

Environmental and Epidemic Sensitivity in the Context of Preserving Personal Health during Wartime

Oksana Kredentser

Institute for Social and Political Psychology of the NAES of Ukraine

E-mail: okred278@gmail.com

<https://orcid.org/0000-0003-4119-190X>

<https://ror.org/049z73212>

Volodymyr Savinov

Institute for Social and Political Psychology of the NAES of Ukraine

E-mail: volodymyr.savinov@gmail.com

<https://orcid.org/0000-0001-5830-2333>

<https://ror.org/049z73212>

Tetiana Tytarenko

Institute for Social and Political Psychology of the NAES of Ukraine

E-mail: tytarenkotm@gmail.com

<https://orcid.org/0000-0001-8522-0894>

<https://ror.org/049z73212>

Aglaya Savchenko

Institute for Social and Political Psychology of the NAES of Ukraine

E-mail: aglayasavchenko@gmail.com

<https://orcid.org/0009-0006-3978-0982>

<https://ror.org/049z73212>

Maryna Dvornyk

Institute for Social and Political Psychology of the NAES of Ukraine

E-mail: dvornyk.marina@gmail.com

<https://orcid.org/0000-0003-1505-0169>

<https://ror.org/049z73212>

Iuliia Paskevskva

Lesya Ukrainka Volyn National University, Ukraine

E-mail: japzpj@ukr.net

<https://orcid.org/0000-0002-9944-8555>

<https://ror.org/02zjp8848>

Tetiana Larina

Institute for Social and Political Psychology of the NAES of Ukraine

E-mail: larinatetyna.olex@gmail.com

<https://orcid.org/0000-0001-8975-3348>

<https://ror.org/049z73212>

Received: 2025-08-30. **Accepted:** 2026-02-25

Copyright © 2026 Oksana Kredentser, Tetiana Tytarenko, Maryna Dvornyk, Tetiana Larina, Volodymyr Savinov, Aglaya Savchenko, Iuliia Paskevskva. Published by Vilnius University Press. This is an Open Access journal distributed under the terms of the [Creative Commons Attribution 4.0 \(CC BY 4.0\) License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract. *This article examines environmental and epidemic sensitivity as a psychological factor influencing health preservation during wartime. Based on a quantitative study involving 6042 adult respondents of varying ages, genders, educational and professional backgrounds, the research identifies key socio-demographic and social predictors of heightened sensitivity to ecological and health-related threats. The results show that women, individuals with higher education, older adults, and professionals in socially oriented fields (e.g., healthcare, education, safety services) report significantly higher levels of sensitivity. Furthermore, the quality and accessibility of medical services, health-supportive infrastructure, and the surrounding social environment were found to be significant contributors to environmental and epidemic sensitivity. These findings suggest that sensitivity in this context reflects not only emotional responsiveness but also a conscious cognitive and behavioural orientation toward health protection and environmental awareness. The study supports the view that, in the context of war-related stressors, environmental and epidemic sensitivity becomes an adaptive mechanism that can serve as a predictor of health-oriented behaviour and psychological resilience. The findings provide a basis for developing targeted psychoeducational and health-promotion interventions in crisis conditions.*

Keywords: *environmental and epidemic sensitivity, health preservation, wartime psychology, social predictors, stress adaptation.*

Introduction

During the armed aggression of the Russian Federation against Ukraine, the issue of safeguarding the population's physical and psychological health acquires particular significance. War is accompanied with severe disruptions to social, economic, and environmental stability, creating additional threats to personal health and well-being. Within this context, the issue of maintaining health and adhering to a healthy lifestyle under wartime conditions acquires particular significance.

A research team has conducted a theoretical analysis of the motivating and demotivating factors affecting Ukrainians' adherence to a healthy lifestyle during the full-scale military invasion of the Russian Federation, which began on 24 February 2022 (Tytarenko et al., 2024). Ten indicators were identified, encompassing the following key aspects of psychological health in wartime: *lifestyle, social environment, heredity, quality of medical services, accessibility of medical services, environmental and epidemic situation, health-supporting infrastructure, and health-related information campaigns.*

Among these, *lifestyle, heredity, and social environment* represent indicators reflecting the processes by which individuals activate mechanisms for interpreting their own experiences of maintaining a healthy lifestyle, particularly under martial law (Dvornyk et al., 2024). In contrast, indicators such as the *quality of medical services, accessibility of medical services, health-supporting infrastructure, and health-related information campaigns* define the nature of interaction with the healthcare system under wartime conditions. The *environmental and epidemic situation* indicator is considered separately, as it captures variability associated with the influence of the surrounding environment on human health, including ecological conditions and sanitary-epidemiological factors.

In the context of war, a healthy lifestyle is understood as an individual's conscious and responsible attitude towards their health, aimed at preventing its deterioration or destruction, while recognising that those experiencing war are subjected to acute stress and a prolonged psychological crisis (Dvornyk, 2023; Tytarenko, 2024).

