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Psychological safety and reproductive health: a comprehensive model for supporting women in wartime

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Women's reproductive health during wartime represents a multidimensional issue that requires an interdisciplinary approach. The war environment exacerbates the psychological and physical challenges women face, amplifying the need for psychological safety to support their reproductive health. This study presents a conceptual model of psychological support tailored to the unique needs of women during armed conflict.
The objective: **to develop a conceptual model of psychological support for fostering for women during armed conflict, particularly in the context of their reproductive health and sense of psychological safety.**
Materials and methods**. An empirical study was conducted from May to November 2024 using an online survey. All participants provided informed consent to participate in the study, which ensured compliance with the necessary ethical standards. The empirical part of the study involved 624 women. The sample consisted of women living in their own homes in the Kyiv, Dnipropetrovsk, Zaporizhzhia, Zakarpattia, Vinnytsia and Lviv regions of Ukraine, as well as women who were forcibly displaced and are in such European countries as Germany, Poland, the Czech Republic, Norway, Slovakia and Austria. The age of the study participants ranged from 22 to 45 years. 312 women lived in Ukraine at the time of the study, and another 312 women were abroad, which is 50%/50%. The majority of the participants in the total sample were young mothers. Among the women who remained in Ukraine, 60% were employed, while among those who were abroad at the time of the study, only 10% were working. The following methods were used: Maddi Resilience Scale; "Prognosis-2" methodology by Rybnikov for assessing nervous-psychic stability; Schubert's risk-taking propensity scale; Rotter's locus of control questionnaire; Janoff-Bulman's basic beliefs scale; the "Psychological Safety Diagnostics" method. For statistical analysis, data processing was conducted using standard computer software packages, including the "Data Analysis" toolkit in Microsoft Excel for Windows 2007 and IBM SPSS software. The computed statistical parameters included the arithmetic mean (M), the standard error of the mean (m), and the level of significance for differences (p). The reliability of the obtained data was assessed using the Student's t-test, with a significance level considered reliable at $p \leq 0.05$ (95% confidence interval). This integrated methodological and statistical approach ensured robust analysis and enhanced the reliability of the study's findings. Statistical analysis, including the use of Pearson's correlation coefficient (r) and the Kruskal–Wallis test, was carried out using IBM SPSS Statistics. The qualitative component included semi-structured interviews to explore personal narratives and individual determinants of psychological safety.**
Results**. The empirical analysis revealed no statistically significant differences in the overall sense of psychological safety between women who remained in Ukraine and those who migrated ($p > 0.05$). However, qualitative findings highlighted diverse personal and situational factors influencing psychological safety. The study identified three primary determinants: locus of control, psychological resilience, and risk acceptance. These findings were integrated into a conceptual model designed to enhance psychological safety and address women's unique needs based on age, social categories, and wartime experiences.**
Conclusions**. The proposed model of psychological support for women in wartime emphasizes restoring psychological safety through targeted interventions addressing personal determinants such as resilience, locus of control, and risk acceptance. Understanding reproductive health is considered as a continuation of the psycho-emotional state which is associated with a sense of psychological safety. The developed model is based on the results of an empirical study of the sense of psychological safety in women who remained in Ukraine and those who were forced to move to European countries. The main attention is paid to restoring the sense of psychological safety of women based on key personal determinants (locus of control, mental resilience, risk-taking). The need for interdisciplinary cooperation is emphasized – involving specialists from different fields to provide comprehensive assistance to women in preserving their reproductive health. The model emphasizes the importance of a multidisciplinary approach involving experts in psychology, health care and social services to provide comprehensive psychological assistance, including through online consultations, depending on the context and taking into account modern achievements. Further research should focus on women's reproductive health during war, with an emphasis on examining the relationship between the sense of psychological safety and women's reproductive health under war-induced stress.**

Keywords: *reproductive health, forced migration, military aggression, personal determinants of woman's sense of psychological safety, locus of control, mental toughness, resilience, risk acceptance, model of psychological support.*

Психологічна безпека та репродуктивне здоров'я: комплексна модель підтримки жінок у воєнний час

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Репродуктивне здоров'я жінок у воєнний час є багатовимірним питанням, яке потребує міждисциплінарного підходу. Військове середовище загострює психологічні та фізичні проблеми, з якими стикаються жінки, посилюючи потребу в психологічній безпеці для підтримки власного репродуктивного здоров'я. Це дослідження має на меті продемонструвати концептуальну модель психологічної підтримки, адаптовану до унікальних потреб жінок під час збройного конфлікту.
Мета дослідження: розробка й обґрунтування концептуальної моделі психологічного супроводу жінок під час збройних конфліктів у контексті їхнього репродуктивного здоров'я та відчуття психологічної безпеки.
Матеріали та методи. Проведено емпіричне дослідження в період із травня по листопад 2024 р. за допомогою онлайн-опитування. Усі респонденти надали інформовану згоду на участь у дослідженні, що забезпечило дотримання необхідних етичних норм. В емпіричній частині дослідження взяли участь 624 жінки. Вибірку склали жінки, які проживають у власних домівках у Київській, Дніпропетровській, Запорізькій, Закарпатській, Вінницькій та Львівській областях України, а також жінки, які були вимушено переміщені та перебувають у таких європейських країнах, як Німеччина, Польща, Чехія, Норвегія, Словаччина та Австрія. Вік учасниць дослідження становив 22–45 років. 312 жінок проживали в Україні на момент дослідження, а ще 312 перебували за кордоном, що становить 50%/50%. Більшість учасниць загальної вибірки були молодими матерями. Серед жінок, які залишилися в Україні, 60% були працевлаштованими, тоді як серед тих, хто перебував за кордоном на момент дослідження, працювали лише 10%. Під час дослідження використовувалися такі інструменти психологічної оцінки: шкала стійкості Мадді (в адаптації Леонтьєва і Рассказової); методика оцінки нервово-психічної стійкості Рибнікова «Прогноз-2»; шкала схильності до ризику Шуберта; опитувальник локусу контролю Роттера; шкала основних переконань Янoффа-Булмана; методика «Діагностика психологічної безпеки». Статистичний аналіз та обробку даних здійснювали за допомогою стандартних пакетів комп'ютерних програм, зокрема інструментів «Аналіз даних» у Microsoft Excel для Windows 2007 та програмного забезпечення IBM SPSS. Розраховані статистичні параметри включали середнє арифметичне (M), стандартну помилку середнього (m) і рівень значущості для відмінностей (p). Достовірність отриманих даних оцінювали за допомогою t-критерію Стьюдента, рівень значущості вважався достовірним при $p \leq 0,05$ (95% довірчий інтервал). Цей комплексний методологічний і статистичний підхід забезпечив надійний аналіз і підвищив надійність результатів дослідження. Статистичний аналіз, включаючи застосування коефіцієнта кореляції (r) Пірсона та тесту Крускала – Уолліса, проводився за допомогою IBM SPSS Statistics. Якісний компонент дослідження включав напівструктуровані інтерв'ю для вивчення особистих наративів та індивідуальних детермінант психологічної безпеки.
Результати. Емпіричний аналіз не виявив статистично значущих відмінностей у загальному рівні психологічної безпеки між жінками, які залишилися в Україні, та тими, хто мігрував ($p > 0,05$). Проте якісні результати вказують на наявність різноманітних особистісних та ситуаційних факторів, що впливають на відчуття психологічної безпеки. Під час дослідження було виокремлено три основні детермінанти психологічної безпеки: локус контролю, психологічна стійкість і прийняття ризику. Ці висновки було інтегровано в концептуальну модель, розроблену з метою підвищення психологічної безпеки та вирішення унікальних потреб жінок на основі їхніх психологічних особливостей.
Висновки. Запропонована концептуальна модель психологічної підтримки жінок у воєнний час наголошує на відновленні психологічної безпеки шляхом цілеспрямованого впливу на особистісні детермінанти відчуття психологічної безпеки, як-от стійкість, локус контролю та прийняття ризику. Розуміння репродуктивного здоров'я розглядається як продовження психоемоційного стану, пов'язаного з відчуттям психологічної безпеки. Розроблена модель ґрунтується на результатах емпіричного дослідження відчуття психологічної безпеки у жінок, які залишилися в Україні, та тих, хто був змушений переїхати до країн Європи. Основна увага приділяється відновленню відчуття психологічної безпеки жінок на основі ключових особистісних детермінант (локус контролю, психічна стійкість, прийняття ризику). Наголошується на необхідності міждисциплінарної співпраці – залучення фахівців із різних галузей для забезпечення комплексної допомоги жінкам щодо збереження їхнього репродуктивного здоров'я. Модель підкреслює важливість мультидисциплінарного підходу із залученням експертів із психології, охорони здоров'я та соціальних служб для надання всебічної психологічної допомоги, зокрема за допомогою онлайн-консультацій, залежно від контексту та з урахуванням досягнень сучасності. Подальші дослідження мають бути зосереджені на репродуктивному здоров'ї жінок під час війни з акцентом на вивченні взаємозв'язку між відчуттям психологічної безпеки та репродуктивним здоров'ям жінки в умовах стресу, спричиненого війною.
Ключові слова: *репродуктивне здоров'я, вимушена міграція, військова агресія, особистісні детермінанти відчуття психологічної безпеки у жінок, локус контролю, психічна стійкість, прийняття ризику, модель психологічної допомоги.*

