Personality and Health in Military Context: A Study of Combatants and Injured Servicemen

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Abstract

Introduction: *The ongoing conflict in Ukraine has placed significant mental and physical health burdens on military personnel, including both elite combat troops and injured servicemen in rehabilitation. Understanding the factors that influence their health outcomes is crucial for developing effective support and intervention strategies.*

Purpose: *This study aims to analyse the relationships between negative indicators of mental and physical health (PTSD symptoms and somatic complaints) and personal characteristics (resilience, self-efficacy, and Big Five personality traits) in two distinct samples of military personnel: elite combat troops and injured servicemen in rehabilitation. By comparing these groups, the study seeks to understand how personal characteristics influence health outcomes and whether the impact differs based on the context of military service.*

Methodology: *The study involved 180 Ukrainian military personnel (all men) divided into two groups: 149 elite combat troops and 31 injured combatants in rehabilitation. Participants completed self-report measures assessing PTSD symptoms, physical complaints, resilience, self-efficacy, and personality traits. Descriptive statistics (means, standard deviations, ranges, skewness, and kurtosis) were computed, and independent samples t-tests and Cohen's d were calculated to determine differences between the groups. Pearson's bivariate correlations and Z-tests were conducted to examine relationships between health indicators and personal characteristics. Multiple linear regression analysis (using the forward method) was performed to construct prognostic models for mental and physical health outcomes.*

Results: *Injured combatants exhibited significantly higher levels of PTSD symptoms, exhaustion, and various physical complaints compared to elite combat troops. In contrast, elite combat troops showed higher levels of resilience, self-efficacy, extraversion, and emotional stability. Regression models highlighted self-efficacy, resilience, and emotional stability as key predictors of reduced PTSD symptoms and physical complaints, with varying predictive values across the two groups.*

Conclusion: *The study underscores the importance of personal characteristics in mitigating the negative health impacts of combat exposure within the global mental health landscape. Tailored interventions enhancing resilience, self-efficacy, and emotional stability are crucial, particularly for injured combatants. Future research should employ longitudinal designs and larger samples to further understand the dynamics of these relationships and support the well-being of military personnel on a global scale. By addressing these critical areas, we can develop more effective strategies to support the mental health and recovery of those affected by combat and conflict worldwide.*

Keywords

Mental Health, military personnel, PTSD, resilience, self-efficacy, Big Five personality traits

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Introduction

Russia's invasion of Ukraine on February 24, 2022, initiated the most serious and bloody military conflict in Europe since 1945. Although neither country releases official data on their military losses during the war, estimates from various sources suggest that military casualties on both sides have reached hundreds of thousands by the end of 2023 (Reuters, 2023). The ongoing hostilities in Ukraine have placed significant stress on its military personnel, who face not only the dangers of combat but also substantial mental and physical health challenges (Prykhodko et al., 2023). Among these personnel are elite combat troops, who are engaged in continuous front-line activities, and servicemen who have been injured and are receiving treatment in military rehabilitation centres. Understanding the factors that contribute to their mental and physical health is crucial for developing effective support and intervention strategies.

Military service, especially in active combat zones, exposes individuals to extreme stressors that can have lasting impacts on both mental and physical health (Kokun et al., 2022; Osorio et al., 2018). The ongoing war and instability in Ukraine create an environment where the negative effects on mental and physical health are particularly pronounced. The psychological impact of combat on military personnel can lead to post-traumatic stress disorder (PTSD), anxiety, depression, alcohol abuse, suicidality, and various somatic symptoms, all of which can severely impair their functioning and quality of life (Kokun et al., 2023; Shen et al., 2009). PTSD symptoms, including flashbacks, nightmares, and severe anxiety, are common among combatants. Somatic complaints, such as chronic pain, fatigue, and gastrointestinal issues, often accompany these psychological symptoms, creating a complex interplay between mental and physical health. Previous studies have shown high prevalence rates of these conditions among combatants, emphasizing the need for effective prevention and treatment strategies (Dami et al., 2018; Prykhodko et al., 2023; Seal et al., 2009).