Similar studies conducted in other conflict zones, such as Sri Lanka, Vietnam (Miller & Rasmussen, 2010), Yemen (Zaid et al., 2024), Syria (Gumus, 2020), have shown that prolonged exposure to war-related trauma leads to elevated health anxiety, environmental insecurity, and social mistrust, which, in turn, affect health-related behaviour. However, unlike those regions, Ukraine's wartime context is characterised by a highly educated population and a strong pre-war healthcare infrastructure, making the Ukrainian case a unique setting for understanding environmental and epidemic sensitivity.

One of the less studied yet important factors in preserving health during wartime is *environmental and epidemic sensitivity*, which we define as an individual's perception of threats associated with environmental pollution, epidemiological hazards, and violations of sanitary and hygienic standards in the context of an armed conflict, particularly concerning the impact of these threats on personal health and capacity to maintain a healthy lifestyle. In other words, individuals who believe that environmental and epidemic conditions affect their health are considered environmentally and epidemiologically sensitive within this framework.

In psychology, the concept of *sensitivity* is generally addressed within multiple theoretical perspectives and is often defined as the ability to perceive and process both internal and external information (Pluess, 2015; Greven et al., 2019). It may manifest in various forms, such as emotional sensitivity, sensory sensitivity, or social sensitivity (Aron & Aron, 1997). Furthermore, the concept of *environmental sensitivity* has been actively developed (Metzger & McEwen, 1999; Pluess, 2015), drawing primarily on the notions of biological sensitivity and sensory processing sensitivity, and likewise regarded as a personal capacity.

In contrast, in our study, which is situated within the domain of social psychology, the examination of environmental sensitivity is grounded in the concept of *attitude* towards stimuli from the external environment.

The human attitude towards the phenomenon of risk, shaped by the awareness of the consequences of technological disasters and climate change, was first examined from a socio-psychological perspective in the work of Yu. Pavlik (2019). The author distinguishes the individual and social/global levels of awareness of environmental risks, as well as the corresponding strategies of engaging with them. Pavlik emphasises that the majority of people possess neither a systematic understanding of environmental risks nor a coherent awareness of their behavioural responses to mitigating the consequences (Pavlik, 2019).

The psychological characteristics of how the population perceives environmental risks directly under wartime conditions have been studied by Ukrainian scholars,

notably, by Yu. Chaplinska and M. Kaznacheiev (2023). Based on their theoretical analysis of psychological-cognitive, socio-anthropological, and integrative approaches to the study of risk perception, the authors identified two dominant representations of environmental risks in the public consciousness during war: *catastrophe anticipation* and *deferred harm* (Chaplinska & Kaznacheiev, 2023).

Alongside environmental sensitivity, we also consider *epidemic sensitivity*, while treating both as analogous external stimuli that may correlate with human health. Risks such as the spread of infectious diseases, the deterioration of the water and food quality, and exposure to toxic substances (particularly as a result of infrastructure destruction) require heightened vigilance and a well-developed culture of environmental awareness among the population. In this context, sensitivity to environmental and biological risks functions as a psychological detector, enhancing an individual's capacity to respond promptly and appropriately to potential health threats.

Moreover, epidemiological sensitivity and the responsible behavioural practices established during the COVID-19 pandemic may serve as an important resource for maintaining health under the strain of wartime stress. However, under conditions of information overload, chronic anxiety, and deprivation of basic needs (housing, water, hygiene), such sensitivity may diminish or become distorted, leading to risk-inducing behaviours.

Certain mental health studies within biological and sensory frameworks of environmental sensitivity have already been presented (Yano & Oishi, 2024). However, within the scientific domain of social psychology, insufficient attention has yet been paid to the individual differences in environmental and epidemic sensitivity as they pertain to maintaining personal health in crises associated with war. In our view, investigating this phenomenon will provide a deeper understanding of the mechanisms of psychohygienic self-regulation and facilitate the development of effective preventive programmes for vulnerable groups, including internally displaced persons, residents of front-line territories, and social sector workers, among others.

The objectives of this study are:

1. to identify the psychological characteristics of Ukrainians who display heightened sensitivity towards the environmental and epidemic situation in Ukraine in the context of maintaining their health during wartime;
2. to examine the influence of socio-demographic and professional factors on such sensitivity;
3. to determine other social predictors of a heightened attitude towards environmental and epidemic conditions as a factor in safeguarding health under wartime conditions.

The hypothesis underpinning our research was the assumption that the psychological characteristics of attitudes towards the environmental and epidemic situation in Ukraine can serve as the basis for constructing a psychological profile of an environmentally and epidemiologically sensitive individual.

