithmic alarm of combat personnel.

The analysis of recent studies and publications indicates an increase in scientific interest in the problem of psychological training of military personnel in high-tech warfare. Methodological bases for ensuring the psychological stability of military personnel directly in the conditions of combat operations were substantiated in the study by O. Kokun *et al*. (2022). Current challenges of psychological support of personnel in combat conditions, considering the transformation of the nature of armed conflict, were systematised by V. Aleshchenko & O. Kokun (2025). The mental stability of a soldier as an integral characteristic that acts as an indispensable guarantee of combat activity was revealed in the study by O. Khmiliar (2023). Social and individual determinants of activity, determination and resilience of Ukrainian servicemen in wartime conditions have been empirically investigated by I. Diachenko *et al*. (2024). The methodology for assessing the moral and psychological state of military personnel, including indicators of group cohesion and trust, in accordance with the practice of the Armed Forces of the leading NATO member countries was streamlined by V. Dykun *et al*. (2023). The subject dimension of a serviceman's behaviour in war and the psychological lessons of mass armed conflicts were analysed by V. Osodlo & T. Traverse (2022).

Despite a significant scientific background, there are still unresolved contradictions in the system of psychological training of specialists of the anti-aircraft missile forces. Firstly, conventional methods do not correspond to the real nature of the destructive load on combat personnel, which combines massive and high intensity of air attacks, physiological exhaustion due to prolonged combat operations, and ultra-high moral and psychological pressure due to awareness of the price of error. The existing approaches do not provide the development of the ability to effectively filter information and quickly make decisions in a matter of seconds, which in combat conditions leads to the suppression of rational thinking under the influence of acute stress response, loss of fine motor skills, and cognitive inhibition. Secondly, there are not enough scientifically based technologies for transforming individual psychological stability into collective combat capability directly when repelling a massive combined strike, in particular, a complete system of diagnostic and corrective actions that would allow personnel to quickly apply mutual support protocols based on objective fatigue markers to prevent critical decompensation among combat personnel (Kokun *et al*., 2022; Dykun *et al*., 2023). Thirdly, there is no clear algorithm for post-combat psychological support: conventional relaxation methods demonstrate only partial effectiveness after many hours of air attacks, and the potential of immersive virtual reality technologies and group debriefing in the recovery system of anti-aircraft missile forces specialists remains scientifically unexplored. These contradictions determine the relevance of developing an updated programme of special psychological training adapted to the conditions of countering massive combined blows.

The purpose of the study was to develop and scientifically substantiate a promising model of the programme of special psychological training for the anti-aircraft missile forces personnel of the Air Forces of the Armed Forces of Ukraine, capable of ensuring the sustained combat effectiveness of the combat crew of an air defence missile system during combat operations and their long-term professional reliability. Achieving the goal involved solving the following tasks: to analyse the specific factors of combat stress of anti-aircraft missile forces personnel in the conditions of repelling massive combined strikes; to substantiate the stage structure of the programme of special psychological

training, the content of each stage, and the tools for verifying its effectiveness; to determine the psychological mechanisms for the development of individual and group resilience of combat services. The scientific originality of the study was to substantiate the five-stage model of special psychological training programme for anti-aircraft missile forces personnel, which for the first time systematically integrated professional and psychological selection, stress hardening with the use of virtual reality technologies, psychological coordination of combat services, mutual monitoring of performance on the principle of "peer-to-peer", post-combat decompression and psychological recovery into a single continuous cycle, adapted to the conditions of countering massive combined enemy strikes.

✦ Materials and Methods

The research was theoretical in nature and was aimed at the conceptual substantiation of the structure and content of the special psychological training programme for anti-aircraft missile forces personnel in the conditions of countering massive combined enemy strikes. In accordance with the tasks set, a complex of complementary general scientific and special methods of the theoretical level was applied, namely, the research was implemented in three consecutive stages: analytical (highlighting the factors of combat stress and analysing the degree of development of the problem), synthetic (systematisation of psychological mechanisms for the development of individual and group stability), and constructive (building the author's model of the training programme and determining the tools for verifying its effectiveness).

The study was based on three groups of sources. The first group consisted of scientific publications by Ukrainian researchers in 2021-2025 on the problems of psychological support for the activities of military personnel in the conditions of the Russian-Ukrainian war, in particular, on ensuring the psychological stability of personnel in combat conditions, the mental stability of a soldier, current challenges of psychological support (Kokun *et al*., 2022; Khmiliar, 2023; Aleshchenko & Kokun, 2025). This group also included studies of psychoprophylactic work with military personnel of groups of enhanced psychological attention and methodology for assessing the moral and psychological state of troops (Kolesnichenko *et al*., 2021; Dykun *et al*., 2023). The second group consisted of international studies on the psychology of combat stress, team interaction, and stress-resistant training, including classical concepts of stress grafting and the neurobiology of acute stress response (Meichenbaum, 1985; Goleman, 2005; Grossman & Christensen, 2008). The concepts of joint mental models of the team and collective effectiveness also retain methodological significance for designing innovative training programmes (Cannon-Bowers *et al*., 1993; Zaccaro *et al*., 1995). A separate subgroup consisted of studies on the use of virtual reality technologies in stress-resistant training of military personnel (Rizzo *et al*., 2012; Pallavicini *et al*., 2016). The third group was formed by regulatory and methodological documents and programme materials on the control of combat and operational stress, reflecting the practice of the armed forces of NATO member countries, in comparison with analytical materials on the experience of combat operations of air defence units of Ukraine in 2022-2026 (Department of the Army, 2006; Reivich *et al*., 2011). The criteria for selecting sources were defined as: relevance of the subject of research, scientific verification, priority of publications of the last 3-5 years to reflect the current state of the problem and preserve classical works that make up the conceptual foundation of stress-resistant training.

Theoretical analysis and synthesis of scientific sources were used to solve the first task of the study – identifying specific factors of combat stress of specialists of the anti-aircraft missile forces. The analytical procedure provided for the decomposition of the professional activity of the combat crew of an anti-aircraft missile system when repelling a massive combined strike, followed by the correlation of its structural elements with the corresponding mental processes (perception, attention, thinking, decision-making) and types of load on them (Kokun *et al*., 2022). The methods of systematisation and generalisation were used to organise the selected factors of destructive load into three categories: information (identification of false and real targets in the conditions of electronic warfare); psychophysiological (exhaustion due to prolonged continuous combat operations); and ethical and psychological (awareness of the price of error in protecting the population and critical infrastructure). This systematisation determined the targets of psychological influence that the content of each stage of the training programme should be directed at, and provided a meaningful correspondence between the structure of destructive factors and the structure of the model.

The comparative analysis is applied in two areas: firstly, to compare conventional approaches to the psychological training of personnel with the real nature of the loads that arise when repelling massive combined strikes, which allowed identifying areas of critical non-compliance of existing practice with current requirements; secondly, to correlate the Ukrainian experience of psychological support of combat activities with approaches implemented in the practice of the armed forces of NATO member countries, in particular, the doctrine of combat and Operational Stress Control and programmes for the development of military resilience (Department of the Army, 2006; Reivich *et al*., 2011; Dykun *et al*., 2023).

Structural and functional modelling has become the leading method for solving the second and third research tasks – constructing the model of the programme of special psychological training and determining the psychological mechanisms of individual and group resilience development. The construction of the model was carried out according to the logic of a full cycle of psychological support of a specialist: from professional and psychological selection through basic training and coordination of combat services to maintaining working capacity directly during combat operations and post-combat recovery. For each stage,

the goal, psychological mechanisms that it is aimed at activating, content, and expected results were determined. Functional connections between the stages were designed according to the principle of continuity of psychological support, in which the results of each previous stage were the initial conditions for the next, and the data of input and output screenings form a feedback loop for verifying the effectiveness of the programme as a whole, which completed the solution of the second research task.

The methodological basis of the study was primarily the subject-action approach developed by the Ukrainian school of psychology, according to which military personnel are regarded as active agents capable of self-regulating their own functional states under extreme operational conditions (Maksymenko, 2006). The second methodological basis was the concept of stress inoculation, which substantiated the development of resistance to critical loads through dosed modelling of stressful situations in controlled conditions, considering the natural relationship between the level of stimulus and performance (Yerkes & Dodson, 1908; Meichenbaum, 1985). The mechanisms of transformation of individual psychological stability into group combat capability are revealed based on the concepts of collective efficiency and joint mental models (Cannon-Bowers *et al*., 1993; Zaccaro *et al*., 1995). Ultimately, the human-centred approach to psychological support of personnel has defined the preservation of mental health of a serviceman as an independent value and a condition for long-term professional reliability (Aleshchenko & Kokun, 2025). The research was conducted in compliance with the principles of academic integrity; the sources used were cited in accordance with the requirements of scientific ethics. A limitation of the study is its theoretical nature: the proposed model has not been experimentally tested at this stage, and its effectiveness is substantiated conceptually.

✦ Results and Discussion

The analysis of the combat experience of the Ukrainian air defence units in 2022-2026 showed that during the repelling of massive combined strikes, the operator of the combat service of an anti-aircraft missile system experiences three types of destructive load: informational (identification of false and real targets against the background of electronic countermeasures), psychophysiological (exhaustion due to long-term, often overtime combat operations), and ethical and psychological (awareness of the cost of error in protecting the population and critical infrastructure). This load structure determined the targets of psychological impact and the logic of constructing the author's model.

The developed programme of special psychological training is based on two fundamental principles. The principle of dynamic compliance assumes that the content of training is promptly updated based on the results of an analysis of current trends in combat operations. The principle of human-centredness determines that the effectiveness of any type of weapons and military equipment is realised only through a professionally and psychologically trained operator, and the preservation of his mental health is an independent value and a condition for long-term professional reliability (Aleshchenko & Kokun, 2025). The model covers five consecutive stages united by the principle of continuity of psychological support (Table 1).

Table 1. *Structure of the programme of special psychological training for the anti-aircraft missile forces personnel*

Stage	Purpose	Leading psychological mechanisms	Main content
1. Professional and psychological selection	Recruitment of combat crews comprising personnel with the required level of professionally relevant qualities	Prognostic diagnosis of neuropsychiatric stability	Psychophysiological, cognitive and intellectual screening; study of individual psychological profile
2. Basic special psychological training	Development of individual psychological stability and readiness	Stress inoculation; cognitive reassessment of the threat	Psycho-education on the neurobiology of combat stress; dosed modelling of stress; cognitive immersion by means of virtual reality
3. Psychological coordination of combat services	Development of group resilience	Shared mental model; synchronisation of trust; collective efficiency	Trainings of team interaction; modelling of crisis situations; working out interchangeability
4. Monitoring of working capacity during combat operation	Maintaining stable performance during impact deflection	Mutual control of fatigue markers; inhibition of acute stress response	"Peer-to-peer" system; express micro-interference; code phrases as inhibitors
5. Decompression and recovery	Maintaining mental health and long-term professional reliability	Activation of parasympathetic regulation; collective understanding of experience	Group debriefing; virtual reality recovery; output screening

Source*: compiled by the authors*

Stage 1. Professional and psychological selection (input screening). The goal of the stage is not only to assess the candidate's health status, but also the individual psychological profile to identify people with high neuropsychic stability, rapid sensorimotor reaction, and the ability to concentrate for a long time under the conditions of a complex interference. Candidates prone to latent aggression, panic attacks, or depressive states are not eligible for selection into combat crews; for working with service personnel who, according to the screening results, require additional attention, algorithms for psychoprophylactic work with groups requiring enhanced psychological attention – developed through Ukrainian practice – are employed (Kolesnichenko *et al*., 2021). The content of the stage covers: psychophysiological screening (registration of heart rate variability due to a sharp change in the

operational environment, tremometry, assessment of sensorimotor reactions); cognitive screening (distribution and volume of attention, cognitive flexibility, noise immunity); screening of intellectual development. The results of incoming screening are recorded and then serve as a reference point for comparison to verify the effectiveness of the programme.

Stage 2. Basic special psychological training. The goal of the stage is to form psychological stability and readiness of a specialist to work as part of a combat crew through a combination of psycho-education on the neurobiology of combat stress with practical training using the stress inoculation method (Meichenbaum, 1985; Kokun *et al*., 2022). The psycho-educational component involves the personnel's assimilation of the mechanism of acute stress response: activation of the amygdala as a "threat detector" triggers the "hit, run, or freeze" reaction, which is accompanied by the release of adrenaline and cortisol and manifests itself in narrowing of the field of vision and auditory perception, loss of fine motor skills, and cognitive inhibition (Grossman & Christensen, 2008). In the scientific literature, this condition is described as "amygdala abduction" – suppression of rational thinking under the influence of stress hormones (Goleman, 2005). The operator's awareness of the neurobiological nature of their own reactions is a prerequisite for the transition to their arbitrary regulation.

The practical component is implemented according to the method of stress grafting, which provides for three consecutive phases: conceptual (awareness of the impact of combat stress on the ability to perform functional duties as part of combat personnel), the phase of development and testing of skills (mastering specific techniques for maintaining combat capability), and the phase of applying skills in conditions as close as possible to combat (Meichenbaum, 1985). The effectiveness of this technique in reducing anxiety and improving performance has been confirmed meta-analytically (Saunders *et al*., 1996). The leading technique is the dosed modelling of stress: a serviceman receives a controlled stress load of increasing intensity, which allows the psyche to develop programmes of cognitive and emotional protection. The regulatory guideline is the regularity according to which for the successful performance of the activity there is an optimal stimulus, and its excess reduces efficiency; dosed modelling forms the operator's ability to consciously maintain the functional state within this optimum with an increase in external pressure (Yerkes & Dodson, 1908). As a result, destructive stress (distress) is transformed into a functional state of mobilisation (eustress), and the role of the amygdala in the structure of emotional response changes: from the trigger of an uncontrolled reaction, it turns into a source of signal information about the threat, to which the operator responds professionally, according to established algorithms of combat operations. Since conventional simulators do not reproduce the level of information and psychological pressure of a massive combined strike, the key tool of the skills application phase is defined as virtual reality technologies, the effectiveness of which in stress-resistant training of military personnel is confirmed, in particular, by the experience of the Stress Resilience In Virtual Environments (STRIVE) programme and systematic reviews of the use of virtual reality in stress management in the armed forces (Rizzo *et al*., 2012; Pallavicini *et al*., 2016). They provide cognitive immersion of a serviceman in simulated conditions of intensive combat operations, where automation of decisions is worked out in conditions of acute time constraints.

Stage 3. Psychological coordination of combat services and development of group resilience. The goal of the stage is to transform the individual psychological stability of military personnel into the collective combat capability of the unit. Psychological coordination is defined as the process of purposeful establishment of inter-individual connections, cognitive interaction and psychological compatibility of military personnel, which ensures the effectiveness of joint combat operations in extreme conditions. The conceptual basis of the stage is the provisions on collective efficiency and joint mental models of the team (Cannon-Bowers *et al*., 1993; Zaccaro *et al*., 1995). The development of group resiliency is implemented through four consecutive components. The first – development of a joint mental model that provides a synchronised understanding by each member of the combat crew of the current situation, interaction algorithms, and predicted actions of colleagues in conditions of time scarcity; the result is a reduction in team anxiety, optimisation of intra-group communication and proactive coordination of actions without additional discussions (Cannon-Bowers *et al*., 1993). The second – synchronisation of trust in two vectors: institutional vertical trust in the "commander-subordinate" system, the significance of which is confirmed by data on the influence of the leader on the stability of subordinates under operational stress and horizontal cohesion between military personnel as a component of the moral and psychological state of the unit (Bartone, 2006; Dykun *et al*., 2023). The third is psychological hardening by modelling intense combat situations: training of team interaction with the distribution of functional responsibilities, working out interchangeability scenarios, and synchronising the pace of combat operations, which strengthens the mental stability of each serviceman as a guarantee of combat activity (Khmiliar, 2023). The fourth is the conversion of combat stress into collective purposeful activity: individual anxiety is transformed into structured joint combat operation, and the verified presence and confident actions of fellow soldiers in the confined space of combat operation are a factor that compensates for the deprivation effects of an isolated environment and prevents individual psychological breakdown.

Stage 4. Monitoring the performance of combat personnel based on "peer-to-peer" principle. The goal of the stage is to maintain a stable level of performance of personnel during the entire period of repelling a massive combined strike. The specifics of the activity of combat personnel during this period are characterised by a discrete

combination of vigilant waiting and hyper-loading lasting from 5 to 8 hours, which determines the rapid development of acute fatigue, somato-motor stress, and exhaustion of sensory systems; these factors threaten to reduce the reaction speed and errors with critical consequences (Kokun *et al*., 2022). The horizontal control system is based on continuous mutual tracking by military personnel of 3 groups of objective fatigue markers directly at the workplace: somatic and sensorimotor (muscle numbness, forced change of posture, tremor of fingers during manipulations); sensory and visual (frequent blinking, squinting, slowing down the amplitude of eye movements); communicative and speech (slowing down the pace of reports, stuttering, skipping code words, atypical emotional destabilisation of intonations). The conceptual basis of distributed responsibility for the psychological state of the unit is the doctrine of control of combat and operational stress, which provides for the identification of signs of stress reactions and the provision of primary support by the unit itself before applying for specialised assistance (Department of the Army, 2006). Marker detection activates the algorithm of rapid micro-movements: initiation of short exercises of alternating muscle tension and relaxation, self-massage of toning points to activate capillary blood flow, verbal activation techniques, and controlled breathing to stabilise the heart rate (Kokun *et al*., 2022). An additional tool is standardised code phrases – inhibitors that allow quickly interrupting the deployment of an acute stress response in a teammate and return the focus of attention to the algorithmic performance of a combat mission. Responsibility for the psychological state of the unit within this system is distributed among all members of the combat crew, and not just assigned to the commander or psychologist.

Stage 5. Decompression and psychological recovery. Output screening. The goal of the stage is to preserve the mental health of personnel and maintain the long-term reliability of combat personnel. Decompression is considered as a systemic process of reintegration of psychophysiological resources after the completion of intensive combat operation, aimed at minimising the cumulative effect of combat stress; according to the subject-action approach, it is interpreted as a conscious transition of a serviceman from a state of combat mobilisation to functional rest (Maksymenko, 2006). The content of the stage includes three components. The first – group psychological debriefing within the combat service, aimed at collective understanding of the combat work carried out, analysis of individual emotional reactions, and levelling the feeling of isolation in the experienced stress; conducting such activities by the unit's forces corresponds to the doctrinal provisions of combat and operational stress control (Department of the Army, 2006). The focus of debriefing is shifted from traumatic aspects to constructive analysis of professional interaction, which strengthens group cohesion as a component of the moral and psychological state of the unit (Dykun *et al*., 2023). The second – targeted activation of the parasympathetic link of the autonomic nervous system by means of virtual reality and directed audiovisual stimulation, which provides neurodynamic discharge, optimisation of central inhibition processes and prompt restoration of cognitive resource; the expediency of using virtual reality technologies in the system of psychological assistance to military personnel was confirmed, in particular, by the experience of their clinical use in military health care institutions (Reger *et al*., 2011). This component acts as a preventive strategy for preventing maladaptive disorders, in particular post-traumatic stress disorder. The third – output screening for indicators identical to the input, closing the feedback loop of the programme: mathematical and statistical comparison of the results of input and output screenings allows objectively assessing the dynamics of individual and group resilience development and verifying the programme's ability to ensure professional reliability of anti-aircraft missile forces personnel.

The results obtained confirm and expand the provisions formulated in Ukrainian military psychology in recent years. The proposed model of the five-stage programme is consistent with the methodological principles for ensuring the psychological stability of military personnel in combat conditions developed by O. Kokun *et al*. (2022) and with conclusions of V. Aleshchenko & O. Kokun (2025) that the current nature of armed struggle requires the restructuring of the entire system of psychological support for personnel, and not just its individual elements. Common in the approaches is the understanding of psychological stability as a resource that requires purposeful development and maintenance. The difference lies in the fact that the works cited cover the psychological support of military personnel within a broad, cross-branch context, whilst the programme model developed here tailors the support cycle to the unique operational profile of anti-aircraft missile system crews – with their discrete standby and hyper-stress regimes, and where a single second's error can prove critical.

The provisions of O. Khmiliar (2023) on the mental resilience of military personnel as an indispensable guarantee of their combat effectiveness has been operationalised at the group level in the proposed programme model: the resilience of an individual operator is regarded as a necessary but insufficient condition for the combat effectiveness of a combat crew, which is complemented by mechanisms of coordination and mutual support. U. Huliak & V. Lisnevskyi (2024) also emphasised the decisive role of the value-based component of a serviceman's motivational sphere in combat operations: in the authors' model, the programme for raising awareness of the value and significance of combat operations aimed at protecting the population is integrated into the psycho-educational component of basic training. Methodology for assessing the moral and psychological state of personnel, compiled by V. Dykun *et al*. (2023) in accordance with the practice of the armies of NATO member countries, corresponds to the developed screening contour; the difference is that the named methodology focuses on periodic assessment of the state of units, while the proposed model complements it with

continuous mutual monitoring of fatigue markers directly during combat operations. The experience of combat operations of air defence units confirms the expediency of allocating a closed space of combat operations as an independent stress factor – an aspect that was not previously systematically considered in the training programmes of air defence specialists. Ultimately, the analysis by V. Osodlo & T. Traverse (2022) of the psychological lessons of mass wars supports the central thesis of this study regarding the inadequacy of purely technical superiority without the psychological readiness of the person wielding the weapon.

Comparison with international studies showed that the methodological core of the second stage of the model corresponds to the classical three-phase scheme of stress inoculation by D. Meichenbaum (1985), the effectiveness of which in reducing anxiety and improving performance was confirmed in a meta-analysis by T. Saunders *et al*. (1996). The developed model concretises the application of the methodology to the activities of combat personnel: the phase of applying skills is implemented through cognitive immersion by means of virtual reality, which continues the line started by A. Rizzo *et al*. (2012) in the STRIVE programme, and generalised by F. Pallavicini *et al*. (2016) in reviews of military applications of virtual reality. Comparison with the US Army Master Resilience Training programme, developed by K. Reivich *et al*. (2011) for the formation of resilience through the training of leaders, the difference of the author's approach is emphasised: instead of the cascade model "from leader to subordinate", a horizontal model of distributed responsibility is proposed, in which the support carrier is each member of the service. However, data by P. Bartone (2006) warns against absolutisation of the horizontal vector about the significant influence of the leader on the stability of subordinates under operational stress – this is why the model retains the vertical trust component. The doctrinal principles for managing combat and operational stress set out by the Department of the Army (2006) and the systematisation of the clinical and operational applications of military psychology carried out by C. Kennedy & E. Zillmer (2006) provided the framework within which the proposed model occupies a niche as a specialised sector-specific solution for air defence.

The phenomenon of algorithmic operator alarm, which interacts with control systems based on artificial intelligence, highlighted in the study deserves a separate discussion. No systematic programmes for psychological preparation for such interaction in combat conditions have been proposed in the available literature; the empirical research by I. Diachenko *et al.* (2024) on the determinants of resilience among Ukrainian military personnel also does not cover this factor. The proposed model creates a structural framework for integrating such training, primarily within the second and third stages, but the content of operator critical thinking training under conflicting recommendations of automated systems requires a separate study. Another point of debate is whether the mechanisms of interpersonal trust described by P. Bartone (2006) for the "commander-subordinate" relationship and comradeship also apply to interactions within the "human-algorithm" system: the answer to this question will determine the architecture of the next generation of training programmes. The importance of comparative analysis lies in the fact that the proposed model integrates individual (self-regulation), group (coordination and mutual support), and organisational (screening feedback loop) levels of psychological support into a single continuous cycle, whereas in the analysed approaches these levels were considered mainly in isolation or sequentially.

✦ Conclusions

The conducted research allowed solving the tasks set and achieving the goal – to substantiate the integral structure and content of the special psychological training programme for anti-aircraft missile forces personnel in the conditions of countering massive combined enemy strikes. According to the results of the solution of the first task, it was established that the destructive load on the operator of the combat service of an anti-aircraft missile system during the repelling of a massive combined strike has a three-dimensional structure: information measurement is associated with the identification of targets in the conditions of electronic counteraction; psychophysiological – with exhaustion for many hours of continuous combat operations; ethical and psychological – with awareness of the price of error. A specific factor that has not yet been systematically considered in the training programmes of air defence specialists is the deprivation effect of the closed space of combat operations, and a promising challenge is the algorithmic alarm of the operator during interaction with control systems based on artificial intelligence. Based on the results of solving the second task, the five-stage structure of the programme covering professional and psychological selection with input screening of psychophysiological, cognitive, and intellectual indicators was substantiated; basic training that combines psycho-education of neurobiological mechanisms of acute stress response with three-phase stress inoculation and dosed modelling of stress load within the optimum of stimulus; psychological coordination of combat services; mutual monitoring of performance directly during combat operations; post-combat decompression, and psychological recovery with initial screening. Virtual reality technologies are defined as a tool for reproducing the maximum information pressure that is unattainable for conventional simulators, which provide cognitive immersion at the stage of basic training, and neurodynamic discharge at the stage of psychological recovery.

Based on the results of solving the third problem, psychological mechanisms of resiliency development at the individual and group levels were determined. At the individual level, the leading mechanism is the transformation of destructive stress into functional mobilisation through cognitive reassessment of the threat, as a result of which

the emotional response to the threat is replaced by professional action according to the established algorithm. At the group level, resilience is formed through four interrelated components: a joint mental model of the combat situation, synchronisation of vertical trust and horizontal cohesion, psychological hardening by means of modelling crisis situations, and the conversion of individual anxiety into a structured collective professional activity. Maintenance of working capacity in the course of combat operations is provided by the "peer-to-peer" system, which is based on mutual tracking of somatic, sensory and visual, communicative and speech markers of fatigue and the use of express micro-interventions; the authors' element of the system is standardised code phrases-inhibitors for rapid interruption of acute stress response in a team member. As part of the solution of the second problem, the tools for verifying the effectiveness of the programme were also outlined: a feedback loop formed by input and output screenings for identical indicators, the data of which are subject to mathematical and statistical comparison. Such a circuit transforms a programme from a set of measures to a managed system with a measurable result. Prospects for further research cover three areas: empirical testing of the programme with mathematical and statistical verification of the dynamics of psychological and psychophysiological indicators of personnel; analysis of psychological determinants of maintaining professional reliability of combat personnel in conditions of high threat of impact on a combat position; investigation of the phenomenon of algorithmic anxiety and trust mechanisms in the human-algorithm system for designing programmes of preparation for interaction with weapons based on artificial intelligence.

✦ Acknowledgements

None.

✦ Funding

None.

✦ Conflict of Interest

None.

✦ References

[1] Aleshchenko, V., & Kokun, O. (2025). Psychological support for military personnel in combat conditions: Contemporary challenges. *Psychological Journal*, 11(1), 18-33. doi: 10.31108/1.2025.11.1.2.

[2] Bartone, P.T. (2006). Resilience under military operational stress: Can leaders influence hardiness? *Military Psychology*, 18, 131-148. doi: 10.1207/s15327876mp1803s_10.

[3] Cannon-Bowers, J.A., Salas, E., & Converse, S. (1993). Shared mental models in expert team decision making. In N.J. Castellan, Jr. (Ed.), *Individual and group decision making: Current issues* (pp. 221-246). Hillsdale: Lawrence Erlbaum Associates.

[4] Diachenko, I., Brodska, L., Serebriakov, O., Samborska, N., & Kharytonova, N. (2024). The influence of social and individual determinants on the Ukrainian military during wartime. *Interpersona: An International Journal*, 18(1), 1-20. doi: 10.5964/ijpr.11791.

[5] Dykun, V.H., Moroz, V.M., & Stasiuk, V.V. (2023). *Methodology of research of the moral and psychological state of the personnel of troops (forces)*. Kyiv: 7BTs.

[6] Goleman, D. (2005). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.

[7] Grossman, D., & Christensen, L.W. (2008). *On combat: The psychology and physiology of deadly conflict in war and in peace*. Nottingham: Human Factor Research Group.

[8] Huliak, U., & Lisnevskyi, V. (2024). Value component in the structure of the motivational sphere of a serviceman's personality. *Bulletin of Taras Shevchenko National University of Kyiv. Psychology*, 1(19), 11-16. doi: 10.17721/BPSY.2024.1(19).2.

[9] Kennedy, C.H., & Zillmer, E.A. (Eds.). (2006). *Military psychology, first edition: Clinical and operational applications*. New York: The Guilford Press.

[10] Khmiliar, O.F. (2023). Mental stability of the soldier. *Scientific Bulletin of Uzhhorod National University. Series: Psychology*, 6, 71-79. doi: 10.32782/psy-visnyk/2022.6.13.

[11] Kokun, O.M., Klochkov, V.V., Moroz, V.M., Pishko, I.O., & Lozinska, N.S. (2022). *Ensuring psychological resilience of military personnel in combat conditions*. Kyiv: Feniks.

[12] Kolesnichenko, O.S., Matsehora, Ya.V., Prykhodko, I.I., Baida, M.S., Lyman, A.A., & Yurieva, N.V. (2021). *Psychoprophylactic work with servicemen of the National Guard of Ukraine assigned to the group of enhanced psychological attention*. Kharkiv: National Academy of the National Guard of Ukraine.

[13] Maksymenko, S.D. (2006). *Genesis of personality realization*. Kyiv: KMM Publishing House LLC.

[14] Meichenbaum, D. (1985). *Stress inoculation training*. New York: Pergamon Press.

[15] Osodlo, V.I., & Traverse, T.M. (2022). *Psychology and war: Unlearned lessons of Gustave Le Bon*. Kyiv: Parliamentary Publishing House.

[16] Pallavicini, F., Argenton, L., Toniazzi, N., Aceti, L., & Mantovani, F. (2016). Virtual reality applications for stress management training in the military. *Aerospace Medicine and Human Performance*, 87(12), 1021-1030. doi: 10.3357/AMHP.4596.2016.

[17] Reger, G.M., Holloway, K.M., Candy, C., Rothbaum, B.O., Difede, J., Rizzo, A.A., & Gahm, G.A. (2011). Effectiveness of virtual reality exposure therapy for active duty soldiers in a military mental health clinic. *Journal of Traumatic Stress*, 24(1), 93-96. doi: 10.1002/jts.20574.

[18] Reivich, K.J., Seligman, M.E.P., & McBride, S. (2011). Master resilience training in the U.S. Army. *American Psychologist*, 66(1), 25-34. doi: 10.1037/a0021897.

[19] Rizzo, A., Buckwalter, J.G., John, B., Newman, B., Parsons, T., Kenny, P., & Williams, J. (2012). STRIVE: Stress resilience in virtual environments: A pre-deployment VR system for training emotional coping skills and assessing chronic and acute stress responses. *Studies in Health Technology and Informatics*, 173, 379-385. doi: 10.3233/978-1-61499-022-2-379.

[20] Saunders, T., Driskell, J.E., Johnston, J.H., & Salas, E. (1996). The effect of stress inoculation training on anxiety and performance. *Journal of Occupational Health Psychology*, 1(2), 170-186. doi: 10.1037/1076-8998.1.2.170.

