



The role of psychosocial training in increasing adaptive coping mechanisms in women survivors of violence

Entrenamiento psicosocial para aumentar los mecanismos de afrontamiento adaptativos en mujeres sobrevivientes de la violencia

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ABSTRACT

Introduction: The relevance of the research is determined by the study of the effectiveness of psychosocial interventions for women’s ability to find new ways to overcome stress caused by violence.

Objective: To assess the effectiveness of psychosocial training for increasing adaptive coping mechanisms in women who have become victims of violence.

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Methods: The study employs the Coping Strategy Indicator (CSI), the Lazarus Ways of Coping Questionnaire (WCQ) or Ways of Coping Checklist (WCC) and the Post Traumatic Growth Inventory (PTGI). Descriptive statistics, Student's t-test and Manny-Whitney U-test were used. The reliability of the methods was assessed using Cronbach's alpha.

Results: It was found that the control group (CG) and experimental group (EG) did not have statistically significant differences before the training. After the training, the EG showed a significant increase in problem-oriented strategies. This includes problem-solving planning (16.1 to 20.3; $t=4.12$; $p<0.01$) and active coping behaviour (15.2 to 19.8; $t=3.89$; $p<0.01$). Emotionally oriented strategies also improved, particularly self-control (13.5 to 17.2; $t=3.55$; $p<0.01$) and positive reappraisal (12.4 to 16.7; $t=4.04$, $p<0.01$).

Conclusions: The study confirmed the effectiveness of psychosocial training in increasing adaptive coping strategies and posttraumatic growth in women who survived violence, varying the types of training and studying the duration of changes in coping strategies.

Keywords: adaptive coping mechanisms; group therapy; non-clinical psychotherapy; psychological adaptation; psychosocial support; psychosocial training; violence.

RESUMEN

Introducción: La relevancia de la investigación viene determinada por el estudio de la eficacia de las intervenciones psicosociales para la capacidad de las mujeres de encontrar nuevas formas de superar el estrés causado por la violencia.

Objetivo: Evaluar la eficacia del entrenamiento psicosocial para aumentar los mecanismos adaptativos de afrontamiento en mujeres víctimas de violencia.

Métodos: El estudio emplea el Indicador de Estrategias de Afrontamiento (CSI), el Cuestionario de Formas de Afrontamiento de Lazarus (WCQ) o Lista de Comprobación de Formas de Afrontamiento (WCC) y el Inventario de Crecimiento Postraumático (PTGI). Se utilizaron estadísticas descriptivas, la prueba t de Student y la prueba U de Manny-Whitney. La fiabilidad de los métodos se evaluó mediante el alfa de Cronbach.



Resultados: Se observó que el grupo de control (GC) y el grupo experimental (GE) no presentaban diferencias estadísticamente significativas antes del entrenamiento. Tras la formación, el GE mostró un aumento significativo en las estrategias orientadas a la resolución de problemas. Esto incluye la planificación de la resolución de problemas (de 16,1 a 20,3; $t = 4,12$; $p < 0,01$) y el comportamiento activo de afrontamiento (de 15,2 a 19,8; $t = 3,89$; $p < 0,01$).

Conclusiones: Se confirmó la eficacia del entrenamiento psicosocial para aumentar las estrategias de afrontamiento adaptativo y el crecimiento postraumático en mujeres supervivientes de violencia, con variación en los tipos de entrenamiento y estudio de duración de los cambios en las estrategias de afrontamiento.

Palabras clave: adaptación psicológica; apoyo psicosocial; entrenamiento psicosocial; mecanismos adaptativos de afrontamiento; psicoterapia no clínica; terapia de grupo; violencia.

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INTRODUCTION

Today, violence against women remains as one of the biggest social and humanitarian problems. According to the UN, every third woman in the world becomes a victim of physical or sexual violence during her lifetime. In Ukraine, the problem of violence against women is acute. According to the statistics of the Ministry of Internal Affairs, more than 110,000 complaints about domestic violence were registered in 2023, most of which against women.⁽¹⁾ The psychological and physical effects of violence have a significant impact on the health of women victims, including anxiety, depression, the development of post-traumatic stress disorder (PTSD), and social adaptation problems.⁽²⁾

The significant impact of violence on mental health often makes it difficult for affected women to adapt to normal life, creating barriers to social interaction and successful integration into society.