Design and Instruments

To conduct the study, the questionnaire “*Healthy Lifestyle of Ukrainians During the War*”, as developed in (Dvornyk, 2023), was used. The questionnaire consists of three parts of questions. *Part 1.* General and sociodemographic characteristics of respondents (gender, age, education, occupation, current place and conditions of residence, and income level). *Part 2.* Predictors of a healthy lifestyle. *Part 3.* Health maintenance practices (aimed at identifying targets and techniques for promoting a healthy lifestyle).

Overall, this questionnaire was employed within a study conducted as part of the research project “*Socio-Psychological Strategies for Forming a Healthy Lifestyle of the Individual under Conditions of Social Instability*” (2021–2024), implemented by the Department of Social Psychology of Personality of the Institute of Social and Political Psychology of the National Academy of Educational Sciences of Ukraine (No. 0122U001680).

This article presents the results of the study obtained by using a multiple-choice question included in Part 2, which addressed factors that most substantially contribute to the preservation and/or restoration of health under wartime conditions. Eight response options were proposed: (1) lifestyle; (2) heredity; (3) availability of medical services; (4) quality of medical services; (5) environmental and epidemiological conditions; (6) health-supportive infrastructure; (7) social environment; (8) health-related information campaigns. The respondents were asked to select no more than three options.

The discriminative of the items was assessed by using *Ferguson’s delta index*. The average Ferguson’s Delta across all items was 0.41. Exclusion of three aspects that demonstrated uneven distributions (items 1, 7, and 8) resulted in an acceptable level of Ferguson’s Delta (0.61).

Cronbach’s a was 0.26, which indicates a rather low level of internal consistency. This confirms that the proposed items are independent of one another. The independence of the response options is also supported by correlation coefficients calculated by using *Pearson’s formula*. The mean correlation coefficient was 0.04 [0.00–0.17], indicating the absence of significant relationships between the selection of different healthy lifestyle factors.

A descriptive research design was chosen because it offers several advantages that were essential for our study (Loeb et al., 2017; Ayton et al., 2023). First, it allows the collection of data from large samples (which we successfully achieved). Second, in our case, the descriptive analysis preceded the experimental phase and enabled us to forecast and formulate several important hypotheses for further research.

Data collection was conducted online via *Google Forms* from late 2023 to early 2024. In total, 6077 questionnaires were completed. However, 13 duplicate entries and 22 invalid responses (characterised by extensive missing data, non-informative content,

or lack of variation) were identified and excluded, resulting in a final dataset of 6042 respondent submissions for analysis.

The participants were provided with written information detailing the aim and procedures of the study, and written informed consent was obtained before data collection. Upon the completion of data processing, the participants were offered personalised feedback on their results. Additional clarification or psychological support was made available whenever required.

Ethical compliance was ensured through a three-stage procedure: first, the research programme was subjected to expert evaluation by independent specialists; second, the expert's evaluation was reviewed by the Ethics Committee of the Institute for Social and Political Psychology of the National Academy of Educational Sciences of Ukraine; and third, the decision of the Ethics Committee was approved by the Academic Council of the Institute.

Data Analysis. The data were analysed by using SPSS (version 21.0), Jamovi (v. 2.3) for all statistical procedures, including descriptive statistics, cross-tabulation analysis (χ^2), dispersive (Kruskal-Wallis, One-Way ANOVA), and regressive analysis.

Participants. The sample comprised 6042 respondents, representing employees of state-funded institutions subordinate to the Ministry of Education and Science of Ukraine and the Ministry of Justice of Ukraine, including staff of the Department for the Execution of Criminal Sentences of the State Criminal-Executive Service of Ukraine. The sample consisted of 60% men and 40% women, with a mean age of 37.9 years (min = 16, max = 77 years; SD = 9.3).

Geographically, the respondents were based both in Ukraine and abroad. The largest share of the participants (57.6%) resided in regions which are geographically distant from front-line zones, although these areas are periodically subject to shelling nevertheless. In particular, residents of Kyiv and the Kyiv Region constituted 7.8% of the sample. A considerable proportion of the participants (over 20%) lived in regions close to the front line. A further 11.5% resided in the relative safety of western Ukraine, while 1.2% lived abroad.

Half of the respondents held a completed higher education degree. Others (approximately 20% each) had incomplete higher or specialised secondary education, or a diploma for a completed programme of secondary education. The participants also included individuals with incomplete secondary education (2.6%), and those holding an academic degree (1.3%).

Results

We first sought to identify the psychological characteristics of Ukrainians who display heightened sensitivity towards the environmental and epidemic situation in Ukraine in the context of preserving their health during wartime. To address this research objective and to conduct a comparative analysis between environmentally and epidemiologically

sensitive and non-sensitive individuals, two groups of respondents were selected from the total dataset (n = 6042). The first group (*environmentally and epidemiologically non-sensitive*) comprised respondents who did not consider the environmental and epidemic situation to be a factor influencing health during the war (n = 5052; 83.6% of the participants). The second group (*environmentally and epidemiologically sensitive*) comprised respondents who regarded the environmental and epidemic situation as a factor influencing health during wartime (n = 990; 16.4% of the participants).