Individual differences in personal characteristics, such as resilience, self-efficacy, and personality traits, play a crucial role in determining how military personnel cope with stress and recover from traumatic experiences. Resilience, defined as the ability to adapt flexibly, recover, and grow from adverse experiences (Masten et al., 2021; Southwick et al., 2014), is a crucial factor that can mitigate the negative effects of combat exposure. Self-efficacy, the belief in one's ability to solve problems and control life events (Slone et al., 2013), is another important determinant of combatants' psychological well-being. The Big Five personality traits—extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience—have been extensively studied in relation to mental health outcomes. These traits influence how individuals perceive and respond to stress, with certain traits being protective while others may increase vulnerability (Ringwald et al., 2024).

Despite the extensive research on these personal characteristics, there is a paucity of studies specifically examining their impact on health outcomes in military servicemen. Furthermore, comparative analyses between different groups within the military, such as elite combat troops and injured servicemen undergoing rehabilitation, are rare. Understanding how these groups differ in their responses to stress and trauma can provide valuable insights for tailored interventions (Shvets et al., 2022).

Purpose

This study aims to fill this gap by analysing the relationships between negative indicators of mental and physical health (number of PTSD symptoms and somatic complaints) and personal characteristics (resilience, self-efficacy, and Big Five personality traits) in two distinct samples of military personnel: elite combat troops and injured servicemen in rehabilitation. By comparing these

groups, we seek to understand how personal characteristics influence health outcomes and whether the impact differs based on the context of their military service.

Methodology

Participants

The study involved 180 Ukrainian military personnel (all men) divided into two groups. The first group comprised 149 Ukrainian servicemen selected for an elite combat troop of the Armed Forces of Ukraine. Participants were aged 22–59 years (M = 36.9, SD = 8.4) and had participated in combat operations for 1 to 11 months (M = 3.4, SD = 0.64) during the Russian-Ukrainian war. Among these 149 military personnel, 118 were soldiers (79.2%), 25 were non-commissioned officers (16.8%), and 6 were commissioned officers (4.0%). Data collection took place at a military training centre from January to March 2023.

The second group consisted of 31 Ukrainian combatants, aged 20 to 54 years (M = 34.3, SD = 8.5), who were injured during hostilities and were receiving treatment at a military rehabilitation centre. In this group, 18 were soldiers (58.0%), 10 were non-commissioned officers (32.1%), and 3 were commissioned officers (9.9%). The study was conducted from February to March 2023.

Participants completed questionnaires individually using paper and pencil.

Ethical considerations

All study procedures adhered to the ethical standards of relevant national and institutional guidelines on human experimentation and the Helsinki Declaration of 1975, revised in 2008. The investigation was conducted with the approval of the General Staff of the Armed Forces of Ukraine. Informed consent was obtained from all participants, who were informed that participation was voluntary and that they could refuse or withdraw from the study at any time. Complete confidentiality was maintained, and only anonymized data were used in the statistical analysis.

Assessments

In line with the study's aims, we employed measures to assess two primary constructs: indicators of negative mental and physical health, and personal characteristics that aid military personnel in coping with stress and recovering from traumatic experiences..

Negative Mental and Physical Health

We used Ukrainian adaptations of two self-report measures. The first measure was the Short Screening Scale for DSM–IV PTSD (Breslau et al., 1999), which consists of seven yes/no items. It evaluates symptoms such as avoidance of trauma-related stimuli, loss of interest in activities, feelings of isolation, difficulty in receiving affection, a sense of a foreshortened future, sleep disturbances, and heightened reactivity. Scores are derived by tallying affirmative responses, with a score of 4 or higher indicating a likely PTSD diagnosis. In this study, we utilized the total score.

The second measure was the Giessen Subjective Complaints List (GBB-24; Brähler et al., 2008), a standardized scale that quantifies 24 physical complaints grouped into four subscales: exhaustion, gastric, joint, and heart. Each subscale contains six questions. Participants rate their level of impairment for each complaint on a five-point Likert scale (0 = *not at all*, 1 = *hardly*, 2 = *somewhat*, 3 = *considerable*, or 4 = *yes, absolutely*). The sum of all subscales yields a general 'pressure of physical complaints' score that ranges from 0 to 96.

Personal Characteristics

We assessed the personal characteristics of military personnel using Ukrainian adaptations of three measures that tap into resilience, self-efficacy, and personality traits. The Connor-Davidson Resilience Scale 10-Item Version (CD-RISC; Campbell-Sills & Stein, 2007) is a self-report measure of resilience. Participants rate 10 statements on a five-point Likert scale ranging from 0 = *never* to 4 = *almost always*. Total scores range from 0 to 40, with all items in the scale positively worded.