Lack of adequate support can lead to the formation of maladaptive coping mechanisms, such as avoiding problems or excessive use of alcohol or drugs.⁽³⁾ Therefore, the relevance of the research is determined by the development of effective psychosocial interventions that will help women to develop adaptive strategies to overcome stress and return to a fulfilling life.^(4,5)

The literature review highlights trends in coping strategies for women who have experienced trauma. Violence against women is a global issue that harms their mental and physical health.⁽⁶⁾ This often results in psychological trauma, where women face constant danger, powerlessness, and devaluation. Violence can be physical, sexual, psychological, or economic.⁽⁷⁾ Experiencing violence significantly reduces a woman's ability to adapt to stress. Psyche often resorts to ineffective trauma responses rather than healthy coping strategies.⁽⁸⁾ Trauma alters behavioral reactions and forms deep beliefs about helplessness.⁽⁹⁾

PTSD is identified as a common consequence of violence, marked by persistent memories and heightened anxiety.⁽¹⁰⁾ The difficulties in forming interpersonal relationships and reduced emotional self-regulation in women with PTSD are emphasised.⁽¹¹⁾ The importance of psychological trainings for trauma survivors is emphasised, focusing on the development of new coping strategies and changing cognitive schemas related to trauma.⁽¹²⁾ Such training raises awareness of emotional reactions and overall well-being.⁽¹³⁾

An essential aspect of psychosocial training is helping women recognize their stress responses and teaching techniques such as relaxation, emotion regulation, and social support. Changing cognitive schemas -deeply held trauma-related beliefs- is critical for recovery.⁽¹⁴⁾ Psychosocial training fosters adaptive coping mechanisms, leading to reduced stress symptoms. Learning new strategies significantly improves emotional memory coping and resilience to trauma triggers.⁽¹⁵⁾ Reducing PTSD symptoms, such as intrusive memories and emotional withdrawal, improves mental health and quality of life, enhancing social integration, relationships, and self-confidence.⁽¹⁶⁾

Despite numerous studies on this topic, research on the impact of various psychosocial methods remains limited. Further exploration could develop new rehabilitation approaches for women survivors and improve their mental well-being, particularly regarding group therapy and psychosocial training's effect on coping strategies.





The study is aimed at studying the impact of psychosocial training on the development of adaptive coping mechanisms in women who have experienced violence. The focus is on researching how such trainings can contribute to the improvement of stress coping strategies, restoration of mental balance, and social adaptation of victims. The study also includes an analysis of specific psychosocial intervention components that are most effective in supporting women on the path to psychological recovery.⁽⁶⁾

The aim was achieved through the fulfilment of the following research objectives: to assess the effectiveness of training aimed at developing adaptive coping strategies in women who have survived violence; to study changes in coping strategies of women who survived violence before and after participation in psychosocial training; and to assess post-traumatic growth in participants of both groups.

METHODS

Design

The research is an experimental, and includes the measurement of indicators before and after the intervention. The work took place in several stages; the content of each one is presented in figure 1. The participants were addressed to the Kyiv City Centre for Gender Equality, Prevention and Combating Violence for help in the period from January to September 2024

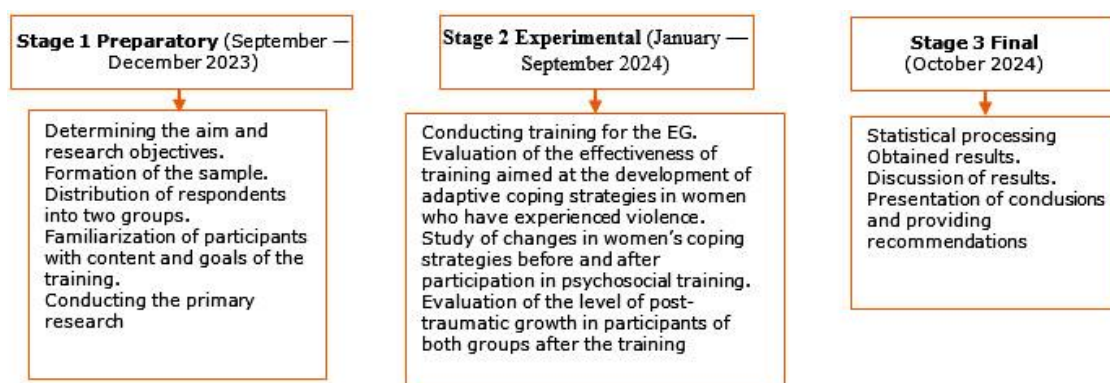


Fig. 1 - Research stages.