Statistical analysis of these two groups, by using the χ^2 test, enabled the identification of their socio-demographic profile (Table 1) and educational-professional profile (Table 2).

Table 1.

*Association Between Environmental and Epidemic Sensitivity and Socio-Demographic Characteristics**

Socio-demographic characteristics	Environmentally and epidemiologically non-sensitive (%) (n = 5052)	Environmentally and epidemiologically sensitive (%) (n = 990)	χ^2	p
Gender				
Male	61.3	57.6	7.68	0.021
Female	38.6	42.4		
Identifies otherwise	0.1	0.1		
Age				
16–24 years	8.0	8.6	4.61	0.202
25–35 years	30.3	32.1		
36–59 years	59.4	57.6		
60–89 years	2.3	1.7		
Place of residence (current settlement, country)				
Front-line zones/occupied areas	21.1	21.2	6.05	0.301
Other parts of Ukraine	57.2	58.6		
Kyiv and Kyiv Region	8.2	6.9		
Western Ukraine	11.6	11.2		
Abroad	1.0	1.5		
Not specified	0.8	0.7		

* Note. Percentages are calculated within each sensitivity category. Statistical significance values are based on the χ^2 test.

The data indicate a statistically significant association between gender and the level of environmental and epidemic sensitivity ($p < 0.05$). Specifically, among those who do

not exhibit environmental and epidemic sensitivity, men predominate (61.3%), while women account for 38.6%. In the sensitive group, the fraction of men decreases to 57.6%, whereas the proportion of women increases to 42.4%.

At the same time, analysis across four age groups (Table 1) showed that the largest proportion in both groups was the respondents aged 36–59 years (59.4% and 57.6%, respectively), while the smallest representation came from young people aged 16–24 years (8% and 8.6%, respectively). However, the observed differences between the two groups were not statistically significant.

No statistically significant differences were found concerning the place of residence. All categories – residents of front-line zones, other regions of Ukraine, Kyiv and Kyiv Region, the western region, or abroad – were represented relatively evenly in both groups. In particular, the proportion of the respondents from front-line and occupied territories was 21.1% in the non-sensitive group and 21.2% in the sensitive group.

The results presented in Table 2 indicate a statistically significant relationship between the educational attainment level and environmental/epidemic sensitivity ($p < 0.001$). In the sensitive group, the individuals who completed higher education predominated (55.7%), compared with 49.2% in the non-sensitive group. The proportion of individuals with completed secondary education was 18.5% in the sensitive group and 23% in the non-sensitive group, suggesting a trend towards greater sensitivity with higher educational attainment. The least represented were individuals with incomplete secondary education – 2.2% and 2.8%, respectively.

Table 2.

*Association Between Environmental and Epidemic Sensitivity and Educational–Professional Characteristics**

Educational–professional characteristics	Environmentally and epidemiologically non-sensitive (%) (n = 5052)	Environmentally and epidemiologically sensitive (%) (n = 990)	χ^2	<i>p</i>
Education			24.50	0.001
Incomplete secondary	2.8	2.2		
Completed secondary	23.0	18.5		
Incomplete higher / specialised secondary	25.0	23.6		
Completed higher	49.2	55.7		
Employment status			5.97	0.015
Unemployed	3.1	2.0		
Employed	96.9	98.0		

Educational–professional characteristics	Environmentally and epidemiologically non-sensitive (%) (n = 5052)	Environmentally and epidemiologically sensitive (%) (n = 990)	χ^2	<i>p</i>
Field of employment			41.30	0.001
Manual and technical work	8.8	7.4		
Natural sciences	2.5	1.7		
Information technology / engineering	4.2	3.7		
Social and behavioural sciences	17.4	19.2		
Culture and arts	0.7	0.3		
Organisational and managerial work	6.7	9.3		
Military service	3.0	1.7		
Civil security	43.9	46.5		
Not specified	12.9	10.2		

* Note. Percentages are calculated within each sensitivity category. Statistical significance values are based on the χ^2 test.

Statistically significant differences were also found in relation to employment status ($p < 0.015$). In the sensitive group, the proportion of employed individuals was slightly higher (98%) than in the non-sensitive group (96.9%). While the proportion of unemployed respondents was low in both groups, it was higher among the non-sensitive participants (3.1% compared with 2%).

Differences by the sector of employment were particularly pronounced ($p < 0.001$). In both groups, the largest proportion of respondents were employed in the field of civil security (43.9% among the non-sensitive and 46.5% among the sensitive participants). The environmentally and epidemiologically sensitive group also had a slightly higher representation of those working in the social and behavioural sciences (19.2% compared with 17.4%) and in organisational and managerial roles (9.3% compared with 6.7%). By contrast, individuals engaged in manual and technical work, military service, and the natural sciences were more frequently represented in the non-sensitive group. The proportion of the respondents employed in the cultural and arts sector was small in both groups.

