

THE IMPACT OF EXTREME WAR CONDITIONS ON THE PSYCHOLOGICAL WELL-BEING OF UNIVERSITY STUDENTS

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Abstract

War as an extreme socio-psychological situation exerts a profound impact on mental health and personality development, particularly among young adults and university students. The aim of this study is to provide a theoretical analysis of the effects of wartime conditions on psychological well-being in early adulthood, as well as to examine psycho-emotional manifestations associated with traumatic experiences. The study outlines the key psychological consequences of war for the population, including increased anxiety, depressive states, fear for one's life, social isolation, and related stress reactions. The concept of the student age is defined as a distinctive developmental stage characterized by significant changes in the spiritual and value-oriented spheres, the search for one's place in the world, the formation of a personal worldview and value system, the awareness of one's identity and uniqueness, and processes of personal and professional self-determination. Particular attention is devoted to the impact of extreme wartime conditions on students' psycho-emotional state, which manifests in elevated stress levels, emotional burnout, a tendency toward harmful habits, and symptoms of post-traumatic stress disorder. The study emphasizes the importance of theoretical reflection on these processes for understanding the mechanisms of personality formation under crisis conditions and highlights the need to develop comprehensive systems of psychological support for university students, including mental health prevention programs and interventions aimed at mitigating the negative effects of war on personal development.

Keywords: extreme conditions, student age, mental health, war in Ukraine

Introduction

Extreme conditions, such as armed conflicts, generate significant social and psychological stress, profoundly affecting people's mental health and well-being.

van Wijk (2022) defines extreme conditions as those characterized by hostile external factors and the influence of diverse, often unique, context-specific physical, psychological, and social stressors. Extreme conditions are inseparably linked to the environment in which they arise.

War exerts a substantial and lasting impact on mental health, affecting diverse segments of the population, including civilians, military personnel, refugees, and children. The prevalence of mental disorders, including depression, anxiety disorders, post-traumatic stress disorder, bipolar disorder, and schizophrenia, at any point in time among the conflict-affected population was 22.1% (Charlson et al., 2019). The continuous flow of armed conflicts, global crises, natural disasters, and pandemics has led to an unprecedented number of individuals experiencing stress, anxiety, depression, and emotional fragility (Prazeres et al., 2023).

The full-scale Russian invasion of Ukraine on February 24, 2022, resulted in a significant aggravation of mental health problems among the population. Early surveys conducted by Xu et al. (2023) in March 2022 revealed that a considerable proportion of Ukrainians reported symptoms of stress (52.7%), anxiety (54.1%), and depression (46.8%) during the initial phase of the war.

Such individuals are constantly exposed to various forms of trauma, including fear for their own life and freedom, experiences of grief, family separation, social isolation, disruption of social ties, forced migration, and more. Even when occurring in isolation, such traumatic events leave long-term consequences for both mental and physical health (Jawaid et al., 2022).

War- and trauma-induced mental disorders can lead to disorganization of key emotional, cognitive, and behavioral functions, including impaired regulation of thoughts, emotions, and feelings; alterations in physiological functioning; immune-inflammatory dysfunction; cognitive distortions; and maladaptive coping mechanisms (Rozanov et al., 2019). Furthermore, the impact of war increases the risk of developing depression and traumatic stress, manifesting in various clinical symptoms such as dissociation, emotional instability, hostility, and cognitive impairments (Moreno-Chaparro et al., 2022).

The meta-analysis by Lim et al. (2022) demonstrated that among individuals residing in war and armed conflict zones, including both military personnel and civilians, there is a high prevalence of depressive, anxiety, and post-traumatic stress disorders. Overall rates were reported as 28.9% for depression, 30.7% for anxiety disorders, and 23.5% for post-traumatic stress disorder, with levels of depression and anxiety being significantly higher among civilians compared to military personnel. Furthermore, the prevalence of mental disorders during active warfare substantially exceeds post-war levels, underscoring the direct impact of extreme wartime conditions on the mental health of affected populations.

Research findings indicate elevated levels of PTSD among the adult civilian population of Ukraine in the context of prolonged armed conflict. Internally displaced persons have been identified as a particularly vulnerable group, with PTSD symptom levels significantly higher compared to urban populations that have not experienced displacement (Johnson et al., 2021).

Students as a Particularly Vulnerable Social Group

Young people in the period of transition to adulthood are especially vulnerable to the deterioration of mental health and the development of psychosocial disorders (McGorry et al., 2024).

Students are a mobile social group whose main social tasks are: mastering a system of knowledge, the core of which is professional knowledge; mastering social roles in material and spiritual production; developing personality; acquiring personal, professional, civic, and moral maturity (Podolyak & Yurchenko, 2006).

The student age (17–23 years) constitutes a distinct stage of life, accompanied by spiritual and personal changes, the search for one's place in the world, the formation of a worldview, value systems, and professional self-determination. It coincides with the crisis of youth, which combines the formation of a socially mature personality with the gap between the ideal and the real "Self," often generating internal conflicts that are resolved in the process of practical self-determination. This period is characterized by individualization, the final formation of a mature personality, and an increased interest in self-knowledge and self-development (Dikhtyarenko & Remeniuk, 2024).