[21] Department of the Army. (2006). *Combat and operational stress control*. Washington, DC: Headquarters, Department of the Army.

[22] Yerkes, R.M., & Dodson, J.D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18(5), 459-482. doi: 10.1002/cne.920180503.

[23] Zaccaro, S.J., Blair, V., Peterson, C., & Zazanis, M. (1995). Collective efficacy. In J.E. Maddux (Ed.), *Self-efficacy, adaptation, and adjustment* (pp. 305-328). Boston: Springer. doi: 10.1007/978-1-4419-6868-5_11.

Структура та змістове наповнення програми спеціальної психологічної підготовки фахівців зенітних ракетних військ в умовах протидії масованим комбінованим ударам Російської Федерації

Костянтин Сидоров
Ад'юнкт
Національний університет оборони України
03049, просп. Повітряних Сил, 28, м. Київ, Україна
https://orcid.org/0009-0009-4753-5292

Ганна Сташевська
Слухач
Національний університет оборони України
03049, просп. Повітряних Сил, 28, м. Київ, Україна
https://orcid.org/0009-0002-3200-7226

Артем Філіппський
Ад'юнкт
Національний університет оборони України
03049, просп. Повітряних Сил, 28, м. Київ, Україна
https://orcid.org/0009-0008-3725-1643

✦ Анотація. У статті обґрунтовано структуру та змістове наповнення програми спеціальної психологічної підготовки фахівців зенітних ракетних військ Повітряних Сил Збройних Сил України в умовах протидії масованим комбінованим ударам противника. Актуальність дослідження зумовлена невідповідністю традиційних підходів психологічної підготовки деструктивним навантаженням сучасної високотехнологічної війни: інтенсивне застосування противником безпілотних літальних апаратів і різнотипного ракетного озброєння, безперервна бойова робота впродовж 5-8 годин, дефіцит часу на ухвалення рішення, усвідомлення ціни помилки спричиняють когнітивне гальмування, фізіологічне виснаження та ризик психологічного зриву операторів зенітних ракетних комплексів. Перехід до систем управління з елементами штучного інтелекту додатково вимагає від бойових обслуг цифрової стресостійкості та критичного мислення. Метою дослідження стало обґрунтування цілісної структури та змістового наповнення програми спеціальної психологічної підготовки фахівців зенітних ракетних військ, спрямованої на підвищення боєздатності бойових обслуг зенітних ракетних комплексів і збереження ментального здоров'я військовослужбовців. Методами аналізу були теоретичний аналіз, систематизація та узагальнення українських і міжнародних наукових джерел військової психології, аналіз досвіду бойової роботи підрозділів протиповітряної оборони України 2022-2026 років, порівняльний аналіз, структурно-функціональне моделювання. Розроблено п'ятиетапну модель спеціальної психологічної підготовки, побудовану на принципах динамічної відповідності та людиноцентричності. Вона охопила: професійно-психологічний відбір із вхідним скринінгом психофізіологічних і когнітивних показників; базову підготовку, що поєднує психоедукацію щодо нейробіології бойового стресу, стресове загартування дозованим моделюванням навантажень у межах оптимуму збудження та когнітивну імерсію засобами віртуальної реальності; психологічне злагодження бойових обслуг і формування групової резильєнтності через спільну ментальну модель, вертикальну довіру та горизонтальну згуртованість; взаємний моніторинг працездатності за принципом «рівний-рівному» на основі соматичних, сенсорно-зорових і комунікативно-мовленнєвих маркерів утоми із застосуванням експрес-мікровтручань; післябойову декомпресію з груповим дебрифінгом, психологічне відновлення особового складу засобами віртуальної реальності та вихідний скринінг, що замикає контур зворотного зв'язку програми. Практичною цінністю дослідження є можливість впровадження запропонованої моделі в систему бойової підготовки підрозділів зенітних ракетних військ, що забезпечить формування стійкої психологічної готовності особового складу, підтримання професійної надійності бойових обслуг, профілактику посттравматичних стресових розладів та збереження бойового потенціалу підрозділів протиповітряної оборони

✦ Ключові слова: психологічна готовність; бойовий стрес; групова резильєнтність; стресове загартування; когнітивна стійкість; обслуга зенітного комплексу; технології віртуальної реальності

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡si»y ofi U¾¡ai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 62-68 ✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ ISSN 2617-6858 ✦ UDC [159.923.2:159.964.21]-053.6:305-021.321:[159.944.4:355.01](045)
✦ E-ISSN 2617-6866 ✦ DOI: 10.33099/2617-6858-26-21-4-62-68

Gender-specific characteristics of intrapersonal conflict in adolescents under conditions of chronic war-related stress

Viktoriia Stanishevska*
Senior Lecturer
Uman National University
20300, 1 Instytutska Str., Uman, Ukraine
https://orcid.org/0000-0003-3324-8988

✦ Abstract. This article presents the results of a theoretical and empirical study of the gender-specific characteristics of intrapersonal conflict in adolescents under conditions of chronic war-related stress. The relevance of the study is determined by the increasing psycho-emotional burden placed on adolescents during martial law, accompanied by heightened levels of anxiety, emotional tension, internal disorganisation, and disturbances in the processes of personal self-determination. The issue is of particular significance during adolescence, which is a sensitive period for the development of self-esteem, identity, and systems of interpersonal relationships. The aim of the study was to identify the gender-specific characteristics of adolescents' experience of intrapersonal conflict under conditions of prolonged war-related stress and to determine the specific characteristics of their emotional responses and methods of psychological adaptation. The theoretical analysis was based on contemporary scientific approaches to understanding intrapersonal conflict, the psychological characteristics of adolescence, and the impact of chronic stress on individual mental development. The empirical study was conducted among adolescents aged 13-16 years living under conditions of systematic exposure to war-related events. A set of psychodiagnostic methods was used to investigate the characteristics of intrapersonal conflict, focusing on the assessment of anxiety levels, self-esteem characteristics, frustration responses, coping strategies, and psychological defence mechanisms. Quantitative analysis methods and Student's t-test were employed for the statistical processing of the results. The empirical findings revealed gender-specific characteristics of intrapersonal conflict among adolescents under conditions of chronic war-related stress. It was established that girls demonstrated higher levels of trait anxiety (49 points) and state anxiety (50 points), a predominance of intropunitive reactions (62%), and greater use of the coping strategy of seeking social support (67%), whereas boys more frequently exhibited extrapunitive reactions (58%) and avoidance coping strategies (61%). The practical value of the study lies in the possibility of applying the findings to the development of gender-oriented programmes of psychological support and psycho-emotional assistance for adolescents under martial law. The results may be used by psychologists, social educators, and mental health professionals to prevent maladaptive manifestations, enhance resilience to stress, and promote the development of effective psychological adaptation strategies among adolescents

✦ Keywords: adolescence; psychological defence mechanisms; resilience to stress; self-esteem; anxiety; coping strategies; psychological adaptation

✦ Introduction

Since the onset of full-scale war in Ukraine in 2022, anxiety has been the most prevalent psychological state across Ukrainian society as a whole. At the same time, anxiety caused by the hostilities is compounded by age-related factors and individual personality traits. Young people, who are at a stage of active personal development, professional

Suggested Citation:
Stanishevska, V. (2026). Gender-specific characteristics of intrapersonal conflict in adolescents under conditions of chronic war-related stress. *Bulletin of National Defence University of Ukraine*, 21(4), 62-68. doi: 10.33099/2617-6858-26-21-4-62-68.

Article's History: Received: 17.03.2026; Revised: 30.07.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (stanishevskayaviktoriya@ukr.net)

self-discovery and the formation of life values, are particularly vulnerable to the effects of prolonged stress. Prolonged exposure to uncertainty, threats to safety and forced changes to their usual way of life can exacerbate symptoms of anxiety and negatively impact the emotional well-being, adaptive capacities and mental health of young people. The conditions of war have a significant impact on the psycho-emotional state of adolescents, requiring a thorough and balanced analysis of their mental health, as noted by A. Kurapov *et al.* (2023). Research into this topic will help to reveal important aspects of the impact of armed conflict on the mental health of adolescents. The research by L. Zasiekina *et al*. (2025) indicates that the effects of wartime on vulnerable individuals manifest in the development of post-traumatic stress disorder, anxiety, depression and other psychological problems. Adolescents require special support from specialists, as they experience such difficult times in particular ways (Peltonen, 2024; Solonenko, 2025). Intrapersonal conflict during adolescence can manifest itself in contradictions between an individual's needs, values, aspirations and actual capabilities. In studies by E. Pfeiffer *et al.* (2024) and Y. Kharchenko & L. Onufriieva (2025), the authors emphasise that, in conditions of wartime stress, these contradictions are exacerbated, which negatively affects adolescents' psycho-emotional state, their behaviour, social adaptation and interpersonal relationships.

The study of gender-specific aspects of experiencing intrapersonal conflict is of particular importance, as boys and girls react differently to stressful situations and employ different psychological defence mechanisms and coping strategies. The issue of intrapersonal conflict is the subject of research by many Ukrainian and international scholars. Researchers view intrapersonal conflict as a clash of conflicting motives, needs, values and aspirations within the individual. Contemporary psychological research indicates that the impact of armed conflicts on adolescents' mental health is long-lasting and protracted (Osokina *et al*., 2023). For instance, K. Zhurba (2022) emphasises that significant psychotraumatic factors for adolescents in wartime include air-raid sirens, shelling and bombing, the emotional distress of adults, terrorist threats, wartime restrictions, the destruction of homes, prolonged stays in shelters, as well as the psychological impact of media reports on violence, loss of life, captivity and torture. For adolescents in temporarily occupied territories, additional stressors include the constant threat to life, the grief of losing loved ones, the difficulties of evacuation and traumatic memories of wartime events. The findings of an empirical study by T. Palko & K. Travina (2024) also confirm the significant negative impact of the war on the psychological and emotional well-being of Ukrainian adolescents. he authors reported high levels of state anxiety in almost half of the participants, together with clinically significant depressive symptoms in a considerable proportion of the respondents.

S. Kuzikova *et al*. (2024) examine the issues of providing psychological support to individuals under wartime conditions, the impact of chronic stress on mental health, and the characteristics of the psychological adaptation of children and adolescents to crisis situations. O. Minenko (2024) empirically demonstrated that the majority of Ukrainian adolescents exhibit significantly elevated levels of state anxiety, whereas the level of trait anxiety generally remains relatively low. The gender differences identified in the study are also consistent with the findings of I. Zhdanova & I. Reva (2020), who report that girls are more prone to internal experiences, emotional reflection, and intrapersonal contradictions, whereas boys more frequently demonstrate external behavioural responses and conflict-oriented patterns of behaviour. During adolescence, intrapersonal conflict may manifest itself in contradictions between an individual's needs, values, aspirations, and actual opportunities. Under conditions of war-related stress, these contradictions become more pronounced, adversely affecting adolescents' psycho-emotional well-being, behaviour, social adaptation, and interpersonal relationships.

It was found that both boys and girls considered the achievement of inner balance, emotional self-control, and the search for a compromise between their own needs, experiences, and social expectations to be the most effective means of overcoming intrapersonal conflict. The respondents identified experiences of injustice, emotional hurt, difficulties in mutual understanding with others, lack of self-confidence, and contradictions between their own desires and the demands of the social environment as the principal factors contributing to the emergence of intrapersonal conflicts. The study of responses to intrapersonal conflict demonstrated that boys more frequently employed behavioural and activity-oriented methods of coping with internal tension, whereas girls were more inclined towards the emotional processing of their experiences, reflection, and seeking psychological support. The aim of this article was to conduct a theoretical and empirical analysis of the gender-specific characteristics of intrapersonal conflict among adolescents under conditions of chronic war-related stress.

✦ Materials and Methods

The empirical study was designed to identify the gender-specific characteristics of intrapersonal conflict among adolescents under conditions of chronic war-related stress. The study involved 60 adolescents aged 13-16 years, including 30 boys and 30 girls. The sample was formed using purposive sampling in accordance with the objectives of the study. The main inclusion criteria were adolescence, residence under martial law, and voluntary consent to participate. At the time of the study, all participants were experiencing systematic exposure to war-related events, including air raid alerts, information overload, and socio-psychological risks associated with the war.

The study was conducted in accordance with the ethical principles of psychological research involving minors. Before the collection of empirical data, participants and their parents or legal guardians were provided with information regarding the aims, objectives, and procedures of the study. Participation was voluntary, anonymous, and confidential.

Written informed consent for the participation of the children was obtained from their parents, and the adolescents provided their own voluntary consent to participate in the psychodiagnostic procedures. Participants had the right to withdraw from the study at any stage. The research was conducted in accordance with the ethical standards of the American Sociological Association's Code of Ethics (2018). To comprehensively investigate the gender-specific characteristics of intrapersonal conflict, the following psychodiagnostic instruments were employed:

- State-Trait Anxiety Scale by E. Gaudry & C. Spielberger (1970);
- Assessment of self-esteem using the Dembo-Rubinstein method (n.d.);
- Coping Strategies Questionnaire by R. Lazarus & S. Folkman (1984);
- S. Rosenzweig Frustration Study Method (1945);
- Life Style Index (LSI) for the assessment of psychological defence mechanisms by R. Plutchik *et al*. (1979).

The selected battery of instruments enabled a comprehensive assessment of psychological characteristics directly associated with manifestations of intrapersonal conflict during adolescence and those that may be influenced by chronic war-related stress. Descriptive statistical methods (calculation of means, standard deviations, and percentages) and Student's independent-samples t-test were used for statistical data analysis. The use of this statistical test was justified by the need to compare the mean scores of two independent groups, namely boys and girls. As the sample consisted of two equal independent groups (n = 30 in each group) and the variables were measured on quantitative scales, Student's independent-samples t-test was applied to determine the statistical significance of gender differences. Differences were considered statistically significant at $p \leq 0.05$. The study was conducted in 2025 at the Uman Gymnasium of the Cherkasy City Council.

✦ Results and Discussion

To analyse the gender-specific characteristics of intrapersonal conflict among adolescents under conditions of chronic war-related stress, the "State-Trait Anxiety Scale" developed by E. Gaudry & C. Spielberger (1970) was employed. The instrument made it possible to identify statistically significant gender differences in adolescents' experience of intrapersonal conflict under conditions of chronic war-related stress. The results of the assessment of trait and state anxiety are presented in Figure 1.

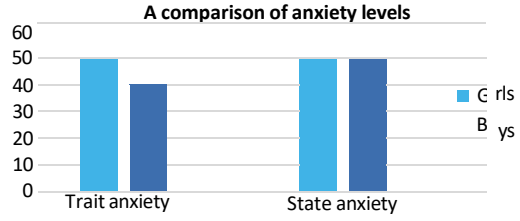

Figure 1. *Level of state anxiety according to the methodology*
Source*: created by the author based on E. Gaudry & C. Spielberger (1970)*

The findings of the study revealed statistically significant gender differences in adolescents' experience of intrapersonal conflict under conditions of chronic war-related stress. It was experimentally confirmed that girls demonstrated higher levels of both trait and state anxiety compared with boys. The mean trait anxiety score among girls was 49 points, whereas among boys it was 41 points. Similarly, state anxiety scores were higher among girls, averaging 50 points compared with 44 points among boys. The next stage of the study involved analysing the level of frustration responses using S. Rosenzweig's (1945) Frustration Study Method, which made it possible to identify statistically significant gender differences in adolescents' experience of intrapersonal conflict under conditions of chronic war-related stress. The results of the analysis of gender differences in frustration responses are presented in Figure 2.

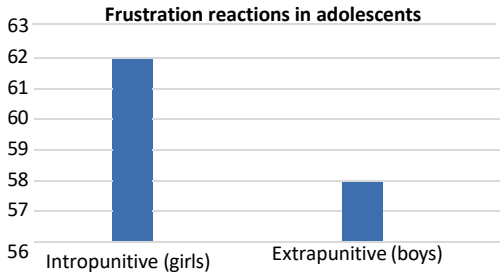

Figure 2. *Gender differences in frustration responses according to the Frustration Study Method*
Source*: created by the author based on S. Rosenzweig (1945)*

The analysis of frustration responses revealed that boys more frequently demonstrated an extrapunitive response pattern, characterised by a tendency towards aggressive or blaming reactions. Girls, by contrast, were more likely to exhibit intropunitive responses, characterised by self-blame, internalised emotional experiences, and emotional tension. The mean proportion of intropunitive responses among girls was 62%, compared with 38% among boys. Conversely, extrapunitive responses predominated among boys (58%) compared with girls (34%). These findings indicate distinct patterns of emotional responses to psychologically traumatic circumstances.

The findings obtained using the Coping Strategies Questionnaire developed by R. Lazarus & S. Folkman (1984) indicated that girls were more likely to engage in emotional processing of their experiences through interpersonal interaction, verbalisation of their emotional state, and seeking support from significant others. In contrast, boys more commonly relied on avoidance, distraction, or behavioural methods of coping with stress. The results of the analysis of coping strategies are presented in Figure 3. The average rate of use of the "seeking social support" strategy among girls was 67%, whilst among boys it was 42%. At the same time, the "avoidance" strategy was observed more frequently among boys (61%) than among girls (39%). The application of the Life Style Index (LSI) developed by R. Plutchik *et al*. (1979) confirmed the

existence of gender differences in psychological responses to stress. Among girls, the predominant defence mechanisms were rationalisation, regression, and the somatisation of emotional experiences. They were more likely to engage in internal analysis of problems and to experience conflict on an emotional level. Boys, by contrast, more commonly employed defence mechanisms aimed at minimising awareness of emotional discomfort and maintaining internal control over their psychological state.

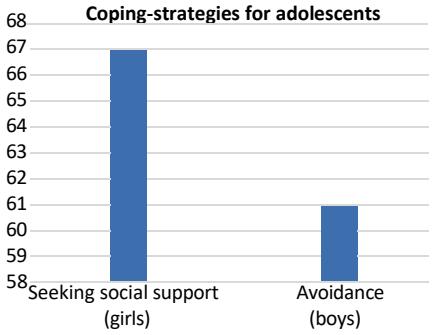

Figure 3. *Gender differences in coping strategies according to the Coping Strategies Questionnaire*
Source*: created by the author based on R. Lazarus & S. Folkman (1984)*

Using the Assessment of Self-Esteem using the Dembo-Rubinstein method (n.d.), the assumption was confirmed that a significant proportion of adolescents exhibit instability in their self-concept and internal inconsistencies in self-esteem. Specifically, the sample of girls more frequently exhibited low self-esteem, emotional insecurity and dependence on social approval. Meanwhile, the sample of boys showed a tendency to display inflated or compensatory self-esteem. Amid chronic war-related stress, adolescents in both groups experienced difficulties with personal self-definition, uncertainty about their life prospects and heightened internal conflict. The analysis carried out made it possible to trace the specific nature of adolescents' psychological responses depending on gender, which manifested itself in differences in emotional experience, behavioural reactions and ways of coping with stressful situations.

The results of the empirical study confirm that chronic war-related stress has a negative impact on adolescents' psycho-emotional state and exacerbates intrapersonal conflicts, which is consistent with the findings of contemporary psychological research. Analysis of the empirical data revealed differences in the nature of intrapersonal conflict experiences depending on gender. For girls, inwardly directed emotional reactions, elevated levels of anxiety and a tendency to experience emotional tension deeply were found to be more typical. In contrast, boys' psychological responses were more frequently manifested through external behavioural forms, in particular aggression, emotional distancing and avoidance of openly experiencing their own emotional states. The findings highlight the need to develop gender-specific psychological support programmes for adolescents, adapted to the conditions of prolonged wartime stress.

The findings of this study are consistent with the conclusions of contemporary Ukrainian and international researchers regarding the impact of chronic stress on the psycho-emotional state of adolescents and the gender-specific nature of experiencing intrapersonal conflicts. The study confirmed the existence of gender-specific patterns in adolescents' intrapersonal conflicts under conditions of chronic wartime stress. The findings showed that girls are characterised by higher levels of state and trait anxiety, a greater tendency towards intrapunitive reactions and a search for social support, whilst boys more frequently demonstrate extrapunitive forms of response and avoidance strategies. These findings are consistent with those of T. Palko & K. Travina (2024), who established that wartime events significantly affect adolescents' psycho-emotional state, leading to increased anxiety, emotional tension and a sense of uncertainty. The authors also concluded that girls are more likely to experience stressful events emotionally, which is supported by the findings of the present study.

The study of gender-specific aspects of experiencing intrapersonal conflict is of particular importance, as boys and girls react differently to stressful situations and employ different psychological defence mechanisms and coping strategies (Bezlyudna & Korchakova, 2021; Karnaukh & Butenko, 2023). Researchers emphasise that adolescence is characterised by emotional instability, an acute preoccupation with one's own self-worth, a desire for self-affirmation and the formation of personal identity. The results of the questionnaire developed by O. Fedorinova & Y. Hapochka (2022) revealed gender differences in how adolescents experience intrapersonal conflict. In particular, boys are more likely to openly express internal tension through external behavioural reactions, impulsivity and the verbal expression of negative emotions. In contrast, girls tend to experience internal conflicts more on an emotional level, demonstrating a tendency towards self-reflection, anxiety and avoidance of openly expressing their inner feelings.

The identified characteristics of anxiety are also consistent with the findings of a study by O. Minenko (2024), which highlights high levels of anxiety among adolescents living in conditions of armed conflict. In the author's view, the constant threat to safety, uncertainty about the future and prolonged exposure to a stressful environment contribute to the development of persistent emotional tension. The data obtained expand on these findings, demonstrating that the intensity of such experiences has gender-specific characteristics and is reflected differently in the ways boys and girls respond. The study's findings are also consistent with the findings of S. Kuzikova *et al*. (2024) regarding the impact of war on the psychological well-being of children and adolescents. The researchers emphasise that the prolonged exposure to wartime stressors activates the individual's defence and adaptation mechanisms and prompts a search for effective ways to psychologically cope with difficult life circumstances. In the present study, this was reflected in

differences in adolescents' coping behaviours: girls more frequently turn to social support as a resource for overcoming difficulties, whilst boys more often resort to avoidance, which may indicate different mechanisms of psychological adaptation to conditions of chronic wartime stress.

The findings partly echo the conclusions of K. Zhurba (2022), who emphasises that war significantly affects the sphere of meaning in the lives of modern adolescents, altering their value systems, life orientations and perceptions of the future. It is precisely this transformation of the individual's sphere of meaning that may act as one of the factors in the emergence and intensification of intrapersonal conflicts during adolescence. The differences identified between boys and girls suggest that the experience of such conflicts is mediated not only by age-related characteristics but also by gender-specific ways of making sense of stressful events. At the same time, the study's findings are consistent with the views of O. Fedorinova & Y. Hapochka (2022) regarding the role of emotional and personality factors in the development of internal personality conflicts. The authors emphasise that intrapersonal conflict arises from a clash of conflicting needs, values and aspirations, and that its course depends to a large extent on individual characteristics of emotional response. The findings confirm this position and demonstrate that, under conditions of chronic war-related stress, such conflicts may intensify, taking on different forms of manifestation depending on the adolescents' gender.

It should also be noted that recent European studies on the psychological consequences of war for adolescents, in particular the work by A. Maftei *et al*. (2022), confirm that even indirect exposure to wartime events leads to increased anxiety, emotional instability and identity crises among young people. Thus, the findings of this study corroborate current scientific evidence that chronic war-related stress acts as a powerful factor in exacerbating adolescents' intrapersonal conflicts and determines the specific nature of their experiences depending on gender characteristics.

✦ Conclusions

The theoretical and empirical study made it possible to establish that chronic war-related stress constitutes a significant psychological traumatic factor that substantially intensifies adolescents' intrapersonal conflicts and complicates the processes of their emotional adaptation, self-determination, and personal identity formation. It was found that under conditions of prolonged exposure to war-related events, intrapersonal conflict acquires the characteristics of persistent emotional tension, accompanied by increased anxiety, internal inconsistency of self-esteem, and a diminished sense of psychological security. The empirical findings revealed gender-specific characteristics of intrapersonal conflict among adolescents under conditions of chronic war-related stress. It was demonstrated that girls exhibited higher levels of trait anxiety (49 points) and state anxiety (50 points), a predominance of intropunitive responses (62%), and greater use of the coping strategy of seeking social support (67%), whereas boys more frequently demonstrated extrapunitive responses (58%) and the avoidance coping strategy (61%). At the same time, adolescents of both genders exhibited unstable self-esteem, difficulties in personal self-determination, and elevated levels of internal conflict.

The synthesis of the findings makes it possible to conceptualise adolescents' intrapersonal conflict under conditions of chronic war-related stress as a complex, multi-level psychological phenomenon determined by the interaction of stress-inducing conditions of the war environment, age-related characteristics of psychological development, and gender-specific patterns of emotional responses. The identified differences in the experience of intrapersonal conflict and mechanisms of psychological adaptation indicate the need for a differentiated approach to organising psychological support for adolescents. The limitations of the study are associated with the relatively small sample size, the localised nature of the sample, and the predominant use of self-report psychodiagnostic methods, which may affect the generalisability of the findings. Future research should focus on expanding the sample of participants, conducting longitudinal studies of adolescents' psycho-emotional well-being, analysing the influence of family and socio-cultural factors on the course of intrapersonal conflict, and developing and evaluating effective psychological intervention programmes for adolescents experiencing prolonged war-related stress.

✦ Acknowledgements

None.

✦ Funding

None.

✦ Conflict of Interest

None.

✦ References

[1] American Sociological Association's Code of Ethics. (2018). Retrieved from https://surl.li/iuyecy.

[2] Bezlyudna, V.I., & Korchakova, N.V. (2021). Ontogenetic aspects of gender stereotyping and polarization. In R.V. Pavelkiva & N.V. Korchakova (Eds.), *Philosophy of the educational space: A psychological perspective* (pp. 144-175). Kyiv: Centre for Educational Literature.

[3] Fedorinova, O.S., & Hapochka, Y.O. (2022). Gender determination of the choice of styles of behavior by students in conflict situations. *Current Problems of Psychology in Educational Institutions*, 12, 118-128.

[4] Gaudry, E., & Spielberger, C.D. (1970). Anxiety and intelligence in paired-associate learning. *Journal of Educational Psychology*, 61(5), 386-391. doi: 10.1037/h0029796.

[5] Karnaukh, L.P., & Butenko, O.H. (2023). Gender socialization of the individual in the context of the transformation of Ukrainian society. In *Innovative projects and programs in the fields of psychology, pedagogy, and education* (pp. 544-583). Riga: Baltija Publishing. doi: 10.30525/978-9934-26-282-1-23.

[6] Kharchenko, Y., & Onufriieva, L. (2025). Psychological trauma experienced by adolescents during the war in Ukraine. *Psychological Perspectives*, 45, 161-176. doi: 10.29038/2227-1376-2025-45-kha.

[7] Kurapov, A., Kalaitzaki, A., Keller, V., Danyliuk, I., & Kowatsch, T. (2023). The mental health impact of the ongoing Russian-Ukrainian war 6 months after the Russian invasion of Ukraine. *Frontiers in Psychiatry*, 14, article number 1134780. doi: 10.3389/fpsyt.2023.1134780.

[8] Kuzikova, S., Zlyvkov, V., Lukomska, S., Shcherbak, T., & Kotukh, O. (2024). *Psychological assistance to the individual in war conditions*. Kyiv-Nizhyn: M.M. Lysenko Private Publisher.

[9] Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company.

[10] Loshenko, O., Palíšek, P., Straka, O., Jabůrek, M., Portešová, Š., & Ševčíková, A. (2024). Impact of the war in Ukraine on the ability of children to recognize basic emotions. *International Journal of Public Health*, 69, article number 1607094. doi: 10.3389/ijph.2024.1607094.

[11] Maftei, A., Dănilă, O., & Măirean, C. (2022). The war next-door – a pilot study on Romanian adolescents' psychological reactions to potentially traumatic experiences generated by the Russian invasion of Ukraine. *Frontiers in Psychology*, 13, article number 1051152. doi: 10.3389/fpsyg.2022.1051152.

[12] Minenko, O.O. (2024). Research on the features of adolescent anxiety in conditions of military conflict. *Scientific Notes. Series "Psychology"*, 3, 47-54. doi: 10.32782/cusu-psy-2024-3-7.

[13] Osokina, O., Silwal, S., Bohdanova, T., Hodes, M., Sourander, A., & Skokauskas, N. (2023). Impact of the Russian invasion on mental health of adolescents in Ukraine. *Journal of the American Academy of Child & Adolescent Psychiatry*, 62(3), 335-343. doi: 10.1016/j.jaac.2022.07.845.

[14] Palko, T., & Travina, K. (2024). The influence of war on the psycho-emotional state of adolescents. *Prospects and Innovations of Science. Series "Psychology"*, 8(42), 832-844. doi: 10.52058/2786-4952-2024-8(42)-832-844.

[15] Peltonen, K. (2024). Children and war – vulnerability and resilience. *European Journal of Developmental Psychology*, 22(3), 340-352. doi: 10.1080/17405629.2024.2382410.

[16] Pfeiffer, E., Garbade, M., & Sachser, C. (2024). Traumatic events and posttraumatic stress symptoms in a treatment-seeking sample of Ukrainian children during the war. *Child and Adolescent Psychiatry and Mental Health*, 18, article number 25. doi: 10.1186/s13034-024-00715-1.

[17] Plutchik, R., Kellerman, H., & Conte, H.R. (1979). A structural theory of ego defenses and emotions. In C.E. Izard (Ed.), *Emotions in personality and psychopathology. Emotions, personality, and psychotherapy* (pp. 227-257). Boston: Springer. doi: 10.1007/978-1-4613-2892-6_9.

[18] Rosenzweig, S. (1945). The picture-association method and its application in a study of reactions to frustration. *Journal of Personality*, 14(1), 3-23. doi: 10.1111/j.1467-6494.1945.tb01036.x.

[19] Assessment of self-esteem using the Dembo-Rubinstein method. (n.d.). Retrieved from https://estet-centr.com/wp-content/uploads/2021/12/EU-RIVEN-SAMOOCINKI.pdf.

[20] Solonenko, O. (2025). Manifistations of continuous traumatic stress among adolescents in war. *Psychological Perspectives*, 45, 152-160. doi: 10.29038/2227-1376-2025-45-sol.

[21] Zasiekina, L., Griffin, A., Blakemore, S.-J., Hlova, I., & Bignardi, G. (2025). Prevalence of war-related posttraumatic stress disorder in adolescents: A systematic review and meta-analysis. *European Journal of Psychotraumatology*, 16(1), article number 2497167. doi: 10.1080/20008066.2025.2497167.

[22] Zhdanova, I.V., & Reva, I.A. (2020). Gender characteristics of adolescents' intrapersonal conflicts. *Personality, Society, and Law*, 2020, 46-49.

[23] Zhurba, K. (2022). War as a factor of influence on the meaningful life sphere of modern adolescents. *New Pedagogical Thought*, 110(2), 105-109. doi: 10.37026/2520-6427-2022-110-2-105-109.