At the next stage, we examined, by using analysis of variance, the influence of socio-demographic and professional factors on sensitivity to the environmental and epidemic situation in the context of maintaining health under wartime conditions. The Kruskal-Wallis test was applied to explore the effects of variables such as gender, age, education, and employment status (Table 3).

Table 3.

*Influence of Socio-Demographic and Professional Factors on Sensitivity to Environmental and Epidemic Threats in the Context of Maintaining Health During Wartime (Kruskal-Wallis Test)**

Factors	χ^2 (Empirical value)	<i>p</i>	Effect size (ϵ^2)
Gender	7.29	0.007	0.00121
Age	8.44	0.004	0.00140
Education	24.32	<.001	0.00403
Employment status	5.97	0.015	0.00098

*Note. Statistical significance values are based on the Kruskal-Wallis test.

With regard to gender, the analysis indicates that, at a statistically significant level ($p < 0.01$), gender influences sensitivity to environmental and epidemic threats. The observed differences show that women are more likely than men to regard environmental and epidemic threats as factors affecting health in wartime conditions.

Age was also found to exert a statistically significant influence ($p < 0.01$). For the purposes of the analysis of variance, age was treated as a continuous variable rather than as grouped categories. The results indicate that environmental and epidemic sensitivity increases with age. This may suggest that, over time, individuals accumulate life experience which enhances caution in matters related to health and fosters a more serious attitude towards potential environmental and epidemic threats.

The further findings demonstrate that the educational level ($p < 0.001$) and the employment status ($p < 0.05$) are also significant factors in environmental and epidemic sensitivity. The presence of statistical significance points to a stable association between these variables and the perception of environmental and epidemic threats as determinants of health during wartime. In other words, the data suggest that being employed and having a higher level of education refers to being more likely to contribute to increased environmental and epidemic sensitivity.

To analyse the influence of variables such as the place of residence and the field of employment, we applied ANOVA, as these variables are non-ordinal. The results show that, at a statistically significant level, the field of employment affects sensitivity to environmental and epidemic threats in the context of maintaining health during war ($F = 12.013$; $p < 0.001$). Individuals employed in the fields of civil security, management, and the social and behavioural sciences are more likely to regard environmental and epidemic threats as factors influencing health during wartime.

It should be noted that the place of residence did not demonstrate a statistically significant effect on the level of sensitivity ($p = 0.778$), which may indicate that merely living under conditions of military threat is not necessarily associated with heightened environmental or epidemic sensitivity, which appears instead to be determined by individual differences in risk perception and adaptive mechanisms.

Finally, we sought to identify social predictors of a heightened attitude towards the environmental and epidemic situation as a factor in maintaining health under wartime conditions. For this purpose, we used both analysis of variance (Kruskal-Wallis test) and regression analysis. Six factors were examined: lifestyle, accessibility and quality of medical services, health-supporting infrastructure, social environment, and health-related information campaigns (Table 4).

Table 4.

*Influence of Social Predictors on Sensitivity to Environmental and Epidemic Threats in the Context of Maintaining Health During Wartime (Kruskal-Wallis Test)**

Factors	χ^2 (Empirical value)	<i>p</i>	Effect size (ϵ^2)
Lifestyle	1.24	0.265	0.00020
Accessibility of medical services	12.50	<.001	0.00206
Quality of medical services	174.00	<.001	0.02880
Health-supporting infrastructure	28.00	<.001	0.00463
Social environment	4.35	0.037	0.00072
Health-related information campaigns	0.316	0.574	0.00005

* *Note.* Statistical significance values are based on the Kruskal-Wallis test.

As shown in Table 4, the most influential predictors are the quality of medical services, health-supporting infrastructure, and accessibility of medical services ($p < 0.001$). This indicates a strong dependence of the perception of environmental and epidemic threats on these indicators. In other words, the lower is the trust in the quality of medical services, the stronger is the health-supporting infrastructure, whereas the greater the accessibility of medical services correlates with the higher sensitivity of the population to potential environmental and epidemic health threats.

A statistically significant, though weaker, association was also identified between social environment and sensitivity to threats ($p = 0.037$). This refers to the role of the social context (support, communication, collective attitudes), which, while not decisive, nonetheless influences the subjective sense of safety or anxiety regarding health.

By contrast, lifestyle and health-related information campaigns did not demonstrate a statistically significant effect on the sensitivity to environmental and epidemic threats. This may suggest that, under wartime conditions, individual health efforts or informational initiatives are less influential than systemic and structural factors such as the accessibility and quality of medical care.

Table 5.

