

The Effectiveness of a Psychological Program for Enhancing Psychological Resilience Among Abused Women



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ARTICLE INFO	ABSTRACT
<p>Submitted : 2025-03-18 Revised : 2025-04-01 Accepted: 2025-05-06 Published: 2025-05-13 Volume: 5 Issue: 1 DOI: https://doi.org/10.53754/civilofficium.v5i1.753</p>	<p>This study aims to test the effectiveness of a psychological program in enhancing psychological resilience among abused women in the Domiz refugee camp in Kurdistan Region of Iraq. The research employed an experimental one-group design (pre-test/post-test) with a purposive sample of abused women. Results showed that participants before the program implementation suffered from low levels of psychological resilience compared to the hypothetical mean of the scale, reflecting the impact of violence, psychological trauma, and refugee conditions on their ability to adapt. After implementing the psychological program, the results demonstrated a significant statistical improvement in psychological resilience levels among the sample members, confirming the effectiveness of the applied psychological program. The findings also indicated a significant decrease in cortisol levels, suggesting improved physiological indicators related to psychological stress. These results emphasize the importance of structured psychological interventions based on scientific foundations in helping abused women recover from the effects of violence and trauma, and highlight the necessity of generalizing such programs in refugee camps and institutions caring for abused women, considering them part of preventive and therapeutic strategies to address psychological and social challenges.</p>
<p>KEYWORDS</p> <p>Abused Women, Cortisol, Psychological Intervention, Psychological Resilience, Refugees, Trauma Recovery</p>	

1. INTRODUCTION

Violence against women remains a widespread global phenomenon with deep historical roots, affecting women across diverse cultural, economic, and social contexts (World Health Organization, 2022). [1] Despite growing awareness of this issue, violence against women continues to be normalized or even accepted in many societies, particularly in male-dominated cultures.[2] Women who have experienced violence face numerous challenges to their psychological and physical well-being, with effects often extending beyond the immediate trauma to impact their overall health and quality of life.[3] Recent global statistics indicate that nearly one in three women worldwide have experienced physical and/or sexual violence in their lifetime, with rates being particularly high in conflict-affected regions.[4] This pervasive violence is not only a violation of human rights but also constitutes a significant public health concern due to its profound impact on women's mental and physical health. Stark and Hester (2019) emphasize that gender-based violence operates within complex socio-cultural frameworks that often disempower women and limit their access to protection and recovery resources, further exacerbating their vulnerability.[5]

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Abused women living in refugee settings face compounded vulnerabilities, as they must navigate the consequences of violence alongside the challenges of displacement, loss of social support networks, and the difficult conditions of refugee camps.[6] These women experience multiple layers of trauma that significantly impact their psychological resilience and biological stress responses, making them particularly vulnerable to mental health problems such as depression, anxiety, and post-traumatic stress disorder.[7] A comprehensive systematic review by Raftery (2023) found that refugee women experience significantly higher rates of gender-based violence compared to non-displaced populations, with prevalence rates ranging from 21% to 73% depending on the setting and methodology. The authors noted that the refugee experience often exacerbates existing vulnerabilities and creates new pathways to violence, including those related to financial dependency, loss of traditional protection mechanisms, and increased community tensions in resource-scarce environments.[8]

Psychological resilience, defined as the ability to adapt positively in the face of adversity, trauma, or significant sources of stress, represents a critical protective factor for mental health and well-being.[9] It encompasses the capacity to "bounce back" from difficult experiences and includes factors such as emotional regulation, positive thinking, problem-solving abilities, and social support.[10] For abused women, developing and strengthening psychological resilience is essential for recovery and adaptation to ongoing life challenges. Southwick et al. (2022) expand on this concept by proposing that resilience should be understood as a multidimensional construct that operates across biological, psychological, social, and cultural domains. Their research suggests that resilience involves complex interactions between genetic, epigenetic, developmental, and environmental factors, highlighting the need for comprehensive approaches to resilience enhancement.[11] Similarly, Masten and Cicchetti (2023) conceptualize resilience as a dynamic process rather than a static trait, emphasizing that it can be cultivated through targeted interventions that address both individual and systemic factors.[12]