The General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995) evaluates perceptions of competence in effectively managing stressful situations. The instrument consists of 10 statements rated on a five-point Likert scale ranging from 1 = *completely wrong* to 4 = *completely correct*. Total scores range from 10 to 40.

The Ten-Item Personality Inventory (TIPI; Gosling et al., 2003) measures the Big Five personality traits: extraversion, agreeableness, conscientiousness, emotional stability (instead of neuroticism, which is reverse-coded), and openness to experience. Each of the five subscales comprises two items, with item scores ranging from 1 to 7 and subscale scores from 2 to 14.

Statistical Analysis

Data were analysed in three steps. First, descriptive statistics (means, standard deviations, ranges, skewness, and kurtosis) were computed, and independent samples t-tests and Cohen's d were calculated to determine differences in the indicators between the two groups of military personnel. Second, Pearson's bivariate

correlations and Z-tests for comparison of correlations from independent samples were conducted within both groups to examine the relationships between indicators of negative mental and physical health and personal characteristics. Third, multiple linear regression analysis (using the forward method) was performed in both groups to further explore these patterns of association by constructing prognostic models for the two main indicators of negative mental and physical health.

Results

Descriptive statistics and comparisons of data for the indicators between the two groups of military personnel are presented in Table 1. Results showed that almost all variables were approximately normally distributed, as indicated by skewness and kurtosis values, which were both less than 1. Only gastric complaints in the second group and heart complaints in the first group slightly exceeded this value. Consequently, we were able to use parametric methods of statistical analysis.

Table 1. Descriptive statistics and comparison of all variables between two groups of military personnel

Variable	Group[1]	*M*	*SD*	*Range*	*Skewness*	*Kurtosis*	*t* [2]	*p*	Cohen's *d*
PTSD symptoms	first	1.41	1.47	0–7	0.98	0.51	-7.12	< .001	1.55
	second	4.19	2.07	0–7	-0.42	-0.91			
Exhaustion	first	4.50	4.46	0–18	0.78	0.23	-6.92	< .001	1.51
	second	12.68	6.26	0–24	-0.02	-0.82			
Gastric complaints	first	2.81	3.15	0–18	1.14	1.28	-3.80	< .001	0.80
	second	5.55	3.77	1–15	0.63	-0.27			
Joint complaints	first	7.04	5.53	0–21	0.74	-0.44	-6.29	< .001	1.23
	second	13.77	5.40	5–22	-0.26	-0.84			
Heart complaints	first	2.39	3.52	0–19	1.18	1.34	-5.21	< .001	1.15
	second	7.55	5.28	0–22	0.58	0.33			
Pressure of physical complaints	first	16.74	14.52	0–69	0.88	0.93	-6.68	< .001	1.40
	second	39.55	17.82	0–78	-0.02	-0.48			
Resilience	first	25.68	6.94	9–40	-0.24	-0.51	3.82	< .001	-0.79
	second	19.71	8.10	1–32	-0.52	-0.76			
Self-efficacy	first	29.88	4.74	14–40	-0.38	0.94	2.36	.023	-0.49
	second	27.35	5.55	17–40	-0.06	-0.38			
Extraversion	first	8.77	2.32	1–14	-0.69	0.96	3.35	.002	-0.68
	second	7.17	2.39	2–12	-0.24	-0.20			
Agreeableness	first	10.65	2.15	2–14	-0.84	0.98	1.29	.205	-0.26
	second	10.07	2.27	5–14	-0.54	-0.17			
Conscientiousness	first	10.61	2.27	3–14	-0.76	0.17	0.10	.917	-0.02
	second	10.57	2.27	5–14	-0.39	-0.11			
Emotional stability	first	9.83	2.37	4–14	-0.41	-0.07	4.37	< .001	-0.93
	second	7.37	2.88	2–12	-0.49	-0.62			
Openness to experience	first	9.66	2.45	1–14	-0.44	0.14	0.15	.878	-0.03
	second	9.57	3.00	3–14	-0.30	-0.55			

[1]First group – an elite combat troop (n = 149); second group – injured combatants (n = 31).
[2]An independent-samples t-test (equal variances not assumed).