Гендерні особливості внутрішньоособистісного конфлікту підлітків в умовах хронічного воєнного стресу

Вікторія Станішевська
Старший викладач
Уманський національний університет
20300, вул. Садова, 28, м. Умань, Україна
https://orcid.org/0000-0003-3324-8988

✦ Анотація. У статті представлено результати теоретичного та емпіричного дослідження гендерних особливостей внутрішньоособистісного конфлікту підлітків в умовах хронічного воєнного стресу. Актуальність дослідження зумовлена зростанням психоемоційного навантаження на підлітків в умовах воєнного стану, що супроводжується підвищенням рівня тривожності, емоційної напруги, внутрішньої дезорганізації та порушенням процесів особистісного самовизначення. Особливої значущості проблема набуває у підлітковому віці, який є сенситивним періодом формування самооцінки, ідентичності та системи міжособистісних взаємин. Метою дослідження було визначення гендерних особливостей переживання внутрішньоособистісного конфлікту підлітками в умовах пролонгованого воєнного стресу та виявлення специфіки їх емоційного реагування і способів психологічної адаптації. Теоретичний аналіз ґрунтувався на сучасних наукових підходах до розуміння внутрішньоособистісного конфлікту, психологічних особливостей підліткового віку та впливу хронічного стресу на психічний розвиток особистості. Емпіричне дослідження проведено серед підлітків віком 13-16 років, які проживають в умовах систематичного впливу воєнних подій. Для вивчення особливостей внутрішньоособистісного конфлікту використано комплекс психодіагностичних методик, спрямованих на визначення рівня тривожності, особливостей самооцінки, фрустраційних реакцій, копінг-стратегій та механізмів психологічного захисту. Для статистичної обробки результатів застосовано методи кількісного аналізу та критерій Стьюдента. У результаті емпіричного дослідження було виявлено гендерну специфіку внутрішньоособистісного конфлікту підлітків в умовах хронічного воєнного стресу. Доведено, що дівчатам притаманні вищі показники особистісної (49 балів) та ситуативної тривожності (50 балів), переважання інтрапунітивних реакцій (62 %) і копінг-стратегії пошуку соціальної підтримки (67 %), тоді як хлопці частіше виявляли екстрапунітивні реакції (58 %) та стратегію уникання (61 %). Практична цінність дослідження полягає у можливості використання отриманих результатів для розробки гендерно орієнтованих програм психологічного супроводу та психоемоційної підтримки підлітків в умовах воєнного стану. Результати дослідження можуть бути використані психологами, соціальними педагогами та фахівцями у сфері психічного здоров'я для профілактики дезадаптивних проявів, розвитку стресостійкості та формування ефективних стратегій психологічної адаптації підлітків

✦ Ключові слова: підлітковий вік; механізми психологічного захисту; стресостійкість; самооцінка; тривожність; стратегії подолання; психологічна адаптація

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡si»y ofi U¾¡ai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 69-76
✦ ISSN 2617-6858
✦ E-ISSN 2617-6866
✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ UDC 159.955:004. 8:355.4
✦ DOI: 10.33099/2617-6858-26-21-4-69-76

Cognitive biases and pitfalls in the use of AI by an intelligence analyst

Yelyzaveta Tymoshchuk
Doctor of Philosophy in Psychology
The National University of Ostroh Academy
35800, 2, Seminarska Str., Ostroh, Ukraine
https://orcid.org/0000-0002-0619-6724

Kateryna Sereda*
Student
The National University of Ostroh Academy
35800, 2, Seminarska Str., Ostroh, Ukraine
https://orcid.org/0009-0000-1693-6055

✦ Abstract. The active integration of artificial intelligence systems into information and analytical activities foregrounds the problem of investigating the psychological factors that determine the specificities of analysts' interaction with automated systems and their susceptibility to cognitive biases in professional decision-making. The aim of this article was to examine the interrelationship between cognitive style, locus of control, and trust in artificial intelligence systems as factors contributing to the formation of intelligence pitfalls in the professional activity of intelligence analysts. The study combined a theoretical analysis of contemporary academic literature with an empirical investigation of the specificities of interaction with automated systems among 50 practising OSINT and information analysts. The Rational-Experiential Inventory by S. Epstein was employed to assess cognitive style, the level of trust in automated systems was determined using the Trust in Automation Questionnaire by M. Körber, and the locus of control was investigated via J. Rotter's methodology. Analysis of the obtained data revealed the presence of correlations between the respondents' thinking peculiarities, their level of subjective control, and their perception of algorithmic systems. Respondents with a predominance of an intuitive mode of information processing more frequently demonstrated a willingness to rely on automated recommendations and assessed the functional capabilities of AI systems more positively. In contrast, participants with a more pronounced analytical thinking style exhibited a tendency towards more thorough verification of algorithmic decisions and a lower level of acceptance without additional analysis. It was also established that a higher level of internal control is accompanied by a more positive perception of the reliability and competence of automated systems. The obtained results confirm the significance of individual psychological characteristics in shaping the specificities of human interaction with artificial intelligence technologies in professional activity. The research findings can be utilised in developing psychological training programmes for analysts and in fostering skills for critical and reflexive interaction with artificial intelligence systems

✦ Keywords: cognitive style; intuitive thinking; rational thinking; locus of control; internality; trust in automated systems; OSINT

✦ Introduction

The active implementation of artificial intelligence technologies within the system of information and analytical support for state security predetermines the transformation of the professional activity of Open Source Intelligence (OSINT) operators and analysts. Automated systems are increasingly utilised for the collection, structuring, filtering, and forecasting of information, thereby enhancing the speed and efficiency of analytical work. At the same time, the final interpretation of the obtained data, the assessment of their reliability, and professional decision-making

Suggested Citation:
Tymoshchuk, Ye., & Sereda, K. (2026). Cognitive biases and pitfalls in the use of AI by an intelligence analyst. *Bulletin of National Defence University of Ukraine*, 21(4), 69-76. doi: 10.33099/2617-6858-26-21-4-69-76.

Article's History: Received: 31.03.2026 ; Revised: 25.07.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (kateryna.sereda@oa.edu.ua)

remain within the realm of human responsibility. Under conditions of information overload and uncertainty, the significance of psychological factors that may influence the specificities of an analyst's interaction with artificial intelligence systems and contribute to the formation of cognitive errors in the process of professional activity is heightened. The issue of trust in artificial intelligence systems occupies a prominent place in interdisciplinary research on human-automation interaction. W.J. von Eschenbach (2021) noted that the insufficient transparency of algorithmic systems and the "black box" phenomenon substantially affect the level of user trust in automated decisions. The author emphasised that the opacity of algorithmic functioning can reduce an individual's willingness to rely on AI recommendations, even when these are highly accurate. In their study on the effectiveness of human-AI interaction, G. Bansal *et al*. (2021) demonstrated that the availability of explanations for algorithmic decisions influences the quality of teamwork and the nature of the perception of automated recommendations. According to the authors, the user's ability to understand the logic of an algorithm's operation fosters a more balanced interaction between the human and the artificial intelligence (AI).

The phenomenon of overtrust in decision-making supported by artificial intelligence was examined by Z. Buçinca *et al*. (2021). The researchers drew attention to the fact that users may demonstrate a tendency to automatically accept algorithmic recommendations without sufficient critical analysis, particularly in situations of high cognitive load. In the conceptual framework of human-centered artificial intelligence, B. Shneiderman (2022) substantiated the necessity of preserving the active role of the human in the decision-making process involving algorithmic systems. The researcher underscored that the effectiveness of AI utilisation is determined not only by the technical characteristics of the system but also by the user's psychological readiness to interact with it. The relationship between trust in artificial intelligence and the individual psychological characteristics of the personality was analysed by O. Gillath *et al.* (2021). The researchers indicated that the level of trust in automated systems may depend on the specificities of an individual's interpersonal trust and attachment style. It was also noted that the psychological characteristics of the personality are capable of influencing the specifics of human interaction with algorithmic systems. The impact of explainable artificial intelligence on the formation of calibrated trust in algorithmic systems was examined by R. De Brito Duarte *et al.* (2023). The authors emphasised that the explainability of algorithms can enhance the level of user trust only under the condition of sufficient understanding of the system's functioning principles and a critical reflection on the received recommendations. The specificities of human perception of AI-generated outputs were analysed by N. Köbis & L.D. Mossink (2021). According to the researchers, users are not always capable of differentiating between results produced by algorithms and those produced by humans, which can influence the formation of trust in automated systems and the specificities of evaluating their effectiveness.

In studies dedicated to human interaction with automated systems, considerable attention is paid to the role of the personality's cognitive characteristics in the decision-making process. An analysis of academic literature confirms that the specificities of information processing, the propensity for an intuitive or analytical mode of thinking, as well as the level of subjective control, can influence the evaluation of algorithmic recommendations and the nature of user behaviour in situations of uncertainty. In professional analytical activity, excessive trust in automated systems or their unjustified dismissal can diminish the quality of analytical conclusions and increase the risk of forming cognitive errors. Despite the substantial body of contemporary research, the problem of the interrelationship between cognitive style, locus of control, and trust in artificial intelligence systems in the professional activity of intelligence analysts remains insufficiently explored, particularly in the context of the formation of cognitive biases and intelligence pitfalls in the process of analytical decision-making. The aim of this article was to investigate the specificities of the interrelationship between the dominant cognitive style (rational and intuitive), the level of subjective control, and trust in automated systems as psychological factors determining the specifics of operator-analysts' professional activity in interaction with artificial intelligence systems and their potential susceptibility to the emergence of intelligence pitfalls in the decision-making process.

✦ Literature Review

The issue of cognitive biases and their impact on professional activity constitutes one of the central themes of contemporary psychology. Foundational studies have systematised the typology of cognitive distortions and biases, among which confirmation bias occupies a particular position. Confirmation bias is the propensity of an individual, or specifically an intelligence analyst, to seek and interpret information in a manner that confirms pre-existing beliefs (Logg *et al*., 2019). It is especially critical to understand and delineate this bias in professional settings, as the dominance of an initial interpretation may constrain the consideration of alternative scenarios. In the context of intelligence analysis, this signifies the risk of focusing solely on data corroborating the initial assessment of a situation while disregarding contradictory information. Within classical studies of cognitive psychology, heuristics are regarded as adaptive mechanisms enabling rapid decision-making under conditions of uncertainty and limited information. Concurrently, the automated use of heuristics can lead to systematic errors of judgement and cognitive biases (Kahneman, 2021). In the professional practice of an OSINT analyst, this implies that the mechanisms ensuring the expediency of assessment may simultaneously elevate the risk of erroneous data interpretation.

The practical application of the cognitive approach in intelligence analysts' activities is presented in the study by

M.O. Popov *et al*. (2022), dedicated to the problem of calibrating nominal judgements within the intelligence information evaluation process. The authors emphasised the necessity of aligning verbal probability assessments with their quantitative representations to enhance the accuracy of analytical conclusions. Such an approach aims to minimise discrepancies between an analyst's subjective judgement and the objective parameters of forecasting. Similar conclusions can be traced in adjacent disciplines. O.V. Cherniakova & O.D. Hryshko (2025), in their study of strategic management, demonstrated the adverse impact of cognitive biases on the efficacy of managerial decision-making. In the works of A. Konverskyi & N. Kolotilova (2023) on argumentation processes, confirmation bias is examined as a factor diminishing the quality of critical evaluation of alternative positions and evidence. Within the framework of investigating individual psychological determinants of analytical activity, it is also essential to consider critical thinking as an integrative personality characteristic. V. Nadurak (2022) underscores that critical thinking entails the capacity to logically analyse arguments, assess the reliability of sources, and identify cognitive errors. Developed critical thinking can thus be considered, in the context of this study, as a means of mitigating the influence of confirmation bias, as it encourages the search for alternative explanations and the verification of initial hypotheses.

Contemporary interdisciplinary research in the field of decision-making highlights the necessity of combining intuitive and analytical thinking strategies in complex professional situations. In this context, it is pertinent to refer to the work of Y.A. Tymoshchuk *et al*. (2022), who examine intuition as a significant component within the structure of personality self-regulation, playing a role in decision-making processes under conditions of uncertainty. The authors note that, under constraints of information and time, intuitive mechanisms may serve as a means of adapting the cognitive system to challenging conditions. This approach permits intuition to be viewed as an integral part of self-regulation mechanisms, rather than merely the antithesis of rational thought. This position is conceptually aligned with the dual-process model proposed by D. Kahneman (2021), according to which intuitive processes ensure speed of assessment, whilst analytical processes provide its verification and correction. From this perspective, the efficacy of a professional decision is determined not by the dominance of one strategy, but by the subject's ability to flexibly regulate their interplay depending on the task context.

In the context of human interaction with algorithmic systems, the question of balance between intuitive and analytical mechanisms acquires particular significance. Intuition enables rapid orientation in complex and uncertain environments, typical of analytical activities within the security domain. Concurrently, the level of self-regulation development and awareness of one's own cognitive processes, as emphasised by Y.A. Tymoshchuk *et al.* (2022), may determine whether an intuitive decision is subjected to subsequent verification or, conversely, remains uncorrected. A deficit in reflective control elevates the risk of uncritical acceptance of algorithmic recommendations or their unjustified dismissal by OSINT analysts. Studies on trust in automated systems corroborate that individual cognitive characteristics of the AI user substantially influence the nature of their interaction (Glikson & Woolley, 2020; Burton *et al*., 2020). Specifically, trust in algorithmic decisions may be both rationally substantiated and conditioned by cognitive shortcuts or heuristic mechanisms. Moreover, the explainability of an algorithm does not always guarantee an adequate evaluation of its decisions, as the interpretation of explanations depends on the analyst's thinking style and level of self-regulation (Bansal *et al*., 2021).

Thus, the interaction between analysts and artificial intelligence systems can be considered as a process integrating cognitive style, self-regulation mechanisms, and the level of subjective control. Such interaction potentially determines whether an algorithmic recommendation becomes a tool for improving work quality or, conversely, a source of cognitive traps. The obtained theoretical propositions necessitate a robust empirical analysis of the psychological factors of trust in automated systems as potential mechanisms for the formation of intellectual traps in the professional activity of OSINT analysts.

✦ Materials and Methods

The empirical study of the psychological factors influencing trust in automated systems within the professional activity of analysts was conducted on a sample of current practitioners in the field of information and analytical support. The study involved 50 respondents aged 24 to 39. Participant selection was carried out based on the criterion of professional involvement in analytical activity, information analysis, and data processing. In forming the sample, characteristics such as professional experience, educational background, and the specifics of the respondents' professional duties were taken into account. The sample included specialists from both the public and private sectors. The survey was conducted on a voluntary basis with anonymity ensured, using the online platform Google Forms during January-February 2026. Personal data of the participants were not collected, and the information obtained was used exclusively in an aggregated form for scientific purposes. The study was conducted in accordance with international ethical standards for socio-psychological research, specifically the principles of the ICC/Esomar International Code on Market, Opinion and Social Research and Data Analytics (2025) and Ethics and Data Protection (2021). All participants were informed of the study's purpose and provided voluntary consent to participate.

To examine cognitive style, the full version of the Rational-Experiential Inventory by S. Epstein *et al*. (1996) was employed, consisting of 40 statements to determine rational ability (RA), rational engagement (RE), experiential ability (EA), and experiential engagement (EE). Examples of the inventory statements included: "I enjoy analysing

complex problems" and "I often rely on my intuition when making decisions". To assess trust in automated systems, the Trust in Automation Questionnaire (Körber, 2019) was applied, enabling the determination of the level of trust in systems based on the following parameters: reliability/competence (F), understanding (I), developers' intentions (Pro), and overall trust (T). Examples of statements include: "I consider the automated system reliable" and "The principles of the system's operation are clear to me". The level of subjective control was investigated using J. Rotter's (1966) methodology, through which general internality (Gen) was determined, as well as internality across various spheres of life activity. An example of a statement was: "Most events in my life depend on my own actions".

To identify the relationships between the studied indicators, Spearman's rank correlation coefficient was applied as a non-parametric method of statistical analysis. The processing and statistical interpretation of the obtained results were carried out using the licensed software IBM SPSS Statistics, which was selected due to its widespread application in psychological and socio-behavioural research and its capacity for conducting non-parametric statistical analysis. The correctness of the results' interpretation was ensured by the correspondence of the chosen statistical methods to the type of data obtained, as well as by comparing the findings with theoretical propositions and research outcomes in the fields of cognitive psychology and the psychology of decision-making.

✦ Results and Discussion

Analysis of the data obtained revealed statistically significant correlations between cognitive style and the level of trust in algorithmic systems. The most pronounced positive correlations were established between an intuitive thinking style and indicators of trust in automation. Intuitive ability (EA) has a strong positive relationship with the overall level of trust in systems (T) ($r = 0.765$; $p < 0.001$) and the indicator of understanding the principles of their functioning (I) ($r = 0.692$; $p < 0.001$). Similar results were also obtained for intuitive engagement (EE), which correlates with overall trust ($r = 0.654$; $p < 0.001$) and system understanding ($r = 0.605$; $p < 0.001$). The identified interrelationships indicate that a pronounced intuitive information processing style is accompanied by a higher level of acceptance of algorithmic recommendations in the process of information analysis. Such patterns may be explained by the characteristics of the intuitive mode of thinking, which is distinguished by rapid decision-making and an orientation towards holistic perception of a situation. Under conditions of information overload and time deficit, the intuitive style potentially facilitates faster acceptance of algorithmic conclusions without their prolonged analytical processing. For the activities of OSINT analysts, this holds both adaptive and potentially risky significance. On the one hand, trust in artificial intelligence systems can enhance the efficiency of analysing large volumes of information; however, on the other hand, excessive reliance on automated recommendations may increase the likelihood of automation bias formation and reduce the level of critical verification of the results obtained.

The rational thinking style is characterised by the opposite tendency. Rational ability (RA) has a statistically significant negative relationship with the indicator of system understanding ($r = -0.528$; $p < 0.001$) and overall trust in automation ($r = -0.389$; $p = 0.005$). A similar negative relationship was recorded between rational engagement (RE) and overall trust ($r = -0.399$; $p = 0.004$). Thus, a more pronounced rational style is accompanied by a more critical attitude towards automated decisions and a lower level of trust in them. The established correlations may indicate that individuals with a dominant rational thinking style are inclined to verify algorithmic recommendations more thoroughly, analyse the logic of system functioning, and pay attention to possible errors in automated analysis. The rational style implies an orientation towards the sequential verification of information and critical evaluation of alternative options, which potentially reduces the level of uncritical acceptance of decisions proposed by artificial intelligence systems. In the field of intelligence analysis, such a characteristic may promote a more cautious use of algorithmic systems, especially in situations where erroneous data interpretation could have substantial consequences for security and the quality of forecasting (Logg *et al*., 2019).

Analysis of the interrelationships between cognitive style and indicators of subjective control showed that intuitive ability (EA) is associated with general internality (Gen) ($r = 0.572$; $p < 0.001$), and intuitive engagement (EE) – with an analogous indicator ($r = 0.575$; $p < 0.001$). At the same time, rational ability demonstrates a moderate negative relationship with general internality ($r = -0.363$; $p = 0.010$). Furthermore, general internality correlates positively with trust in algorithmic systems ($r = 0.599$; $p < 0.001$) and with understanding of the principles of their functioning ($r = 0.586$; $p < 0.001$). A relationship was also established between internality in the sphere of work-related relations (R_S) and the assessment of the system's reliability and competence ($r = 0.462$; $p = 0.001$). The data obtained provide grounds to assume that a higher level of subjective control is linked to a more conscious attitude towards interaction with algorithmic systems. Individuals with pronounced internality tend to perceive the results of their own activities as a consequence of their own decisions and actions, which also affects the specifics of using automated recommendations. In a professional environment, this may manifest as a greater readiness to take responsibility for the final decision, even when using artificial intelligence systems. At the same time, a high level of internality can be combined with both greater trust in the system and higher confidence in one's own ability to control the interaction process with it.

Data analysis also showed that the level of subjective control influences not only the attitude towards algorithmic systems but also the nature of verifying automated

recommendations during the decision-making process. Individuals with high internality potentially orient themselves more often towards their own assessment of the situation and may demonstrate a higher level of responsibility for the final outcome of analytical activity. In situations involving risk forecasting or the assessment of potential threats, this may manifest as a more thorough verification of automated conclusions and their comparison with alternative sources of information. At the same time, under high cognitive load, even pronounced internality does not always guarantee a sufficient level of criticality towards algorithmic recommendations, especially if the system demonstrates high indicators of accuracy and stability of results. In such cases, the likelihood of the gradual formation of excessive trust in automated decisions increases.

The practical interpretation of these results suggests the existence of distinct models of interaction with artificial intelligence systems, varying according to the specifics of individual cognitive styles and locus of control. Under time deficit, significant information load, or the need for rapid response, individuals with a pronounced intuitive style may be more inclined to promptly accept algorithmic recommendations without their detailed verification. This type of interaction potentially increases the efficiency of working with large datasets but simultaneously increases the risk of automation bias formation. Conversely, respondents with a more pronounced rational style may demonstrate a tendency to re-verify the system's results, compare automated conclusions with alternative sources of information, and carry out a more detailed analysis of contradictory data. In the process of professional decision-making, this can contribute to reducing the risk of erroneous conclusions, yet at the same time slow down information processing under high dynamics of events (Burton *et al*., 2020).

The identified patterns acquire particular significance in the field of intelligence analysis, where algorithmic systems are actively applied for forecasting, classification, and risk assessment. Under such conditions, the specific nature of the interaction between the human and the artificial intelligence system affects not only the effectiveness of professional analysis but also the likelihood of cognitive errors occurring. Excessive trust in algorithmic decisions can lead to uncritical acceptance of automated recommendations, whereas excessive distrust can lead to the ignoring of potentially significant information (Logg *et al*., 2019). The established interrelationships point to the advisability of considering the individual psychological characteristics of specialists in the process of professional training and the organisation of the use of artificial intelligence systems in analytical practice.

Thus, the analysis conducted has confirmed the existence of a systemic interrelationship between the characteristics of an individual's cognitive organisation, the level of subjective control, and trust in algorithmic decisions. An intuitive thinking style is accompanied by a higher level of trust in automated systems, whereas a rational style is accompanied by greater criticality towards them. At the same time, a higher level of internality is combined with more positive perception and acceptance of algorithmic recommendations. The identified patterns allow cognitive style and subjective control to be considered as psychological factors associated with the specifics of human interaction with artificial intelligence systems and the potential predisposition to the formation of cognitive biases in the process of professional decision-making. The results obtained attest to the important role of individual psychological characteristics in the process of human interaction with artificial intelligence systems. The revealed interrelationships are consistent with contemporary research in the field of the psychology of decision-making and human interaction with automated systems.

The established positive relationship between an intuitive thinking style and a higher level of trust in automated decisions is consistent with the findings of Z. Buçinca *et al*. (2021), who indicated users' propensity to automatically accept artificial intelligence recommendations under high cognitive load. Within the present study, a tendency towards faster acceptance of algorithmic conclusions was also observed among respondents with a pronounced intuitive style. Unlike the work of Z. Buçinca *et al.* (2021), attention was focused not only on the general mechanisms of automation bias, but also on the specific features of professional interaction with algorithmic systems in the field of information-analytical activity. The results of G. Bansal *et al.* (2021) allow for a deeper interpretation of the established correlations, as the authors emphasised the importance of understanding the principles of an algorithm's functioning for forming effective human–automated system interaction. The patterns identified partially confirm these conclusions, demonstrating a link between the perception of the system and the level of trust in its recommendations. At the same time, the conducted analysis extends the approach of G. Bansal *et al*. (2021), as it allows for the assumption that even under conditions of understanding the system's operational principles, cognitive style may influence the degree of criticality towards algorithmic conclusions.

The negative relationship between a rational thinking style and trust in automated decisions aligns with the theoretical propositions of D. Kahneman (2021), according to which an analytical mode of information processing involves the sequential verification of alternatives and critical evaluation of the results obtained. In the present study, respondents with a more pronounced rational style more frequently demonstrated a propensity to verify algorithmic recommendations and compare them with other sources of information. This gives grounds to assume that a rational style may partially reduce the risk of uncritical acceptance of automated decisions. Additional explanation for the identified patterns is found in the works of A. Konverskyi & N. Kolotilova (2023), dedicated to the influence of cognitive biases on the process of information evaluation and argumentation. The authors stressed that specific features of information processing can affect the formation of

erroneous judgments and biases in the decision-making process. The presented results complement these propositions, demonstrating that the specificity of cognitive style may be associated not only with information evaluation but also with the nature of trust in artificial intelligence systems.

An important aspect of interpreting the results was the interrelationship between internality and trust in algorithmic systems. A similar approach to analysing trust in AI is presented in the work of O. Gillath *et al*. (2021), which examined the role of individual psychological characteristics of personality in interaction with automated systems. The patterns identified partially confirm the authors' conclusions, as respondents with a higher level of subjective control demonstrated a more conscious attitude towards the use of artificial intelligence systems. At the same time, data analysis showed that a high level of internality is not necessarily accompanied by distrust of automated decisions. In a subset of respondents, it was combined with confidence in their own ability to control the process of interaction with the system and to evaluate its recommendations.

The problem of forming calibrated trust in algorithmic systems was analysed by R. De Brito Duarte *et al*. (2023) and J. Schoeffer *et al*. (2025), who noted that the explainability of algorithms in itself does not guarantee a critical attitude towards automated recommendations. A similar trend is observed in the present study, as even under conditions of understanding the system's operational principles, a portion of respondents maintained a high level of trust in algorithmic conclusions. This indicates that trust in AI is determined not only by the transparency of the system but also by the psychological characteristics of the user. The propositions of B. Shneiderman (2022), formulated within the framework of the human-centred approach to artificial intelligence, are also consistent with the results of the conducted study. The author emphasised the necessity of maintaining an active human role in the process of using algorithmic systems and the importance of combining technological capabilities with the user's critical thinking. The established interrelationships between cognitive style, subjective control, and the level of criticality towards automated recommendations further underscore the significance of psychological factors in the process of human–AI interaction.

Another aspect of the problem of trust in algorithmic systems was examined by W.J. von Eschenbach (2021), who focused attention on the "black box" phenomenon and the insufficient transparency of AI functioning. In contrast to the study by W.J. von Eschenbach (2021), the present work directed primary attention to the psychological factors of human interaction with artificial intelligence systems. This provides grounds to believe that the specific features of an individual's cognitive organisation may influence the nature of perceiving algorithmic decisions to no lesser extent than the technical characteristics of the system itself.

Summarising the results of the study, it can be noted that the identified interrelationships between cognitive style, characteristics of subjective control, and the nature of interaction with artificial intelligence systems have significant practical importance. The obtained results can be utilised in the professional training of specialists whose activities involve processing large volumes of information and making decisions with the engagement of algorithmic systems. In particular, considering individual cognitive characteristics can contribute to the development of training programmes aimed at fostering the critical reflection on AI recommendations, reducing the risk of automation bias, and forming a more conscious and effective human interaction with intelligent technologies. At the same time, the results of the study should be interpreted considering certain limitations. These include the limited sample size and the predominant use of correlational analysis, which does not allow for the establishment of cause-and-effect relationships between the variables under study. Therefore, the conclusions obtained primarily characterise the presence of statistical interrelationships between the investigated variables and cannot be directly generalised to all professional groups without additional empirical verification.

✦ Conclusions

The conducted study allowed for establishing an interrelationship between cognitive style, the level of subjective control, and trust in artificial intelligence systems in the process of professional decision-making. Data analysis demonstrated that an intuitive thinking style is associated with a higher level of trust in automated recommendations and a greater readiness to rely on algorithmic conclusions in the process of information analysis. Conversely, a rational style is accompanied by a more critical attitude towards the outputs of artificial intelligence systems and a propensity for their additional verification. It was established that the level of subjective control also influences the nature of interaction with algorithmic systems. Individuals with pronounced internality demonstrated a more conscious attitude towards the use of automated recommendations and a greater willingness to take responsibility for the final decision. At the same time, a high level of trust in artificial intelligence systems under conditions of considerable cognitive load can be regarded as a potential risk factor for automation bias and may reduce the level of critical analysis of the information received. Summarising the results of the study, it can be noted that the specific features of cognitive style and subjective control are important factors influencing the nature of human interaction with artificial intelligence systems. The obtained results indicate the expediency of considering individual cognitive characteristics when analysing how specialists perceive, evaluate, and utilise algorithmic recommendations.

The study showed that the critical reflection on information, the ability to independently evaluate automated decisions, and the level of subjective control can influence the effectiveness of working with large datasets and AI systems. This provides grounds to consider human interaction with artificial intelligence not merely as a technological but also as a cognitive-psychological process, in which the individual characteristics of the user play a significant role.

A certain limitation of the study was the sample size and the use of predominantly correlational analysis of the interrelationships between the variables under study. Prospects for further research are associated with studying the impact of professional stress, the specificity of analytical tasks, and the experience of using artificial intelligence systems on the specific features of human interaction with algorithmic systems in the decision-making process.

✦ Acknowledgements

None.

✦ Funding

None.

✦ Conflict of Interest

None.

✦ References

[1] Bansal, G., Wu, T., Zhou, J., Fok, R., Nushi, B., Kamar, E., Ribeiro, M.T., & Weld, D.S. (2021). Does the whole exceed its parts? The effect of AI explanations on complementary team performance. In *Proceedings of the 2021 CHI conference on human factors in computing systems* (pp. 1-16). New York: Association for Computing Machinery. doi: 10.1145/344928710.1145/3411764.3445717.

[2] Buçinca, Z., Malaya, M.B., & Gajos, K.Z. (2021). To trust or to think: Cognitive forcing functions can reduce overreliance on AI in AI-assisted decision-making. In *Proceedings of the ACM on human-computer interaction, 5(CSCW1)* (pp. 1-21). New York: Association for Computing Machinery. doi: 10.1145/3449287.

[3] Burton, J.W., Stein, M.-K., & Jensen, T.B. (2020). A systematic review of algorithm aversion in augmented decision making. Journal of Behavioral Decision Making, 33(2), 220-239. doi: 10.1145/344928710.1002/bdm.2155.

[4] Cherniakova, O.V., & Hryshko, O.D. (2025). Cognitive bias and their influence on personnel management efficiency and the adoption of strategic solutions. Scientific Bulletin of Uzhhorod National University. Series: Psychology, 3, 183-190. doi: 10.1145/344928710.32782/psy-visnyk/2025.3.34.

[5] De Brito Duarte,R., Correia, F., Arriaga, P.,& Paiva,A.(2023).AI trust:CanexplainableAI enhancewarrantedtrust?Human Behavior and Emerging Technologies, 2023, article number 4637678. doi: 10.1145/344928710.1155/2023/4637678.

[6] Epstein, S., Pacini, R., Denes-Raj, V., & Heier, H. (1996). Individual differences in intuitive-experiential and analytical-rational thinking styles. Journal of Personality and Social Psychology, 71(2), 390-405. doi: 10.1145/344928710.1037/0022-3514.71.2.390.

[7] Ethics and Data Protection. (2021). Retrieved from https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ethics-and-data-protection_he_en.pdf.