The full-scale invasion of Ukraine on February 24, 2022, profoundly disrupted life balance, exposing the fragile interplay of psychological and physical safety. Among the most affected are women, whose psychological well-being is critical not only for themselves but also for their roles as emotional anchors within families and communities [19]. This war has introduced intense and prolonged stressors, deeply challenging their psychological stability, resilience, and coping mechanisms.

For Ukrainian women, these challenges extend into the realm of reproductive health. Psychological safety directly impacts this domain by influencing stress levels, hormonal balance, and adaptive capacity, all of which are crucial for reproductive function and overall well-being. Elevated stress and psychological insafety can disrupt hormonal regulation, complicating both fertility and pregnancy outcomes. Such connections highlight the need for a holistic understanding of women's psychological safety that integrates its implications for their reproductive health.

The impact of war-related stress on women's psychological safety and reproductive health: a broader perspective. This study builds upon existing ideas regarding the effects of war-related stress on women's reproductive health and psychological safety. Specifically, the reduction in women's perceived psychological safety, as assessed by the psychological indicators outlined by the authors, is shown

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to influence reproductive health under the conditions of war-related stress [3, 6, 9, 10, 12, 13, 28, 29, 42, 46, 48, 49].

However, in this article, should to explore not merely the relationship between war-related stress and reproductive health but rather the degree to which this stress is perceived among two distinct groups of women: those who remained in Ukraine following the full-scale invasion on February 24, 2022, and those who were forced to relocate to European countries as a theoretical and empirical foundation for developing a conceptual model of psychological support for women's reproductive health during armed conflicts and wars. It is important to note that, according to the WHO (World Health Organization), reproductive health is defined as a state of complete physical, mental, and social well-being in all matters related to the reproductive system, its functions, and processes. This concept encompasses not only the ability to reproduce and the freedom to make decisions regarding reproductive behavior but also access to appropriate medical services. Reproductive health can be examined through both narrow and broad lenses. In a narrow sense, reproductive health pertains to the physiological state of a woman's reproductive system, including: menstrual cycle: the regularity, duration, and absence of pathological symptoms; fertility: the capacity to conceive, carry a pregnancy, and deliver a healthy baby; pregnancy and childbirth: the facilitation of a physiological pregnancy and minimizing obstetric complications; postpartum period: the restoration of reproductive system functions and psychological well-being; contraception: access to tools for birth regulation.

This approach focuses primarily on medical aspects, including the prevention and treatment of gynecological disorders such as infections of the reproductive organs, endometriosis, menstrual irregularities, or infertility. A broader understanding of reproductive health incorporates not only physiological well-being but also multidimensional aspects, especially psychological, social, and hormonal dimensions:

1. Psychological Aspect: psychological resilience: women's ability to adapt to life changes, including war, migration, or loss; emotional responses to stress, traumatic events, or social conditions impacting reproductive function [21].
2. Social Aspect: sociocultural factors influencing access to reproductive health services and decision-making autonomy; the role of gender equality in securing reproductive rights; hormonal health: the status of the endocrine system, which regulates reproductive organ function (e.g., stability of estrogen and progesterone levels); hormonal balance across life stages (puberty, reproductive years, perimenopause, menopause).
3. Lifestyle and external factors: the influence of nutrition, physical activity, and social support systems on reproductive health.

This multidimensional approach underscores the complex interaction between psychological constructs, perceived safety, and the reproductive well-being of women. By analyzing the degree of perceived stress among women in different geopolitical and social contexts, this study should to provide actionable insights for improving targeted psychological and medical interventions in reproductive health. Understanding how war-related stress affects women's psychological and reproductive health provides critical data for developing tailored medical and psychological interventions. Moreover, this research contributes to a more comprehensive perspective on reproductive health, emphasizing its role in ensuring not only individual well-being but also societal resilience in the face of ongoing global crises. Psychological safety, defined as an individual's perception of protection and freedom from psychological harm, has emerged as a critical factor for human resilience, growth, and development. It influences not only personal well-being but also collective productivity, social cohesion, and community stability. Importantly, psychological safety enables individuals to adaptively respond to stressors, challenges, and societal demands, laying the foundation for individual and societal progress. However, achieving and maintaining psychological safety is a complex process, particularly during crises and conflicts, where individual and collective stability are most vulnerable.

The objective: to substantiate a conceptual model of psychological support for fostering a sense of psychological safety among women during armed conflict in the context of their reproductive health.

