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

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✦ **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 $\alpha = 0.84\text{-}0.91$). 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,

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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: $\alpha = 0.91$. 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: $\alpha = 0.84$. 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: $\alpha = 0.89$. 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 $\alpha = 0.05$. 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 ($\chi^2 = 7.839$; $p = 0.005$): 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 authors*

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 authors*

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 difference 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 corresponded 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 authors*

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 combat 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 implemented in recovery centres should be targeted and individualised. 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.

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✦ Conflict of Interest

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

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✦ **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