[8] Gillath, O., Ai, T., Branicky, M.S., Keshmiri, S., Davison, R.B., & Spaulding, R. (2021). Attachment and trust in artificial intelligence. Computers in Human Behavior, 115, article number 106607. doi: 10.1145/344928710.1016/j.chb.2020.106607.

[9] Glikson, E., & Woolley, A.W. (2020). Human trust in artificial intelligence: Review of empirical research. Academy of Management Annals, 14(2), 627-660. doi: 10.1145/344928710.5465/annals.2018.0057.

[10] ICC/Esomar International Code on Market, Opinion and Social Research and Data Analytics. (2025). Retrieved from https://iccwbo.org/news-publications/business-solutions/iccesomar-international-code-market-opinion-social-research-data-analytics/#top.

[11] Kahneman, D. (2021). *Thinking, fast and slow*. Kyiv: Nash Format.

[12] Köbis, N., & Mossink, L.D. (2021). Artificial intelligence versus Maya Angelou: Experimental evidence that people cannot differentiate AI-generated from human-written poetry. Computers in Human Behavior, 114, article number 106553. doi: 10.1145/344928710.1016/j.chb.2020.106553.

[13] Konverskyi, A., & Kolotilova, N. (2023). Confirmation bias in argumentation processes. Bulletin of Taras Shevchenko National University of Kyiv. Philosophy, 2(9), 20-24. doi: 10.1145/344928710.17721/2523-4064.2023/9-3/15.

[14] Körber, M. (2019). Theoretical considerations and development of a questionnaire to measure trust in automation. In S. Bagnara, R. Tartaglia, S. Albolino, T. Alexander & Y. Fujita (Eds.), *Proceedings of the 20th congress of the international ergonomics association (IEA 2018)* (vol. 823; pp. 13-30). Cham: Springer. doi: 10.1145/344928710.1007/978-3-319-96074-6_2.

[15] Logg, J.M., Minson, J.A., & Moore, D.A. (2019). Algorithm appreciation: People prefer algorithmic to human judgment. *Organizational Behavior and Human Decision Processes*, 151, 90-103. doi: 10.1145/344928710.1016/j.obhdp.2018.12.005.

[16] Nadurak, V. (2022). Critical thinking: Concept and practice. *Filosofiya Osvity. Philosophy of Education*, 28(2), 129-147. doi: 10.1145/344928710.31874/2309-1606-2022-28-2-7.

[17] Popov, M.O., Stefantsev, S.S., & Zaitsev, O.V. (2022). A cognitive approach to the calibration of the intelligence analyst's nominal judgments. *Science & Defence*, 2(19), 37-42. doi: 10.1145/344928710.33099/2618-1614-2022-19-2-37-42.

[18] Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1-28. doi: 10.1145/344928710.1037/h0092976.

[19] Schoeffer, J., Jakubik, J., Vössing, M., Kühl, N., & Satzger, G. (2025). AI reliance and decision quality: Fundamentals, interdependence, and the effects of interventions. *Journal of Artificial Intelligence Research*, 82, 471-501. doi: 10.1145/344928710.1613/jair.1.15873.
[20] Shneiderman, B. (2022). *Human-centered AI*. Oxford: Oxford University Press. doi: 10.1145/344928710.1093/oso/9780192845290.001.0001.
[21] Tymoshchuk, Y.A., Bruiaka, I.V., & Liubomyrskyi, V. (2022). The role of intuition in the structure of self-regulation in conditions of uncertainty. *Scientific Notes of Ostroh Academy National University: Psychology Series*, 15, 52-61.
[22] von Eschenbach, W.J. (2021). Transparency and the black box problem: Why we do not trust AI. *Philosophy & Technology*, 34(4), 1607-1622. doi: 10.1145/344928710.1007/s13347-021-00477-0.

Когнітивні упередження та пастки при використанні ШІ аналітиком розвідки

Єлизавета Тимощук
Доктор філософії в галузі психології
Національний університет «Острозька академія»
35800, вул. Семінарська, 2, м. Острог, Україна
https://orcid.org/0000-0002-0619-6724
Катерина Середа
Студент
Національний університет «Острозька академія»
35800, вул. Семінарська, 2, м. Острог, Україна
https://orcid.org/0009-0000-1693-6055

✦ Анотація. Активне впровадження систем штучного інтелекту в інформаційно-аналітичну діяльність актуалізує проблему дослідження психологічних чинників, що визначають особливості взаємодії аналітиків з автоматизованими системами та їхню схильність до когнітивних упереджень у процесі професійного прийняття рішень. Метою статті було дослідження взаємозв'язку між когнітивним стилем, локусом контролю та довірою до систем штучного інтелекту як чинниками формування інтелектуальних пасток у професійній діяльності аналітиків розвідки. Дослідження поєднувало теоретичний аналіз сучасних наукових праць з емпіричним вивченням особливостей взаємодії з автоматизованими системами у 50 практикуючих OSINT та інформаційних аналітиків. Для оцінки когнітивного стилю застосовано опитувальник раціонально-інтуїтивного стилю мислення S. Epstein, рівень довіри до автоматизованих систем визначався за допомогою Trust in Automation Questionnaire M. Körber, а локус контролю досліджувався за методикою J. Rotter. Аналіз отриманих даних засвідчив наявність кореляційних залежностей між особливостями мислення респондентів, рівнем суб'єктивного контролю та сприйняттям алгоритмічних систем. Респонденти з переважанням інтуїтивного способу обробки інформації частіше демонстрували готовність покладатися на автоматизовані рекомендації та позитивніше оцінювали функціональні можливості систем штучного інтелекту. Натомість учасники з більш вираженим аналітичним стилем мислення виявляли схильність до ретельнішої перевірки алгоритмічних рішень і нижчого рівня їх прийняття без додаткового аналізу. Також встановлено, що вищий рівень внутрішнього контролю супроводжується позитивнішим сприйняттям надійності та компетентності автоматизованих систем. Отримані результати підтверджують значущість індивідуально-психологічних характеристик у формуванні особливостей взаємодії людини з технологіями штучного інтелекту в професійній діяльності. Результати дослідження можуть бути використані під час розроблення програм психологічної підготовки аналітиків та формування навичок критичної й рефлексивної взаємодії із системами штучного інтелекту

✦ Ключові слова: когнітивний стиль; інтуїтивне мислення; раціональне мислення; локус контролю; інтернальність; довіра до автоматизованих систем; OSINT

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡si»y ofi U¾¡ai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 77-89
✦ ISSN 2617-6858
✦ E-ISSN 2617-6866
✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ UDC 159.98:355.1
✦ DOI: 10.33099/2617-6858-26-21-4-77-89

Transformation of existential pain in psychological counselling of military personnel: Building an ideal model as a tool for integrating combat experience

Anna Shyrokova
Assistant
Private Higher Educational Establishment "Kyiv Medical University"
01004, 17-A Velyka Vasylkivska Str., Kyiv, Ukraine
https://orcid.org/0009-0005-9774-2119

Antonina Kuraieva*
Assistant
Private Higher Educational Establishment "Kyiv Medical University"
01004, 17-A Velyka Vasylkivska Str., Kyiv, Ukraine
https://orcid.org/0009-0004-7956-5107

Oleksandr Farmahei
Doctor of Psychological Sciences, Professor, Colonel
Private Higher Educational Establishment "Kyiv Medical University"
01004, 17-A Velyka Vasylkivska Str., Kyiv, Ukraine
https://orcid.org/0000-0001-7522-6811

✦ Abstract. The relevance of the study is conditioned by the need to expand contemporary approaches to psychological counselling of military personnel with combat experience. Along with post-traumatic, anxious and depressive manifestations, moral trauma and existential pain are important consequences of combat experience, which can cause loss of life meanings, violation of moral integrity, and a crisis of personal identity. This necessitates the application of counselling models aimed at symptom reduction with simultaneous integration of combat experience, the restoration of personal integrity, and the search of new meanings in life. The purpose of the study was to theoretically substantiate the potential of psychosynthesis in transforming the existential pain of military personnel through R. Assagioli's concept of constructing an ideal model to facilitate the integration of combat experience in the process of psychological counselling. The methodological basis of the research was the methods of theoretical analysis, synthesis, comparison, systematisation, and generalisation of contemporary scientific sources on the psychology of combat trauma, moral trauma, existential psychology, psychosynthesis, and psychological counselling. A comparative analysis of psychotherapeutic approaches to working with moral and existential trauma was carried out, in particular, cognitive behavioural therapy, acceptance and commitment therapy, scheme therapy, Gestalt therapy, logotherapy, and existential psychotherapy. As a result of the study, a conceptual model of transformation of existential pain of military personnel by means of psychosynthesis was proposed, the central element of which is the technique of constructing an ideal model. The stages of psychosynthetic counselling were substantiated, including awareness of existential pain through the phenomena of "wonder at pain" and "wonder at joy", disidentification from traumatic experience, establishing contact with the True Self (Higher Self), activation of the will, construction of an ideal model, and integration of combat experience into a coherent system of personal meanings. It was shown that moral trauma and existential pain arise due to the actualisation of fundamental existential givens of human existence and are accompanied by a violation of moral identity, value system, and life prospects. In contrast to

Suggested Citation:
Shyrokova, A., Kuraieva, A., & Farmahei, O. (2026). Transformation of existential pain in psychological counselling of military personnel: Building an ideal model as a tool for integrating combat experience. *Bulletin of National Defence University of Ukraine*, 21(4), 77-89. doi: 10.33099/2617-6858-26-21-4-77-89.

Article's History: Received: 09.04.2026; Revised: 01.08.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (a.kuraieva@kmu.edu.ua)

symptom-centred models of psychological assistance, the proposed approach is focused on the reconstruction of a holistic self-concept, integration of internal conflicts, and the development of personal potential. The practical significance of the study lies in the possibility of applying the proposed psychosynthetic model in consulting military personnel and veterans, and in programmes of psychological support and training of specialists

✦ Keywords: Higher Self; will; personal identity; moral trauma; psychosynthesis; disidentification; life-meaning orientations

✦ Introduction

Contemporary research has substantially broadened and deepened understanding of the psychological consequences of participation in combat operations. If for a long time the dominant conceptual model for explaining mental disorders in military personnel was post-traumatic stress disorder, then contemporary research increasingly demonstrates the limitations of a purely clinical and symptomatic approach to understanding the psychological consequences of war. Empirical data by A.A. Kuraieva *et al*. (2024) showed that a significant part of veterans and military personnel, even in the absence of clinically pronounced manifestations of post-traumatic stress disorder (PTSD), experience a deep crisis of life meanings, loss of internal integrity, destruction of established moral guidelines, alienation from their own experience, and difficulties in integrating experienced events into the structure of personal history. That is why in contemporary military psychology, the study of moral trauma, existential pain, spiritual distress, and the crisis of personal identity as interrelated phenomena that determine the long-term psychological consequences of combat experience is becoming increasingly important. J.I. Harris *et al*. (2021) stressed that the central consequence of moral trauma is a violation of the integrity of the individual, the destruction of habitual ideas about justice and humanity. In parallel with the growing interest in moral trauma in the scientific literature, a separate area of research is being formed on the phenomenon of existential pain in military personnel, presented by L. Terletska (2023). In contrast to acute emotional reactions, existential pain encompasses a deep level of experience associated with the loss of a sense of meaning, inner continuity of life, trust in the world, the experience of the inevitability of death, the reassessment of life values, and the need to rethink own identity after participating in combat operations. The loss of life meaning, a sense of inner alienation, and the inability to integrate combat experience into the previous value system often become the main factors of prolonged psychological suffering, which requires fundamentally different approaches to psychological assistance.

Contemporary discourse demonstrates that the psychological recovery of military personnel largely depends on the ability of a person not to displace or forget the experience, but to integrate combat experience into their own life history, rethink it through the prism of personal values, and form a new system of internal meanings. As noted by M.A. Wilson *et al.* (2024), the understanding of psychological counselling for military personnel is also changing accordingly. The researchers noted that the psychologist should work not only with manifestations of anxiety, depression, or post-traumatic symptoms, but first of all with the processes of restoring personal subjectivity, reconstructing the image of the self, forming a new life perspective, and integrating traumatic experience into a single system of personal meanings. In contrast to models focused mainly on reducing psychopathological symptoms, integrative approaches consider the consequences of combat experience as a process of personal restructuring, covering the transformation of values, changing life meanings, revising the system of relationships with the world and the development of a new personal identity (Hollis *et al.*, 2023). That is why, along with conventional protocols, approaches aimed at reconstructing personal meaning, developing psychological flexibility, post-traumatic growth, moral recovery and integrating traumatic experience are actively developing. A special place among such approaches is occupied by psychosynthesis, which from the very beginning of its development was focused not only on overcoming psychological difficulties, but also on achieving the internal integrity of the individual.

The central task of psychological work is to integrate internal contradictions, develop awareness, find or choose the inner centre of the individual, and restore the ability to self-control. According to Y.V. Kucherenko *et al.* (2024), this approach is particularly important in working with military personnel, as combat experience is often accompanied by deep fragmentation of the personal structure, conflict between pre-war and military identity, and the experience of moral dilemmas. Special scientific and practical interest within the framework of psychosynthesis is the technique of building an ideal model, which is considered as a concept and a step-by-step process of forming an authentic image (model) of the individual, reflecting its most important values, meanings, potential, and strategic life guidelines. In contrast to the idealised or fantasy self-image, the ideal model in psychosynthesis acts as an internal psychological construct that ensures the direction of personal development, integrates various aspects of individual experience, and contributes to the development of consistency between a person's ideas about their own past, present, and future (Kucherenko *et al.*, 2024). For military personnel experiencing a crisis of self-identity after combat operations, such a model can serve as a psychological reference point that allows them to gradually integrate combat experience into the personality structure without displacing or denying it.

Despite the active development of research on moral trauma, existential pain and psychological rehabilitation of

veterans, the analysis of contemporary scientific literature indicates a lack of attention to the study of mechanisms for integrating combat experience by means of psychosynthesis. N. Jamieson *et al.* (2023) evaluated the effectiveness of a number of psychotherapeutic approaches to dealing with moral trauma, in particular, cognitive behavioural therapy, acceptance and commitment therapy, mindfulness practices, narrative interventions, and moral recovery programmes. However, the advisory potential of psychosynthesis is practically not represented in empirical and theoretical studies, despite its conceptual correspondence to current ideas about the integration of the individual after psychotraumatic events. Thus, an obvious scientific gap is formed, which consists in the lack of a holistic theoretical substantiation of the possibilities of using the construction of an ideal model as a tool for transforming existential pain and integrating combat experience in the process of psychological counselling of military personnel. The relevance of this problem is determined not only by its insufficient theoretical development, but also by the urgent needs of psychological practice. In the context of a long-term war, the number of military personnel who need long-term psychological support is constantly growing, while the effectiveness of psychological assistance increasingly depends on the ability of a specialist to work with a crisis of personal meanings, moral conflicts, identity transformation, and restoration of internal integrity of a person. That is why the development and theoretical substantiation of advisory models focused on the integration of combat experience is one of the most urgent tasks of contemporary military and advisory psychology. The purpose of the study was to theoretically substantiate the potential of psychosynthesis for transforming the existential pain of military personnel by integrating combat experience in the process of psychological counselling based on the concept of the ideal model by R. Assagioli.

✦ Materials and Methods

The research was carried out within the theoretical and methodological paradigm and was aimed at conceptualising the possibilities of using the concept and technique of building an ideal model in the method of psychosynthesis as a tool for transforming existential pain and integrating combat experience in the process of psychological counselling of military personnel. The methodological basis of the study was the provisions of humanistic, existential, transpersonal, and consultative psychology, concepts of moral trauma, post-traumatic growth, psychological integration of traumatic experience, and the theoretical foundations of psychosynthesis developed by R. Assagioli (2000) and further expanded by R.G. Tedeschi & L.G. Calhoun (2004) and S.W. Black & K. Klinger (2022). The research materials were contemporary scientific publications devoted to the psychological consequences of combat experience, moral trauma, existential pain, psychological rehabilitation of military personnel, post-traumatic growth, and the use of integrative models of psychological counselling, including O.M. Kokun *et al.* (2021) and Y.V. Kucherenko *et al.* (2024). The analysis included papers published in international peer-reviewed scientific journals indexed in international bibliographic databases, and studies by Ukrainian scholars devoted to the psychological support of military personnel during wartime. The theoretical study was carried out in three interrelated stages. At the first stage, a systematic analysis of contemporary scientific approaches to understanding existential pain, moral trauma, personal identity crisis, and psychological integration of combat experience was carried out. At the second stage, a comparative analysis of psychotherapeutic approaches used in working with the consequences of psychotraumatic experience (cognitive behavioural therapy, logotherapy, acceptance and commitment therapy, psychosynthesis) was performed. The comparison was carried out according to the following criteria: the leading psychological mechanism of change, the ability to work with life-meaning experiences, identity crisis, integration of traumatic experience, development of internal resources, and a holistic self-concept.

The choice of psychosynthesis as a conceptual basis for research was conditioned by the fact that this approach combines work with personal identity, life meanings, will, subpersonalities, and spiritual resources of the individual, considering integration as a central mechanism of psychological changes. In contrast to approaches focused mainly on symptom reduction or cognitive restructuring, psychosynthesis allowed considering existential pain not only as a consequence of psychotrauma, but as a potential resource for personal transformation, which was most consistent with the purpose of this study. At the third stage, a conceptual modelling of the consultative process was carried out, in which the construction of an ideal model was determined by the central mechanism of transformation of existential pain and integration of combat experience. During the modelling, the relationships between the processes of disidentification, introspection, integration of subpersonalities, actualisation of personal resources, reconstruction of the system of life meanings and the development of a new integrated self-concept as interrelated stages of psychosynthesis were analysed. The proposed conceptual model was focused on the use in psychological counselling of military personnel who were in a relatively stable psycho-emotional state and have a sufficient level of ability to reflect, introspect, and semantic development of their own experience. Its use was not considered as an independent method of dealing with acute crisis states, severe psychopathological symptoms, or other conditions that require specialised psychiatric or comprehensive psychotherapeutic care. To achieve this goal, the methods of theoretical analysis, comparative analysis, conceptual synthesis, and theoretical modelling were used. Their integrated application provided an opportunity to substantiate the conceptual model of psychological counselling, in which the construction of an ideal model was the central tool for transforming existential pain and integrating the combat experience of military personnel.

✦ Results and Discussion

For a long time, psychological assistance to military personnel was based mainly on a medical model of mental health, which focused on psychopathological disorders that have clear diagnostic criteria. The focus was on conditions such as PTSD, depressive disorders, anxiety disorders, acute stress responses, adjustment disorders, suicidal behaviour, and addiction (Litz *et al.*, 2009). Accordingly, psychological counselling was primarily focused on identifying symptoms, diagnosing them, and reducing clinical manifestations in accordance with international classifications of mental disorders. An analysis of the clinical experience of working with combat veterans showed that a significant part of military personnel who do not meet the diagnostic criteria for a mental disorder continue to experience deep psychological difficulties. They may not have enough symptoms to make a diagnosis of PTSD or depression, but they suffer from loss of meaning in life, feelings of moral guilt, identity crisis, inner alienation, destruction of the value system, or inability to integrate the experience of combat into their own biography.

As emphasised by J. Grimell (2017), such experiences have a significant impact on quality of life, interpersonal relationships, and professional functioning, although they are not formally classified as mental disorders. In this regard, contemporary military psychology and psychotherapy are increasingly distancing themselves from an exclusively pathopsychological model to a broader understanding of the psychological consequences of war. Scientific discourse actively develops concepts of moral trauma, existential trauma, semantic crisis, spiritual distress, identity trauma, and other phenomena that do not have a separate status of mental disorders in the DSM-5-TR or ICD-11, but can be no less destructive for the individual (Shay, 1994). The focus of psychological assistance is also shifting: from treating symptoms to restoring personal integrity, reconstructing the value system, rethinking combat experience, and forming new life meanings. It is in this context that the existential approach and psychosynthesis become particularly relevant, which allow working with manifestations of psychological distress and also with fundamental questions of human existence (Alberti *et al.*, 2012). The use of the ideal model technique in psychological counselling allows transforming moral and existential pain through the reconstruction of the integral self-concept, the integration of combat experience, and the restoration of the system of personal meanings, which goes beyond the conventional symptom-centred model of psychological assistance. Moral trauma and existential trauma are interrelated, but not identical, psychological phenomena that especially often occur in military personnel as a result of participation in combat operations. Moral trauma occurs when a person becomes a participant, witness of events that contradict their deep moral beliefs, ethical principles, or ideas about good and evil, or fails to prevent such events. As noted by S. Frankfurt & P. Frazier (2016) and J.K. Farnsworth *et al*. (2017), moral trauma does not arise only because of the fact of participation in military operations, but is formed as a result of a violation of a person's deep moral beliefs. Typical examples are given below:

1. Inability to save a fellow human being. A soldier is forced to leave a wounded comrade due to intense enemy fire or the execution of a withdrawal order. After that, he is haunted for a long time by the thought: "I should have done more", even if it was objectively impossible to save fellow soldier.

2. Civilian deaths during military operations. Despite compliance with the rules of warfare, the soldier becomes a witness or indirect participant in the death of civilians. This can cause deep feelings of guilt, shame, and doubt about own morals.

3. The necessity of using lethal force or the trauma of taking a life. Even when the use of a weapon is lawful and necessary to protect oneself or others, the act of taking a human life may conflict with a service member's pre-war moral values.

4. Choice between two equally difficult solutions (the trolley problem). For example, the need to decide whether to evacuate one seriously wounded soldier risking the life of the entire group, or leave him to save the majority. Such moral dilemmas often leave long-term inner experiences, regardless of the correctness of the decision made.

5. Sense of betrayal on the part of the command or the state. Moral injury may arise when a service member believes that their unit was left without adequate support, supplies, or evacuation, or when decisions by the command conflict with their notions of military honour and justice.

6. Loss of trust in own moral principles. After a long stay in war conditions, a person may realise that they acted contrary to their pre-war beliefs, became more rigid or emotionally indifferent. This is often accompanied by an identity crisis and the question: "Am I still the same person I was before the war?"

7. Guilt for survival. A service member experiences the deaths of fellow soldiers and struggles to accept their own survival, believing that they should have died or that they do not deserve to live more than those who died.

A common feature of these situations is that they are not necessarily associated with unlawful or immoral actions on the part of the service member. Moral trauma can occur even when a person has acted professionally, in accordance with the order, international humanitarian law, and military necessity. Its source is not a legal assessment of the act, but an internal conflict between the personal experience and own system of moral values, accompanied by persistent experiences of guilt, shame, loss of trust in oneself, other people, or the world (Zasiekina *et al.*, 2023). Existential trauma has a broader character and is associated with the destruction of a person's basic ideas about oneself, other people, and the world as a whole. This occurs when combat experience calls into question the fundamental existential pillars of the individual: life security, justice, meaning of existence, freedom of choice, own identity, and the future (Ravn, 2024). Meeting with death, constant threat

to life, experiencing losses, awareness of the randomness of survival, the need to make decisions in conditions of uncertainty, and responsibility for the lives of other people actualise the basic existential givens of human existence. As a result, a soldier may experience a loss of meaning in life, inner emptiness, alienation from civilian life, an identity crisis, and difficulties integrating combat experience into their own biography (Black & Klinger, 2022).

As highlighted by T. Molendijk (2025), dealing with moral and existential trauma is one of the key tasks of psychological counselling for military personnel, because without their integration, even successful reduction of symptoms of anxiety or post-traumatic stress does not ensure the restoration of personal integrity. In the process of counselling, it is important to create conditions for rethinking the own experience, restoring personal meanings, reconstructing moral identity, and forming a new integrated self-image. In this context, the psychosynthetic ideal model technique is of particular value, as it allows combat experience to be acknowledged and incorporated into an updated self-concept, in which the service member remains not merely a bearer of traumatic memories but also a person capable of growth, responsible choice, and the pursuit of their own life values.

Ignoring moral and existential trauma can negatively affect not only the mental health of an individual soldier, but also the combat capability of a unit. The accumulation of unresolved internal conflicts leads to the development of emotional exhaustion, loss of motivation, decreased trust in commanders and fellow soldiers, deterioration of decision-making processes, increased impulsivity or, conversely, psychological inhibition. In the long run, this can lead to professional burnout, discipline disorders, and reduced psychological stability and effectiveness in performing combat missions. But timely psychological counselling aimed at transforming moral and existential trauma helps to restore internal integrity, develop resilience, strengthen responsible leadership, maintain the cohesion of the military team, and maintain long-term combat readiness of personnel (Kokun *et al.*, 2021). The theoretical analysis of contemporary existential concepts, the psychology of combat trauma, and the psychosynthetic approach allowed forming a complete model of transformation of existential pain of military personnel in the process of psychological counselling. In contrast to approaches focused mainly on reducing the symptoms of psychotraumatic stress, the proposed model considers combat experience as a potential source of personal transformation that occurs through rethinking the existential givens of human existence.

In the course of the study, a conceptual distinction was made between the concepts of existential givens and existential challenges. Existential givens are defined as objective, universal, and unchangeable characteristics of human existence that do not depend on individual beliefs or socio-cultural context. These include mortality, freedom, responsibility, fundamental isolation, physicality, the variability of life, suffering, and the lack of a predefined meaning of existence. J.A. Nieuwsma *et al.* (2015) noted that they form the basis of any human experience and cannot be eliminated, but only realised and accepted. Existential challenges arise as a subjective psychological reaction of the individual to awareness of the fundamental realities of human existence. The main challenges include finding the meaning of life, experiencing freedom of choice, responsibility for own decisions, experiencing loneliness, anxiety before death, and questions of personal identity and authenticity (Siegel, 2010). Based on the analysis, it was established that combat experience significantly intensifies a service member's engagement with all the major existential givens simultaneously. The constant proximity of death, the need to make decisions in conditions of uncertainty, the experience of losses, responsibility for the lives of other military personnel and the post-war return to civilian life significantly increase the intensity of existential pain. The source of psychological suffering is not the existential given itself, but in the way it is personally interpreted (Shyrokova *et al.*, 2025). The study identified the main areas of psychological transformation of existential pain in the counselling process (Table 1).

Table 1. *Main areas of transformation of existential pain in the process of psychological counselling of military personnel*

Existential given	Manifestation of existential pain	Area of psychosynthetic transformation	Expected psychological outcome
Mortality	Fear of death, loss of the future	Accepting the finiteness of life	Awareness of the value of life
Freedom	Powerlessness, loss of control	Restoring inner agency	Responsible decision-making
Responsibility	Feeling of guilt	Rethinking of own role	Integration of moral experience
Isolation	Alienation, misunderstanding	Development of authentic relationships	Restoring trust
Absurdity/meaninglessness	Loss of meaning	Building personal meanings	New life perspective
Identity/physicality	Destroying of self-image	Reconstruction of the integral self-concept	Integrated sense of self

Source*: compiled by the authors*

Table 1 showed the relationship between the main manifestations of existential pain in military personnel and the corresponding areas of their psychosynthetic transformation. The presented areas cover rethinking the attitude to mortality, restoring subjectivity and responsibility, overcoming alienation, forming new life meanings, and reconstructing an integral self-concept. It is assumed that such a transformation will contribute to the integration of combat experience and the restoration of the psychological integrity of personality, according to Y.V. Kucherenko *et al.* (2024), represents adaptive step-by-step algorithm for advising military personnel, in which the ideal model is

considered not as an image of an "ideal warrior", but as an integrated personality that combines combat experience with peaceful life roles. This approach prevents the establishment of a rigid military identity and helps to restore the integrity of the individual (Fig. 1).

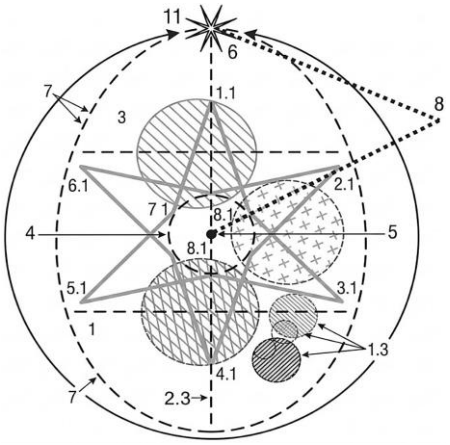

Figure 1. *Complex scheme of psychosynthesis: Interaction of mental spheres, functions, and axes of personality development*

Source*: compiled by the authors based on R. Assagioli (2000), Y.V. Kucherenko et al. (2024)*

The main elements of the integrated psychosynthesis framework presented in Figure 1 as the "Egg" model, which represents the psychological structure of a service member experiencing existential pain, are characterised below. The lower unconscious contains the mental consequences of a traumatic combat experience, repressed experiences, intense affective reactions, fear of death, feelings of guilt, shame, powerlessness, and bodily responses to stress. It is at this level that a significant part of the experience of moral and existential trauma is localised. Existential pain can manifest as obsessive memories, somatic tension, sleep disturbances, an inner sense of danger, and emotional fragmentation. The middle unconscious provides an integration of acquired life experience, professional skills, and behavioural patterns. After a combat experience, it is at this level that the events experienced are gradually integrated into the overall autobiographical memory. Psychological counselling is aimed at transferring traumatic experiences from the sphere of emotional disorganisation to the level of meaningful life experience. The higher unconscious is a source of spiritual values, personal meanings, internal resources, moral guidelines, and the desire for self-realisation. This area becomes the main resource for the transformation of existential pain. Through an appeal to values, love, service, responsibility, and the meaning of life, the serviceman gradually rethinks the personal experience. The field of consciousness reflects the actual thoughts, emotions, bodily sensations, and experiences of a serviceman. It is in the field of consciousness that the initial awareness of existential pain occurs, its acceptance and further rethinking during psychological counselling. The personal Self is the centre of self-awareness, able to observe own experiences without fully identifying with them. One of the key tasks of psychological counselling is to restore the position of the personal Self as an active subject, able to realise own pain without losing personal integrity. In psychosynthesis, the personal Self is also referred to as the conscious Self, the inner observer, and the subject of consciousness and will. The Higher Self is the source of inner integrity, freedom, spiritual development, and authenticity. Contact with the Higher Self provides an opportunity to re-evaluate existential givens and integrate combat experience without destroying personal identity. The Higher Self is also interpreted as the Self, the True Self, or the spiritual core of the personality. The collective unconscious includes universal archetypal images, collective moral values, and the cultural experience of humanity. In the process of counselling, the serviceman addresses the universal themes of life, death, heroism, sacrifice, loss, and human dignity, which contributes to the expansion of individual experience to the universal level. The external unifying centre is not a separate mental structure, but is a functional construct formed through the relationship of the personal Self (5/8.1), the Higher Self (6), and the ideal model (11). This centre determines the direction of personal development, ensures the coordination of internal resources with life values, and coordinates the process of psychosynthesis as an ideal of self-realisation. In the context of the transformation of the existential pain of military personnel, the external unifying centre acts as a psychological reference point that helps to integrate combat experience, restore the integrity of the individual, and form a realistic, functionally mature model of further life.