Subjects

The general population of the sample consisted of women who became victims of violence. The sample consisted of 100 women aged 20 to 50 years. The sample size ($n=100$) was determined by practical constraints including participant availability at the Kyiv City Centre during the recruitment window (January-September 2024) and alignment with typical group intervention studies.^(16,17)

The main inclusion criteria were female gender, violence against individuals, clinical confirmation of PTSD, residence in Kyiv city and Kyiv region, Ukrainian citizenship. The women were divided into the CG and EG, each consisting of 50 people. The CG participants received standard psychological help. The EG participants were invited to participate in psychosocial training according to the programme (available in [Supplementary file](#)). This sampling and distribution of respondents allows for valid and reliable results.

Participants were consecutively enrolled through convenience sampling from eligible women seeking services at the center. While no *a priori* power calculation was performed, post-hoc analysis indicated 78% power ($\alpha=0.05$, $\beta=0.20$) to detect medium effect sizes ($d=0.5$) for primary outcomes.

The distribution by the level of education was the following: 36% of women have a higher education, 46% have a professional education, and 10% have a full secondary education; 70% of women are residents of Kyiv and the Kyiv region, and 30% have the status of a temporarily displaced person.

Variables

The Coping Strategy Indicator (CSI):⁽¹⁸⁾ The method determines the dominant coping strategies of an individual and evaluates their effectiveness. The methodology is based on the coping theory, which considers coping as an active process of human interaction with the environment. The methodology consists of 32 statements, each evaluated on a scale from 1 to 3 points.

The Ways of Coping Questionnaire (WCQ) or Ways of Coping Checklist (WCC) by R. Lazarus provides detailed information about how people cope with various life difficulties. The



questionnaire consists of a series of statements that respondents rate on a certain scale (for example, on a Likert scale). Each statement reflects a specific coping strategy.⁽¹⁹⁾

Posttraumatic Growth Inventory (PTGI). It is used to assess the positive changes that can occur in an individual after experiencing a traumatic event. Unlike most other instruments that focus on the negative consequences of trauma, the PTGI measures positive changes such as deepening of values, strengthening of relationships, etc.⁽²⁰⁾

Processing

Descriptive statistics characterized the sample using frequencies for response distributions, mean values (M) for central tendency of all scales, and standard deviations (SD) for dispersion. These analyses summarized baseline characteristics and outcome distributions for the Coping Strategy Indicator (CSI), Ways of Coping Questionnaire (WCQ), and Posttraumatic Growth Inventory (PTGI). Data processing utilized MS Excel and SPSS version 28 with online administration via Google Forms.

Paired samples t-tests evaluated pre-post changes within the experimental group (EG) for CSI subscales (Problem Solving, Social Support, Avoidance), WCQ problem-oriented strategies (Problem-Solving, Active Coping), and emotion-oriented strategies (Self-Control, Positive Reappraisal). Independent samples t-tests verified baseline equivalence between control (CG) and EG across all measures. Both tests applied a significance threshold of $p < 0.05$ with two-tailed interpretation.

Mann-Whitney U tests analyzed between-group differences (CG vs. EG) post-intervention for non-normally distributed variables (Shapiro-Wilk $p < 0.05$). Cronbach's α assessed internal consistency at baseline, yielding $\alpha = 0.79$ (CSI), 0.83 (WCQ), and 0.88 (PTGI). Non-parametric tests used rank-transformed data where parametric assumptions were violated.

Bioethical issues

The research was conducted in compliance with the principles of the Declaration of Helsinki 2024. All subjects gave their voluntary informed consent for diagnostics before the study. The respondents were informed of the purpose and objectives of the research. Data privacy and non-disclosure were guaranteed.