Recent research has increasingly focused on the physiological correlates of psychological stress and resilience. Stress biomarkers such as stress-related hormones and C-reactive protein (CRP) provide objective measures of the body's response to chronic stress and trauma.[13] These stress-related hormones, which play a crucial role in the body's adaptation to prolonged psychological distress, have been found to be dysregulated in individuals experiencing chronic trauma.[14] Similarly, CRP is an inflammatory marker that often increases in response to stress and has been associated with various stress-related health conditions.[15] Groundbreaking research by Agorastos and Chrousos (2022) has further elucidated the biological mechanisms underlying the stress response, demonstrating that chronic trauma exposure can lead to persistent alterations in hypothalamic-pituitary-adrenal (HPA) axis functioning, with long-term implications for both mental and physical health. Their work shows that trauma-induced dysregulation of stress hormones can contribute to a range of health problems, including cardiovascular disease, metabolic disorders, and immune dysfunction.[16]

Despite the growing recognition of the importance of psychological resilience for abused women, especially those in refugee settings, there remains a significant gap in evidence-based interventions specifically designed to enhance resilience among this population.[17] Few studies have examined both the psychological and physiological impacts of resilience-focused interventions for abused women, limiting our understanding of the full range of benefits such programs might offer. The present study aims to address this research gap by developing and testing a psychological program designed to enhance psychological resilience among abused women in the Domiz refugee camp. The program integrates evidence-based approaches to trauma recovery and resilience building, with a focus on strengthening personal resources and coping strategies. Additionally, by measuring both psychological and physiological outcomes, this study seeks to provide a more comprehensive understanding of the effectiveness of the intervention.

Recent work by Bryant et al. (2022) underscores the importance of such interventions, demonstrating that even relatively brief resilience-focused programs can yield significant improvements in mental health outcomes among refugee women who have experienced gender-based violence. Their randomized controlled trial of a group-based resilience intervention for Syrian refugee women showed reductions in depression and anxiety symptoms and improvements in functional impairment, suggesting that targeted psychological support can be effective even in resource-constrained settings. [18] The research was

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guided by the following question: How does a psychological program affect the enhancement of psychological resilience and biological health indicators among abused women in refugee settings?

2. LITERATURE STUDY

Psychological resilience has emerged as a critical concept in understanding how individuals respond to and recover from adversity. Windle (2011) defines resilience as "the process of effectively negotiating, adapting to, or managing significant sources of stress or trauma" (p. 163). This definition emphasizes resilience as a dynamic process rather than a fixed trait, suggesting that it can be developed and enhanced through appropriate interventions.[19] Building on this conceptualization, Ungar (2021) proposes an ecological model of resilience that considers both individual capacities and environmental resources. His extensive cross-cultural research suggests that resilience is heavily influenced by contextual factors, including access to material resources, supportive relationships, and cultural beliefs and practices. This perspective is particularly relevant for understanding resilience among refugee women, whose capacity for adaptation is shaped not only by personal characteristics but also by the social, economic, and political contexts in which they live.[20]

Research by Babić et al. (2020) identified several key dimensions of psychological resilience, including emotional balance, self-efficacy, social relationships, patience, and problem-solving abilities. These dimensions highlight the multifaceted nature of resilience and its connection to various aspects of psychological functioning.[21] Similarly, Al Eid (2020) noted that resilience encompasses cognitive flexibility, emotional regulation, and adaptive coping strategies, all of which contribute to an individual's ability to withstand and recover from stressful situations.[22] An innovative longitudinal study by Galatzer et al. (2018) further extends our understanding of resilience trajectories following trauma exposure. Their research identified distinct patterns of adaptation over time, including resilience (minimal disruption in functioning), recovery (initial distress followed by return to baseline), chronic dysfunction, and delayed distress. Importantly, they found that the resilience trajectory was the most common response to trauma, with approximately 35–65% of trauma survivors showing this pattern, suggesting that human beings possess remarkable capacity for adaptation even in the face of severe adversity.[23]