Tasks:

1. To conduct a critical analysis of existing psychological support models for women during wartime.
2. To justify the components of psychological safety perception among women.
3. To empirically examine the differences in the sense of psychological safety between women who were forced to migrate to Europe and those who remained in Ukraine during the war.
4. To propose a conceptual model of psychological support for women in the context of armed conflict in Ukraine.

The conceptual hypothesis of the study is based on the assumption that the sense of psychological safety in women is determined by personal determinants, specifically: resilience, mental and emotional stability, risk-taking propensity, and internality. To achieve the study's objective, we undertook the following steps:

1. Scientific-theoretical analysis: It has been theoretically substantiated that the personal determinants psychological safety women is determined by personal factors, specifically: locus of control, mental toughness, resilience, risk acceptance. Analyzed the essence of the concepts "psychological safety", "women's sense of psychological safety during armed conflict".
2. Formulation of hypotheses: Developed hypotheses for the empirical research.
3. Selection and justification of psychodiagnostic tools: Chose and justified the psychodiagnostic instruments for the empirical research.
4. Empirical research: Conducted the empirical part of the study to determine the relationship between indicators of psychological safety and its personal determinants in women who remained in Ukraine versus those who had moved abroad.

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The empirical hypotheses proposed were:

1. Women who have been displaced to European countries experience a higher sense of psychological safety compared to women who have remained in Ukraine.
2. Women with high levels of resilience demonstrate high levels of psychological safety, particularly in terms of their sense of meaning, control, and fairness of events.
3. Women with high levels of mental and emotional stability show higher scores in their perception of meaning, control, and fairness of events (as components of psychological safety).
4. Higher risk-taking propensity is associated with higher levels of psychological safety, specifically in terms of perception of meaning, control, and fairness of events.
5. Higher internality scores in women are associated with higher levels of psychological safety, particularly in terms of perception of meaning, control, and fairness of events.

MATERIALS AND METHODS

To fulfill research task, we carried out an empirical investigation, which took place between May and November 2024 via an online survey. The study adhered to established guidelines and obtained informed consent from all respondents, ensuring full compliance with necessary ethical standards. The empirical study involved 624 women. The sample consisted of women residing in their homes in the Kyiv, Dnipropetrovsk, Zaporizhzhia, Zakarpattia, Vinnytsia and Lviv regions of Ukraine, as well as women who had been displaced and were located in various European countries, specifically Germany, Poland, the Czech Republic, Norway, Slovakia, and Austria. The age of the women studied ranged from 22 to 45 years. Of these, 312 women were living in Ukraine at the time of the study, while 312 were abroad, representing a 50%/50% split. The majority of women in the overall sample were young mothers. Among the women in Ukraine, 60% were employed, while among those abroad, only 10% were working at the time of the study.

To achieve the task of the empirical part of the study and test our hypotheses, we systematically addressed the following steps:

1. Assessment of psychological safety: Levels of psychological safety among women were assessed using the Basic Beliefs Scale by Janoff-Bulman. This scale includes subscales such as world benevolence, people's kindness, world fairness, world controllability, randomness of events, self-control, control over events, and luck.
2. Examination of resilience: We compared resilience levels of women in Ukraine and abroad, evaluating three components of resilience (engagement, control, risk acceptance) using the respective scales of the Maddi Resilience Scale.
3. Assessment of nervous-psychic stability: Nervous-psychic stability levels were determined using the "Prognosis-2" methodology by Rybnikov, which includes scales for nervous-psychic stability and sincerity.
4. Evaluation of risk-taking propensity: Risk-taking levels among women were assessed using Schubert's Risk-Taking Propensity Scale.
5. Determination of internality: Internality levels were measured using the Rotter's Locus of Control Questionnaire, which includes assessments of general internality, internality in achievements, failures, family relations, work relations, interpersonal relations, and health.
6. Statistical analysis: Statistical methods (Mann–Whitney U test) were used to identify correlations between:
   - Resilience and psychological safety indicators (perceptions of meaning, control, and fairness of events);
   - Nervous-psychic stability and perceptions of meaning, control, and fairness of events;
   - Risk-taking propensity and perceptions of meaning, control, and fairness of events;
   - Internality and perceptions of meaning, control, and fairness of events.
7. Comparison of psychological safety: We compared psychological safety between women currently in Ukraine and those who had been displaced to Europe. This comparison should us to understand whether external factors (surroundings) influence the sense of safety in women and to test the conceptual hypothesis. The comparison showed whether a technically safer environment (abroad) results in higher psychological safety compared to a more dangerous home environment.

The study employed a combination of validated psychodiagnostic tools and statistical methods to examine the research objective. The following methods were used:

- Maddi's resilience scale [50];
- "Prognosis-2" methodology by L. Rybnikov for assessing nervous-psychic stability [51];
- Schubert's risk-taking propensity scale [52];
- Rotter's locus of control questionnaire [53];
- Janoff-Bulman's basic beliefs scale (World Assumptions Scale) [54];
- The "Psychological Safety Diagnostics" method [55].

The survey for all psychodiagnostic methods was conducted using the online platform Google Forms. This platform was chosen for its accessibility, ease of use, and secure data collection features. The survey link was distributed through various channels, including institutional websites and social media platforms, ensuring broad participant reach and compliance with data protection standards. All questionnaires used in the study were standardized and validated psychodiagnostic methods, previously established in the field of scientific psychology. The selection of methods and ethical procedures for the study were reviewed and approved by the Department of Special Education, Municipal Institution of Higher Education "Khortytsia National Educational Rehabilitational Academy". Approval was granted during a departmental meeting, documented under protocol No. 9, dated 11/04/2024. It is important to note that the approval covered only the list of psychodiagnostic tools and the ethical procedures for conducting the survey. For statistical analysis, data processing was conducted using standard computer software packages, including the "Data Analysis" toolkit in Microsoft Excel

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for Windows 2007 and IBM SPSS software. The computed statistical parameters included the arithmetic mean (M), the standard error of the mean (m), and the level of significance for differences (p). The reliability of the obtained data was assessed using the Student's t-test, with a significance level considered reliable at $p \leq 0.05$ (95% confidence interval). This integrated methodological and statistical approach ensured robust analysis and enhanced the reliability of the study's findings.

Descriptive Statistics. In the first stage of the study, data collected from all applied methodologies were processed using descriptive statistics, including calculations of mean values and standard deviations. The results for each methodology were summarized in numerical tables, which were streamlined to ensure clarity and brevity in presentation.

RESULTS AND DISCUSSION

To address the research objective, we conducted both theoretical and empirical phases of the study. *During the first, theoretical phase*, we performed a critical analysis of available psychological support models and frameworks (assistance and care) for women during wartime, as presented in open-access sources [3, 4, 12, 13, 29, 42, 46].