Results of Regression Analysis of the Influence of Social Predictors on Sensitivity to Environmental and Epidemic Threats in the Context of Maintaining Health During Wartime

Predictor	Estimate	SE (Standard error)	t	p
Quality of medical services	0.1554	0.0120	12.96	<.001
Health-supporting infrastructure	0.0691	0.0173	3.98	<.001
Social environment	0.0698	0.0280	2.50	0.013
Accessibility of medical services	0.0446	0.0126	3.53	<.001

Thus, it can be stated with a high degree of probability that, for those individuals who consider the environmental and epidemic factors as significant due to health maintenance, other factors – such as the quality of medical services, health-supporting infrastructure, social environment, and accessibility of medical services – will also be of importance.

Discussion

The present study has made it possible to outline the characteristics of environmental and epidemic sensitivity among Ukrainians in the context of maintaining health during wartime. Our findings indicate that the majority of respondents exhibit environmental and epidemic non-sensitivity ('equanimity') under wartime conditions. Given that contemporary behavioural responses to changes in the environmental and epidemic situation generally lack systematic awareness, it may be argued that, due to the war, Ukrainians may display equanimity as a particular psychological response to catastrophic life circumstances. This is consistent with the psychological meaning of equanimity, understood as both a component and a central mechanism of action and change in mindfulness practice (Desbordes et al., 2015). Such non-sensitivity to environmental and epidemic threats, or the psyche's equanimity due to their context, may be explained by the predominance of more immediate and tangible threats, which require prioritising factors not of a strategic, remote, or global nature, but rather those related to direct survival.

The data also showed that women, compared with men, exhibited a higher level of sensitivity to the environmental and epidemic situation. This is consistent with previous research indicating that women are more prone to eco-anxiety and display a stronger orientation towards a healthy lifestyle, particularly in times of crisis (Dvornyk, 2023; Tytarenko, 2024; Yano & Oishi, 2024). This finding aligns to some extent with research conducted by Indian scholars, who identified gender-specific differences on the equanimity scale (Nandita & Rajan, 2024). Comparable gender-related differences have been observed in populations affected by armed conflicts in Palestine, where women tend to display heightened concern for safety and family health protection

(Bdier & Mahamid, 2024). In this context, it may be assumed that environmental and epidemic equanimity constitutes a socio-psychological resource for preserving health, which may temporarily stabilise the individual's mental and psychological states under wartime conditions.

The role of education and employment in shaping environmental and epidemic sensitivity was also confirmed: respondents with completed higher education demonstrated an increased sensitivity to the environmental and epidemic situation, which is consistent with international perspectives that consider educational attainment as a predictor of environmental awareness. Similar associations have been noted in the research of A. Lutz and M. Schmitt (2018) emphasised the role of the educational level in the perception of environmental risks and readiness for environmentally responsible behaviour. From a psychological standpoint, these results can be explained through the mechanisms of cognitive awareness and informational competence. Individuals with higher education can have a broader access to reliable sources of information, critical thinking skills, and developed abilities to forecast risks, which, under conditions of wartime instability, contribute to heightened environmental and epidemic sensitivity as a component of self-preservative behaviour.

To sum up, the profile of environmentally and epidemiologically sensitive individuals may be characterised as women with higher education, employed in the social and behavioural sciences, and engaged in organisational or managerial activities.

The identified socio-psychological predictors – specifically, the quality and accessibility of medical services, as well as the strength of health-supporting infrastructure, and social environment – emerge as significant accompanying factors of environmental and epidemic sensitivity. The correlation of sensitivity with the quality of medical services and health-preserving infrastructure supports the findings of the WHO (2022) study, which emphasised that trust in the healthcare system and the availability of social resources greatly enhance awareness and responsible decision-making in the areas of hygiene, prevention, and self-organisation in crises.

Thus, the obtained results expand the understanding of the socio-demographic and socio-psychological factors influencing environmental and epidemic sensitivity. In wartime, this set of factors acquires particular importance for safeguarding both individual and public health, necessitating targeted work with different population groups in order to raise awareness, foster trust in systems of social support and medical services, and promote social cohesion and proactivity in health preservation.

Limitations

It should be noted that this study has certain limitations. First, data collection took place under conditions of ongoing shelling across the Ukrainian territory, which may have influenced the reactivity of the respondents' answers. Second, we primarily used self-report instruments, which have several important limitations, such as social desirability

bias and limited self-awareness of respondents on their own behaviours, emotions, or motivations. Therefore, future research would benefit from combining subjective and objective methods to assess sensitivity to environmental and epidemic conditions and readiness to counteract their negative health consequences. In this context, it would also be promising to analyse the impact of individual personality traits on environmental and epidemic sensitivity under wartime conditions.

Third, a certain limitation of the study lies in the sample composition, which consisted mainly of individuals who are officially employed, have a stable job position, and receive regular payments (i.e., have regular income). As a future research perspective, it would be worthwhile to extend the study to other population categories, such as unemployed individuals or private entrepreneurs.

Conclusions

We have found that the majority of the surveyed respondents do not regard the environmental and epidemic situation as having an impact on their health. A profile of those more sensitive to this context was identified: women with higher education, employed in the social and behavioural sciences, and engaged in organisational and managerial activities.