The importance of psychological resilience for mental health and well-being has been well-documented. According to Ryff and Singer (1998), resilience is associated with higher levels of psychological well-being, including purpose in life, personal growth, and positive relationships with others.[24] Tugade and Fredrickson (2004) found that resilient individuals use positive emotions to bounce back from negative emotional experiences, suggesting that emotional regulation plays a key role in the resilience process.[25] Recent neurobiological research by Mohammad et al. (2018) has begun to illuminate the neural mechanisms underlying resilience, identifying specific brain circuits and neurochemical systems involved in stress regulation and adaptive responses to adversity. Using advanced neuroimaging techniques, they documented structural and functional differences in the prefrontal cortex, amygdala, and hippocampus between individuals showing high versus low resilience following trauma exposure.[26] These findings suggest that resilience has identifiable neural correlates that may be modified through targeted interventions.

Violence against women constitutes a significant global health and human rights issue. The World Health Organization defines violence against women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual, or mental harm or suffering to women" (Agwa et al, 2021). This violence takes various forms, including physical, sexual, psychological, and economic abuse, and occurs in both public and private settings.[27] Research by Machado (2020) indicates that women who experience violence are at increased risk for a range of negative health outcomes, including physical injuries, chronic pain, gastrointestinal disorders, and various mental health issues. The psychological impact of violence is particularly profound, with survivors often reporting symptoms of depression, anxiety, post-traumatic stress disorder, and suicidal ideation.[28]

A landmark meta-analysis by Devries et al. (2022) synthesized data from 216 studies across 72 countries, confirming the strong association between intimate partner violence and adverse mental health outcomes. The authors found that women who experienced intimate partner violence were 2.3 times more likely to develop depression, 2.6 times more likely to develop anxiety disorders, and 3.1 times more likely to develop post-traumatic stress disorder compared to women without such experiences.[29] These findings underscore the significant mental health burden associated with gender-based violence and highlight the need for effective interventions. For women living in refugee settings, the consequences of violence are often exacerbated by the challenges of displacement and the difficult conditions of refugee camps. Studies by Abd Al-Sahib and

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Mohammed (2017) found that refugee women who had experienced violence showed higher levels of psychological distress and lower levels of resilience compared to those who had not experienced violence.[7]

Comprehensive research by Zubair and Falih (2022) on refugee women's experiences across multiple settlement contexts found that many face a "triple trauma paradigm" consisting of pre-migration trauma (including conflict-related violence), trauma during migration (including exploitation and assault during transit), and post-migration trauma (including discrimination, socioeconomic hardship, and continued exposure to violence).[30] The cumulative effect of these multiple traumas can overwhelm traditional coping mechanisms and create complex mental health challenges that require specialized interventions. Research on the physiological correlates of stress and trauma has highlighted the role of various biomarkers in understanding the body's response to adverse experiences. Stress-related hormones, produced by the adrenal glands, are among the primary biological indicators involved in the stress response. Under normal conditions, these hormones follow a diurnal rhythm, with levels highest in the morning and decreasing throughout the day. However, chronic stress and trauma can disrupt this pattern, leading to either persistently elevated or irregular hormonal levels.[31]

C-reactive protein (CRP) is an acute-phase protein produced by the liver in response to inflammation (Pepys & Hirschfield, 2003).[32] Elevations in CRP have been associated with various inflammatory conditions, as well as with chronic stress and psychological distress (Kennedy, 2022).[33] Studies have found higher levels of CRP in individuals with depression, anxiety, and post-traumatic stress disorder, suggesting a link between psychological distress and inflammatory processes (D'Acunto et al., 2020).[34] A groundbreaking study by Marsland et al. (2024) on the neuroimmune mechanisms underlying trauma response found that individuals with a history of early life trauma showed distinctive patterns of inflammatory dysregulation, including elevated baseline levels of pro-inflammatory cytokines and heightened inflammatory responses to psychosocial stressors. These findings suggest that trauma leaves a "biological signature" that can persist for years and contribute to the development of both mental and physical health problems. The authors propose that interventions targeting both psychological and physiological aspects of trauma may be particularly effective for promoting recovery and resilience.[35]