The outcome of this theoretical analysis was the identification of critical shortcomings in existing models of psychological assistance and care for women during armed conflict, particularly in the context of their reproductive health. These shortcomings were synthesized into ten major issues:

1. Insufficient individualization of approaches: Existing models often propose universal strategies without considering the unique personal, cultural, and social contexts of women's lives that influence their sense of psychological safety. For instance, migrant women from different regions of Ukraine may experience diverse war-related traumas and face varying access to resources in European countries.
2. Limited focus on gender-sensitive approaches: While existing models include sociocultural factors and gender equality, they often fail to address specific challenges faced by women in various social roles. For example, single mothers or survivors of violence require specialized assistance not explicitly detailed in current psychological support frameworks.
3. Risk of stigmatization and labeling: The use of psychodiagnostic methods without proper support may inadvertently stigmatize or heighten anxiety among women. This necessitates sensitive interpretation of results and communication with participants.
4. Imbalance between individual and group interventions: Models often emphasize group formats, such as therapy or support groups. However, in the context of armed conflict and forced migration, women may distrust group settings due to past traumas or concerns about confidentiality.
5. Lack of adaptability to changing circumstances: Current models lack clear protocols for rapid response to evolving situations, such as escalations in hostilities, relocation of clients to other countries, or emerging social challenges (e.g., changes in migration laws in European countries).
6. Insufficient integration of medical aspects: Medical support is often limited to consultations about reproductive health, with little attention to the interaction between medical and psychological aspects. For example, stress-induced hormonal imbalances significantly affect women's mental health but are rarely addressed in these models.
7. Challenges in evaluating effectiveness: Monitoring methods for psychological changes, such as anxiety levels or resilience, may be useful but insufficiently timely. Furthermore, models often overlook women's subjective experiences, which can vary significantly in their perception of intervention outcomes.
8. Neglect of digital technologies: Modern conditions of armed conflict and forced migration necessitate the active use of digital technologies in psychological support. However, current models often lack explicit integration of tools such as online consultations, mental health apps, or virtual support platforms.
9. Absence of a long-term perspective: Many models focus on wartime support without accounting for the long-term consequences for women's mental and reproductive health, such as post-traumatic stress disorder (PTSD) or the delayed impact of chronic stress on the reproductive system.
10. Limited emphasis on cross-cultural interaction: For women who have relocated to Europe, existing models do not adequately address potential cross-cultural conflicts arising from differences in social norms, attitudes toward reproductive rights, and access to healthcare services.

Based on this critical analysis, we propose the following key focuses for the development of relevant models: Integration of gender-sensitive approaches and specialized programs for vulnerable categories of women (1), Development of individualized strategies tailored to women's experiences of war or migration (2), Active incorporation of digital tools for psychological support (3), Enhanced emphasis on the long-term impacts of war on mental and reproductive health (4), Multidisciplinary collaboration among medical, social, and psychological professionals (5). These recommendations, in our view, will help adapt psychological support models to the realities of women's lives in various contexts, making them more effective and flexible.

To achieve the second task of the study, we identified and substantiated the personal determinants of women's sense of psychological safety during armed conflicts. The result of this stage of the research was explores the unique personal determinants that shape women's psychological safety in the context of war, including resilience, mental toughness, risk acceptance, and locus of control. It examines how these factors affect women's ability to cope with stress both within Ukraine and in situations of forced migration. By analyzing these dynamics, the research sheds light on the differential impacts of conflict-related adversities on women's psychological and reproductive health.

Indicators of Resilience by Maddi's Scale. The results of resilience indicators for the general group of women are shown in Table 1.

Assessment of neuropsychological stability using the "Prognosis-2" Method.

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Table 1

Average indicators of resilience by S. Maddi's method, points (N = 624)

Indicators	Mean	Standard deviation
Engagement	36.23	± 9.78
Control	27.54	± 9.65
Risk Acceptance	17.49	± 5.81
Overall Resilience	81.26	± 25.24

Table 3

Mean Values of Risk Readiness Indicators for Women, points (N = 624)

Indicator	Mean value	Standard deviation
Risk Readiness	–11.4	± 16.1

Table 2

Mean values of neuropsychological stability indicators, Prognosis-2 Method, points (N = 624)

Indicator	Mean value	Standard deviation
Neuropsychological Stability	5.16	± 2.64

Table 4

Mean Values of Locus of Control Indicators for Women, points (N = 624)

Indicator	Mean value	Standard deviation
General Internality	4.87	± 2.16
Internality in Achievements	5.94	± 2.11
Internality in Failures	4.65	± 2.11
Internality in Family Relations	5.13	± 1.96
Internality in Professional Relations	4.42	± 1.90
Internality in Interpersonal Relations	6.22	± 1.97
Internality in Health and Illness	4.41	± 1.78

After excluding 13 responses due to high sincerity scores (≥ 10), the neuropsychological stability of 611 women was analyzed: Neuropsychological Stability Scale: An average score of 5.16 ± 2.64 points reflects a moderate level of neuropsychological stability. While this suggests a general capacity to cope with stress, it also signals potential vulnerabilities to neuropsychological breakdowns under extreme conditions. The data from this assessment are presented in Table 2.

The findings highlight a moderate level of neuropsychological stability among respondents. However, the possibility of breakdowns in extreme situations remains present. Risk readiness according to G. Schubert's Method. The findings for risk readiness are summarized in Table 3.

The mean score for risk readiness corresponds to a moderate level, reflecting a protective motivation to avoid failure. However, given that women's readiness to take risks often manifests under more defined and specific circumstances compared to men, this single psychodiagnostic method may not sufficiently capture their actual risk-taking behavior in real-life situations.

Locus of Control: Another Determinant of Psychological Security.

The mean values for "locus of control" indicators are presented in Table 4.

The mean statistical values of indicators for various types of locus of control in women are presented in sten scores. It is important to note that in the interpretation of results, a score of 5.5 serves as the norm (or median value). Scores above 5.5 indicate an internal locus of control in situations corresponding to the scales, whereas scores below this threshold reflect an external locus of control. In general, the findings indicate a predominance of an external locus of control, as demonstrated by results on the scales of general internality, internality in the domains of failures, family relations, professional relationships, and health. Conversely, scores on the scales measuring internality in the domains of achievements and interpersonal relationships exceeded the average (5.94 and 6.22 sten scores, respectively).

Overall, while women demonstrated a level of internality below the mean on most scales, the scores were not critically low. This suggests that the surveyed women, in certain situations involving failures, family matters, professional challenges, and health, tend to attribute responsibility to external circumstances or other individuals (such as partners, colleagues, or healthcare providers). High scores on the internality scales for achievements and interpersonal relationships indicate that the respondents generally perceive themselves as responsible for their accomplishments and exhibit a high degree of achievement motivation. Furthermore, they believe they can influence their relationships with others and the attitudes of others toward them. They demonstrate the ability to independently shape their social circles.