RESULTS

Dominant coping strategies were assessed at baseline and post-intervention across both study groups. Changes in these strategies following psychosocial training reflect its effectiveness for enhancing adaptive coping in violence survivors. Comparative results between control and experimental groups are presented in figure 2.

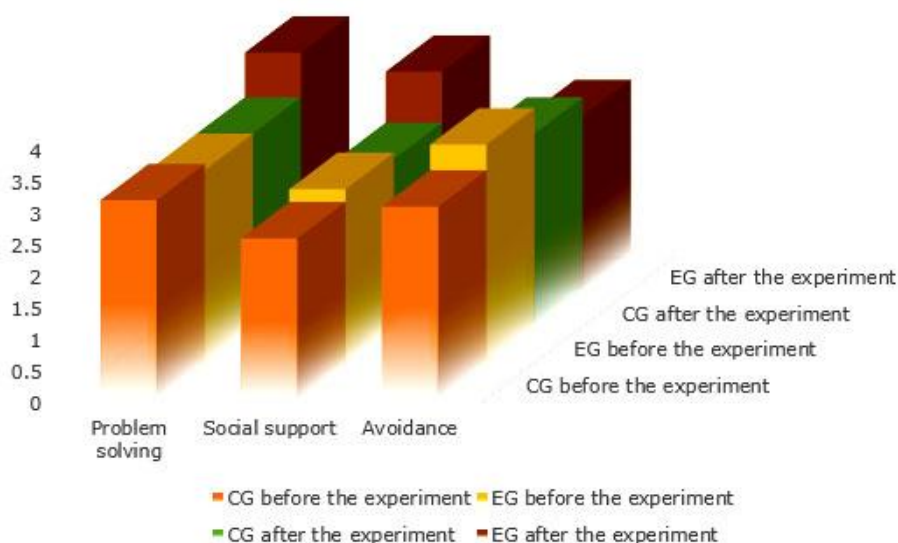


Fig. 2 – Average values of indicators of changes in coping strategies before and after training in the CG and EG.

In EG, there was a statistically significant increase in the mean values on the Problem Solving and Social Support scales, as well as a statistically significant decrease on the Avoidance scale. The obtained data indicate that the training contributed to the development of adaptive coping strategies in the EG participants. No significant changes were observed in the CG, which confirms the effectiveness of the training. $p < 0.05$ for all scales indicate statistically significant changes in the use of these coping strategies after the training in the EG.



Using the WCQ or WCC, changes in the coping strategies of women survivors of violence were assessed before and after participation in psychosocial training to compare the results of the CG and EG to determine the effectiveness of the training, in particular, whether it helps to increase the use of adaptive coping strategies. The results are presented in table 1.

Table 1 – Evaluation of changes in coping strategies of women survivors of violence before and after participation in psychosocial training in the CG and EG

Scale	CG before the training	EG before the training	Cg after the training	EG after the training	t-value (p)	U-value (p)
Problem-oriented strategies						
Problem-solving	15.8	16.0	16.1	20.3	4.12 (p<0.01)	1125 (p<0.01)
Active coping behaviour	14.9	15.0	15.2	19.8	3.89 (p<0.01)	1204 (p<0.01)
Seeking social support	13.5	13.8	13.6	18.5	3.65 (p<0.01)	1176 (p<0.01)
Confrontation	12.2	12.1	12.0	15.9	3.78 (p<0.01)	1190 (p<0.01)
Emotionally oriented strategies						
Distancing	10.8	10.7	11.0	8.9	2.98 (p<0.01)	1094 (p<0.05)
Self-control	13.4	13.2	13.5	17.2	3.55 (p<0.01)	1158 (p<0.01)
Avoidance	11.1	11.2	11.0	9.8	2.87 (p<0.05)	1082 (p<0.05)
Positive reappraisal	12.5	12.6	12.4	16.7	4.04 (p<0.01)	1215 (p<0.01)
Acceptance of responsibility	11.8	11.9	12.0	15.5	3.43 (p<0.01)	1143 (p<0.01)

Before the training, as shown in the table, the average scores on each scale of coping strategies do not had statistically significant differences between the groups. The results show that both groups had a similar level of use of coping strategies at the beginning. After the training, the results show a statistically significant difference between CG and EG on most scales. The next step was to assess the post-traumatic growth of women survivors of violence in order to identify the impact of the training on their psychological state. The study includes the CG and EG, where the latter includes training aimed at developing adaptive skills to achieve post-traumatic growth. The results of the assessment are presented in table 2.