Figure 1 also shows the "Star of mental functions", which reflects the mechanisms of transformation of existential pain in accordance with the provisions of P. Ferrucci (1982):

1.1. Sensations. Help to become aware of the bodily manifestations of existential pain, nervous system reactions, physical symptoms of prolonged stress, and regain contact with own body.

2.1. Emotions. Main area of experience of fear of death, guilt, shame, loss, loneliness, powerlessness, and grief. Awareness of these experiences is a necessary condition for further integration.

3.1. Urge-desires. Reflect unconscious motivational contradictions between the desire to avoid pain and the need to restore life, close relationships, professional activities, and future life prospects.

4.1. Imagination. Used as a central psychotherapeutic mechanism for building an ideal personality model, forming a new image of the future, and visualising an integrated self-concept.

5.1. Thinking. Promotes cognitive rethinking of combat experience, reconstruction of life history and integration of new personal meanings.

6.1. Intuition. Helps to discover new existential meanings, restore inner self-confidence, and find answers that cannot be obtained solely logically.

7.1. Will. Central integrating mechanism of psychosynthetic transformation. It is the will that coordinates all mental functions, ensures disidentification with traumatic experience, supports the construction, and achievement of an ideal model and its further implementation in life.

8.1. Personal Self. Acts as the central point of psychological changes. Through the process of disidentification, the soldier moves from the position of "I am my pain" to the position of "I experience pain, but it does not define me".

Dynamic model of psychosynthesis (Sørensen, 2023):

1.3. Subpersonalities. Military personnel may experience the activation of various subpersonalities, including the "Warrior", "Commander", "Wounded", "Rescuer", "Inner Critic", "Survivor", "Father", "Man", "Victim", and "Protector". Psychological work within the framework of psychosynthesis is not aimed at eliminating these parts of the personality, but at their awareness, coordination and integration into the integral structure of the Self. In the diagram, each subpersonality is correlated with a dominant mental function and the corresponding level of the unconscious. Thus, the Subpersonality "Victim" can manifest itself at the level of the lower unconscious through unpleasant bodily sensations, experiences of powerlessness and inner emptiness.

2.3. Vertical development axis. Reflects two possible areas of personal dynamics after combat experience. Upward movement (psychosynthesis) involves accepting existential pain, developing awareness, disidentification, building an ideal model, forming new life meanings, and post-traumatic personal growth. Downward movement (regression) is characterised by fixation on traumatic experiences, increased psychological disintegration, avoidance, feelings of hopelessness, and narrowing of personal identity.

Within the proposed conceptual model, the number 11 indicates the final result of the psychosynthetic transformation of existential pain (an ideal model). It symbolises the achievement of a harmonious interaction between the personal Self, the Higher Self, mental functions, subpersonalities, and different levels of the psyche. After passing through the process of awareness, disidentification, building an ideal model and integrating combat experience, the serviceman forms a new integral self-concept, in which existential pain ceases to be a source of destruction and is transformed into a resource of personal development, psychological stability, and post-traumatic growth. Based on the complex model of psychosynthesis shown in Figure 1, a sequence of stages reflecting the logic of psychosynthetic counselling is determined. The first stage is not to reduce the intensity of existential pain, but to realise it as a carrier of important information about the inner world of a person. In psychosynthesis, pain is not considered solely as a pathological symptom that needs to be eliminated, but as a manifestation of an internal conflict between the actual way of existence of the individual and its deep development potential. That is why the consultant helps the serviceman to move from an automatic desire to get rid of pain to a position of careful study of its content. At the centre of this approach is not the question "How to stop this pain?", and "What does this pain signify?" (activation 5 in Figure 1). At this stage, the soldier can experience the phenomenon of "wonder at pain", when he realises that the source of their suffering is not only a traumatic event, but also a collision with the fundamental existential givens of human existence. Further, there may be a "wonder at joy" – the discovery that behind the experience of pain is hidden a significant personal value, love, loyalty, a sense of duty, a desire for justice, or another resource that gives this pain its existential content. Surprise creates a psychological distance between a person and their experience and translates the reaction from an automatic emotional level to the plane of awareness. It is this awareness that creates the conditions for the transition from the experience of suffering to its semantic transformation in the field of consciousness (4). The second stage is the process of disidentification (de-identification) – one of the fundamental principles of psychosynthesis, which allows a person to stop identifying their own personality with individual experiences, roles, or crisis states (1.3). In the context of combat experience, this is particularly significant, as following trauma, a service member may begin to define themselves through their own pain: "I am traumatised"; "I am someone who lost fellow soldiers"; "I am a person who broke down". This identification gradually narrows the self-concept, restricts the vision of the future, and supports the existential crisis.

In the process of counselling, the consultant helps the client to form a different internal position, which is reflected in psychosynthetic formulas: "I am not my pain – I am more than my pain", "I am not my crisis – I am more than my crisis", "I am not my traumatic experience – I am someone who experiences it and is able to give it a new meaning". The process involves acknowledging the suffering while expanding the boundaries of personal identity. Pain is recognised as a real part of the experience, but it ceases to define the individual completely. The theoretical basis of such a process is one of the basic laws of psychosynthesis, formulated by R. Assagioli (2000): "We are dominated by everything we identify with; what we disidentify from, we can control". It is disidentification that creates inner freedom in relation to own experiences. The serviceman gradually moves from the position of the object of injury to the position of the subject of their own life, able to realise, comprehend and actively transform personal experience. The process of disidentification is supported by other laws of psychosynthesis. According to the law of attention, any mental content on which consciousness concentrates for a long time becomes more powerful and influential. If a person's entire attention is focused solely on pain, guilt, or loss, these experiences gradually become a central element of their identity. Instead, shifting attention to the inner Observer through the will (8.1), own resources, values, and developmental potential weakens the dominance of traumatic experiences and opens up the possibility of integrating new meanings. That is why, after the process of disidentification is

completed, it becomes possible to build an ideal model – a new integrated self-image that no longer denies combat experience, but also does not allow it to remain the only basis for self-identification (Sørensen, 2023). Thus, existential pain is gradually transformed from a source of destruction into a resource of personal development, and combat experience is integrated into the integral life history of a serviceman. The ideal model includes desired personal qualities, life values, ways to interact with the world, and future social roles. In psychosynthesis, the ideal model (11) is not considered an unattainable ideal or a fantasy image of perfection. It is a realistic model of personality development, reflecting its potential opportunities and direction of further integration, and the result of psychosynthetic transformation, in which the individual achieves internal integrity, retains functionality, the ability to self-regulate, and realise their own values despite the experienced existential pain. For this reason, the model is shaped in accordance with a person's inner values, meanings, and deeper aspirations, rather than social expectations or imposed standards (Firman & Gila, 2010).

The process of building an ideal model is associated with the phenomenon of an external unifying centre as a concrete support for self-realisation in activity and behaviour. The external unifying centre is formed through the establishment of a functional and semantic connection between the personal Self (8.1), the Higher Self (6), and the ideal model as an image achievable ideal (11), which is taken out of the elements of the "Egg" model, which together determine the course of integration of mental functions, subpersonalities, and levels of the psyche in the process of psychosynthesis. At the initial stages of psychological counselling, the client often needs a certain external reference point, which represents integrity, maturity, and the desired direction of personal development. Such a unifying centre can be a significant person, a spiritual ideal, a professional or moral model, a value system, or a symbolic image that evokes trust and inner response (Ferrucci, 1982). The external unifying centre serves as a temporary support, helping the serviceman overcome disorganisation caused by moral or existential trauma, and establish the course of further personal changes. As the psychosynthetic process develops, there is a gradual transition from the support to the external to the internal unifying centre, which, according to R. Assagioli (2000), is a True or Higher Self. Unlike the empirical (conscious, personal) Self, which can be temporarily identified with pain, crisis, social roles, or traumatic experiences, the True Self is seen as an unchanging centre of consciousness and will that preserves the integrity of the individual regardless of external circumstances. It is the establishment of contact with the True Self that allows integrating even the most painful experiences without losing own identity. An important mechanism of this process is the will (7.1), which was defined by R. Assagioli (2000) as the central function of the individual, providing conscious choice, inner freedom, and the ability to direct personal development.

After identifying with the traumatic experience, the serviceman gradually moves from a reactive experience of their own pain to an active development of the future self-image. Through repeated visualisation of the ideal model, its emotional residence, and the consistent transfer of individual characteristics to everyday behaviour, the will becomes an integrating force that combines conscious values, personal meanings, and specific actions. As a result, a new integrated self-image is formed, in which combat experience no longer defines the personality in its entirety but becomes one of the components of their life journey. The practical implementation of the proposed conceptual model is carried out using the psychosynthetic exercise "Building an ideal model", adapted to the tasks of psychological counselling of military personnel experiencing existential pain. The exercise is based on the principle of using creative imagination to form a realistic image of an integrated personality, which is not a fantasy ideal or an unattainable model, but reflects the potential state of psychological integrity available to a particular person in the process of personal development. The goal of the technique is to gradually relinquish inauthentic self-images formed under the influence of traumatic experience, social expectations, and internal conflicts, and to create a new integrated image of the self that serves as a guide for further psychological transformation. The first stage of the exercise involves studying the client's self-images, in particular, false or partial models of the Self. With the help of managed visualisation, the client consistently addresses various ideas about the self: an understated or restrictive image, an idealised image, a fantasy image of the desired Self ("barren image" according to R. Assagioli), the image they seek to present to others, self-perceptions shaped by the evaluations of others, and the image they believe others would like to see in them. After visualising each image, the client reproduces it as a drawing or symbol at will and performs a brief reflection on the emotions, associations and meaning associated with it in their own life.

The second stage is disidentification. After analysing all the constructed images, the client becomes aware of their impact on their life, identifies those that constrain their development, and, through an act of will, symbolically relinquishes these inauthentic self-perceptions. At this stage, one of the basic principles of psychosynthesis is implemented – disidentification, according to which a person ceases to perceive individual roles, experiences, or consequences of a traumatic experience as identical to their own personality. The third stage is building an ideal model. After freeing themselves from previous images, the client is invited to create a new self-image that reflects their authentic values, life goals, and inner potential. The emphasis is therefore placed not on creating an unattainable ideal, but on developing a realistic model of a person capable of functioning effectively, accepting their own experience, and realising their life values. The resulting image is also recorded as a drawing or symbolic image and accompanied by written reflection. The fourth stage is the integration

of the ideal model. The final component of the exercise is the psychological "revival" of the created model. The client imagines themselves embodying the fully developed ideal model and gradually experiences typical life situations, modelling new ways of responding, behaving, and making decisions in accordance with the new personality structure. Regular repetition of this stage helps to transfer the existing internal changes to everyday life and consolidate new behavioural strategies.

The action of the exercise is based on a combination of several interrelated mechanisms of psychosynthesis. Disidentification (8.1/5) helps to separate the personal Self from traumatic experiences, negative roles, and limiting ideas about oneself, while creative imagination (4.1) allows forming a realistic image of further personal development. Activation of the will (7.1) is associated with the conscious choice of a new direction of development and its consistent implementation, and integration of subpersonalities (3.1) is associated with the coordination of internal roles and contradictory parts of the individual. Contact with the Higher Self (6) orients a person to authentic values, meanings, and personal potential, which together sets the stage for a gradual reconstruction of the self-concept (8.1) after a traumatic experience. Thus, building an ideal model in psychosynthesis is not limited to visualising the desired qualities, but involves a consistent restructuring of the way to perceive oneself and own experience. Such a process is aimed at moving from a fragmented identity formed under the influence of moral and existential trauma to a more holistic self-perception, consistent with the inner will, personal meanings and authentic values, which creates prerequisites for constructive integration of combat experience (Vargiu, 1974). An important result of the study was the substantiation that the central mechanism of psychological changes is the transformation of personal meanings, and not a direct decrease in the intensity of negative experiences. In psychosynthesis, the development of desired qualities and a new personal perspective occurs only after accepting and realising negative experiences, and not by displacing them. If during the development of an ideal model there is resistance or strengthening of negative emotions, this is considered as a manifestation of non-integrated internal conflicts that require separate study before further modelling of the desired image. Generalisation of the results gives grounds to assume that the use of the technique of building an ideal model in consulting military personnel can help to restore the integrity of personal identity, integrate combat experience into life history without its displacement, develop internal freedom and responsibility, form new personal meanings, and increase psychological stability. In addition, its use can potentially activate the processes of post-traumatic personal growth. Thus, the conducted research allowed developing a conceptual model of psychological counselling of military personnel, in which the algorithm for constructing an ideal model acts as a central psychosynthetic tool for integrating combat experience.

The problem of moral and existential trauma has become increasingly important in contemporary psychotherapy in recent years. Despite differences in theoretical approaches, most trends recognise that the psychological consequences of combat experience are not limited to the development of post-traumatic stress disorder or other mental disorders. Considerable attention is paid to restoring a person's ability to live in accordance with their own values, integrate traumatic experiences, restore identity, and form a new system of life meanings. However, the mechanisms for achieving these goals differ significantly in different psychotherapy schools. In cognitive behavioural therapy (CBT), moral and existential pain is considered primarily through a system of dysfunctional beliefs, automatic thoughts, and cognitive distortions that were formed after traumatic events. The work of a psychologist is aimed at identifying such beliefs as "I am guilty", "the world is dangerous", "I will never be normal again", their critical analysis and gradual cognitive restructuring. Contemporary adaptations of CBT for military personnel also place considerable emphasis on addressing guilt, shame, and traumatic memories (Herman, 1997). In acceptance and commitment therapy (ACT), the central task is not to eliminate pain, but to develop psychological flexibility. It is believed that suffering is aggravated not by the traumatic experience itself, but by a person's struggle with their experiences. Therefore, the client learns to accept complex emotions without avoidance, identify with their thoughts (cognitive diffusion), be aware of their own values, and behave in accordance with these values, even in the presence of pain. When working with military personnel, ACT is particularly effective in overcoming moral trauma, when feelings of guilt cannot simply be refuted by logical arguments (Hayes *et al.*, 2012). Scheme therapy considers existential experiences as a consequence of the activation of early maladaptive schemes and modes of personality, which can worsen after combat events. In particular, moral trauma often activates patterns of defection, punishment, distrust, emotional deprivation, or excessive standards. As noted by A. Arntz & G. Jacob (2013), counselling aims to identify these patterns, develop a "healthy adult" regimen, and develop more adaptive ways to respond to experiences. In Gestalt therapy, the central concern is unresolved experience and disruptions in a person's contact with themselves and the surrounding world. Combat experience may remain an unfinished Gestalt, manifested in recurring memories, emotional fixation, difficulty completing the grieving process, or inability to accept the loss. Psychotherapy work focuses on awareness of actual experiences "here and now", completing emotionally incomplete situations, and integrating discarded aspects of the individual (Perls, 1969).

A special place in working with existential pain is occupied by logotherapy by V.E. Frankl (1966), which proceeds from the position of a person's desire for meaning as the main motivational force. From the standpoint of logotherapy, suffering itself does not destroy the individual, if a person is able to find or create the meaning in

their experience. Counselling is aimed at finding the personal meaning of combat experience, rethinking losses, responsibility, and own life vocation. It was logotherapy that for the first time systematically posed the problem of existential vacuum and loss of meaning as an independent psychological phenomenon. In existential psychotherapy, moral and existential pain is seen as a natural consequence of a person's encounter with the fundamental data of existence: mortality, freedom, responsibility, isolation, and the lack of a predefined meaning of life (Yeomans, 2018). The task of the consultant is not to eliminate these experiences, but to create a space for their awareness, acceptance, and personal understanding. It is argued that confronting own finitude, responsibility, and freedom enables a person to live more authentically. The analysis of the theoretical foundations of these areas suggests that most of them focus mainly on individual components of the experience of moral or existential trauma: cognitive, emotional, behavioural, or semantic. A comparison of the methods is presented in Table 2.

Table 2. *Comparative table of psychotherapy schools working with the main manifestations of existential pain*

Criteria	CBT	ACT	Logotherapy	Psychosynthesis
Work with symptoms	Present	Present	Partially present	Partially present
Work with meanings	Partially present	Present	Central focus	Central focus
Work with identity	Partially present	Present	Present	Central focus
Work with will	Not a focus	Partially present	Present	Central focus
Personal integration	Not a focus	Present	Present	Central focus

Note*: the following scale is used for evaluation: "not a focus" – aspect is not included in the conceptual model of the approach; "partially present" – aspect is considered indirectly and does not constitute a separate target of the work; "present" – aspect is a component of the approach, but not its main focus; "central focus" – aspect forms the core of theoretical provisions and practical work within the approach*
Source*: compiled by the authors*

Comparative analysis shows that CBT, ACT, and logotherapy focus primarily on individual aspects of existential pain, while psychosynthesis encompasses a broader set of targets, combining work with meanings, identity, will, and personality integration. This gives grounds to consider psychosynthesis as a more holistic conceptual approach to working out moral and existential trauma. But much less attention is paid to the process of holistic reconstruction of the individual after a combat experience, when not only the attitude to trauma changes, but also the very structure of self-identity, the system of internal roles, life prospects, and the image of the future. It is in this respect that R. Assagioli's (2000) psychosynthesis demonstrates its conceptual specificity. Unlike approaches that are primarily focused on accepting, comprehending, or cognitively re-evaluating experiences, psychosynthesis combines these processes with active personality integration. The central place is occupied by the mechanisms of disidentification, the development of the conscious self, work with the will, the integration of subpersonalities, and the construction of an ideal model, which allow not only to change the attitude to combat experience, but also to form a new integral personal organisation. In the context of moral and existential trauma, this is of fundamental importance. If moral trauma destroys the value system, and existential pain destroys life meanings and identity, then psychosynthesis offers tools aimed specifically at restoring the integrity of the individual, and not just at reducing symptoms or adapting to the experience experienced. Building an ideal model allows integrating combat experience into a person's life history, without denying it, but simultaneously not allowing it to become the only basis for self-identification. It is this integrative orientation that makes psychosynthesis a particularly promising method of psychological counselling for military personnel experiencing moral trauma and existential pain.

The analysis of contemporary psychotherapeutic approaches has shown that they explain the nature of moral and existential trauma in different ways and use different mechanisms of psychological changes. The general trend of contemporary psychotherapy is a gradual transition from a symptom-centred model of care to working with meanings, values, moral identity, and personal integrity. It is in this context that psychosynthetic techniques, in particular, the technique of building an ideal model, can be considered as an integrative tool for psychological counselling of military personnel, which combines the rethinking of existential experience with the active development of a new image of themselves and their own future. Analysis of the developments of R. Assagioli (2000) allowed establishing that the ideal model technique has a significant potential for integrating traumatic experience, since its goal is not to create an unattainable image of an "ideal person", but to form a realistic model of personality that corresponds to the current stage of human development and ensures its further psychosynthesis. The central mechanism of the technique is the creation of an achievable self-image, its repeated visualisation, experience, and gradual transfer to real behaviour.

✦ Conclusions

The conducted theoretical research allowed substantiating the expediency of considering the existential pain of military personnel as an independent subject of psychological counselling, which goes beyond the traditional symptom-centred model of psychological assistance. It was established that along with post-traumatic manifestations, a significant part of the military experiences moral and

existential trauma, which manifests itself in the loss of life meanings, violation of moral integrity, crisis of personal identity, and difficulties in integrating combat experience. It is these phenomena that largely determine the long-term psychological consequences of war and require a separate methodological understanding. As a result of the study, a conceptual model of transformation of existential pain in psychological counselling of military personnel was developed, which was based on the principles of psychosynthesis by R. Assagioli. Thus, the expediency of using the algorithm for constructing an ideal model as a tool for integrating combat experience in the process of psychological counselling was substantiated. The proposed approach was focused on restoring personal integrity, transforming existential meanings, and forming an integrated self-concept, within which combat experience was included in the life history of the individual, without determining its self-identification.

The sequence of psychosynthetic counselling, which included awareness of existential pain through the phenomena of "wonder at pain" and "wonder at joy", the process of disidentification with traumatic experience, the construction of an ideal model, and the integration of new personal meanings, was theoretically substantiated. It was shown that this sequence creates conditions for the transition from experiencing moral and existential trauma to post-traumatic personal growth, the development of inner freedom, responsibility, and psychological stability. A comparative analysis of contemporary psychotherapeutic approaches has shown that most of them work effectively with individual cognitive, emotional, behavioural, or semantic aspects of traumatic experience. Psychosynthesis is characterised by an integrative orientation, since it combines work with existential meanings, moral values, identity, and personal development potential in a single consultative process. It can therefore be considered a promising method of psychological support for military personnel experiencing moral and existential trauma. Prospects for further research are related to empirical testing of the proposed model and evaluation of the effectiveness of psychosynthetic interventions in dealing with moral and existential trauma of military personnel.

✦ Acknowledgements

The authors express their sincere gratitude to Yehor Valeriiovych Kucherenko for his academic guidance, methodological assistance, and significant contribution to the conceptualisation of the ideal model, and for the intellectual inspiration that prompted the writing of this paper.

✦ Funding

None.

✦ Conflict of Interest

None.

✦ References

[1] Alberti, A., Bartoli, S., Caldironi, B., Ferrucci, P., Giorni, G., Peresson, L., & Rosselli, M. (2012). *A psychotherapy on the side of the human being: The historical 1977 manifesto of therapeutic psychosynthesis*. Florence: L'Uomo Edizioni.

[2] Arntz, A., & Jacob, G. (2013). *Schema therapy in practice: An introductory guide to the schema mode approach*. Basel: Wiley-Blackwell.

[3] Assagioli, R. (2000). *Psychosynthesis: A collection of basic writings*. Amherst, MA: Synthesis Center.

[4] Black, S.W., & Klinger, K. (2022). Building spiritual strength: A spiritually integrated approach to treating moral injury. *Current Treatment Options in Psychiatry*, 9, 313-320. doi: 10.1007/s40501-022-00276-0.

[5] Farnsworth, J.K., Drescher, K.D., Evans, W., & Walser, R.D. (2017). A functional approach to understanding and treating military-related moral injury. *Journal of Contextual Behavioral Science*, 6(4), 391-397. doi: 10.1016/j.jcbs.2017.07.003.

[6] Ferrucci, P. (1982). *What we may be: Techniques for psychological and spiritual growth through psychosynthesis*. Los Angeles, CA: J.P. Tarcher.

[7] Firman, J., & Gila, A. (2010). *Psychosynthesis: A psychology of the spirit*. Albany, NY: State University of New York Press.

[8] Frankfurt, S., & Frazier, P. (2016). A review of research on moral injury in combat veterans. *Military Psychology*, 28(5), 318-330. doi: 10.1037/mil0000132.

[9] Frankl, V.E. (1966). Self-transcendence as a human phenomenon. *Journal of Humanistic Psychology*, 6(2), 97-106. doi: 10.1177/002216786600600201.

[10] Grimell, J. (2017). Making dialogue with an existential voice in transition from military to civilian life. *Theory & Psychology*, 27(6), 832-850. doi: 10.1177/0959354317739164.

[11] Harris, J.I., Chamberlin, E.S., Engdahl, B., Ayre, A., Usset, T., & Mendez, D. (2021). Spiritually integrated interventions for posttraumatic stress disorder and moral injury: A review. *Current Treatment Options in Psychiatry*, 8, 196-212. doi: 10.1007/s40501-021-00248-w.

[12] Hayes, S.C., Strosahl, K.D., & Wilson, K.G. (2012). Psychological flexibility as a unified model of human functioning. In *Acceptance and commitment therapy: The process and practice of mindful change* (2nd ed., pp. 60-99). New York, NY: Guilford Press.

[13] Herman, J.L. (1997). *Trauma and recovery: The aftermath of violence – from domestic abuse to political terror*. New York, NY: Basic Books.

[14] Hollis, J., Hanna, P., & Perman, G. (2023). Recontextualising moral injury among military veterans: An integrative theoretical review. *Journal of Community & Applied Social Psychology*, 33(1), 85-101. doi: 10.1002/casp.2643.
[15] Jamieson, N., Carey, L.B., Jamieson, A., & Maple, M. (2023). Examining the association between moral injury and suicidal behavior in military populations: A systematic review. *Journal of Religion and Health*, 62, 3904-3925. doi: 10.1007/s10943-023-01885-6.
[16] Kokun, O.M., Moroz, V.M., Lozinska, N.S., & Pishko, I.O. (2021). *Psychological prevention of psychotraumatization among servicemen of the Armed Forces of Ukraine: Methodological guide*. Kyiv: Ukrainian Military Medical Academy.
[17] Kucherenko, Y.V., Shyrokova, A.V., & Piven, L.V. (2024). Psychological assistance to adults at the threshold between post-traumatic recovery and self-growth, based on psychosynthesis. *Problems of Humanities. Psychology*, 54, 30-41. doi: 10.32782/2312-8437.54.2024-2.4.
[18] Kuraieva, A.A., Husiatnyk, O.S., & Hushchyna, T.Y. (2024). Medico-psychological foundations in the conceptualization of combat psychotrauma. *Habitus*, 67, 333-336. doi: 10.32782/2663-5208.2024.67.57.
[19] Litz, B.T., Stein, N., Delaney, E., Lebowitz, L., Nash, W.P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*, 29(8), 695-706. doi: 10.1016/j.cpr.2009.07.003.
[20] Molendijk, T. (2025). Just war theory for morale and moral injury: Beyond individual resilience. *Journal of Military Ethics*, 23(3-4), 201-218. doi: 10.1080/15027570.2024.2442802.
[21] Nieuwsma, J.A., Walser, R.D., Farnsworth, J.K., Drescher, K.D., Meador, K.G., & Nash, W.P. (2015). Possibilities within acceptance and commitment therapy for approaching moral injury. *Current Psychiatry Reviews*, 11(3), 193-206. doi: 10.2174/1573400511666150629105234.
[22] Perls, F.S. (1969). *Gestalt therapy verbatim*. Lafayette, CA: Real People Press.
[23] Ravn, I. (2024). The existential challenges of stress, trauma, and psychopathology and their integration to the self: A self-determination theory perspective. *Trends in Psychology*. doi: 10.1007/s43076-024-00373-4.
[24] Shay, J. (1994). *Achilles in Vietnam: Combat trauma and the undoing of character*. New York, NY: Scribner.
[25] Shyrokova, A.V., Kuraieva, A.A., & Frolov, O.S. (2025). The problem of posttraumatic personality growth in modern psychological theories *Psychological Studies*, 2, 214-223. doi: 10.32782/psych.studies/2025.2.29.
[26] Siegel, D.J. (2010). *Mindsight: The new science of personal transformation*. New York, NY: Bantam Books.
[27] Sørensen, K. (2023). *Conflict, crises, and synthesis – introduction*. Retrieved from https://kennethsorensen.dk/en/conflict-crises-and-synthesis-introduction/.
[28] Tedeschi, R.G., & Calhoun, L.G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1). doi: 10.1207/s15327965pli1501_01.
[29] Terletska, L. (2023). Psychotherapy of existential guilt as a means of preserving the psychological health of the individual. *Bulletin of Taras Shevchenko National University of Kyiv. Psychology*, 1(17), 72-78. doi: 10.17721/BPSY.2023.1(17).10.
[30] Vargiu, J. (1974). Subpersonalities. *Synthesis*, 1, 52-90.
[31] Wilson, M.A., Shay, A., Harris, J.I., Faller, N., Usset, T.J., & Simmons, A. (2024). Moral distress and moral injury in military healthcare clinicians: A scoping review. *AJPM Focus*, 3(2), article number 100173. doi: 10.1016/j.focus.2023.100173.
[32] Yeomans, A.E. (2018). Self-care during dark times. In J. Kuniholm (Ed.), *Sharing wellness: Psychosynthesis for helping people: Theory and applications, a collection of classic articles* (pp. 103-130). Cheshire, MA: Cheshire Cat Books.
[33] Zasiekina, L., Kokun, O., Hlova, I., & Bojko, M. (2023). Defining conceptual boundaries of moral injury and post-traumatic stress disorder in military population: A systematic review. *East European Journal of Psycholinguistics*, 10(1), 299-314. doi: 10.29038/eejpl.2023.10.1.zas.