Analysis of correlations between indicators of negative mental and physical health and personal characteristics (Table 2) shows that in both groups, higher levels of resilience and self-efficacy were associated with lower levels of all indicators of negative mental and physical health. Most of these correlations are statistically significant, reaching the highest values in cases

with PTSD symptoms and exhaustion (r = -.35 – -.54; p < .001). Additionally, higher levels of emotional stability were associated with lower levels of all indicators of negative mental and physical health. These correlations are also statistically significant in the vast majority of cases, reaching the highest values in PTSD symptoms and exhaustion in the injured combatants group (r = -.53 – -.58; p < .001). There are no reliable correlations with the remaining three Big Five personality traits – extraversion, agreeableness, and openness to experience – and indicators of negative mental and physical health, with the exception of one case – the correlation between exhaustion and openness to experience in injured combatants (r = -.36; p = .05).

Table 2. Bivariate correlations between indicators of negative mental and physical health and personal characteristics in two military personnel groups

Mental and physical health variables	Group[1]	Personal characteristics						
		Resilience	Self-efficacy	Extraversion	Agreeableness	Conscientiousness	Emotional stability	Openness to experience
PTSD symptoms	first	–.40***	–.35***	–.12	–.17*	–.20*	–.34***	–.14
	second	–.54**	–.54**	–.25	–.05	–.14	–.53**	–.29
Exhaustion	first	–.37***	–.36***	–.13	–.04	**–.29[2]***	–.31***	–.15
	second	–.39*	–.39*	–.29	–.04	**.11[2]**	–.58***	–.36*
Gastric complaints	first	–.28***	–.32***	.03	–.10	–.39***	–.23**	–.07
	second	–.09	–.25	.03	.21	–.10	–.24	.01
Joint complaints	first	–.36***	–.32***	–.07	–.01	**–.22[3]****	–.18*	–.07
	second	–.07	–.20	.15	.15	**.22[3]**	–.25	–.07
Heart complaints	first	–.33***	–.33***	–.08	–.10	**–.41[4]*****	–.22**	–.12
	second	–.27	–.43*	–.04	.07	**.05[4]**	–.42*	–.20
Pressure of physical complaints	first	–.39***	–.38***	–.08	–.06	**–.36[5]*****	–.27***	–.12
	second	–.26	–.38*	–.06	.09	**.10[5]**	–.45**	–.21

*p < .05. ** p < .01. *** p < .001.
[1] First group – an elite combat troop (n = 149); second group – injured combatants (n = 31).
[2](z = -1.98; p = .024); [3](z = -2.17; p = .015); [4](z = -2.35; p = .009); [5](z = -2.31; p = .010).

Only one personality trait – conscientiousness – showed significant differences in the size of correlations with indicators of negative mental and physical health between the two groups: exhaustion (z = -1.98; p = .024), joint complaints (z = -2.17; p = .015), heart complaints (z = -2.35; p = .009), and overall pressure of physical complaints (z = -2.31; p = .010). The direction of this difference indicates a significant decrease in the severity of the negative association between conscientiousness and indicators of negative mental and physical health in injured combatants compared to elite combat troops.

To further explore these patterns of association, we constructed two prognostic models for each of the two military personnel groups and tested these using multiple regression. These models predicted military personnel's mental and physical health deterioration and were tested with PTSD symptoms (Table 3) and pressure of physical complaints (Table 4) as separate dependent variables. All constructed models turned out to be highly informative (R = .45 – .59; R^2 = .21 – .34).

The most informative model was that predicting PTSD symptoms in injured combatants (R = .59; F = 14.6, p < .001; R^2 = .34). It included only one predictor of reduced PTSD symptoms – self-efficacy (= -0.58; p < .001). The informativeness of this model in the elite combat troop was: R = .47; F = 19.4, p < .001; R^2 = .22. It included resilience, as the strongest predictor of reduced PTSD symptoms (= -0.35; p < .001), as well as emotional stability (= -0.22; p = .008).

The predictive value of the model for the pressure of physical complaints in the elite combat troop (R = .50; F = 21.1, p < .001; R^2 = .25) was somewhat higher than in injured combatants (R = .45; F = 7.28, p = .012; R^2 = .21). It included resilience as the strongest predictor of reduced physical complaints (= -0.35; p < .001), as well as conscientiousness (= -0.27; p = .001). The model for pressure of physical complaints in injured combatants, similar to the model predicting PTSD symptoms, included only one predictor, which was emotional stability (= -0.45; p = .012).