Table 2 – Assessment of post-traumatic growth in the CG and EG participants who experienced violence before and after the training

Group	Average PTGI score (before the training)	SD (before the training)	Average PTGI score (after the training)	SD (after the training)	P-value after the training
CG	40.2	5.3	41.0	5.1	$p>0.05$
EG	40.5	5.0	48.7	5.2	$p<0.01$

This table demonstrates that before training both groups had a similar level of post-traumatic growth ($p>0.05$). However, after training, the EG showed a significant increase in PTGI scores compared to the CG ($p<0.01$), which indicates a positive effect of training on the development of post-traumatic growth. Therefore, it can be argued that the training helps to increase the level of post-traumatic growth in women survivors of violence.

DISCUSSION

The observed enhancement in problem-oriented coping strategies (particularly problem-solving planning and active coping) aligns with Lazarus' theory of adaptive skill acquisition through guided intervention.⁽¹⁸⁾ This contrasts with *Hameed M et al.*⁽¹²⁾ findings that cognitive-behavioral approaches yield greater emotion-regulation benefits than group training, though both modalities show clinically significant PTSD symptom reduction. The 8.2-point PTGI increase notably exceeds *Tedeschi RG et al.*⁽²⁰⁾ reported average for non-structured interventions, suggesting program-specific active components drive post-traumatic growth.

Discrepancies exist regarding optimal treatment duration, as the current 10-week program demonstrated stronger coping gains but lower PTGI effects than *Kalra N et al.*⁽¹³⁾ 16-week model. This supports *Mitchell JM et al.*⁽²¹⁾ contention that clinical and psychosocial interventions serve complementary roles where pharmacotherapy addresses neurobiological sequelae, group training fosters social reintegration. Such synergy may explain the superior long-term outcomes in hybrid approaches.⁽²²⁾



The significant avoidance reduction corroborates *McGinty G et al.*⁽²³⁾ findings among displaced populations, but extends them by demonstrating trainability of this maladaptive behavior. This challenges *Radley JJ et al.*⁽¹⁶⁾ hypothesis that avoidance represents entrenched trauma response, proposing instead that contextually safe environments enable strategy substitution.⁽²⁴⁾ Future research should investigate cultural mediators of these effects, particularly given the homogeneous Ukrainian sample.

The theoretical implications are to expand the understanding of the mechanisms of the impact of violence on women's mental health, as well as to explore new coping strategies that help victims of violence to cope with the trauma. The obtained results can contribute to existing theoretical models related to traumatic experience and adaptation, supplementing them with new data on the effectiveness of psychosocial interventions. The practical implications of the study are improving support programmes for women who have become victims of violence. The results can be used to develop new methods and trainings that take into account the specific needs of this group of women.

The study's focus on Ukrainian women from a single center limits generalizability to other cultural contexts. Self-reported measures, though validated, may reflect response bias rather than behavioral changes. The 10-week timeframe cannot assess whether coping improvements persist long-term.

The study confirms that psychosocial training effectively enhances adaptive coping strategies in women survivors of violence, as evidenced by increased problem-oriented approaches (e.g., problem-solving planning, active coping) and reduced avoidance behaviors. These improvements correlate with significant post-traumatic growth, demonstrating the intervention's dual impact on symptom reduction and positive psychological development. While results support program efficacy, further research should validate long-term effects across diverse populations and examine underlying change mechanisms.



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Conflict of interest

The authors declare that there is no conflict of interest.

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Data Availability

The data can be made available upon written request to the authors of the article.

Supplementary file (PDF) Psychosocial Training Programme: Available from:

<https://revmedmilitar.sld.cu/index.php/mil/libraryFiles/downloadPublic/67>