Трансформація екзистенційного болю в психологічному консультуванні військовослужбовців: побудова ідеальної моделі як інструмент інтеграції бойового досвіду

Анна Широкова
Асистент
Приватний вищий навчальний заклад «Київський медичний університет»
01004, вул. Велика Васильківська, 17-А, м. Київ, Україна
https://orcid.org/0009-0005-9774-2119

Антоніна Кураєва
Асистент
Приватний вищий навчальний заклад «Київський медичний університет»
01004, вул. Велика Васильківська, 17-А, м. Київ, Україна
https://orcid.org/0009-0004-7956-5107

Олександр Фармагей
Доктор психологічних наук, професор, полковник
Приватний вищий навчальний заклад «Київський медичний університет»
01004, вул. Велика Васильківська, 17-А, м. Київ, Україна
https://orcid.org/0000-0001-7522-6811

✦ Анотація. Актуальність дослідження зумовлена потребою в розширенні сучасних підходів до психологічного консультування військовослужбовців із бойовим досвідом. Поряд із посттравматичними, тривожними та депресивними проявами важливими наслідками бойового досвіду є моральна травма й екзистенційний біль, що можуть спричиняти втрату життєвих смислів, порушення моральної цілісності та кризу особистісної ідентичності. Це визначає необхідність застосування консультативних моделей, орієнтованих не лише на редукцію симптомів, а й на інтеграцію бойового досвіду, відновлення особистісної цілісності та формування нових життєвих смислів. Метою дослідження було теоретичне обґрунтування можливостей психосинтезу у трансформації екзистенційного болю військовослужбовців через концепцію побудови ідеальної моделі за Р. Ассаджіолі в інтеграції бойового досвіду в процесі психологічного консультування. Методологічною основою дослідження стали методи теоретичного аналізу, синтезу, порівняння, систематизації та узагальнення сучасних наукових джерел із психології бойової травми, моральної травми, екзистенційної психології, психосинтезу та психологічного консультування. Проведено порівняльний аналіз сучасних психотерапевтичних підходів до роботи з моральною та екзистенційною травмою, зокрема когнітивно-поведінкової терапії, терапії прийняття та відповідальності, схема-терапії, гештальт-терапії, логотерапії та екзистенційної психотерапії. У результаті дослідження запропоновано концептуальну модель трансформації екзистенційного болю військовослужбовців засобами психосинтезу, центральним елементом якої визначено техніку побудови ідеальної моделі. Обґрунтовано етапи психосинтетичного консультування, що включає усвідомлення екзистенційного болю через феномени «здивування від болю» та «здивування від радості», розототожнення з травматичним досвідом, встановлення контакту зі Справжнім Я (Вищим Я), активізацію волі, побудову ідеальної моделі та інтеграцію бойового досвіду у цілісну систему особистісних смислів. Показано, що моральна травма та екзистенційний біль виникають унаслідок актуалізації фундаментальних екзистенційних даностей людського буття й супроводжуються порушенням моральної ідентичності, системи цінностей і життєвих перспектив. На відміну від симптомоцентричних моделей психологічної допомоги, запропонований підхід орієнтований на реконструкцію цілісної Я-концепції, інтеграцію внутрішніх конфліктів і розвиток особистісного потенціалу. Практична цінність дослідження полягає в можливості застосування запропонованої психосинтетичної моделі у консультуванні військовослужбовців і ветеранів, а також у програмах психологічного супроводу та підготовки фахівців

✦ Ключові слова: Вище Я; воля; ідентичність особистості; моральна травма; психосинтез; розототожнення; смисложиттєві орієнтації

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡si»y ofi U¾¡ai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 90-99
✦ ISSN 2617-6858
✦ E-ISSN 2617-6866
✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ UDC 159.923:355.01
✦ DOI: 10.33099/2617-6858-26-21-4-90-99

Psychological resource of adaptation to war-related loss in the families of fallen defenders

Olha Yurkova*

Doctor of Psychological Sciences, Researcher
Military Institute of Taras Shevchenko National University of Kyiv
03680, 81 Yulia Zdanovska Str., Kyiv, Ukraine
https://orcid.org/0000-0002-5679-6584

✦ Abstract. The full-scale war in Ukraine has significantly expanded the range of psychological problems that require scientific understanding, among which the study of psychological adaptation of people who lost loved ones as a result of military operations is of particular importance. The death of a family member is one of the most serious traumatic events, which is accompanied not only by the experience of grief, but also by the need for psychological adaptation to radically changed life circumstances. Therefore, the purpose of the study was to reveal the features of the functioning of resilience in the process of psychological adaptation of family members of fallen servicemen to war-related loss and highlight its main structural levels. To achieve this goal, a set of general scientific research methods was used, in particular, theoretical and comparative analysis, systematisation, generalisation, structural analysis, and modelling. The methodological basis of the research was systematic, integrative, and activity-based approaches to the investigation of psychological adaptation of the individual. Generalisation of contemporary Ukrainian and international scientific approaches allowed substantiating the author's vision of resilience as an integrative psychological resource that provides the process of psychological adaptation to war-related loss, and not only acts as a personal property or the result of successful adaptation. It was determined that the specific feature of the resilience of family members of fallen servicemen is its functioning in the conditions of ongoing war, constant exposure to military threats, a high level of public anxiety, and the mass nature of war-related losses, which forms a specific socio-psychological context of adaptation. A structural organisation of resilience was proposed, which was based on four interrelated levels: cognitive, emotional, behavioural, and social. The functional purpose, psychological mechanisms, and role in the process of psychological adaptation to war-related loss were determined for each level. It was proved that the interaction of these levels provides a holistic process of adaptation, restoration of the viability of the individual, and integration of the experience of loss into the future life path. The practical significance of the results obtained lies in the fact that the proposed concept can be used as a theoretical and methodological basis for developing programmes for psychological support of family members of fallen servicemen, building models of psychological assistance, developing psychodiagnostic tools, and further empirical studies of psychological adaptation to war-related loss

✦ Keywords: resilience; plasticity; grief; psychological growth; families of fallen servicemen; psychological mechanisms; resilience

✦ Introduction

The full-scale war in Ukraine has led to a significant increase in the number of families experiencing the loss of loved ones as a result of military operations, which causes the need for an in-depth study of the psychological features of adaptation to such life changes. The loss of a family member as a result of war is complex in nature, as it combines the experience of grief with the need to adapt to a sudden change in life circumstances, transformation of family roles, revision of further life plans, and functioning in conditions of ongoing military danger. For family members of fallen servicemen, this experience is additionally related to the specifics of the circumstances of death,

Suggested Citation:
Yurkova, O. (2026). Psychological resource of adaptation to war-related loss in the families of fallen defenders. *Bulletin of National Defence University of Ukraine*, 21(4), 90-99. doi: 10.33099/2617-6858-26-21-4-90-99.

Article's History: Received: 20.03.2026; Revised: 27.07.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (yrkova.ya@gmail.com)

the social significance of military service, and the need to integrate the loss into the future life of the family. Under such conditions, psychological adaptation is not limited to a gradual decrease in the intensity of grief experiences, but covers the restoration of daily functioning, the preservation of psychological integrity, the development of new ways of interacting with changed life circumstances, and the integration of the experience of loss into the future life perspective. That is why the study of psychological resources that provide the possibility of adaptation to war-related loss is important for understanding the patterns of experiencing this experience and for the further development of the system of psychological support for family members of fallen servicemen.

In international psychological research, resilience is increasingly considered not as a permanent personal property, but as a dynamic process of adaptation to adverse and potentially traumatic life events. G. Bonanno (2021), developing the concept of regulatory flexibility, argued that successful adaptation is determined not by the presence of individual universal traits or unchanging strategies for overcoming difficulties, but by the ability of a person to flexibly change the ways of responding to the requirements of a particular situation. The researcher emphasised the variability of individual adaptation trajectories after potentially traumatic events and stressed that the effectiveness of psychological strategies depends on the context of their application. This approach expands the understanding of resilience as a dynamic adaptation process and creates theoretical prerequisites for analysing the psychological mechanisms that ensure the adaptation of the individual to difficult life circumstances.

In Ukrainian psychological studies, the problem of resilience was actively considered in the context of individual adaptation to crisis and traumatic events, in particular caused by war. E. Hrishyn (2024) considered resilience as an integral psychological resource of the individual and substantiated the importance of its development for adaptation and restoration of psychological functioning in conditions of prolonged stress load. O. Bila *et al*. (2024) summarised approaches to understanding psychological resilience in war conditions and focused on the interaction of personal and social resources that ensure the individual's ability to adapt to adverse circumstances and restore psychological well-being. O. Kokun (2025) considered resilience in relation to resources at different levels and substantiated the importance of personal interaction with the social environment for successful adaptation to difficult life circumstances. O. Chykhantsova (2025), studying the resilience of Ukrainians under martial law, identified it as an important personal resource that contributes to the preservation of psychological stability and adaptive functioning in conditions of prolonged exposure to military stressors. Together, the results of Ukrainian research have shown a tendency to understand resilience not only as a separate personal characteristic, but as a psychological resource, the functioning of which is associated with the interaction of internal capabilities of the individual, and the resources of the social environment.

A separate area of international resilience research is related to the study of psychological stability of military personnel and their families. S. Panda *et al*. (2024) substantiated the need for a comprehensive development of psychological resilience of military personnel and noted the expediency of integrating appropriate measures into the system of their psychological training. M. Hébert *et al*. (2024), analysing programmes to strengthen the resilience of military families, focused on the importance of a family-oriented approach and family support at different stages of the military service cycle. G. McGill *et al*. (2023), examining the experiences of families who had lost a military service member, found that adaptation following the loss is associated with changes in family and social relationships and personal identity, while maintaining connections with the social environment and the military community may play an important role in adapting to changed life circumstances. Collectively, the results of these studies have shown the expediency of considering resilience in a military context not only through individual psychological resources, but also considering family and social factors of adaptation.

The problem of psychological adaptation of family members of fallen servicemen is represented by a much smaller number of studies, which mainly highlighted certain aspects of experiencing war-related loss and resources to overcome it. L. Malimon & V. Parkhomenko (2025), studying the resources of resilience of women who lost loved ones as a result of war, established the importance of personal and social resources in the process of adapting to loss and maintaining psychological functioning. O. Baidarova & O. Klymenko (2025), analysing the experience of participation of wives of fallen servicemen in support groups, showed that group interaction contributes to strengthening resilience through receiving emotional support, sharing experience of experiencing loss, and forming a sense of belonging to a community of people with similar life experiences. L. Podkorytova *et al*. (2025), studying the features of psychological assistance to fathers and mothers of fallen servicemen, focused on the gender specifics of experiencing grief and substantiated the need to consider it when organising psychological support for families of fallen soldiers. Thus, the results of these studies showed the importance of personal and social resources, group support, and differentiated psychological assistance in the process of adaptation of family members of fallen servicemen to loss, but revealed mainly individual components of this process.

Similar conclusions were obtained in the study by A. Fadeeva *et al*. (2023), who showed that families of fallen servicemen, along with emotional support, need comprehensive practical, informational and psychological assistance that should be available at different stages of experiencing loss. However, the holistic theoretical substantiation of resilience as an integrative psychological resource

of adaptation to the war-related loss experienced by family members of fallen military personnel remains insufficiently developed, which makes it necessary to develop an appropriate concept. Most of these studies focused on individual psychological or psychosocial aspects of experiencing loss, while the holistic theoretical substantiation of resilience as an integrative psychological resource of adaptation to the war-related loss experienced by family members of fallen servicemen remains insufficiently developed. It is this scientific gap that necessitates the development of a concept and determination of the structural organisation of resilience in the context of war-related loss.

The purpose of the study was to theoretically substantiate the concept of resilience as an integrative psychological resource of adaptation to the war-related loss experienced by family members of fallen servicemen and determine its structural organisation. In accordance with the purpose of the study, the following tasks are formulated: to analyse and generalise contemporary scientific approaches to understanding the resilience and psychological adaptation of family members of fallen servicemen to wartime loss; to determine the features of the functioning of resilience as a psychological resource for adaptation of family members of fallen servicemen in the context of war-related loss; to theoretically substantiate the concept of resiliency as an integrative psychological resource for adaptation to wartime loss and to determine its structural organisation.

✦ Materials and Methods

The research was theoretical and analytical in nature and was based on a conceptual analysis of contemporary scientific approaches to understanding resilience, psychological adaptation to loss, and features of the functioning of psychological resources in military and family contexts. The theoretical basis of the study was scientific publications of Ukrainian and international researchers devoted to the resilience of the individual, military and family resilience, psychological adaptation to traumatic events, the experience of the loss of a loved one, and psychological support of family members of fallen servicemen. Scientific sources were selected through a thematic search for publications in the Google Scholar, Crossref, and PubMed academic search engines and electronic databases, and in the repositories of Ukrainian research institutions and higher education institutions. The search was conducted in Ukrainian and English using keywords and their combinations: “резильєнтність”, “психологічна резильєнтність”, “адаптація до втрати”, “воєнна втрата”, “горювання”, “сім’ї загиблих військовослужбовців”, “resilience”, “psychological resilience”, “bereavement”, “grief”, “war-related loss”, “military families”, “bereaved military families”. The main array consisted of publications from 2020-2026, which allowed focusing on contemporary approaches to the problem under study. Some earlier studies were included in the analysis if they were of conceptual significance for understanding military and family resilience. The criteria for including sources were: compliance with the research problems; coverage of theoretical or empirical aspects of resilience, psychological adaptation to loss, military or family resilience; availability of results relevant to explain the psychological mechanisms of adaptation of family members of fallen servicemen; availability of the full text or sufficient bibliographic and meaningful information for theoretical analysis. Publications that did not relate to the psychological content of resilience and adaptation to loss, duplicated already selected materials, or did not contain information relevant to the research objective were not included. The final theoretical analysis included 22 scientific sources presented by monographs, dissertation research, review and empirical scientific publications. The methodological basis of the study was system, integrative, and activity-based approaches, according to which resilience was considered as a dynamic psychological resource, the functioning of which was determined by the interaction of internal mechanisms of the individual and the resources of the social environment. A set of interrelated theoretical methods was used to implement the research tasks:

- ✦ theoretical analysis – to determine the main scientific approaches to the interpretation of resilience and psychological adaptation to loss;
- ✦ comparative analysis – to compare approaches to resilience as a personal property, a dynamic process, and a multi-level psychological resource;
- ✦ systematisation and generalisation – to identify common patterns and psychological resources of adaptation presented in the analysed studies;
- ✦ structural analysis – to determine functionally different but interrelated components of resilience;
- ✦ theoretical modelling – for their integration into an integral structural organisation of resilience in the context of adaptation to war-related loss.

Building a structural organisation of resilience in the context of adaptation to war-related loss carried out by consistent conceptual integration of the results of theoretical analysis and previous author’s research on the problem of experiencing war-related loss. At the first stage, scientific provisions on resilience as a dynamic process and psychological resource of adaptation were summarised. At the second stage, the psychological mechanisms and resources associated with adaptation to loss were systematised and correlated by their functional content. At the third stage, based on the results of structural analysis, they were combined into four interrelated levels – cognitive, emotional, behavioural, and social, for each of which the functional purpose and main psychological mechanisms were determined. At the final stage, using the method of theoretical modelling, these levels were integrated into the structural organisation of resilience as a psychological resource for adapting family members of fallen servicemen to war-related loss. This logic corresponds to the transition from the analysis of scientific approaches to the four-level structural organisation of resilience presented in the results of the study.

✦ Results and Discussion

The conducted theoretical analysis of contemporary Ukrainian and international studies has shown that, despite the significant development of scientific ideas about resilience as a dynamic process of psychological adaptation, there is no holistic concept of its functioning as a psychological resource for adaptation to the war-related loss experienced by family members of fallen servicemen. Existing studies mainly cover certain aspects of this phenomenon – personal, family, social, or psychosocial factors of adaptation, features of experiencing loss, or psychological support, but do not reveal the structural organisation of resilience and mechanisms of its functioning in conditions of war-related loss. This made it necessary to develop the concept that integrates contemporary scientific approaches and considers the specifics of adaptation of family members of fallen servicemen.

Based on the results of the conducted theoretical analysis and own empirical research, O. Yurkova (2025; 2026), proposed to consider resilience in the context of war-related loss as an integrative psychological resource, and not as a separate personal characteristic. In contrast to the general models of psychological stability, the proposed approach considers the specifics of war-related loss, which combines the experience of grief, psychotraumatic experience, the need to rebuild life meanings, and restore everyday functioning. Based on the above, a structural organisation of the resilience of family members of fallen servicemen in the context of adaptation to war-related loss was developed, which is shown in Figure 1.

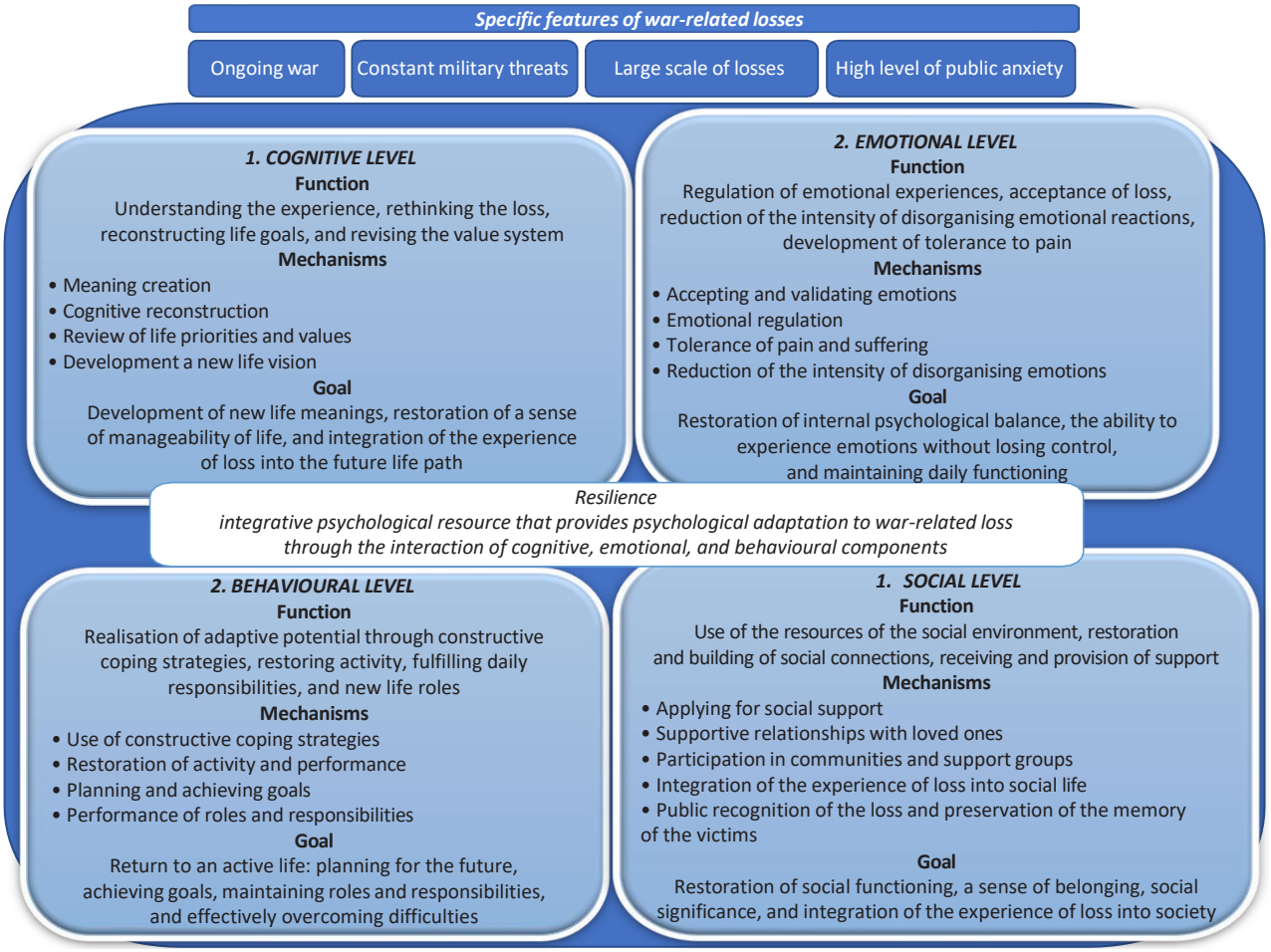

Figure 1. *Structural organisation of resilience in the context of adaptation to war-related loss*

Source*: compiled by the author*

The specific feature of the resilience of family members of fallen servicemen is also that the process of adaptation takes place in the conditions of ongoing war, constant exposure to military threats, systematic attacks on civilian infrastructure, and a high level of public anxiety. In addition, war-related loss in Ukrainian realities is rarely an isolated event, but is experienced in conditions of large-scale loss of military personnel, when within the same community or region at the same time a significant number of families go through a similar traumatic experience. The combination of these factors forms a specific socio-psychological context, which determines the features of the functioning of psychological resources of adaptation and determines the need to consider resilience as a multi-level system of interrelated components.

The cognitive level of resilience is the basis of the process of psychological adaptation to war-related loss, since

it is at this level that the experience is understood and the system of ideas about the self, the surrounding world, and own future is rebuilt. The death of a loved one destroys the usual picture of the world, basic beliefs about security, justice, predictability of life, and personal identity. In this regard, the individual faces the need not only to accept the fact of loss, but also to integrate it into their own life experience without losing the integrity of the individual. The functioning of the cognitive level is provided by the processes of meaning-making, rethinking loss, reconstructing life goals, and revising the system of personal values. They allow a person to move from the perception of loss as an exceptionally destructive event to the gradual development of a new life perspective, in which the memory of the deceased is integrated into personal history without the dominance of destructive experiences. Furthermore, rethinking does not mean reducing the significance of the loss or giving up the emotional connection with the deceased, but is aimed at restoring the internal consistency of life experience.

The main psychological mechanisms of the cognitive level are meaning-making, cognitive reconstruction, and revision of the system of personal values. Meaning-making ensures the integration of the experience of loss into the life history of the individual and the development of a new understanding of own life after the tragedy. Cognitive reconstruction aims to transform maladaptive beliefs about the self, the world, and the future that have been disrupted by loss. Reviewing the value system allows identifying new life priorities, restoring the internal consistency of the individual, and forming the basis for further psychological adaptation. Thus, the cognitive level of resilience creates prerequisites for further psychological adaptation, ensuring the development of new life meanings, restoring a sense of manageability of own life, and integrating the experience of war-related loss into the future life path. It determines the area of further emotional, behavioural, and social changes, acting as the basis for restoring the viability of the individual.

The emotional level of resilience ensures the regulation of psychoemotional experiences that arise in response to war-related loss, and creates conditions for the gradual restoration of internal psychological balance. Experiencing the death of a loved one is accompanied by a wide range of emotional reactions, which are dominated by acute pain, sadness, anxiety, guilt, helplessness, anger, despair, and emotional exhaustion. In conditions of war-related loss, the intensity of these experiences is often aggravated by the circumstances of death, the social context of the war, the uncertainty of the future, and the need to simultaneously solve new life problems. In this context, resilience does not eliminate negative emotions and does not reduce the significance of loss, but provides the ability of the individual to gradually regulate own emotional state without avoiding or displacing experiences. It helps to accept the fact of loss, reduce the intensity of disorganising emotional reactions, form tolerance to psychological pain, and restore the ability to experience a wide range of emotions without losing control of own functioning. An important sign of this level is not the absence of suffering, but the gradual increase in the ability to live with it, preventing it from completely dominating everyday life.

The key mechanisms of the emotional level are emotional regulation, acceptance of loss, and the development of tolerance for psychological pain. Emotional regulation provides the ability to be aware of, express, and gradually control the intensity of experiences without suppressing or avoiding them. Acceptance of loss helps to integrate experiences into life experiences without denying the reality of the event, while tolerance for psychological pain forms the ability to live with the experience of loss without allowing its disorganising effect on everyday functioning. Thus, the emotional level of resilience creates conditions for the transition from emotional disorganisation to relative psychological stability, which allows the individual to gradually restore activity, maintain meaningful social relationships, and make decisions necessary for further adaptation. It is the restoration of emotional balance that allows implementing constructive ways to overcome difficulties, which is the content of the next – behavioural level of resilience.

The behavioural level of resilience reflects the practical realisation of the adaptive potential of the individual and is manifested in the choice of constructive ways to interact with the new life reality after a war-related loss. If the cognitive level provides a rethinking of the experience experienced, and the emotional level provides a gradual stabilisation of the psychoemotional state, then the behavioural level determines the ability of a person to restore active functioning, make decisions, perform everyday duties, and gradually return to the realisation of their own life roles. In the context of war-related losses, the behavioural level of resilience is realised through the use of constructive coping strategies aimed at overcoming difficulties and adapting to new living conditions. Its content is not a return to the pre-war way of life, but the development of new behaviours that correspond to changed life circumstances. These models include the gradual recovery of daily activities, the maintenance of professional and family activities, the ability to take responsibility for their own lives, the use of active coping strategies, and the willingness to seek help if necessary.

Mechanisms for implementing the behavioural level are the use of constructive coping strategies, maintaining activity and restoring role functioning. Constructive coping strategies ensure the ability to actively overcome difficulties, find resources, and make effective decisions. Maintaining activity promotes a gradual return to everyday life, and restoring role functioning allows the individual to adapt to new family, professional, and social responsibilities that have arisen after the loss. Of particular importance at this level is the ability of the individual to transform internal psychological changes into specific behavioural actions. It is through behaviour that the effectiveness of cognitive and emotional adaptation processes is manifested: a

person gradually regains the ability to plan for the future, realise new life goals, maintain social roles, and participate in everyday life. Thus, the behavioural level provides a transition from the internal experience of loss to the active restoration of life functioning, creating conditions for further social integration, and use of the resources of the social environment.

The social level of resilience reflects the ability of an individual to use the resources of the social environment and restore full interaction with the environment in the process of adapting to war-related losses. Unlike other traumatic events, the death of a close serviceman changes not only the internal psychological state of a person, but also their social functioning, the system of interpersonal relationships, family roles, and place in the social community. In this regard, the effectiveness of adaptation largely depends on the ability of the individual to maintain, restore and build new social connections. The social level is realised through the active use of resources of the family, close environment, professional and local community, public organisations, mutual support groups, and the system of psychological and social assistance. Social support performs not only a compensatory function, reducing the level of psychological stress, but also creates conditions for restoring a sense of security, belonging, social significance, and trust in the world. The social level involves not only receiving assistance, but also gradually restoring a person's ability to maintain relationships, participate in the life of the family and community, accept the support of others and act as a source of it.

The main mechanisms of the social level are social support, interpersonal interaction, and social integration. Social support provides the emotional, informational, and practical resources needed to adapt to loss. Interpersonal interaction promotes the restoration of trust, a sense of belonging and reciprocity, while social integration ensures the inclusion of the individual in family, professional and social life, creating conditions for the restoration of social functioning, and maintaining the memory of the deceased. Of particular importance in the process of adaptation to war-related loss is the social recognition of the loss and the preservation of the memory of the deceased. Participation in memorial events, interaction with the communities of families of fallen servicemen, maintaining public memory, and awareness of the significance of the sacrifice of a loved one contribute to the integration of the experience of loss into the life history of the individual and strengthen its psychological stability. That is why the social level completes the process of adaptation, ensuring the restoration of social functioning, strengthening the sense of belonging to the community, and creating conditions for further personal development.

The proposed cognitive, emotional, behavioural, and social levels of resilience do not function in isolation, but form a single interconnected system of psychological adaptation to war-related loss. Each of the levels performs its own function, but the effectiveness of their implementation largely depends on the state and development of other levels. In this context, it is advisable to consider resilience as an integrative psychological resource realised through the constant interaction of cognitive, emotional, behavioural, and social mechanisms. The starting point of adaptation is the cognitive level, since it is the rethinking of the experienced loss, the reconstruction of the system of personal meanings, and the development of a new vision of own future that create the basis for further psychological changes. Understanding loss changes the nature of the emotional response: the gradual acceptance of a new life reality helps to reduce the intensity of disorganising experiences and creates conditions for restoring internal psychological balance. Emotional stabilisation, in turn, provides an opportunity to switch to active behavioural adaptation strategies. Reducing the intensity of psychological pain and restoring the ability to regulate their own emotional state allows the individual to gradually return to performing everyday duties, realising life roles, making decisions, and planning for the future. It is the behavioural level that ensures the practical implementation of internal psychological changes in the real functioning of a person.

The implementation of constructive behavioural strategies contributes to the restoration of social functioning. A person gradually restores relationships with their family, professional and social environment, uses social support resources more actively, and integrates into communities that unite people with similar experiences. Social support, in turn, not only facilitates the process of adaptation, but also creates conditions for further rethinking the loss experienced, strengthening new life meanings and revising own life perspective. Thus, the interaction of resilience levels is systemic in nature. Changes that occur at one level lead to transformations at others, forming a holistic process of psychological adaptation to war-related loss. That is why the central element of the proposed model is resilience, which is considered as an integrative psychological resource that is formed in the process of interaction of cognitive, emotional, behavioural, and social mechanisms and provides restoration of the viability of the individual, integration of the experience of loss and return to full social functioning.

An important area of contemporary research is the consideration of resilience as a dynamic process of psychological adaptation, formed in the interaction of personal and environmental resources. Representatives of this approach move away from the conventional interpretation of resilience as a relatively stable personal characteristic and consider it as a process that unfolds in response to traumatic events. D. Assonov & O. Khaustova (2019) share this perspective, defining resilience as an adaptive process of restoring psychosocial functioning following exposure to psychotraumatic factors and emphasising the need to distinguish it from stress resilience, hardiness, coping, and post-traumatic growth. A similar opinion was expressed by G. Bonanno (2021), who substantiated the concept of regulatory flexibility and proves that the success of adaptation is determined not by individual personality traits,

but by a person's ability to change cognitive, emotional and behavioural ways of responding to the requirements of a particular situation. A similar view was indicated by E. Hrishyn (2024), who considered resilience as a multi-level process of interaction of personal, social, and environmental resources and defines it as an integral psychological resource of adaptation.

The concept proposed by the researchers is generally consistent with this scientific approach, since it also considers resilience not as a static personal property, but as a psychological resource that ensures the process of adaptation to unfavourable life circumstances. In contrast to the above concepts, attention is focused on the specifics of the functioning of resilience in the conditions of war-related loss experienced by family members of fallen servicemen. In this case, it is advisable to consider resilience as an integrative psychological resource that is realised through the interaction of cognitive, emotional, behavioural, and social levels and provides not only psychological adaptation to loss, but also integration of its experience into the future life path.

Further development of contemporary ideas about resilience is associated with the transition from its individual understanding to multi-level models, in which psychological adaptation is considered as a result of the interaction of personal, family, social, and institutional resources. Within the framework of this approach, the effectiveness of overcoming unfavourable life circumstances is determined not only by the internal potential of a person, but also by the capabilities of the social environment in which they operate. Such provisions are most fully presented in the socio-ecological concept of O. Kokun (2025), who noted that resilience is formed at different levels of social interaction – from the individual and the family to the community and society as a whole. A similar approach can be traced in the study by S. Panda *et al*. (2024), which substantiated the need to develop resilience through a comprehensive system of psychological training covering individual, group, and organisational resources. The opinion of M. Hébert *et al*. (2024) was similar, which highlighted the importance of family-oriented support models as an important factor in the psychological resilience of military personnel and their families. Similar conclusions were found in the study by O. Zhohlo *et al*. (2025), where adaptation was considered as a result of the interaction of internal resources of the individual with external resources of the social environment. The development of this area was the investigation of military family resilience, which substantiated the need to consider adaptation as a result of the interaction of personal, family and social resources. In particular, H. Cramm *et al*. (2018) showed that the resilience of a military family is determined not by the totality of individual qualities of its members, but by the effectiveness of family communication, emotional support, cohesion, flexible reallocation of roles, and the availability of external assistance. Empirical research by M. Turliuc & A.-D. Balcan (2024) confirmed that resilience can be purposefully developed through psychological training aimed at strengthening a person's cognitive, emotional, behavioural, and social resources. J. Tornero-Aguilera *et al*. (2024) stressed that psychological resilience is an integral part of the professional readiness of a serviceman and should be formed in conjunction with physical fitness, ensuring the maintenance of cognitive efficiency, emotional stability, and the ability to act in conditions of high stress load.

Thus, these provisions confirmed the importance of a multi-level approach to understanding resilience, but they mainly outlined the sources or levels of resource support for adaptation. The proposed concept focuses not so much on the localisation of resources, but on the disclosure of the psychological structure of resilience and the mechanisms of its functioning in conditions of war-related loss. That is why the identified cognitive, emotional, behavioural, and social levels were considered not as autonomous components, but as an interconnected system of psychological mechanisms that ensures a holistic process of adaptation of family members of fallen servicemen. In addition, the proposed model considers the specific conditions of war-related loss – ongoing war, constant military threats, the large scale of losses, and a high level of public anxiety, which determine the features of the functioning of this system.

A separate area of research is devoted to the psychological features of adaptation to the loss of a loved one. These studies focus on processes of grieving, the reconstruction of meaning in life experience, the restoration of everyday functioning, and post-traumatic growth. In this context, resilience was considered as a psychological resource that provides a gradual integration of the experience of loss into the future life path of the individual. Thus, G. McGill *et al*. (2023) considered resilience through the prism of experiencing the loss of a loved one, emphasising the importance of the processes of meaning formation, maintaining psychological balance, and gradually restoring everyday functioning. A similar conclusion was reached by E. Burgin *et al*. (2024), who showed that adaptation after a severe loss is determined not only by individual characteristics of a person, but also by the quality of social support, family relationships, and the availability of professional psychological assistance. A similar opinion was expressed by K. Kamene (2025), who considered adaptation to loss as a process of reconstructing life meanings, integrating experienced experiences into own life history, and forming a new system of personal values. The researcher noted that post-traumatic growth is not a mandatory consequence of experiencing loss, and psychological assistance should be aimed primarily at supporting the natural process of grief and meaning development.