These findings support the idea that environmental and epidemic sensitivity is multifactorial and is associated with individual cognitive characteristics, life experience, gender roles, and professional socialisation. Thus, under wartime conditions, the key factors in maintaining health and shaping an adequate public attitude towards the environment are likely to be the structural components of the healthcare system – primarily the quality, accessibility, and availability of infrastructure – whereas behavioural and informational factors appear to play a secondary role. This underscores the need to prioritise systemic changes in the healthcare sector both during and after the war.

Understanding of these relationships has practical significance for developing differentiated strategies for public communication, fostering psychohygienic competence, reducing vulnerability, and promoting adaptive behaviour under wartime conditions.

Acknowledgements

This research was conducted by the Department of Social Psychology of Personality at the Institute for Social and Political Psychology of the National Academy of Educational Sciences of Ukraine as part of the scientific project No. 0122U001680 *“Socio-Psychological Strategies for Forming a Healthy Lifestyle of the Individual Under Conditions of Social Instability”* (2021–2024). The department’s team extends sincere gratitude to the Department for the Execution of Criminal Sentences of the State

Criminal-Executive Service of Ukraine for their assistance in collecting empirical data and forming the panel sample.

Author contributions

Oksana Kredentser: conceptualization, methodology, project administration, writing – original draft preparation, writing – review and editing.

Tetiana Tytarenko: conceptualization, methodology, writing – review and editing.

Maryna Dvornyk: conceptualization, data curation, investigation, project administration, writing – review and editing.

Tetiana Larina: conceptualization, data curation, formal analysis, methodology, writing – original draft preparation.

Volodymyr Savinov: data curation, formal analysis, investigation, visualization, writing – review and editing.

Aglaya Savchenko: formal analysis, visualization.

Iuliia Paskevka: investigation, writing – original draft preparation.

References

Aron, E. N., Aron, A., & Jagiellowicz, J. (2012). Sensory processing sensitivity: a review in the light of the evolution of biological responsiveness. *Personality and Social Psychology Review*, 16(3), 262–282. <https://doi.org/10.1177/1088868311434213>

Ayton, D. (2023). Chapter 5: Qualitative descriptive research. In D. Ayton, T. Tsindos & D. Berkovic (Eds.), *Qualitative research: a practical guide for health and social care researchers and practitioners* (pp.49–54). Deakin, ACT. Melbourne: Council of Australian University Librarians, Open Educational Resources Collective.

Bdier, D., & Mahamid, F. (2024). Womens' Mental Health and War Catastrophes in Palestine. In M. Zangeneh (Ed.), *Essentials in Health and Mental Health. Advances in Mental Health and Addiction* (pp. 177–186). Cham: Springer. https://doi.org/10.1007/978-3-031-56192-4_11

Bilewicz, M., Babińska, M., & Gromova, A. (2024). High rates of probable PTSD among Ukrainian war refugees: the role of intolerance of uncertainty, loss of control and subsequent discrimination. *European Journal of Psychotraumatology*, 15(1), 1–9. <https://doi.org/10.1080/20008066.2024.2394296>

Chaplinska, Yu., & Kaznacheyev, M. (2023). Psykhologichni osoblyvosti spryynyattya ekolohichnykh ryzykiv v umovakh viyny [Psychological features of the perception of environmental risks in war conditions]. *Visnyk of the Lviv University. Series Psychological sciences*, 16, 56–63 <https://doi.org/10.30970/PS.2023.16.8> [In Ukrainian]

Desbordes, G., Gard, T., Hoge, E. A., Hölzel, B. K., Kerr, C., Lazar, S. W., Olenzki, A., & Vago, D. R. (2015). Moving beyond mindfulness: defining equanimity as an outcome measure in meditation and contemplative research. *Mindfulness*, 6(2), 356–372. <https://doi.org/10.1007/s12671-013-0269-8>

Dvornyk, M. S. (2023). Promotsiya zdorovoho sposobu zhyttya osobystosti v umovakh viyny: kontseptualni zasady doslidzhennya [Promotion of a healthy lifestyle of the individual in war condi-

tions: conceptual foundations of research]. *Problems of Political Psychology*, 13(27), 57–64. <https://doi.org/10.33120/popp-Vol13-Year2023-127> [In Ukrainian]

Dvornyk, M. S., Lazorenko, B. P., Larina, T. O., Gromova, G. M., Pohorilska, N. I., Savinov, V. V., & Gundertaylo, Y. D. (2024). Zdorovyy sposib zhyttya ukrayintsiv pid chas viyny: pervynnyy analiz danykh opytuvannya [Healthy lifestyle of Ukrainians during the war: primary analysis of survey data]. *Psykholohichni perspektyvy [Psychological Perspectives]*, 43, 80–102. <https://doi.org/10.29038/2227-1376-2024-43-dvo> [In Ukrainian]