A correlation analysis was conducted using Pearson's method to explore relationships among the aforementioned indicators (specifically, resilience, psychological stability, locus of control, risk propensity, and sense of psychological security). Statistically significant correlations were identified between the following constructs:

1. Resilience and the sense of psychological safety (specifically, the component reflecting general perceptions of the meaningfulness, controllability, and fairness of events);
2. Psychological stability and the sense of psychological safety (general perceptions of the meaningfulness, controllability, and fairness of events);
3. Risk propensity and the sense of psychological safety (general perceptions of the meaningfulness, controllability, and fairness of events);
4. Locus of control and the sense of psychological safety (general perceptions of the meaningfulness, controllability, and fairness of events).

The results are summarized in Table 5.

The findings should deepen our understanding of how psychological safety influences women's reproductive capacities and overall health, particularly under the extreme pressures of armed conflict. These insights are not only valuable for psychologists and social scientists but also essential for healthcare professionals, such as obstetricians and gynecologists, who play a pivotal role in supporting women during these challenging times. By bridging the gap between psychological and physical health, this study seeks to inform strategies that foster resilience, protect reproductive health,

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Table 5

Correlation analysis results between indicators of resilience, psychological stability, risk propensity, internality, and the sense of psychological safety (general perceptions of meaningfulness, controllability, and fairness of events), N = 624

Indicator	Sense of Psychological safety (General Perceptions of Meaningfulness, Controllability, and Fairness of Events)
Resilience	0.559*
Psychological Stability	0.455
Risk Propensity	0.266
Locus of Control	0.635

Note: * – statistically significant correlations at $p \leq 0.05$.

and ensure psychological safety for women in crisis. The concept of an individual's sense of psychological safety, while narrower, shares common characteristics with the broader construct of psychological safety. For women, the issue of psychological safety becomes especially significant, as they often serve as custodians of family well-being. A woman's psychological safety directly influences her own health, her partner's well-being, the healthy development of children, and the mental health of the broader society. This connection is especially evident in the realm of reproductive health, where psychological safety plays a critical role in modulating stress levels, hormonal balance, and overall reproductive function [26].

During wartime, this issue gains particular relevance. Armed conflicts introduce prolonged and intense stressors that disrupt a woman's psychological equilibrium, potentially compromising her reproductive health. Stress hormones such as cortisol can interfere with normal hormonal cycles, ovulation, and pregnancy, creating significant challenges for women seeking to maintain or restore reproductive health in crisis conditions. Despite the critical importance of this topic, the concept of psychological safety for women and its determinants during war remain underexplored in academic literature [17].

Existing research does, however, highlight the undeniable impact of a woman's psychological safety on her daily life and her ability to adapt to new realities both within the country and abroad [15]. In the current study, we seek to deepen the understanding of women's psychological safety and its personal determinants, considering their influence not only on emotional well-being but also on reproductive health outcomes. The ability to maintain psychological stability amidst crisis conditions is crucial for preserving women's health, supporting their capacity for childbearing, and mitigating the long-term consequences of war-related stress.

The concept of psychological safety has been extensively addressed in the works of A. Maslow, Y. Chaplak, V. Komissaruk, W. Wang, S. Long, C. Chen, R. Janoff-Bulman, and I. Isenhardt et al. The problem of emotional states during wartime has been explored by V. Aleshchenko, T. Clark, K. Hanson-DeFusco, J. Hedström & T. Herder, V. Ivashchenko & N. Kiselyova, and others [2, 7, 11, 12, 14]. Women's emotional states during stressful situations have been studied by S. Oraimi, O. Burlaka & V. Vahner, A. Cevirme et al., O. Cherepiekhina et al., O. Drobot & A. Doroshenko, and others [1, 3, 5, 6, 8]. However, the specific intersection of psychological safety, its determinants, and reproductive health among women during military actions remains an open field for research.

The inclusion of sources from Ukrainian scholars, such as I. Maidanik, is a notable feature of this study [23]. These works provide culturally relevant insights into the challenges faced by Ukrainian women during the ongoing conflict. The war has disrupted not only women's psychological safety but also their ability to maintain physical and reproductive health, creating a dual burden that necessitates targeted interventions [23]. The connection between psycho-emotional and reproductive health in women during armed conflicts and wars has been highlighted by several researchers. A. Cevirme et al., for instance, examined emotional states and reproductive health during wartime [5]. Similarly, I. Zhabchenko et al. analyzed scientific studies on the reproductive consequences of wartime stress and potential interventions for correction [48, 49]. O. Slaba et al. conducted comparative analysis of the quality of life of women who left the territory of Ukraine during the ongoing war and women who stayed at their homes [44]. A. Kornatska et al. focused on the clinical course and psycho-emotional state of women with uterine leiomyoma and adenomyosis who were exposed to factors associated with military aggression [18].

V. Podolskyi et al. investigated the impact of chronic stress on the hormonal state of women affected by hostilities and displaced women [36]. O. Drobot and A. Doroshenko explored the psychological readiness for motherhood among women in wartime conditions [8]. T. Sobko conducted a cross-sectional study on psychological distress in pregnant women during wartime [45]. Additionally, K. Novak analyzed psychological preparedness for motherhood under wartime conditions [32]. These studies collectively underscore the intricate interplay between psycho-emotional well-being and reproductive health in the context of armed conflicts, offering valuable insights for both research and practice.

Before delving into the core concepts of this topic – namely, "psychological safety", "women's sense of psychological safety during armed conflict", and "personal determinants of women's psychological safety during armed conflict" – it is essential to analyze the definition of "psychological safety". While these concepts are interrelated and should be examined comprehensively, they also require differentiation. In general discussions of psychological safety, it is often equated with the psychological safety of the environment. A psychologically safe environment possesses several characteristics: it is free from manifestations of psychological violence and supports the satisfaction of individuals' fundamental social-psychological needs, thereby fostering a sense of psychological security. Researchers note that a psycho-

logically safe environment promotes productive activity and personal development for participants in social communication by ensuring an adequate quality of life, thereby instilling confidence in both the present and future [7, 30, 37].

From this perspective on psychological safety, it is important to note that it is also determined by the effective functioning of defensive mechanisms, which, in turn, are influenced by personal characteristics and the presence and predominance of certain mechanisms in reserve (the more developed the individual, the more defense mechanisms they have in their arsenal), and the individual's sensitivity to various types of threats. Thus, an individual's psychological safety is determined less by external factors or threats and more by the individual's perception of these threats and, more broadly, their perception of reality. Regarding the concept of "sense of psychological safety", it is, in our view, a narrower concept that describes how psychological safety manifests within the individual. A. Maslow, one of the first to investigate psychological safety, defined it as "a sense of trust, protection, and freedom, which separates one from fear and anxiety, and especially, a sense of the fulfillment of one's needs in the present and future". Maslow believed that the sense of safety influences everything a person feels and colors their perception, "dressing it in a particular hue". He also noted that the sense of safety is dynamic and can be lost at any moment in a person's life. Summarizing the perspectives of scholars on the sense of psychological safety, it is evident that each of these theories contributes significantly to a comprehensive understanding of the concept, as psychological safety is a dynamic and complex phenomenon with many components [25]. Losing a sense of psychological safety (due to the emergence of a particular threat) does not always mean it can be restored merely by eliminating the threat [14].