In Ukrainian studies, O. Chykhantsova (2025) emphasised the relationship of resilience with the processes of experiencing grief and restoring psychological well-being, while V. Klymchuk (2021) considered meaning-making, life goal reconstruction, and post-traumatic growth as important mechanisms of psychological adaptation after traumatic events. These studies demonstrated that adaptation to loss is a long-term process in which semantic

restructuring of life experience, social support, and restoration of psychological well-being are of leading importance. They focused on certain aspects of experiencing grief or factors of successful adaptation. Instead, the concept under consideration opens up these processes as interrelated manifestations of the functioning of a single resilience system. Meaning, emotional regulation, behavioural activity, and social interaction do not act as independent mechanisms for overcoming loss, but are integrated into the integral structure of the psychological resource, which ensures the adaptation of family members of fallen servicemen to the conditions of war-related loss.

Thus, the comparison of the results with contemporary Ukrainian and international studies showed that the proposed concept does not contradict the existing scientific approaches to understanding resilience, but develops them considering the specific features of the war-related loss experienced by family members of fallen military personnel. Unlike most of the concepts under consideration, which focus on individual resources or adaptation factors, the proposed model considers resilience as an integrative psychological resource realised through the interaction of cognitive, emotional, behavioural, and social levels. This approach makes it possible to holistically explain the psychological mechanisms of adaptation to war-related loss and can serve as a theoretical basis for further empirical research and development of programmes for psychological support for families of fallen defenders.

✦ Conclusions

The conducted theoretical analysis showed that the problem of psychological resilience is widely represented in contemporary Ukrainian and international studies. The researchers have thoroughly covered the issues of personal resilience, psychological stability of military personnel, the role of internal and external resources in the process of adaptation to traumatic events, and certain aspects of experiencing war-related loss. The scarcity of conceptual approaches to understanding resilience among the family members of fallen service personnel necessitated the formulation of a comprehensive theoretical model of this phenomenon. Resilience is substantiated as an integrative psychological resource for adapting to war-related loss, which fundamentally contrasts with perspectives that view it merely as an individual trait or the outcome of successful adaptation. In the proposed concept, resilience is defined as a dynamic system of interrelated cognitive, emotional, behavioural, and social mechanisms that ensure the process of psychological adaptation to loss, support the viability of the individual, and contribute to the integration of the experience of loss into the future life path.

A special feature of the proposed approach is to consider the specific features of experiencing war-related loss in an ongoing war. Unlike most existing models, the developed concept is based on the fact that the adaptation of family members of fallen servicemen occurs in conditions of constant exposure to military threats, a high level of public anxiety, and the large scale of losses, when a significant number of families simultaneously experience a similar traumatic experience. Such a socio-psychological context significantly affects the functioning of psychological resources and needs to be considered when analysing the structure of resilience. Based on the generalisation of the results of theoretical analysis and empirical research, a structural organisation of resilience is proposed, which covers four interrelated levels: cognitive, emotional, behavioural, and social. The functional purpose of each level was determined, the main psychological mechanisms of their implementation were outlined, and it was shown that their interaction provides a holistic process of psychological adaptation to war-related loss. The practical significance of the proposed concept lies in the possibility of using it as a theoretical and methodological basis for developing programmes for psychological support of family members of fallen servicemen, improving psychodiagnostic tools, and building models of psychological assistance. Prospects for further research consist in the empirical verification of the proposed structural model, determining the relationships between its components, and creating and testing a psychodiagnostic methodology for assessing the resilience of family members of fallen servicemen.

✦ Acknowledgements

None.

✦ Funding

None.

✦ Conflict of Interest

None.

✦ References

[1] Assonov, D., & Khaustova, O. (2019). Development of resilience concept in scientific literature of recent years. *Psychosomatic Medicine and General Practice*, 4(4), article number e0404219. doi: 10.26766/pmgp.v4i3-4.219.

[2] Baidarova, O., & Klymenko, O. (2025). Strengthening the resilience of the wives of deceased military servants through support groups. *Bulletin of Taras Shevchenko National University of Kyiv. Social Work*, 1(11), 5-16. doi: 10.17721/2616-7786.2025/11-1/1.

[3] Bila, O.H., *et al*. (2024). *Psychological resilience of personality under conditions of war*. Cherkasy: Bohdan Khmelnytsky National University of Cherkasy.

[4] Bonanno, G.A. (2021). *The end of trauma: How the new science of resilience is changing how we think about PTSD*. New York: Basic Books.

[5] Burgin, E.E., Prosek, E.A., Shin, K., Cunningham, V.L., & Ponder, W.N. (2024). Needs assessment of surviving military families: Clinical symptoms and the parent-child relationship. *Counseling Outcome Research and Evaluation*, 15(1), 37-50. doi: 10.1080/21501378.2023.2257236.

[6] Chykhantsova, O.A. (2025). Resilience as a personal resource of Ukrainians under the military conflict conditions. *Journal of Modern Psychology*, 2, 146-153. doi: 10.26661/2786-7471/2025-2-16.

[7] Cramm, H., Norris, D., Venedam, S., & Tam-Seto, L. (2018). Toward a model of military family resiliency: A narrative review. *Journal of Family Theory & Review*, 10(3), 620-640. doi: 10.1111/jftr.12284.

[8] Fadeeva, A., Mann, E., McGill, G., Wilson Menzfeld, G., Moreland, M., Melling, A., & Kiernan, M.D. (2023). Bereaved UK military families: A mixed methods study on the provision of practical and emotional support. *Death Studies*, 47(4), 450-460. doi: 10.1080/07481187.2022.2089777.

[9] Hébert, M.L., Tippe, J.M., Aquin, C., Maximos, M., Brémault-Phillips, S., & Sevigny, P.R. (2024). Military family-centred resilience-building programming across the deployment cycle: A scoping review. *International Journal of Environmental Research and Public Health*, 21(10), article number 1378. doi: 10.3390/ijerph21101378.

[10] Hrishyn, E.O. (2024). *Psychological support for the development of resilience as a factor of self-regulation of an individual who experiences difficult life situations*. (Doctoral dissertation, West Ukrainian National University, Ternopil, Ukraine).

[11] Kamene, K. (2025). Resilience through loss: Transforming grief into growth – a narrative review. *Premier Journal of Psychology*, 5, article number 100010. doi: 10.70389/PJP.100010.

[12] Klymchuk, V.O. (2021). *Psychology of post-traumatic growth*. Kropyvnytskyi: Imex-LTD.

[13] Kokun, O.M. (2025). *Resilience and human hardiness in the modern world: Theory, research, practice*. Kyiv: G.S. Kostiuk Institute of Psychology of the National Academy of Educational Sciences of Ukraine.

[14] Malimon, L., & Parkhomenko, V. (2025). Peculiarities of resilience of women with traumatic experience of loss as a result of warfare. *Psychological Prospects Journal*, 45, 91-106. doi: 10.29038/2227-1376-2025-45-mal.

[15] McGill, G., Mann, E., Moreland, M., Osborne, A., Kiernan, M.D., & Wilson-Menzfeld, G. (2023). Bereaved military families: Relationships and identity. *Journal of Loss and Trauma*, 28(6), 504-521. doi: 10.1080/15325024.2022.2127678.

[16] Panda, S.P., Chatterjee, K., Srivastava, K., Chauhan, V.S., & Yadav, P. (2024). Building psychological resilience in armed forces worldwide. *Medical Journal Armed Forces India*, 80(2), 130-139. doi: 10.1016/j.mjafi.2024.02.006.

[17] Podkorytova, L., Voloshyn, V., Shkarlatiuk, K., & Chyrkova, T. (2025). Psychological assistance to parents of fallen military personnel: Gender-specific aspects. *Scientific Perspectives*, 8, 1493-1505. doi: 10.52058/2708-7530-2025-8(62)-1493-1505.

[18] Tornero-Aguilera, J.F., Stergiou, M., Rubio-Zarapuz, A., Martín-Rodríguez, A., Massuça, L.M., & Clemente-Suárez, V.J. (2024). Optimising combat readiness: Practical strategies for integrating physiological and psychological resilience in soldier training. *Healthcare*, 12(12), article number 1160. doi: 10.3390/healthcare12121160.

[19] Turliuc, M.N., & Balcan, A.-D. (2024). Psychological intervention programme for developing resilience in the military personnel: A randomized controlled trial. *Stress and Health*, 40(4), article number e3399. doi: 10.1002/smi.3399.

[20] Yurkova, O. (2026). Living with loss rather than recovering from it: Meaning making and continuing bonds in war-related grief. *Knowledge, Education, Law, Management*, 1, 124-133. doi: 10.51647/kelm.2026.1.18.

[21] Yurkova, O. (2025). Grief experiences in the context of life and war-related loss: Ukrainian and international perspectives. *Habitus*, 80, 215-221. doi: 10.32782/hbts.80.41.

[22] Zhohlo, O., Rudenko, I., & Zhohlo, V. (2025). Personal resilience in war conditions: Theoretical principles of formation. *Disaster and Crisis Psychology Problems*, 2, 46-58. doi: 10.52363/dcpp-2025.2.4.

Психологічний ресурс адаптації до воєнної втрати у родинах полеглих захисників

Ольга Юркова
Доктор психологічних наук, науковий співробітник
Військовий інститут Київського національного університету імені Тараса Шевченка
03680, вул. Юлії Здановської, 81, м. Київ, Україна
https://orcid.org/0000-0002-5679-6584

✦ Анотація. Повномасштабна війна в Україні суттєво розширила коло психологічних проблем, що потребують наукового осмислення, серед яких особливого значення набуває вивчення психологічної адаптації осіб, які втратили близьких унаслідок бойових дій. Загибель члена родини є однією з найбільш тяжких психотравмуючих подій, яка супроводжується не лише переживанням горя, а й необхідністю психологічної адаптації до докорінно змінених життєвих обставин. З огляду на це, мета дослідження полягала у розкритті особливостей функціонування резильєнтності в процесі психологічної адаптації членів сімей загиблих військовослужбовців до воєнної втрати та виокремленні її основних структурних рівнів. Для досягнення поставленої мети було використано комплекс загальнонаукових методів дослідження, зокрема теоретичний і порівняльний аналіз, систематизацію, узагальнення, структурний аналіз та моделювання. Методологічною основою дослідження стали системний, інтегративний та діяльнісний підходи до вивчення психологічної адаптації особистості. Узагальнення сучасних українських та міжнародних наукових підходів дозволило обґрунтувати авторське бачення резильєнтності як інтегративного психологічного ресурсу, що забезпечує процес психологічної адаптації до воєнної втрати, а не лише виступає особистісною властивістю чи результатом успішної адаптації. Визначено, що особливістю резильєнтності членів сімей загиблих військовослужбовців є її функціонування в умовах триваючої війни, постійного впливу воєнних загроз, високого рівня суспільної тривоги та масового характеру воєнних втрат, що формує специфічний соціально-психологічний контекст адаптації. Запропоновано структурну організацію резильєнтності, основу якої становлять чотири взаємопов'язані рівні: когнітивний, емоційний, поведінковий та соціальний. Для кожного рівня визначено його функціональне призначення, психологічні механізми та роль у процесі психологічної адаптації до воєнної втрати. Обґрунтовано, що взаємодія зазначених рівнів забезпечує цілісний процес адаптації, відновлення життєздатності особистості та інтеграцію досвіду втрати у подальший життєвий шлях. Практичне значення отриманих результатів полягає в тому, що запропонована концепція може бути використана як теоретико-методологічна основа для розроблення програм психологічного супроводу членів сімей загиблих військовослужбовців, побудови моделей психологічної допомоги, розроблення психодіагностичного інструментарію та подальших емпіричних досліджень психологічної адаптації до воєнної втрати

✦ Ключові слова: резильєнтність; пластичність; горювання; психологічне зростання; сім'ї загиблих військовослужбовців; психологічні механізми; стійкість

BULLETIN ofi ½a»io»al Dvfiv»cv U»ivv¡si»y ofi U¾¡ai»v

✦ Vol. 21 ✦ No. 4 ✦ 2026 ✦ 100-110
✦ ISSN 2617-6858
✦ E-ISSN 2617-6866
✦ Journal homepage: https://nuou-visnyk.com.ua/en
✦ UDC 159.9:355.1-057.36-057.75
✦ DOI: 10.33099/2617-6858-26-21-4-100-110

Psychological mechanisms underlying the impact of negative institutional experience on veterans' reintegration

Tetiana Yablonska
Doctor of Psychology, Professor
Taras Shevchenko National University of Kyiv
01033, 60 Volodymyrska Str., Kyiv, Ukraine
https://orcid.org/0000-0001-7272-9691

Artem Baratiuk*
Postgraduate Student, Assistant Lecturer
Taras Shevchenko National University of Kyiv
01033, 60 Volodymyrska Str., Kyiv, Ukraine
https://orcid.org/0000-0003-3473-0434

✦ Abstract. The return of veterans to civilian life is a multidimensional process whose course depends on the nature of their interactions with medical, social, administrative, and professional institutions. Opaque procedures, conflicting requirements, prolonged waiting, dismissive communication, and insufficient coordination between institutions may increase psychological distress, reduce trust in the system, and limit the use of available support resources. The aim of the article was to provide a theoretical substantiation and systematisation of the psychological mechanisms underlying the impact of negative institutional experiences on the psychological, social, and professional reintegration of veterans, as well as to develop a corresponding conceptual model. The study was conducted as an integrative theoretical review using thematic analysis, conceptual synthesis, and theoretical modelling. Scientific publications selected from the Scopus, Web of Science, PubMed, and Google Scholar databases were analysed according to the forms of institutional interaction, characteristics of its subjective evaluation, psychological mechanisms, behavioural responses, consequences for reintegration, and protective factors. Within the structure of negative institutional experience, event-objective and subjective-evaluative aspects were distinguished, as well as structural, procedural, interpersonal, and symbolic levels. It was substantiated that the psychological significance of such experience is determined by perceptions of fairness, controllability, recognition, and fulfilment of institutional obligations. Its impact may be mediated by reduced institutional trust, emotional reactions to violations of fairness and obligations, decreased agency and self-efficacy, disruption of identity continuity, and a diminished sense of social belonging. Behavioural consequences may include help avoidance, passivity, conflict, social distancing, and failure to complete procedures, thereby limiting access to support resources. The practical value of the model lies in substantiating the need for transparent procedures, respectful communication, personalised navigation, continuous support, and interagency coordination as conditions for maintaining veterans' trust, agency, and engagement with support systems

✦ Keywords: organisational justice; agency; self-efficacy; identity continuity; social belonging; help-seeking; veteran-oriented support

✦ Introduction

The return of veterans to civilian life is a prolonged and multidimensional process that involves restructuring a system of social roles, restoring interpersonal connections, forming a new professional trajectory, and interacting with

Suggested Citation:
Yablonska, T., & Baratiuk, A. (2026). Psychological mechanisms underlying the impact of negative institutional experience on veterans' reintegration. *Bulletin of National Defence University of Ukraine*, 21(4), 100-110. doi: 10.33099/2617-6858-26-21-4-100-110.

Article's History: Received: 05.04.2026; Revised: 04.08.2026; Accepted: 25.08.2026; Published: 31.08.2026

*Corresponding author (bergmanartem@gmail.com)

a network of medical, social, administrative, and professional institutions. In the context of the full-scale war in Ukraine, the significance of this issue is heightened by the increasing number of military personnel who will undergo military-to-civilian transition and will require various forms of support. An important factor in the effectiveness of reintegration is the quality of interaction with the system, upon which the receipt of treatment, rehabilitation, social protection, vocational training, and other necessary resources depends. Inconsistent procedures, insufficient coordination between institutions, lack of transparency in decisions, or demeaning communication may create additional psychological burden and complicate the return to active civilian life. Therefore, it is important to study the psychological mechanisms through which experience of interaction with this system may affect veterans' subsequent reintegration.

J. Grimell (2024), synthesising findings from a ten-year study of the transition from military to civilian life, demonstrated that the completion of service does not automatically terminate the influence of military identity. The author emphasises the need for its integration with new civilian, family, and professional roles, whilst difficulties in maintaining continuity of self-perception may complicate post-service adaptation. K. Nizheiko & K. Kovalivska (2024), analysing international experience and Ukrainian specifics of veterans' reintegration, linked its effectiveness to the veteran's inclusion in community life, access to support, opportunities for vocational training, and public participation. A. Smith *et al*. (2025) in a systematic review of military-to-civilian transition drew attention to the heterogeneity of adaptation trajectories and showed that they depend on gender, family responsibilities, circumstances of service completion, and availability of support. Therefore, contemporary research treats reintegration as an individualised process whose outcomes are shaped at the intersection of personal, social, and contextual conditions.

A separate line of research concerns the organisation of the support system and veterans' interactions with its representatives. M. Halych (2025), comparing contemporary approaches to social-psychological support for combatants and their families, substantiated the need for integration of psychological, social, medical, legal, and professional assistance rather than the use of isolated services. N. Ein *et al*. (2024) in a brief review of barriers and facilitators of access to mental health services for veterans and their families established the importance of both the accessibility of assistance and characteristics of direct interaction with professionals, particularly trust, confidentiality, competence, and alignment of services with veterans' needs. M. Hinton *et al*. (2023), investigating veterans' decisions regarding posttraumatic stress disorder treatment, showed that the initiation and continuation of professional help depend on previous treatment experiences, expected benefit, trust in professionals, and alignment of assistance with current needs. Thus, the formal availability of a service itself does not guarantee its actual use by veterans.

The psychological significance of institutional interaction is also explained by research into fairness, autonomy, and fulfilment of organisational obligations. M. Adamovic (2023) in a contemporary review of organisational justice research systematised the significance of outcome fairness, procedural fairness, interpersonal treatment, and informational explanation of decisions, which provides grounds for considering the manner of implementation of formally established procedures as an independent psychologically significant component of interaction. J. Raabe *et al*. (2024), applying provisions of self-determination theory to service members' transition to civilian life, emphasised the significance of maintaining autonomy, competence, and belonging, whereas limited opportunity to influence significant decisions may weaken the sense of control and confidence in the effectiveness of one's own actions. M.-E. Christl *et al*. (2024) based on review findings on the phenomenon of institutional betrayal showed that particularly pronounced negative psychological consequences arise when an institution on which a person depends and from which protection is expected does not prevent harm, does not respond to it, or itself creates conditions for its repetition. In the military and veterans' context, M. McAdams *et al*. (2025) systematised research on institutional betrayal and demonstrated the relevance of this phenomenon for analysing the relationships between service members and veterans and organisations from which safety, support, and fulfilment of corresponding institutional obligations are expected.

Available research, therefore, reveals individual components of military-to-civilian transition, access to assistance, organisational fairness, institutional betrayal, autonomy, trust, and identity. However, these areas are also predominantly presented separately, which does not provide a comprehensive explanation of how specific characteristics of a veteran's interaction with institutions acquire subjective psychological significance, transform into psychological and behavioural responses, and subsequently affect various aspects of reintegration. The aim of this article was to conceptualise veterans' negative institutional experiences and to construct a theoretical model explaining its link to subjective assessment of institutional interaction, psychological and behavioural responses, and reintegration outcomes.

✦ Literature Review

Veterans' reintegration means re-engagement in civilian social roles, interpersonal relationships, professional activities, and the institutional support system. It involves restructuring of everyday functioning, reappraising military experience, and adaptation to the civilian environment. It cannot be evaluated by a single indicator, since employment does not guarantee psychological recovery, nor does maintenance of family ties indicate readiness to use formal services. J. Grimell (2024) and A. Smith *et al*. (2025) link the success of reintegration to veterans' personal resources, social support, environmental opportunities, and the

character of institutional interaction. Psychological reintegration encompasses reduction of distress symptoms, restoration of life predictability, ability to plan, make decisions, and influence significant circumstances. Following structured military environment, responsibility for treatment, education, employment, and social contacts shifts to the veteran, which increases burden in the presence of injury, loss of status, or insufficient preparation for discharge. J. Grimell (2024) notes that military experience should be integrated into a coherent self-concept and should not impede building a future.

Social reintegration is connected with restoration of participation in family, friendship, community, and professional networks and re-negotiation of roles, autonomy, communication, and emotional closeness. The directness, control, or wariness inherent in military environments may be mistakenly perceived as unwillingness to adapt. Success of reintegration depends on acknowledgement of military experience without heroicisation, pathologisation, or reduction of the veteran to the role of help recipient. K. Nizheiko & K. Kovalivska (2024) in the Ukrainian context link social reintegration to inclusion in community life, access to support, vocational training, and public participation. Professional reintegration involves translation of military skills into civilian competencies, adaptation to new performance criteria, and formation of professional identity. Failure to recognise qualifications, mismatch between vacancies and previous level of responsibility, need for retraining, and employer stereotypes may be experienced as loss of status and social utility. M. Shkoda (2024) links restoration of professional self-efficacy to education, entrepreneurial training, professional support, and practical acquisition of civilian competencies.

All aspects of reintegration depend on access to treatment, rehabilitation, retraining, social security, and legal protection. Institutional engagement reflects a veteran's ability to approach institutions, understand procedures, maintain interaction, protect rights, and use services. In Ukraine, this engagement is complicated by fragmentation of the system and weak coordination between institutions, which increases the number of repeated applications and places the onus of organising assistance on the veteran. O. Druhova *et al*. (2025) consider veteran hubs as an alternative, founded on principles of single-window access, inter-sectoral partnership, and continuous support. O. Matveieva *et al*. (2024) emphasise that restoration of trust in the institutional system requires interaction between local authorities, civil society, and service providers.

Components of veterans' reintegration are interdependent. Refusal of medical assistance may worsen health and professional functioning, whilst unemployment may intensify isolation and psychological distress. Yet employment does not always compensate for institutional mistrust or loss of belonging. Therefore, reintegration should be considered a non-linear process of mutual reinforcement or compensation of psychological, social, professional, and institutional factors. For understanding the interaction between veterans and institutions providing rehabilitation services, it is important to consider certain organisational phenomena and their potential, particularly negative, impact on veterans. It is known that veterans are highly sensitive to manifestations of social injustice, disrespect, rights violations, and these aspects come to the forefront in the complex process of their social and psychological rehabilitation and interaction with institutions. K.-K. Moon *et al*. (2024), in analysing organisational justice, discuss evaluation of outcomes, procedures, interpersonal treatment, and completeness of explanations. In the context of negative institutional experience, accessibility of services, coordination of institutions, symbolic recognition of the veteran's contribution, and fulfilment of expected obligations are also important. Discrimination and stigmatisation are separate forms of negative experience in which unfavourable treatment is linked to veteran status. They may manifest in attribution of aggression, mental instability, professional incapacity, or dependence on assistance. However, not every non-transparent or ineffective procedure is discriminatory. Dissatisfaction with a service also represents only a summary evaluation, whereas negative institutional experience encompasses the significance of interaction for trust, agency, identity, and behaviour. Institutional mistrust reflects expectations of unreliable, non-transparent, or inconsistent institutional actions and is considered a possible consequence of negative experience. It may concern an individual worker, institution, or the system as a whole, and may explain avoidance of new structures even without direct negative contact.

M.-E. Christl *et al*. (2024) define institutional betrayal as a narrower and more intense phenomenon that arises when a significant institution fails to prevent harm, does not respond to it, or creates conditions for repeated harm. The authors link its significance to the violation of expectations of protection and fair response. Not every delay or bureaucratic error is betrayal, as it entails violation of a fundamental obligation and pronounced consequences for safety, trust, or access to assistance. A. Adams-Clark *et al*. (2024) also link institutional betrayal to traumatic reactions and barriers to service use. Moral injury describes enduring consequences of events that violate deep beliefs about goodness, duty, loyalty, and fairness. It may manifest in guilt, shame, moral anger, mistrust, alienation, and destruction of attitudes towards oneself or significant groups. B. Litz & H. Walker (2025) note that in institutional context, moral injury may arise when a veteran perceives institutional actions or inaction as a fundamental violation of its obligations regarding protection, support, reciprocity, and recognition of their contribution. K. Zasiekina *et al*. (2026) show that moral injury and posttraumatic reactions may overlap, but have distinct emotional, value-based, and identity-related components.

Explanation of institutional experience effects requires synthesis of several approaches. The socio-ecological perspective views reintegration as a result of interaction between personal characteristics, family support,

communities, organisational practices, and government policy. Psychological state influences interaction with institutions, whilst institutional conditions, in turn, affect the intensity of distress, self-efficacy, social activity, and readiness to seek help. M. Halych (2025) in research on contemporary approaches to veterans' support also substantiates integration of psychological, social, legal, medical, and professional support for veterans and their families. M. Adamovic (2023), synthesising contemporary research on organisational justice, emphasises the significance of decision-making processes, consistency of rules, opportunity to be heard, and completeness of explanations. Lack of transparency increases uncertainty, disrespectful communication creates experience of devaluation, whilst absence of explanations reduces predictability. K.-K. Moon *et al*. (2024) show that perceived fairness may be an important link between characteristics of organisational interaction and subsequent attitudes and behaviour. A. Higgins (2025) and M. McAdams *et al*. (2025), in analysing institutional betrayal in military and veterans' contexts, proceed from the assumption that the military organisation, medical system, and state may be perceived as bearers of obligations regarding safety, treatment, social protection, and recognition of contribution. M.-E. Christl *et al*. (2024) note that the stronger the dependence on an institution and the higher the expectations regarding its fulfilment of obligations, the more acute may be the response to inaction, inadequate support, or unfair decision. J. Raabe *et al*. (2024), drawing on self-determination approach, explain the transition from procedural difficulties and limited opportunity to influence significant decisions to reduction in the sense of autonomy and competence. Unpredictable requirements and inability to influence decisions may weaken the sense of control and confidence in the effectiveness of one's own actions. Y. Hunter (2025) shows that in the professional sphere this may manifest in difficulties transferring military competencies into civilian career and forming a new professional trajectory.

In turn, J. Grimell (2024) views identity reconstruction in the process of military-to-civilian transition as reconciliation of previous military identity with new civilian roles, connected with preservation of continuity of self-perception and sense of social belonging. After discharge from service, a veteran should not abandon the military component of their identity, but should reconcile it with new family, professional, and civic roles. The author also notes that treatment of the veteran solely as a problem, formal applicant, or passive recipient of assistance may intensify the gap between previous experience of responsibility, competence, and agency and the new dependent position in interaction with institutions. M. Hinton *et al*. (2023) in research on veterans' treatment decisions showed that models of help-seeking explain the transition from psychological assessment of need to concrete behaviour related to seeking and using professional support. Decisions depend on awareness of need, expected benefit, risks, accessibility of the service, and trust in the professional. Negative contact reduces expected benefit and increases psychological costs of repeated contact. Researchers also established that initiation and continuation of treatment depend on previous experience, trust, professional competence, and alignment of assistance with the veteran's needs.

In the Ukrainian context, veterans' reluctance to seek psychological or social services does not always indicate denial of the problem. It may be a rational response to disrespect, breach of confidentiality, contradictory recommendations, or absence of results. O. Lushchak *et al*. (2026) in research on help-seeking behaviour for psychological assistance showed that it is also influenced by individual attitudes, accessibility of services, and expectations of their effectiveness. Therefore, a theoretical model should distinguish between institutional event, its subjective assessment, psychological reaction, and subsequent behaviour. Combination of socio-ecological, fairness-based, identity-related, and behavioural approaches with concepts of institutional betrayal, moral injury, control, and self-efficacy allows for explanation of the effect of negative institutional experience on psychological, social, and professional reintegration through interconnected cognitive, emotional, identity-related, and behavioural mechanisms.

✦ Materials and Methods

The study was conducted in the format of an integrative theoretical review using thematic analysis, conceptual synthesis, and theoretical modelling. A search for scientific publications was conducted in the Scopus, Web of Science, PubMed, and Google Scholar databases. The temporal range of the search encompassed publications from 2022-2026 in English and Ukrainian. Search queries were formulated by combining the keywords "veterans", "military personnel", "reintegration", "transition to civilian life", "institutional trust", "institutional betrayal", "organisational injustice", "moral injury", "help-seeking" and their Ukrainian-language equivalents in accordance with the search capabilities of each database. The initial search and subsequent review encompassed approximately 250 publications. Selection was carried out sequentially in three stages: by correspondence to keywords and publication title, by abstract content, and by analysis of the full text. Both authors independently compiled preliminary lists of relevant sources, after which the lists were compared. Publications were included in the final corpus if their relevance was confirmed by both authors; discrepancies regarding source inclusion were discussed until a consensus decision was reached. As a result, 23 publications were included in the final conceptual analysis.

The main inclusion criteria were publication in 2022-2026 in English or Ukrainian, direct focus on military personnel, combatants, or veterans, and discussion of military-to-civilian transition, reintegration, or interaction with military, medical, social, administrative, or professional institutions and its psychological or behavioural consequences. Theoretical, review, quantitative, and qualitative studies relevant to the subject of the review were

included in the main list. Conceptually significant works conducted on other populations were additionally included if they directly revealed phenomena necessary for constructing the theoretical model, namely organisational justice, administrative burden, and institutional betrayal. Exclusion criteria were failure to correspond to the topic of military-to-civilian transition, reintegration, or institutional interaction; absence of psychologically relevant provisions or findings for explaining the investigated mechanisms; publication outside the established temporal range; language other than English or Ukrainian; and duplication of materials. Studies of non-military populations were not included in the main corpus of the review, except where they had direct conceptual significance for defining individual components of the proposed model.

Selected publications were analysed according to the following categories: forms of negative institutional experience, its subjective assessment by veterans, psychological mechanisms of effect, behavioural responses, consequences for reintegration, and protective factors. Additionally, characteristics of institutional interaction and moderating conditions capable of intensifying or alleviating its consequences were recorded. Using thematic analysis, repeated provisions were combined into substantive groups according to the principle of conceptual similarity, and using conceptual synthesis, links were established between institutional experience, its assessment, reduced trust, experience of injustice, reduced agency and self-efficacy, changes in identity and social belonging, help-seeking behaviour, and difficulties in reintegration.

Theoretical modelling was carried out iteratively on the basis of thematic analysis and conceptual synthesis results. Initially, repeated characteristics of negative institutional interaction were grouped by substantive similarity, which provided grounds for distinguishing structural, procedural, interpersonal, and symbolic levels of negative institutional experience. Subsequently, the means of subjective assessment of institutional interaction, described psychological mechanisms, behavioural responses, and reintegration outcomes were compared. The model included components that were conceptually distinct from related concepts, had theoretical or empirical justification in selected sources, and could be logically attributed to a specific link in the sequence "institutional interaction → subjective assessment → psychological mechanisms → behavioural responses → access to resources → reintegration outcomes". The professional experience of the authors in working with military personnel and veterans was used as context for interpretation and substantive organisation of identified patterns, but was not regarded as independent empirical confirmation of model components.