According to Arnett (2014), the process of transition from childhood dependence to adult independence has now become more prolonged and multifaceted than in previous historical periods. Its complexity lies not so much in severity as in the diversity of stages and interconnections that shape the path to adulthood.

In early adulthood, identity formation emerges as a leading developmental task. This process encompasses several interrelated dimensions: the psychological, which ensures a sense of continuity of the "Self" across time and space; the personal, defined by individual character traits and behavioral style; and the social, manifested in the performance and recognition of roles within the community (Wood et al., 2017).

At the stage of entering new social roles, young adults rely on their “Self-concept” as one of the mechanisms of adaptation. It enables the alignment of external expectations with the internal self-image, reducing the discrepancy between environmental demands and already established identity (Arch et al., 2025). Under the extreme conditions of war, however, such alignment becomes significantly more difficult.

Features of Young Adults’ Response to Extreme Conditions of War

Modern students live in a time of rapid social change and face immense pressure due to intense competition within society. Psychological problems among students are increasing and affect not only their studies and everyday life but also their long-term development (Zhang, 2022).

Research findings demonstrate that university students consistently experience deterioration in mental health (Emmertson et al., 2024). Moreover, suicidal ideation is significantly more prevalent among students compared to their peers who are not enrolled in higher education institutions (Mason, 2023).

In the context of armed conflict, students encounter numerous difficulties, including constant air raid alarms, shelling, limited access to online resources, reduced opportunities for practical training, and a decrease in the number of instructional hours.

The neurobiological mechanism underlying the impact of extreme conditions and stress on long-term memory and learning ability involves complex humoral interactions. During acute stress exposure, large amounts of noradrenaline and glucocorticoids, such as cortisol, are released. This interaction acts particularly strongly within the central nervous system, leading to impairments in working memory and attentional functions of the prefrontal cortex. As a result, attention is predominantly focused on threatening stimuli, which hinders the effective consolidation of information unrelated to potential danger and consequently reduces learning capacity (Defante et al., 2024).

Students affected by the war in Ukraine report deterioration of their psycho-emotional state, manifested in increased depressive symptoms, emotional and physical exhaustion, feelings of loneliness, nervous tension, and anger. These manifestations are more pronounced among students compared to university staff, and among women compared to men. In addition, there has been a documented increase in the use of psychoactive substances, including tobacco products, alcohol, analgesics, and sedatives (Kurapov et al., 2023).

Survey data from students across different regions of Ukraine indicate that the armed conflict has become a source of emotional strain for the vast majority of respondents, with 80.8% reporting symptoms of psychological distress. Behavioral disturbances among students in higher education institutions under conditions of armed confrontation significantly increase the likelihood of developing anxiety, depressive disorders, aggressive reactions, and emotional lability. Collectively, these factors contribute to the deterioration of physical health and a decline in the psycho-emotional well-being of student youth (Byshevets et al., 2023).

Both teachers and students experience considerable psycho-emotional strain and anxiety, which negatively affect students’ academic activities. Prolonged air raid alarms, the constant flow of information about missile attacks, and the general sense of danger substantially complicate the learning process, leading to emotional exhaustion and reduced academic motivation. Even in the absence of immediate signals of threat, students report diminished ability to absorb educational material, concentrate, and engage in the learning process, ultimately resulting in lower academic performance. Teachers, in turn, express concern about the excessive levels of stress and anxiety among students, viewing these factors as detrimental to their psychological state and potentially contributing to the long-term growth of mental and psychological disorders (Mayer et al., 2023).

War significantly affects sleep quality among students, with direct proximity to combat zones associated with the highest risk of sleep disturbances. Poor sleep quality is not merely an isolated symptom but a substantial health issue with serious consequences for cognitive functioning, academic performance, and the long-term mental and physical well-being of students.

Specifically, insufficient sleep duration and disrupted sleep structure negatively influence

the ability to concentrate, retain information, and make decisions—skills that are critically important for effective learning. Moreover, chronic sleep disturbances increase vulnerability to the development of anxiety and depressive disorders, as well as other mental health conditions (El Haddad et al., 2025).

Findings from research on the impact of life events on the psychological well-being of medical students and the role of coping strategies revealed that negative life events are associated with increased levels of subthreshold depression and the predominance of negative coping styles, whereas positive coping strategies show an inverse relationship with these outcomes. This highlights the importance of developing adaptive stress-response mechanisms to support students' mental health during periods of challenging life circumstances (G. Chen et al., 2024).

Despite residing in western regions of Ukraine, where direct combat does not occur, the majority of students reported experiencing traumatic events related to the war, as well as recurrent war-related dreams. Nevertheless, a high prevalence of sleep disorders, including insomnia and symptoms of post-traumatic stress disorder (PTSD), has been documented among Ukrainian students. Additionally, the impact of war exerts an independent effect on the development of insomnia and war-related nightmares, which in turn indirectly intensify PTSD symptomatology. Individuals living in western Ukraine, at a relative distance from the frontline, may experience indirect or secondary traumatization, as well as feelings of injustice and emotional solidarity with compatriots directly affected by the war—such as relatives and friends who became victims, military personnel defending the country, and numerous unknown civilian casualties (Pavlova & Rogowska, 2023).