Resilience as a determinant of women's sense of psychological safety during wars and armed conflicts. In the context of factors influencing the sense of psychological safety of individuals, particularly women, it is essential to separately examine the concept of resilience. V. Lunov asserts that psychological safety manifests in an individual's ability to maintain resilience in environments with traumatic psychological factors and in resisting destructive internal and external influences [20]. Psychological resilience is a trait characterized by attributes such as stability, resistance, and balance. It enables individuals to withstand life's difficulties and adverse circumstances while maintaining health during various life trials [16]. Researchers indicate that psychological resilience is determined by one's equilibrium – defined as the ability to balance the level of stress with the capabilities of one's psyche and the available resources of the body. The level of stress is influenced not only by external conditions but also by the subjective assessment of these conditions. A psychologically resilient individual is capable of maintaining a balance between conformity and autonomy [11].

The role of risk acceptance as a determinant of women's sense of psychological safety. Another significant factor potentially related to women's sense of psychological safety is risk acceptance. This aspect has been explored in the research of S. Maddy. S. Maddy considers risk, along with engagement and control, as one of the factors contributing to resilience [22]. T. Sobko views an individual's tendency to take risks as an indicator of their readiness to make decisions (which can indirectly reflect self-confidence and a sense of safety) [45]. O. Kokun explains that a high willingness to take risks is associated with low motivation to avoid failure (which can be interpreted as a high level of psychological safety) [17]. C. Roussin et al. [40], O'Donovan and E. McAuliffe also link risk-taking to psychological safety in their study of measures to increase psychological safety [33]. They discuss interpersonal risk behaviors such as "speaking up" and "voice behavior" in this context. Most researchers agree that high levels of resilience and psychological safety are likely to be observed in individuals who exhibit a proactive life stance and are therefore prepared to take risks in situations that demand it.

Locus of control as a determinant of the sense of psychological safety. The concept of "locus of control" was introduced to psychology in the mid-1960s. It describes an individual's generalized belief about the causes of events in their life and who is responsible for them. Locus of control encompasses two poles: internal and external. Internals have an internal locus of control, meaning they believe that their own actions and decisions are responsible for the outcomes in their lives. Externals, on the other hand, have an external locus of control, attributing outcomes to external factors or luck. A key point is that internals not only believe in their personal responsibility for surrounding events but also tend to have higher self-confidence, are more decisive, and are more prone to taking risks. This, in turn, indirectly influences their sense of psychological safety. Therefore, it can be hypothesized that internality, being associated with risk-taking propensity, is linked to an individual's sense of safety. Moreover, according to J. Rotter, the developer of the locus of control scale, individuals experience stressors more intensely when they perceive a lack of control over a situation. Conversely, individuals who are inclined to exert control and believe in their ability to manage various events are less likely to experience stress in challenging situations. As a result, they are likely to have a higher sense of psychological safety [34].

The experience of women's sense of psychological safety during armed conflict In the context of armed conflict and danger, the term "sense of psychological safety" acquires new interpretations. It is clear that there is a significant difference between women's sense of psychological safety in secure versus hazardous conditions [39]. Under normal conditions, psychological safety is understood as a state of mental protection from anxieties, encompassing confidence in the present and future, belief in the world's benevolence, control and fairness of events, and a conviction of one's own value and ability to manage life events [31]. These conditions form the basis for internal balance, effective functioning, and personal development, as indicated by the author V. Lunov [20]. Research on the psychological states of Ukrainian women during the ongoing conflict includes studies that predict how the loss of psychological safety may impact women's perinatal capacities [38]. In the context of war, the concept of psychological safety is interpreted somewhat differently and often aligns closely with the concept of "psychological protection" [35].

The term "psychological protection" was first defined by foundational psychologists such as Erikson, Jung, and Adler

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Table 6

Average indicators of psychological safety among women in two groups (measured in points)

Indicators	Mean (women in Ukraine), N = 312	Standard deviation	Mean (women abroad), N = 312	Standard deviation
Benevolence of the World	4.37*	± 0.95	4.22	± 1.26
Kindness of People	4.073	± 0.82	3.81	± 1.033
Overall Benevolence	4.22	± 0.81	4.02	± 1.08
Fairness of the World	3.46	± 0.76	3.30	± 1.12
Controllability of the World	3.52	± 0.68	3.53	± 0.91
Randomness	3.56	± 0.87	3.86	± 1.086
Meaningfulness, Controllability, and Fairness	3.52	± 0.51	3.57	± 0.87
Value of the Self	4.53	± 0.87	4.51	± 1.24
Degree of Self-Control	4.14	± 0.65	3.93	± 1.02
Luck/Fortune	3.90	± 0.75	3.91	± 1.12
Beliefs in Self-Worth, Control, and Luck	4.19	± 0.57	4.11	± 0.88

Note: * – in the Basic Beliefs Scale by R. Janoff-Bulman, all indicators are evaluated on a scale from 1 to 6. This is a standard scale for this questionnaire, reflecting the level of respondents' agreement with the proposed statements. Therefore, in the table, the unit of measurement for each indicator is points.

as a state that develops in infancy, fostering a sense of trust and attachment to the world, thereby encouraging healthy development. The issue of psychological safety during combat should be examined in contrast to the sense of danger, and in conjunction with psychological protection, defense mechanisms, and adaptation strategies [41]. Focusing on Ukrainian women, some researchers challenge traditional narratives by asserting that Ukrainian women have shown remarkable resilience in the face of severe challenges. They have taken on roles as diplomats, journalists highlighting the war, frontline fighters, heads of households, and anti-war activists, among others. Additionally, they play a crucial role in supporting children's education and facilitating humanitarian aid, despite experiencing political exclusion from decision-making processes related to the war and social exclusion due to sexual violence, human trafficking, internal displacement, and refugee status, all contributing to their loss of psychological safety [1].

While numerous studies address the psycho-emotional states experienced during wartime, most focus on combatants. Some scholarly publications even introduce the concept of "Ukrainian syndrome" as a specific behavioral adaptation model and individual stance towards the Russo-Ukrainian war [24]. Researchers examining the emotional states of combatants mention "combat stress", which contrasts with the experience of psychological safety. Thus, while various emotional states under danger are documented the aspect of personal development within the framework of psychological safety is likely to be less salient during wartime [27].

Analysis of Basic Beliefs Scale. The results obtained using the Basic Beliefs Scale by R. Janoff-Bulman, which assesses the level of psychological safety, are presented in Table 6.

As shown in Table 6, the mean scores for both groups of women across all scales exceeded the average benchmark of 3.5 ± 0.5 points for this methodology. A comparison of the two groups reveals no statistically significant differences. According to the Basic Beliefs Scale, the mean scores for women in both groups (in Ukraine and abroad) were above the average score of 3.5 ± 0.5 points, reflecting an overall positive outlook among respondents. These results indicate a shared baseline of optimism and resilience, despite the differing circumstances faced by the two cohorts.