Table 3. Multiple regression analysis: personal characteristics as predictors of mental health deterioration in two military personnel groups (dependent variable – *PTSD symptoms*)

Group[1]	Predictors and *excluded* variables	*R*	R^2	*F*, between/ within group variance, *p*	B	95% confidence interval for *B*		*Beta*	*t*	*p*	*VIF*
						Lower bound	Upper bound				
first	(Constant)	.47	.22	19.4 33.2/1.71 < .001	4.72	3.62	5.82			< .001	
	Resilience				-0.08	-0.11	-0.04	-0.35	-4.28	< .001	1.15
	Emotional stability				-0.14	-0.23	-0.04	-0.22	-2.69	.008	1.15
	Extraversion							-.07	-.95	.343	1.01
	Agreeableness							-.11	-1.40	.164	1.08
	Conscientiousness							-.05	-.65	.516	1.14
	Openness to experience							.10	1.22	.224	1.28
	Self-efficacy							-.06	-.60	.547	1.89
second	(Constant)	.59	.34	14.6 40.5/2.78 < .001	10.06	6.90	13.21		6.53	< .001	
	Self-efficacy				-0.21	-0.32	-0.10	-0.58	-3.82	< .001	1.00
	Extraversion							-.25	-1.68	.105	1.00
	Agreeableness							.03	0.19	.850	1.02
	Conscientiousness							.09	0.55	.590	1.17
	Emotional stability							-.25	-1.25	.223	1.78
	Openness to experience							.05	0.27	.787	1.43
	Resilience							-.21	-0.75	.459	3.26

[1]First group – an elite combat troop (n = 149); second group – injured combatants (n = 31).

Table 4. Multiple regression analysis: personal characteristics as predictors of physical health deterioration in two military personnel groups (dependent variable – *pressure of physical complaints*)

Group[1]	Predictors and *excluded* variables	*R*	R^2	*F*, between/ within group variance, *p*	*B*	95% confidence interval for *B*		*Beta*	*t*	*p*	*VIF*
						Lower bound	Upper bound				
first	(Constant)	.50	.25	22.1 3445/155 < .001	53.84	42.26	65.43		9.19	< .001	
	Resilience				-0.75	-1.07	-0.42	-0.35	-4.56	< .001	1.07
	Conscientiousness				-1.71	-2.66	-0.76	-0.27	-3.56	.001	1.07
	Extraversion							-.01	-0.11	.913	1.02
	Agreeableness							.07	0.83	.407	1.21
	Emotional stability							-.07	-0.84	.402	1.23
	Openness to experience							.13	1.61	.110	1.27
	Self-efficacy							-.06	-0.55	.584	2.08
second	(Constant)	.45	.21	7.28 1908/262 .012	59.73	42.86	76.59		7.25	< .001	
	Emotional stability				-2.81	-4.95	-0.68	-0.45	-2.70	.012	1.00
	Extraversion							.05	.31	.761	1.07
	Agreeableness							.11	.65	.520	1.00
	Conscientiousness							.13	.79	.435	1.01
	Openness to experience							.10	.49	.631	1.55
	Resilience							.22	.81	.423	2.59
	Self-efficacy							-.12	-.54	.592	1.78

[1]First group – an elite combat troop (n = 149); second group – injured combatants (n = 31).

Discussion

Interpretation of Findings

The present study aimed to analyse the relationships between negative indicators of mental and physical health (PTSD symptoms and somatic complaints) and personal characteristics (resilience, self-efficacy, and Big Five personality traits) in two distinct samples of Ukrainian military personnel: elite combat troops and injured servicemen in rehabilitation. The findings provide significant insights into how these personal characteristics influence health outcomes and highlight differences based on the context of military service.

The results revealed that injured combatants exhibited significantly higher levels of negative mental and physical health indicators compared to elite combat troops. This finding aligns with previous research indicating that physical injuries sustained in combat can exacerbate psychological distress and somatic complaints (Maia et al., 2011; Seal et al., 2007). Injured combatants, who often face prolonged recovery periods and potential long-term disabilities, may experience heightened stress and anxiety, contributing to their higher levels of PTSD symptoms, exhaustion, and physical complaints.

In contrast, elite combat troops demonstrated higher levels of resilience, self-efficacy, extraversion, and emotional stability, which are recognized as protective factors against stress and trauma (Kokun, 2024; Kokun & Bezverkhyi, 2024; Masten et al., 2021; Southwick et al., 2014). These traits likely enable elite combat troops to cope more effectively with the demands of combat, maintaining their mental and physical health despite the challenging conditions. The rigorous selection and training processes for elite troops might also play a role in enhancing these protective characteristics, equipping them with the skills and mindset necessary to handle combat stressors.