Greven, C. U., Lionetti, F., Booth, C., Aron, E. N., Fox, E., Schendan, H. E., Pluess, M., Bruining, H., Acevedo, B., Bijttebier, P., & Homberg, J. (2019). Sensory processing sensitivity in the context of environmental sensitivity: a critical review and development of research agenda. *Neuroscience and BioBehavioral Reviews*, 98, 287–305. <https://doi.org/10.1016/j.neubiorev.2019.01.009>

Gumus, E. C., & Gungormus, Z. (2020). Life satisfaction and healthy lifestyle behavior changes of the university students who migrated from Syria to Turkey due to the war. *International Journal of Scientific and Technological Research*, 6(5), 69–77. <https://doi.org/10.7176/JSTR/6-05-06>

Larina, T. (2024). The Role of Mindfulness in Coping with the Experience of War: An Analysis of Empirical. *Scientific Studios on Social and Political Psychology*, 30(2), 53–59. <https://doi.org/10.61727/ssppj/2.2024.53>

Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., & Reber, S. (2017). *Descriptive Analysis in Education: A Guide for Researchers*. (NCEE 2017-4023; ED573325). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. <https://eric.ed.gov/?id=ED573325>

Lutz, A. E., & Schmitt, M. T. (2025). Psychological approaches to social change for environmental protection and environmental justice. In I. Walker (Ed.), *Handbook of Environmental Psychology*. Tallinn: Edward Elgar Publishing. https://doi.org/10.31219/osf.io/76y2d_v1

Metzger, T., & Mcewen, D. (1999). Measurement of Environmental Sensitivity. *The Journal of Environmental Education*, 30(4), 38–39. <https://doi.org/10.1080/00958969909601883>

Miller, K. E., & Rasmussen, A. (2010). War exposure, daily stressors, and mental health in conflict and post-conflict settings: bridging the divide between trauma-focused and psychosocial frameworks. *Social Science & Medicine*, 70(1), 7–16. <https://doi.org/10.1016/j.socscimed.2009.09.029>

Nandita, K. B., & Rajan, S. K. (2024). Finding balance in a digital world: Equanimity as a predictor of nomophobia. *Journal of Human Behavior in the Social Environment*, 35(6), 955–965. <https://doi.org/10.1080/10911359.2024.2362181>

Pavlik, Yu. (2019). Ekolohichnyy ryzyk yak skladna sotsialna sytuatsiya: dynamika konstruyuvannya problemy [Ecological risk as a complex social situation: The dynamics of the problem's constructing]. *Scientific Studios of Social and Political Psychology*, 25(1), 158–165. [In Ukrainian]

Pluess, M. (2015). Individual Differences in Environmental Sensitivity. *Child Development Perspectives*, 9(3), 138–143. <https://doi.org/10.1111/cdep.12120>

Pluess, M., & Boniwell, I. (2015). Sensory-processing sensitivity predicts treatment response to a school-based depression prevention program: Evidence of vantage sensitivity. *Personality and Individual Differences*, 82, 40–45. <https://doi.org/10.1016/j.paid.2015.03.011>

Tytarenko, T., Vasiutynskyi, V., Hubeladze, I., Chunikhina, S., & Hromova, H. (2024). War-Related Life-Making Landscapes: Ukrainian Context. *Journal of Loss and Trauma: International Perspectives on Stress & Coping*, 29(2), 154–178. <https://doi.org/10.1080/15325024.2023.2256219>

Tytarenko, T. (2024). Self-Recovery Practices of Ukrainian Civilians at the Beginning of the War: Subcultural Differences. *Insight: the psychological dimensions of society*, 12, 338–357. <https://doi.org/10.32999/2663-970X/2024-12-4>

Tytarenko, T. M. (2024). Moye maybutnye zalezhyt vid mene: praktyky zdorovoho sohodennya u voyennykh i povoyennykh umovakh [My future depends on me: practices of a healthy present in war and

post-war conditions]. Kropyvnytskyi: Imeks-LTD. <https://doi.org/10.33120/MFDMPHN-2024>
[In Ukrainian]

World Health Organization (WHO). (2025). *Health emergency preparedness and response*. https://apps.who.int/gb/ebwha/pdf_files/WHA78/A78_9-en.pdf

Yano, K., & Oishi, K. (2024). Individual differences in environmental sensitivity: associations between cognitive emotion regulation and mental health. *Frontiers in Psychology. Cognitive Science*, 15, 1–12. <https://doi.org/10.3389/fpsyg.2024.1322544>

Zaid, S. M., Fadel, A. M., Taresh, S. M., Mohammed, L. A., & Fitriana, N. (2024). Psychologists' perspective of mental health in Yemen during the civil war and COVID-19: a qualitative inquiry. *Current Psychology*, 43, 14774–14785. <https://doi.org/10.1007/s12144-022-03617-7>