Thus, it has been demonstrated that there is a connection between resilience, psychological stability, risk propensity, locus of control, and the sense of psychological safety (as measured by one of its components). Accordingly, the following empirical hypotheses were confirmed:

1. Women with high resilience scores exhibit higher levels of psychological safety (specifically, the component reflecting general perceptions of meaningfulness, controllability, and fairness of events).
2. Women with high psychological stability demonstrate elevated scores on perceptions of meaningfulness, controllability, and fairness of events (as a component of psychological safety).
3. Higher risk propensity scores are associated with higher levels of psychological safety (perceptions of meaningfulness, controllability, and fairness of events).
4. Women with higher internality scores show higher levels of psychological safety (perceptions of meaningfulness, controllability, and fairness of events).

According to the data in Table 6, the null hypothesis was not rejected across all three scales, as the Mann–Whitney U test values (635, 797, 710) were not statistically significant, with corresponding asymptotic significance levels (0.218, 0.700, and 0.627, respectively) far exceeding the threshold for significance ($p = 0.05$).

These findings indicate that there is no statistically significant difference in psychological safety indicators between women who remained in Ukraine during the conflict and those who relocated abroad. Consequently, the hypothesis that women who were forced to leave for European countries would exhibit higher levels of psychological safety than those who stayed in Ukraine was refuted.

When formulating this hypothesis, it was assumed that the indicators of psychological safety would be higher in

safer environments free from direct threats. However, a broader perspective may provide insights into why this hypothesis was not supported. One potential factor is that, as noted in the theoretical section of this study, the perception of danger by an individual may have a greater impact on psychological safety than the presence of danger itself. While women in Ukraine face objective threats (e.g., missile strikes, enemy advances), women abroad are subjected to psychological stressors such as unfamiliar environments, cultural differences, and challenges of adapting to a foreign sociocultural context. These factors may equalize the outcomes between the groups. This is corroborated by other studies, which reveal that women remaining in Ukraine during the war report higher anxiety levels compared to those who left, yet they remain productive, socially active, and report better health [23, 27, 41, 43, 47].

The concept of risk has also taken on new significance for women in the context of armed conflict. An analysis of the daily lives of women in a war-torn country demonstrates that even routine activities, such as going to work or shopping, require a certain level of risk tolerance. The mere act of staying in the country under hazardous conditions can be seen as an indicator of risk readiness. Therefore, although it was assumed that psychological safety would be higher for women abroad due to objectively safer conditions (absence of immediate danger), this assumption may be challenged. It is plausible that women who remained in Ukraine exhibited higher risk tolerance and resilience, which could lead to greater psychological safety compared to those who left, who may have exhibited lower risk tolerance and a preference for avoiding dangerous conditions.

Moreover, according to the study titled "Psychological Markers of War", conducted in Ukraine by the Rating Sociological Group, residents of the eastern regions exhibit the least active behavioral strategies and adaptation to wartime conditions [47]. This suggests that their resilience and, consequently, their psychological safety may be lower. In our study, we did not focus on comparing psychological safety indicators across regions. It is possible that significant regional differences would have emerged had this been examined.

The results support the following empirical hypotheses:

1. Women with higher levels of resilience exhibit greater psychological safety.
2. Higher levels of neuropsychological stability in women are associated with more positive perceptions of the meaningfulness, controllability, and fairness of events.
3. Greater risk propensity correlates with higher psychological safety among women.
4. A stronger internal locus of control is associated with increased psychological safety in women.

In accordance *with the fourth task of this article*, to propose a conceptual model of psychological support for women in the context of armed conflict in Ukraine, we developed a conceptual model of psychological support for women who remained in Ukraine and women who forced to move to Europe during the armed conflict.

Fundamental Principles and Explanation of the Concept.

The proposed model, developed to provide psychological support for women who have remained in Ukraine and those who were forced to migrate to European countries, integrates individual, group, digital, and interdisciplinary approaches. These approaches should to ensuring comprehensive restoration of psychological and social equilibrium in the context of armed conflict.

Our findings indicate no statistically significant difference in the sense of psychological safety between women who stayed in Ukraine and those who relocated to Europe. Measurements were conducted using indicators such as locus of control, psychological resilience, and risk acceptance. This evidence supports the development of a unified psychological support model with shared foundational principles, adapted to the specific needs of each group.

Key Distinctions of the Model:

1. Reproductive health as psychosocial equilibrium.

Acknowledging reproductive health as a psychosocial state intertwined with safety perceptions and control over one's body and life. It also reflects the impact of stress, trauma, or sociocultural conditions on women's reproductive functions during traumatic events or forced migration.

2. Empirical foundation.

Based on research into the psychological safety of women who remained in Ukraine and those who migrated to Europe, highlighting the importance of addressing shared psychological needs.

3. Focus on psychological safety.

Emphasis on restoring psychological safety through personal determinants such as locus of control, resilience, and risk acceptance.

4. Integration of digital technologies.

Leveraging online services to enhance accessibility to psychological assistance.

5. Long-term perspective.

Focused on mitigating the long-term consequences of chronic stress on psychological and reproductive health.

6. Interdisciplinary collaboration.

Incorporating specialists from various fields to ensure a holistic approach to support.

Developmental Framework. The model addresses general and specific factors influencing women's psychological safety during armed conflict. The absence of significant differences between groups enables a unified model adaptable to individual needs.

Core principles:

1. Differentiated approach.

Respect for diverse life experiences based on regional, social, and cultural contexts, with tailored methods for women in Ukraine (coping with chronic stress and trauma) and those in Europe (sociocultural integration and legal literacy).

2. Systemic-ecological framework.

Interactions between women, their immediate surroundings, and societal conditions during conflict.

3. Trauma and resilience framework.

Building resilience and adaptive capacities to navigate trauma.

4. Biopsychosocial paradigm.

Integration of physical, psychological, and social aspects of support.

5. Psycho-diagnostic methods.

Comprehensive assessment of psychological safety using measures of locus of control, resilience, and risk-taking.

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6. Resource-based approach.

Harnessing internal (resilience) and external (social support) resources to restore psychological balance.

7. Gender-sensitive strategies.

Acknowledging and addressing the specific needs of women.

Components of the Model

8. Target groups.

Women in Ukraine: Strategies to manage chronic stress, maintain social connections, and ensure emotional stability.

Women in Europe: Support for cultural adaptation, identity preservation, and integration into new environments.

9. Comprehensive assessment.

Tools to evaluate locus of control, psychological resilience, and risk tolerance.

10. Multidisciplinary approach.

Cognitive-behavioral therapy (CBT) for anxiety and trauma, social-psychological group work, and medical consultations for reproductive health.

Intervention levels:

Individual: Psychotherapy and resource-building exercises.

Group: Support groups and cultural adaptation programs.

Family: Counseling and emotional support for displaced families.

Adaptation programs:

Tailored programs for women in both Ukraine and Europe focusing on emotional regulation, cultural adaptation, and resource access.