On the basis of revealed interrelationships, using the method of theoretical modelling, a conceptual model of psychological mechanisms underlying the impact of negative institutional experience on veterans' reintegration was developed. Its correspondence with review findings was verified by repeated comparison of each component and predicted link with selected publications and subsequent adjustment of model structure between authors. Components for which there was insufficient theoretical or empirical justification in the analysed corpus were not distinguished as independent elements. Formalised assessment of methodological quality and bias risk of individual publications according to standardised instruments was not conducted, which is due to the integrative nature of the review and methodological heterogeneity of included theoretical, review, quantitative, and qualitative works. During interpretation, the type and design of publication, characteristics of studied samples, and direct relevance of findings to components of the conceptual model were taken into account. The absence of standardised bias risk assessment was considered a methodological limitation of the study.

✦ Results and Discussion

To explain the role of institutional environment in veterans' reintegration, an author-developed construct of negative institutional experience is proposed. It encompasses subjectively significant interactions with formal structures, actions, decisions, inaction, or procedures perceived as unjust, non-transparent, demeaning, inconsistent, excessively burdensome, or such as violate expected obligations regarding support and protection. The psychological significance of this experience is determined by relating the event to previous experience, needs, expectations, and beliefs about appropriate treatment.

Based on the theoretical analysis conducted, within the proposed construct of negative institutional experience, event-objective and subjective-evaluative aspects are distinguished. The event-objective aspect encompasses the characteristics of interaction itself between veteran and institution, whilst the subjective-evaluative aspect reflects the psychological significance this interaction acquires for the veteran. Refusal, delay, contradictory decision, repeated requests for information, formalised communication, or lack of coordination may be assessed as injustice, uncontrollability, devaluation, exclusion, or breach of obligations. Such assessments may provoke anger, hurt, disappointment, wariness, or helplessness. This distinction makes it possible to maintain analytical coherence between the characteristics of an event, its subjective assessment, and subsequent psychological reaction.

The event-objective aspect encompasses the duration of procedures, volume of required documents, accessibility of information, consistency of requirements, possibility of appeal, nature of communication, and veteran participation in decision-making. The subjective-evaluative aspect reflects perception of these conditions as justified, predictable, and based on respect for the veteran. Therefore, negative institutional experience should be analysed taking into account perception of fairness, controllability, recognition, and fulfilment of institutional obligations. Such experience is cumulative in nature. An individual failed interaction may remain localised; however, repeated episodes form stable expectations about the system. Experience during

service, treatment, and military-medical procedures influences attitudes towards civilian institutions, and mistrust of one agency may extend to the entire support system.

Synthesis of publications made it possible to systematise negative institutional experience of veterans at structural, procedural, interpersonal, and symbolic levels (Adamovic, 2023; Hinton *et al*., 2023; Raabe *et al*., 2024). The structural level reflected the organisation of the support system, the procedural level determined the order of receiving services, the interpersonal level encompassed contact with institutional representatives, and the symbolic level concerned recognition of military service, acquired competencies, experienced losses, and the veteran's right to remain an active participant in reintegration (Ein *et al*., 2024; Grimell, 2024; Nizheiko & Kovalivska, 2024). This division did not reduce negative experience to bureaucratic complexity, since formally available services could be accompanied by devaluation, disrespect, or exclusion of the veteran from decision-making (Halych, 2025; Herd & Moynihan, 2025; McAdams *et al*., 2025). The structural level encompassed territorial inequality of services, shortage of trained professionals, absence of coordinated transition between military and civilian medicine, poor information exchange, and fragmentation of support. Under such conditions the veteran was forced to independently determine the support pathway, repeatedly submit documents, and coordinate the work of institutions even in the presence of injury, pain, exhaustion, or psychological distress. Accordingly, insufficient inter-agency interaction transferred organisational burden from system to veteran.

The effectiveness of support depended on the combination of psychological support, social work, vocational training, community resources, and veteran participation in civilian life. K. Nizheiko & K. Kovalivska (2024) noted that isolated services do not address situations in which one person's needs are regarded by different institutions as disconnected cases. M. Halych (2025) emphasised that psychological assistance should be integrated with family, social, legal, and professional contexts of reintegration. Otherwise, some needs remain unmet and responsibility for unutilised opportunities is mistakenly placed on the veteran.

The procedural level is determined by the manner of realisation of formally guaranteed rights and services. What matters are duration of waiting, clarity of criteria, consistency of requirements, accessibility of information, and possibility of appeal. Repeated requests for documents, changes in rules, need to repeatedly describe traumatic events, and uncertain timescales increase temporal, cognitive, and psychological costs. P. Herd & D. Moynihan (2025) showed that complex administrative procedures particularly limit access for people who most need help but have fewer resources to navigate them. Procedure complexity does not necessarily create negative experience if rules are consistent, timescales are predictable, and decisions are clearly explained. Conversely, a brief process may be perceived negatively due to arbitrary decision-making, uneven application of criteria, or inability to be heard. Therefore, the number of documents or stages is not a sufficient indicator. What matters is whether the veteran can foresee the consequences of his own actions, understand the logic of decisions, and maintain influence over the process.

The interpersonal level is formed during contact with officials, medical professionals, psychologists, and other specialists. Negative experience arises from formalised communication, distrust in the veteran's words, stigmatisation, breach of confidentiality, moral judgement, use of authority, or absence of explanations. A refusal accompanied by reasoning, acknowledgement of the difficulty of the situation, and offering of an alternative pathway has different consequences from a formally correct decision communicated indifferently or dismissively. N. Ein *et al*. (2024) established that the quality of initial contact, trust in the professional, confidentiality, competence, and alignment of assistance with needs influence the initiation and continuation of treatment alongside accessibility of services. M. Hinton *et al*. (2023) showed that negative experience with assistance providers and doubts about the practical benefit of treatment may influence choice of services more strongly than formal availability of an evidence-based programme. Through interpersonal contact, the veteran assesses the safety, competence, and ability of the system to take account of his experience.

The symbolic level is connected with recognition of military service, acquired competencies, experienced losses, and the veteran's right to remain an active participant in reintegration. Devaluation manifests in reduction of the veteran to the category of benefit recipient, attribution of psychological instability, ignoring of professional skills, or treatment as a passive object of assistance. In the professional sphere, combat experience may be devalued if knowledge, skills, and competencies acquired during service do not find application in civilian professional activity. M. Shkoda (2024) emphasised that educational support should foster formation of professional agency and application of military skills in civilian activities. O. Ihnatovych (2025) also emphasised the significance of psychological support for restoration of competence, autonomy, and ability to form realistic career perspectives.

Levels of negative experience intersect. Lack of information exchange is a structural problem, realised through repeated submission of documents, need to re-explain circumstances of injury, and feeling that previous statements have no value. Shortage of professionals manifests through waiting periods, shortened consultations, and inability to establish stable contact. Therefore, the unit of analysis should be the entire trajectory of the veteran's interaction with the system throughout service, treatment, discharge, status formalisation, rehabilitation, and professional adaptation. The central link between institutional interaction and reintegration outcomes is subjective assessment. Identical conditions may have different consequences depending on previous experience, health status, significance of decision, expectations, and available support. The psychological significance of interaction is determined by the

extent to which it is perceived as fair, controlled, based on recognition, and on fulfilment of institutional obligations.

Assessment of fairness is formed through comparison of outcome, procedure, and communication with beliefs about appropriate treatment. An unfavourable decision does not necessarily destroy trust if the veteran understands its legal or clinical basis. Yet a positive outcome may leave a sense of injustice if obtained after humiliation, conflict, or repeated need to prove obvious need. Assessment of control reflects the ability to influence process and foresee the consequences of one's own actions. Low control arises from variable requirements, uncertain timescales, fragmented information, and dependence on the position of an individual worker. Procedural agency is psychologically important, entailing access to information, opportunity to ask questions, provide data, choose an acceptable option, and use appeal. J. Raabe *et al*. (2024) showed that autonomy, competence, and belonging support adaptation, whilst loss of control weakens confidence in one's own capacities.

Assessment of recognition is determined by whether the system takes account of the veteran's military experience, contribution, losses, and competencies. Recognition entails treatment of the veteran as a full participant in interaction. Lack of recognition arises when his experience and knowledge about his own state are ignored and professional skills or contribution remain mere rhetoric. Assessment of fulfilment of obligations reflects belief in institutional adherence to duties regarding protection, treatment, and support after service. Negative interaction may be perceived as the system's refusal of reciprocity after the veteran's fulfilment of military duty. Psychological harm is intensified if a significant institution fails to perform its expected protective function. M.-E. Christl *et al*. (2024) emphasised that institutional betrayal should be distinguished from ordinary dissatisfaction with services and should be applied only in case of pronounced breach of fundamental obligations. Subjective assessment mediates the link between event and psychological consequences, but does not determine them unambiguously. Support from a professional, family, or fellow service members may preserve readiness for interaction even after an unfair decision. Yet a less intense event is capable of causing distancing if it confirms previous experience of unsuccessful contacts. Therefore, its significance depends on accumulated history of system interaction.

One psychological mechanism is reduction in institutional trust. Lack of transparency, contradictory requirements, disrespect, and broken agreements form expectations that the next contact will also be unsuccessful or cause further devaluation. Mistrust performs a protective function but may limit access to resources which remain available. Specific mistrust concerns a particular worker, institution, or procedure, whilst generalised mistrust extends to the system as a whole. This transfer is intensified if different institutions employ similar formalised communication, repeatedly request information, or shift responsibility to one another. As a result, individual negative contacts begin to be perceived as a stable property of the entire system.

Another psychological mechanism is emotional reaction to perceived injustice and breach of institutional obligations. It may manifest as anger, hurt, disappointment, shame, humiliation, or feeling of abandonment. Anger signals boundary violation, but its prolonged persistence may maintain conflict and transfer to the civilian environment. Shame arises when a veteran is forced to repeatedly prove vulnerability, whilst moral outrage is intensified by breach of expected reciprocity between service and societal support. These reactions should not be automatically identified with moral injury. Anger about a non-transparent procedure in itself is not sufficient ground for applying this concept. B. Litz & H. Walker (2025) linked moral injury to events causing prolonged destruction of basic beliefs about fairness, loyalty, reciprocity, or moral trustworthiness of a significant community.

The next mechanism is reduction in agency, control, and self-efficacy. If repeated actions do not produce anticipated results, confidence in the practical sense of one's own efforts is weakened. This may lead to reduced persistence, refusal to contact again, or passive waiting. In the professional sphere, doubts arise about the value of competencies, delay in job-seeking, and avoidance of training. Reduction in agency does not indicate stable personal passivity. It may be a contextual response to a specific system in which purposeful actions do not yield predicted results. Therefore, a practical task is restoration of the link between veterans' actions and institutional consequences.

Yet another psychological mechanism is disruption of identity continuity and sense of social belonging. Return to civilian life is accompanied by loss of familiar roles, status, time structure, cohesion, and competence criteria. J. Grimell (2024) emphasised that military identity should be integrated into a broader system of civilian roles without mutual negation of these components. Negative institutional experience complicates this process when the veteran transitions from the status of responsible subject to the role of applicant, patient, or help recipient. Decisions made without his participation and failure to recognise competencies intensify the gap between previous self-image and current situation. A. Smith *et al*. (2025) showed that adaptation trajectories depend on gender, family responsibilities, circumstances of service completion, and access to support, which excludes a universal transition model for all veterans.

Psychological mechanisms affect reintegration through behavioural responses. Mistrust limits access to treatment or professional programmes when it translates into delay in seeking help, cessation of contact, or failure to complete procedures. Experience of injustice may provoke conflict, distancing, and transfer of negative expectations to other institutions. As a result, access to resources for psychological, social, and professional reintegration narrows. Help-avoidance is also linked to desire to cope independently with problems, concerns about confidentiality, stigma, reluctance to repeatedly discuss traumatic experience, and doubts about professional competence. Negative institutional

experience intensifies these barriers since formalised treatment reduces expected benefit of assistance, whilst devaluation raises psychological cost of subsequent contact.

One possible consequence is selective use of the system. A veteran may contact only professionals recommended by fellow service members, rely on informal networks, or limit contact to obtaining a necessary document. This partially restores control but narrows available resources. Support from fellow service members has protective potential, but without connection to professional services may entrench distancing from formal assistance. In the psychological sphere, negative institutional experience intensifies distress, anger, frustration, helplessness, and reduced sense of safety. Its effect is sustained by uncertainty, delayed treatment, and need to repeatedly prove right to assistance. In the social sphere, generalised mistrust may extend to civil society, intensify opposition between military and civilian populations, and complicate inclusion in community.

In the professional sphere, negative experience reduces activity in job-seeking, participation in retraining, and confidence in adaptation to civilian rules. Failure to recognise qualifications and absence of individual navigation increase the gap between competencies and available opportunities. N. Syvak (2024) emphasised that professional reintegration requires combination of employment, entrepreneurial programmes, retraining, and workplace adaptation, since financial incentives do not eliminate psychological and institutional barriers. Engagement with the support system encompasses actually navigating the help pathway, maintaining contact, and using obtained resources. Its reduction manifests through incomplete formalisation of services, missed consultations, discontinued rehabilitation, or non-use of professional programmes. Increasing the number of services does not guarantee engagement if previous experience formed expectations of ineffectiveness or disrespect.

The strength of negative experience's effect depends on individual, social, and institutional conditions. What matter are prior trust, health status, circumstances of service completion, intensity of combat experience, self-efficacy, and access to information. High initial trust may mitigate consequences of individual error, but its violation sometimes intensifies experience of betrayal. Adaptation is supported by family ties, fellow service members, community, mentorship, professional competence, and ability to plan the future. A support specialist may compensate for negative experience by explaining procedures, coordinating institutions, and restoring the link between veterans' actions and outcomes. And importantly, shared negative experience within a network of fellow service members may contribute to generalisation of mistrust.

Factors of positive institutional experience are protective in relation to negative experience. Transparent criteria, predictable timescales, clear explanations, veteran participation, respectful communication, continuous support, and information exchange support trust and agency. A veteran-oriented approach involves adaptation of procedures to combined medical, psychological, social, and professional needs. O. Ihnatovych (2025) noted that individualised support should also restore the veteran's ability to independently determine goals for civilian life. Results of conceptual synthesis are summarised in a model of the transition from institutional conditions to reintegration outcomes. Structural, procedural, interpersonal, and symbolic experience acquires psychological significance through assessment of fairness, controllability, recognition, and fulfilment of obligations. This activates erosion of trust, moral-emotional reactions, reduction in agency and self-efficacy, and disruption of identity and belonging. Subsequent behavioural responses limit access to reintegration resources. Visual representation of this sequence is presented in Figure 1.

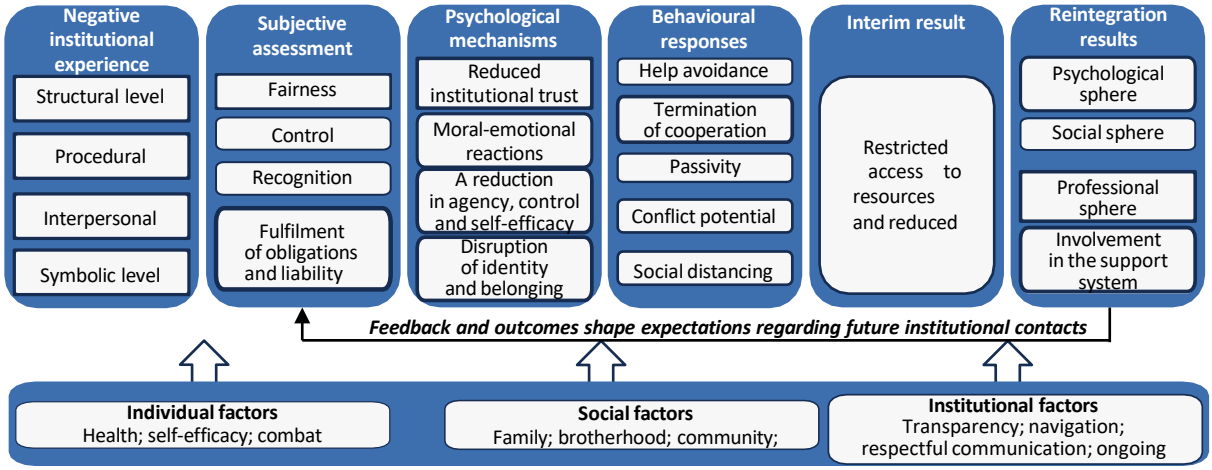

Figure 1. *Conceptual model of psychological mechanisms underlying the impact of negative institutional experience on veterans' reintegration*

Source*: developed by the authors*

The model is not exclusively linear, as reintegration outcomes affect expectations regarding future contacts. Negative experience reduces trust, mistrust promotes avoidance, limited assistance worsens outcomes, and this

confirms belief in system ineffectiveness. Positive contact may interrupt this cycle if clear explanation, met agreement, or participation in decision-making creates a corrective experience. The model also accounts for accumulation of experience at different stages of military-to-civilian transition. Events during service form expectations about military organisations, treatment influences trust in medicine, discharge determines sense of support continuity, and status formalisation shapes attitudes towards the administrative system. Therefore, repeated events of moderate intensity may have greater effect than a single pronounced episode.

The proposed model differs from approaches that explain reintegration difficulties primarily through combat trauma or insufficient personal resources. The institutional environment is viewed as a factor capable of either supporting agency or intensifying helplessness. Scientific novelty lies in distinguishing the sequence of subjective assessment, psychological and behavioural mediators, whose action depends on personal, social, and organisational conditions. The model provides a basis for empirical verification of its components. Institutional experience can be objectively assessed through accessibility of services, repeated contacts, predictability of timescales, consistency of requirements, and communication quality. Subjective assessment encompasses fairness, control, recognition, and breach of obligations. Psychological mediators may be trust, self-efficacy, emotional reactions to fairness and obligation violations, identity continuity and sense of social belonging, whilst behavioural indicators are help-seeking, continuation of contact, and programme participation. Outcomes should be measured separately in psychological, social, and professional spheres. Causal sequence should be verified in longitudinal studies using mediation analysis, structural equation modelling, and qualitative analysis of help-seeking pathways. Generalisation of mistrust and possibility of compensation of negative experience by positive interaction with another institution require separate study.

The practical value of the model lies in the fact that the effectiveness of reintegration is not ensured merely by increasing the number of programmes. Necessary are reduction of repeated procedures, inter-agency information exchange, personalised navigation, explanation of decisions, and veteran participation in determining the help pathway. Quality of services should be assessed by pathway completion, preservation of trust, clarity of procedures, and willingness to contact again. It is important to prepare professionals for interaction without stigmatisation or paternalism. Model limitations are related to heterogeneity of literature and predominance of research conducted in institutional systems of other countries. Ukrainian research in this direction, like the institutional system itself for veterans' reintegration, has actively developed since 2022, yet researchers have mostly described needs, organisation of support, professional adaptation, and individual psychological states. Lack of longitudinal research limits the possibility of final causal conclusions but does not diminish the model's significance as a basis for further operationalisation and empirical verification.

✦ Conclusions

Negative institutional experience of veterans is defined as subjectively significant interaction with formal structures that is perceived as unjust, non-transparent, demeaning, inconsistent, or violates expected obligations regarding support and protection. Its essence lies in the psychological significance that interaction acquires for the veteran through relating the event to previous experience, needs, expectations, and beliefs about appropriate treatment. Within the structure of this experience, it is appropriate to distinguish between the event-objective aspect, encompassing characteristics of interaction with the institution, and the subjective-evaluative aspect, which reflects veteran perception of it. Negative institutional experience is not identical to administrative barriers, service dissatisfaction, institutional mistrust, institutional betrayal, or moral injury, although it may be related to them. Negative experience is systematised at structural, procedural, interpersonal, and symbolic levels. The structural level reflects the organisation of the support system, accessibility of services, and coordination between institutions; the procedural level concerns clarity, predictability, and consistency of rules and decisions; the interpersonal level encompasses the nature of direct communication with institutional representatives; the symbolic level concerns recognition of military service, contribution, competencies, and agency of the veteran. These levels interact and may accumulate throughout service, treatment, discharge, status formalisation, rehabilitation, and professional adaptation, therefore the psychological significance involves the entire trajectory of the veteran's interaction with the system.

The effect of negative institutional experience depends on subjective assessment of fairness, controllability, recognition, and fulfilment of institutional obligations. Primary psychological mechanisms are identified as reduction in institutional trust, emotional reactions to fairness and obligation violations, reduction in agency, control and self-efficacy, and disruption of identity continuity and sense of social belonging. Through these mechanisms, negative experience may translate into behavioural responses – avoidance or delay of seeking help, cessation of contact, passivity, conflict, failure to complete procedures, selective use of formal services, and social distancing. Such responses narrow access to medical, psychological, social, and professional resources and may complicate psychological, social, and professional reintegration, as well as reduce engagement with the support system.

The proposed model reflects the link between institutional experience, its assessment, psychological, behavioural responses, and reintegration outcomes. The model accounts for cumulative nature of experience, moderating factors, and feedback in which negative outcomes may intensify mistrust and form expectations of ineffectiveness

of subsequent contacts. The strength of this effect depends on prior trust, health status, circumstances of service completion, intensity of combat experience, self-efficacy, and access to information. Repetition of negative contacts and spread of such experience within a network of fellow service members may intensify generalisation of mistrust. Yet its consequences may be alleviated by family and fellow service member support, community resources, mentorship, professional competence, access to information, and individual support. At the institutional level, protective significance is held by transparent criteria, predictable timescales, clear explanations, veteran participation in decision-making, respectful communication, support continuity, personalised navigation, and inter-agency coordination, which maintain trust, agency, and willingness to continue system interaction. Further research should be directed towards empirical verification of the proposed model in Ukraine, operationalisation of its components, development of instruments for measuring negative institutional experience, and verification of causal and mediational links in longitudinal studies. Mechanisms of generalisation of institutional mistrust, conditions for compensation of negative experience by positive interaction, and effectiveness of veteran-oriented support models require separate study.

✦ Acknowledgements

None.

✦ Funding

None.

✦ Conflict of Interest

None.

✦ References

[1] Adamovic, M. (2023). Organizational justice research: A review, synthesis, and research agenda. *European Management Review*, 20(4), 762-782. doi: 10.1111/emre.12564.

[2] Adams-Clark, A.A., Harsey, S., & Freyd, J.J. (2024). Factors of institutional betrayal associated with PTSD symptoms and barriers to service use among campus sexual assault survivors. *Psychological Injury and Law*, 17, 383-397. doi: 10.1007/s12207-024-09524-5.

[3] Christl, M.-E., Pham, K.-C.T., Rosenthal, A., & DePrince, A.P. (2024). When institutions harm those who depend on them: A scoping review of institutional betrayal. *Trauma, Violence, & Abuse*, 25(4), 2797-2813. doi: 10.1177/15248380241226627.

[4] Druhova, O.S., Kirichenko, S.V., Yefimova, Z.D., & Subota, K.S. (2025). The role of military hubs in ensuring effective veteran reintegration. *Energy Saving. Power Engineering. Energy Audit*, 10, 17-33. doi: 10.20998/2313-8890.2025.10.02.

[5] Ein, N., Gervasio, J., Cyr, K.S., Liu, J.J.W., Baker, C., Nazarov, A., & Richardson, J.D. (2024). A rapid review of the barriers and facilitators of mental health service access among veterans and their families. *Frontiers in Health Services*, 4, article number 1426202. doi: 10.3389/frhs.2024.1426202.

[6] Grimell, J. (2024). You can take a person out of the military, but you can't take the military out of the person: Findings from a ten-year identity study on transition from military to civilian life. *Frontiers in Sociology*, 9, article number 1406710. doi: 10.3389/fsoc.2024.1406710.

[7] Halych, M. (2025). Comparative analysis of contemporary approaches to social and psychological support for combatants and their families. *Scientific Journal of the National Academy of Internal Affairs*, 30(3), 23-32. doi: 10.63341/naia-herald/3.2025.23.

[8] Herd, P., & Moynihan, D. (2025). Administrative burdens in the social safety net. *Journal of Economic Perspectives*, 39(1), 129-150. doi: 10.1257/jep.20231394.

[9] Higgins, A. (2025). Military institutional betrayal: A quantitative analysis of perceived inadequate transition support and institutional betrayal among U.S. veterans. *Journal of Veterans Studies*, 11(2), 109-122. doi: 10.21061/jvs.v11i2.758.

[10] Hinton, M., *et al*. (2023). A qualitative study of the expectations, experiences, and perceptions that underpin decisions regarding PTSD treatment in help-seeking veterans. *Military Medicine*, 188(7-8), e2234-e2241. doi: 10.1093/milmed/usac374.

[11] Hunter, Y. (2025). Empowering veterans in career transition: The development of a model for overcoming imposter syndrome in the civilian workforce. *New Horizons in Adult Education and Human Resource Development*, 37(2), 74-85. doi: 10.1177/19394225251339034.

[12] Ihnatovych, O. (2025). Veterans' psychological support during reintegration into civilian life. *Psychology and Personality*, 1, 54-64. doi: 10.33989/2226-4078.2025.1.54.

[13] Litz, B.T., & Walker, H.E. (2025). Moral injury: An overview of conceptual, definitional, assessment, and treatment issues. *Annual Review of Clinical Psychology*, 21, 251-277. doi: 10.1146/annurev-clinpsy-081423-022604.

[14] Lushchak, O., Velykodna, M., Deputatov, V., & Strilbytska, O. (2026). Mental health help-seeking behavior among Ukrainian adults during the 2nd year of the 2022 Russian invasion: A cross-sectional study. *Frontiers in Psychology*, 17, article number 1793954. doi: 10.3389/fpsyg.2026.1793954.

[15] Matveieva, O., Mamatova, T., Borodin, Y., Gustafsson, M., Wihlborg, E., & Kvitka, S. (2024). Digital government in conditions of war: Governance challenges and revitalized collaboration between local authorities and civil society in provision of public services in Ukraine. In *Hawaii international conference on system sciences 2024* (pp. 2002-2011). Honolulu: University of Hawai'i at Mānoa.

[16] McAdams, M., Henninger, M.W., Bloeser, K., & McCarron, K.K. (2025). Institutional betrayal in military and veteran populations: A systematic scoping review. *Journal of the American Psychiatric Nurses Association*, 31(1), 8-22. doi: 10.1177/10783903241299720.
[17] Moon, K.-K., Lim, J., & Kim, J.-S. (2024). Examining the effect of organizational justice on turnover intention and the moderating role of generational differences: Evidence from Korean public employees. *Sustainability*, 16(6), article number 2454. doi: 10.3390/su16062454.
[18] Nizheiko, K., & Kovalivska, K. (2024). Reintegration of veterans into civilian life: International experience and specifics in Ukraine. *Economy and Society*, 67. doi: 10.32782/2524-0072/2024-67-161.
[19] Raabe, J., Eckenrod, M.R., Cooper, E., & Crain, J.A. (2024). Facilitating United States service members' transition out of the military: A self-determination theory perspective. *Journal of Career Development*, 51(1), 40-59. doi: 10.1177/08948453231198064.
[20] Shkoda, M.S. (2024). Interactive educational platforms as a tool for social and professional adaptation of war veterans. *Economic Paradigm*, 2(8), 155-162. doi: 10.25313/2520-2294-2024-8-10263.
[21] Smith, A., Rafferty, L., Croak, B., Greenberg, N., Khan, R., Langston, V., Sharp, M.-L., Stagg, A., Fear, N., & Stevelink, S. (2025). A systematic review of military-to-civilian transition, the role of gender. *Plos One*, 20(2), article number e0316448. doi: 10.1371/journal.pone.0316448.
[22] Syvak, N. (2024). Evaluating policy alternatives for the economic reintegration of Ukrainian veterans. *Public Administration and Law Review*, 4, 4-19. doi: 10.36690/2674-5216-2024-4-4-19.
[23] Zasiekina, L., Zasiekin, S., & Kuperman, V. (2026). Moral injury and post-traumatic stress disorder in war: The effect of marital status and previous genocidal trauma. *International Journal of Psychology*, 61(2), article number e70204. doi: 10.1002/ijop.70204.

Психологічні механізми впливу негативного інституційного досвіду на реінтеграцію ветеранів

Тетяна Яблонська

Доктор психологічних наук, професор
Київський національний університет імені Тараса Шевченка
01033, вул. Володимирська, 60, м. Київ, Україна
https://orcid.org/0000-0001-7272-9691

Артем Баратюк

Аспірант, асистент
Київський національний університет імені Тараса Шевченка
01033, вул. Володимирська, 60, м. Київ, Україна
https://orcid.org/0000-0003-3473-0434

✦ Анотація. Повернення ветеранів до цивільного життя є багатовимірним процесом, перебіг якого залежить від характеру взаємодії з медичними, соціальними, адміністративними та професійними інституціями. Непрозорі процедури, суперечливі вимоги, тривале очікування, знецінювальна комунікація та недостатня координація між установами можуть посилювати психологічний дистрес, знижувати довіру до системи та обмежувати використання доступних ресурсів підтримки. Метою статті було теоретичне обґрунтування та систематизація психологічних механізмів впливу негативного інституційного досвіду на психологічну, соціальну та професійну реінтеграцію ветеранів, а також побудова відповідної концептуальної моделі. Дослідження проведено у форматі інтегративного теоретичного огляду із застосуванням тематичного аналізу, концептуального синтезу та теоретичного моделювання. Наукові публікації, відібрані у базах Scopus, Web of Science, PubMed і Google Scholar, аналізувалися за формами інституційної взаємодії, особливостями її суб'єктивного оцінювання, психологічними механізмами, поведінковими реакціями, наслідками для реінтеграції та захисними чинниками. У структурі негативного інституційного досвіду виокремлено подієво-об'єктивний і суб'єктивно-оцінний аспекти, а також структурний, процедурний, міжособистісний і символічний рівні. Обґрунтовано, що психологічне значення такого досвіду визначається оцінюванням справедливості, контрольованості, визнання та виконання інституційних зобов'язань. Його вплив може реалізовуватися через зниження інституційної довіри, емоційні реакції на порушення справедливості та зобов'язань, зниження суб'єктності й самоефективності, порушення безперервності ідентичності та почуття соціальної належності. Поведінковими наслідками можуть бути уникнення допомоги, пасивність, конфліктність, соціальне дистанціювання та незавершення процедур, що звужують доступ до ресурсів підтримки. Практична цінність моделі полягає в обґрунтуванні необхідності прозорих процедур, поважної комунікації, персональної навігації, безперервного супроводу та міжвідомчої координації як умов підтримання довіри, суб'єктності й залученості ветеранів до системи допомоги

✦ Ключові слова: організаційна справедливість; суб'єктність; самоефективність; безперервність ідентичності; соціальна належність; звернення по допомогу; ветеран-орієнтована підтримка

BULLETIN OF NATIONAL DEFENCE UNIVERSITY OF UKRAINE

Volume 21, No. 4
2026

Founded in 2006.
Published 6 times per year.

Managing Editor:
V. Bohaichuk

Signed for print with the original layout 25.08.2026
Format 60*84/8
Conventional Printed Sheet 12.9
Circulation 100 copies

Address for contacts:
National Defence University of Ukraine
03186, 30 Povitrianykh Syl Ave., Kyiv, Ukraine
E-mail: vnuou@nuou-visnyk.com.ua
E-mail: visnyk@edu.nuou.org.ua
https://nuou-visnyk.com.ua/en