The correlation analysis further supported the protective role of resilience, self-efficacy, and emotional stability. In both groups, higher levels of these personal characteristics were associated with lower levels of all indicators of negative mental and physical health. These findings are consistent with the literature suggesting that resilience helps individuals recover from adverse experiences and adapt to stress (Bonanno et al., 2015). Self-efficacy, or the belief in one's ability to manage and overcome challenges, is crucial in navigating the uncertainties and pressures of military service (Bandura, 1997). Emotional stability, which involves maintaining composure and managing emotions effectively, is particularly important in high-stress environments like combat (McCrae & Costa, 1987).

Interestingly, the study found significant differences in the associations between conscientiousness and indicators of negative mental and physical health between the two groups. In injured combatants, the negative associations between conscientiousness and health indicators were less pronounced compared to elite combat troops. This might suggest that the impact of conscientiousness, which typically involves diligent and disciplined behaviour (Javaras et al., 2019), is moderated by the severity of the combat experience and the presence of physical injuries. Injured combatants may face challenges that overwhelm their conscientious tendencies, such as dealing with pain, disability, and the psychological burden of injury.

The regression models provided additional insights into the predictive value of personal characteristics for health outcomes. The most informative model was the one predicting PTSD symptoms in injured combatants, where self-efficacy emerged as the sole significant predictor. This underscores the critical role of self-efficacy in managing PTSD symptoms, particularly in individuals dealing with the added stress of physical injuries. For the elite combat troops, resilience and emotional stability were the key predictors of reduced PTSD symptoms, highlighting the multifaceted nature of psychological resilience in this group.

Similarly, the models predicting the pressure of physical complaints highlighted the importance of resilience and conscientiousness in elite combat troops, while emotional stability was the sole predictor for injured combatants. These findings suggest that different personal characteristics may play varying roles in mitigating physical health complaints depending on the context and severity of combat experiences.

Overall, the study emphasizes the complex interplay between personal characteristics and health outcomes in military personnel. The findings underscore the need for tailored interventions that enhance resilience, self-efficacy, and emotional stability, particularly for injured combatants who face unique challenges in their recovery and rehabilitation. Future research should continue to explore these relationships using longitudinal designs and larger, more diverse samples to further our understanding of how to best support the well-being of military personnel.

Practical value

The findings of this study have important practical implications for military training and rehabilitation

programs. Enhancing resilience and self-efficacy through targeted interventions could help mitigate the negative mental and physical health outcomes in military personnel. Training programs for elite combat troops should continue to focus on these personal characteristics to maintain their high levels of resilience and emotional stability. For injured combatants, rehabilitation programs should incorporate psychological support that strengthens self-efficacy and emotional stability, alongside physical recovery.

Furthermore, the study underscores the need for tailored interventions that consider the specific contexts and experiences of different military groups. Developing specialized programs for injured servicemen that address both physical and psychological rehabilitation can facilitate their recovery and improve their overall well-being (Kang et al., 2024; Vus & Esterlis, 2022).

Limitations and Future Directions

Despite the valuable insights provided by this study, there are several limitations that need to be addressed. The cross-sectional design limits the ability to draw causal inferences about the relationships between personal characteristics and health outcomes. Future research should employ longitudinal designs to better understand the temporal dynamics of these relationships. Additionally, the sample size, particularly for the injured combatants group, was relatively small, which may limit the generalizability of the findings. Larger studies with more diverse samples are needed to validate these results and explore potential variations across different military contexts. Future research should also investigate other potential moderators and mediators, such as social support and coping strategies, to provide a more comprehensive understanding of the factors influencing mental and physical health in military personnel.

Conclusions

This study highlights the significant impact of personal characteristics on the mental and physical health of military personnel in the context of global mental health challenges. Resilience, self-efficacy, and emotional stability emerged as key protective factors against PTSD symptoms and somatic complaints. The findings emphasize the importance of tailored interventions that enhance these personal characteristics, particularly for injured combatants undergoing rehabilitation. Addressing the unique needs of different military groups can improve their health outcomes and support their recovery and reintegration into society. Future research should continue to explore these relationships using longitudinal designs and larger, more diverse samples to further our understanding of how to best support the well-being of military personnel worldwide.

Conflict of interest

The authors declare no conflict of interest.

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