Monitoring and evaluation.

Continuous assessment of intervention effectiveness through standardized tools and client feedback.

This model underscores the importance of a unified yet adaptable psychological support framework, integrating innovative tools, interdisciplinary expertise, and evidence-based practices to address the complex needs of women affected by armed conflict.

Levels of Intervention:

1. Individual level.

1.1. Psychoeducation: Explaining the impact of stress on reproductive and mental health.

1.2. Individual psychotherapy: CBT for managing anxiety, PTSD, and emotional regulation disorders.

1.3. Body-oriented therapy: Relaxation techniques and restoring connection with the body.

1.4. Hormonal counseling: Coordination with endocrinologists and gynecologists to support physiological balance.

2. Group level.

2.1. Therapeutic groups for trauma work: Focused on experience-sharing and building support networks.

2.2. Psychological clubs for migrant women: Creating safe spaces for adaptation to new environments.

2.3. Support groups: Organizing informal groups to discuss everyday challenges.

3. Digital level.

3.1. Online counseling: Access to specialists regardless of location.

3.2. Mobile Apps: Tools for emotional state tracking and stress-reduction exercises.

3.3. Platforms for group support: Virtual groups connecting women from different regions.

4. Family and social level.

4.1. Family counseling: Advising women's close ones to create a supportive environment.

4.2. Social-legal assistance: Providing information on reproductive rights and access to services.

4.3. Community partnerships: Engaging community initiatives to support women.

5. Institutional level.

5.1. Professional training: Workshops for psychologists, healthcare providers, and social workers.

5.2. Interdisciplinary collaboration: Coordinated efforts among psychologists, doctors, lawyers, and social workers.

Implementation Stages:

1. Diagnostic stage:

Assessment of psychological state: measuring control locus, resilience, and risk acceptance.

Analysis of social, economic, and cultural conditions: understanding women's living conditions.

2. Implementation of assistance:

Development of individual and group support plans.

Use of digital tools: expanding access to services.

3. Monitoring and adjustment:

Regular monitoring of intervention effectiveness.

Adapting assistance strategies: tailoring to changing conditions.

Specific measures and techniques for psychological support of women's reproductive health during armed conflicts and wars.

The proposed measures integrate individual, group, and digital methods of psychological support should to ensuring a sense of psychological safety, restoring control over life and body, and adapting to new conditions.

1. Individual measures:

1.1. Techniques for restoring a sense of control.

Practice "My Resources": Listing internal and external resources (knowledge, experience, social support) that help overcome challenges, reinforcing internal locus of control.

Exercise "Zone of control": Visualizing factors within and outside one's control to focus on realistic actions.

1.2. Body-oriented techniques.

"Breathing through the body": focusing on breathing, imagining air flowing through the body, reducing tension.

"Body as a map": Visualizing tense areas in the body and performing gentle movements (stretching, pulling) to relax them.

2. Group measures:

2.1. Psychoeducational groups.

Group "Safety and Stress": Sessions explaining the impact of stress on reproductive health and ways to maintain hormonal balance and psychoemotional well-being.

2.2. Support groups.

"Body interaction groups": participants perform simple physical exercises together, such as yoga or Pilates, emphasizing the mind-body connection.

2.3. Therapeutic groups:

Group "Woman in a new reality": Focused on adapting to new conditions, discussing migration or living under conflict, using narrative therapy for trauma processing.

3. Digital Tools.

3.1. Online platforms for psychoemotional support.

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Example: Mobile App "Maria AI": Provides relaxation exercises, stress tracking, and reproductive health recommendations.

3.2. Online counseling: sessions with psychotherapists via secure platforms like "My soul".

4. Social Environment Integration.

4.1. Role therapy:

"Role expansion" exercise: Identifying roles (mother, professional, daughter) and exploring how each can support in current circumstances.

4.2. Community interaction: Social initiatives such as "Women's Space": Creating safe zones for communication, experience-sharing, and resource exchange.

5. Interdisciplinary measures.

5.1. Psychosocial counseling: Collaborative work among psychologists, gynecologists, and endocrinologists on hormonal health, stress, and reproductive functions.

5.2. Educational programs: Seminars for healthcare providers and psychologists on working with women under stress, integrating psychological and medical support.

6. Innovative exercises.

6.1. "The home inside me": Imagining an inner "home" as a safe space, describing its elements, and transferring that sense of security into real life.

6.2. "A Day in Balance": Planning one day when every activity (work, rest, nutrition, physical exercise) contributes to harmony between mental and physical states.

Expected outcomes:

1. Increased psychological safety.
2. Improved control over bodily and emotional reactions.
3. Reduced stress impact on reproductive health.
4. Enhanced resilience and adaptation to new social conditions.
5. Better access to reproductive and mental health services.
6. Women's integration into society, fostering confidence in their abilities.
7. Higher levels of social cohesion and mutual support.

This model considers the key psychological factors affecting women's sense of psychological safety during armed conflict, offering a holistic and adaptive approach to psychological support that integrates medical and psychosocial aspects for maintaining women's well-being regardless of location.

CONCLUSIONS

This study objective to substantiate a conceptual model of psychological support to foster a sense of psychological safety among women during armed conflict, with a specific focus on reproductive health. Through a critical analysis of existing psychological support models, we identified significant gaps in addressing the complex interplay between psychological safety and reproductive health needs during wartime.

1. Empirical Foundation: The model was developed based on an empirical study of the psychological safety of women who remained in Ukraine and those who were forcibly displaced to European countries.

2. Focus on Psychological Safety: The model emphasizes restoring a sense of psychological safety in women, grounded in personal determinants such as locus of control, resilience, and risk acceptance, while addressing the unique needs of women from various age and social categories.

3. Multidimensional Approach: The proposed model integrates individual, group, digital, social, and institutional interventions to address the psychological needs of women in conflict settings. Key components include psychoeducation, body-oriented therapy, digital tools, family and community involvement, and interdisciplinary collaboration.

4. Interdisciplinary Collaboration: The model underscores the importance of involving specialists from diverse fields to ensure a comprehensive approach to support.

Our empirical findings revealed no statistically significant differences in the sense of psychological safety between women who migrated to Europe and those who remained in Ukraine. This suggests that while the challenges faced by these groups differ in nature-ranging from adaptation and social integration for migrants to prolonged exposure to conflict stressors for those who stayed-their overall psychological safety is influenced by shared underlying factors such as perceived control, access to resources, and social support.

This research emphasizes the critical importance of addressing the psychological aspects of reproductive health during armed conflict. Future studies should focus on exploring the specific psychological mechanisms linking reproductive health and psychological safety, as well as evaluating the effectiveness of the proposed interventions. By prioritizing this intersection and leveraging interdisciplinary collaboration, researchers and practitioners can contribute to the development of targeted, culturally sensitive approaches that safeguard women's well-being during and after conflict.

Conflict of interest. The authors declare no conflicts of interest.

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