PTSD is one of the most prevalent mental disorders in regions affected by war. Among university students in conflict zones, high levels of traumatic exposure and significant prevalence of PTSD symptoms have been observed. The most vulnerable group to PTSD development consists of individuals with low and medium income levels, highlighting the amplifying role of socio-economic factors in the formation of mental disorders under wartime conditions (Yousef et al., 2021).

Greater severity of PTSD symptoms is positively associated with impairments in educational functioning. This association persists even after controlling for socio-demographic characteristics, the presence of traumatic brain injury, current alcohol misuse or dependence, and major depressive disorder. Student veterans with PTSD symptoms may be physically present in classrooms yet simultaneously face considerable difficulties in the learning process due to intrusive and repetitive traumatic memories, heightened psychological distress in response to triggers, and pronounced physiological reactions within the classroom environment (Morissette et al., 2021).

In the context of war, which creates extreme conditions for students, similar stress situations negatively affect psychological well-being. University students in Italy were among the first to be forced to rapidly adapt to new learning conditions. Researchers noted that many students experienced high levels of anxiety and depression. Increased risk of anxiety was associated with female gender, fears regarding the consequences of the pandemic, limited participation in university life, and inability to meet with a partner (L. Villani et al., 2021).

Nevertheless, even under extreme conditions, students are capable of demonstrating high productivity: quickly assimilating material, diligently completing tasks, maintaining motivation, and exercising self-regulation. At the same time, difficulties are evident, including feelings of tension in the learning process, superficial knowledge acquisition, rapid forgetting, slowed information processing, and lack of systematicity. Academic performance is largely determined by the nature of learning behavior: positive and mixed patterns are associated with high and moderate outcomes, whereas negative patterns correlate with low achievement (Dudnyk, 2024).

Recognizing these features is crucial for understanding the psychosocial vulnerability of students and for developing measures aimed at supporting their mental health and effective self-determination in the process of forming a mature personality. The traumatic consequences of war may persist for many years after its conclusion. Therefore, systematic monitoring of students' mental state and overall well-being, as well as research into strengthening psychological health and identifying necessary resources, is essential (Fedchyshyn et al., 2025).

Conclusions and Implications

War exerts a significant and lasting negative impact on the mental health of the population, affecting diverse categories. The psychological consequences of armed conflict manifest in the high prevalence of depression, anxiety, post-traumatic stress disorder (PTSD), and other mental disorders, as well as in impairments of emotional regulation, cognitive functions, and behavioral strategies. Continuous exposure of student youth to various forms of traumatic influence—such as threats to life, family separation, social isolation, and forced migration—leads to long-term psychological and physical consequences. War-induced mental disorders can disrupt key emotional, cognitive, and behavioral functions, including the regulation of thoughts, emotions, and physiological functioning.

The student age represents a critical period of early adulthood, during which active personality formation, worldview development, value system construction, and professional identity establishment occur. Youth at this stage are particularly vulnerable to psycho-emotional and socio-psychological challenges, which may lead to deterioration of mental health and the emergence of intrapersonal conflicts. This phase involves processes of individualization and self-determination, combining the acquisition of social roles with the search for personal uniqueness. It is characterized by crisis moments associated with the comparison of the “ideal Self” and the “real Self,” which may generate psychological discomfort and require active personal processing.

Contemporary students are subjected to considerable psycho-emotional strain caused by wartime conditions. Psychological problems increasingly observed among student youth manifest in depressive states, emotional and physical exhaustion, anxiety, aggressiveness, feelings of loneliness, and impaired concentration. War substantially worsens students’ sleep quality, contributes to the development of PTSD, and induces secondary traumatization, even among those distant from the frontline. Socio-economic factors, gender, and place of residence further modulate the level of psychological burden. The spread of psychoactive habits, declining academic motivation, and deteriorating educational performance reflect the complex impact of war on students’ cognitive, emotional, and behavioral functions.

Thus, the psycho-emotional vulnerability of student youth in wartime requires systematic monitoring and the implementation of targeted psychological support measures, including programs for the prevention of mental disorders, sleep support, and the development of adaptive coping strategies.

In the context of prolonged war, universities can and should serve not only an educational function but also become spaces of psychological support and social stability for students. This entails integrating psychoprophylactic programs into the educational process, developing psychological counseling services, and fostering an atmosphere of trust and mutual respect that helps reduce anxiety and restore internal resources among youth.

Further research should focus on identifying the long-term consequences of war-related trauma for student youth and on developing effective strategies for its prevention and mitigation. Particular importance lies in analyzing resilience and adaptation factors that enable students to maintain motivation and psychological well-being even under challenging conditions. Such insights will form the basis for comprehensive support programs and the optimization of educational activities, ensuring not only the prevention of mental disorders but also the development of resilience and social engagement among students in the future.

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