The relationship between psychological resilience and physiological markers such as hormonal regulation and CRP is complex and bidirectional. Chrousos et al. (2024) propose that resilience is associated with more adaptive patterns of stress hormone secretion, including more efficient termination of the stress response and quicker return to baseline levels.[36] Similarly, research by Doan (2021) suggests that resilience may buffer the negative effects of stress on inflammatory processes, potentially reducing CRP levels in response to stress. [37] Liu et al. (2024) further explored this relationship in their longitudinal study of trauma-exposed individuals, finding that those with higher psychological resilience showed more rapid normalization of stress-related hormone and inflammatory markers following stress exposure. The authors suggest that psychological resilience may protect physical health through enhanced allostatic regulation, the process by which the body maintains stability through change in response to environmental demands.[38]

Various interventions have been developed to enhance psychological resilience, with growing evidence supporting their effectiveness. According to Alquaiz (2024), cognitive-behavioral approaches have shown particular promise in enhancing resilience among abused women. These approaches focus on challenging negative thought patterns, developing coping skills, and promoting adaptive behaviors.[10] A study Fields et al. (2016) evaluated the effectiveness of imago therapy in enhancing resilience and improving emotion regulation among women who had experienced domestic violence.[39] The results showed significant improvements in resilience scores following the intervention, with effects maintained at follow-up. Similarly, Khan (2023) found that a counseling program based on resilience principles was effective in improving resilience levels among adolescent girls in orphanages. The program focused on developing positive thinking, problem-solving skills, and emotional regulation strategies.[40]

A comprehensive systematic review and meta-analysis by Micklitz et al. (2024) examined the efficacy of psychological interventions for women who had experienced intimate partner violence. Analyzing data from 42 randomized controlled trials, the authors found that trauma-focused cognitive behavioral therapy, narrative exposure therapy, and mindfulness-based interventions showed the strongest evidence for improving mental health outcomes and enhancing resilience. The authors noted that interventions incorporating both individual and group formats, and those addressing both trauma processing and skill building, tended to show the largest effect sizes.[41] Few studies, however, have examined interventions specifically designed for abused women in refugee settings. Giacomucci (2020) evaluated the impact of a psychodrama-based counseling

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program on reducing learned helplessness among abused women, finding significant improvements in the experimental group compared to the control group. This study highlights the potential of creative therapeutic approaches for this population.[42]

Innovative research by Tol et al. (2023) tested a group psychological intervention specifically designed for refugee women exposed to gender-based violence, incorporating elements of cognitive processing therapy, skills training in affect regulation, and culturally adapted mindfulness practices. The results showed significant improvements in psychological resilience, functional capacity, and social connectedness, with effects maintained at 12-month follow-up. Notably, the intervention was delivered by trained lay helpers, suggesting the potential for scalable implementation in resource-constrained settings. Emerging research has begun to explore the relationship between resilience-focused interventions and physiological outcomes.[43] A study by Alhalal and Falatah (2020) examined the association between intimate partner violence and biological stress markers among Saudi women, finding that resilience was a significant moderator of this relationship. Women with higher resilience levels showed more balanced stress hormone profiles despite experiencing similar levels of violence.[44] Similarly, El Agamy et al. (2024) investigated hormonal and CRP levels in children exposed to violence, noting significant alterations in these biomarkers compared to non-exposed children. The authors suggested that interventions targeting psychological resilience might help normalize these physiological parameters.[45]

Groundbreaking research by Mohammed and Omar (2017) integrated psychological and physiological assessments in their evaluation of a trauma-focused intervention for refugee women who had experienced sexual violence. The study found that improvements in psychological resilience were accompanied by normalization of diurnal stress hormone rhythms and reductions in pro-inflammatory markers, suggesting that effective psychological interventions can have measurable biological effects. The authors propose a "psychobiological model of resilience" that emphasizes the interconnectedness of psychological and physiological processes in trauma recovery. Despite these promising findings, there remains a gap in research examining both psychological and physiological outcomes of resilience-focused interventions for abused women, particularly in refugee settings. The present study aims to address this gap by evaluating the effectiveness of a comprehensive psychological program in enhancing resilience and improving biological stress indicators among abused women in the Domiz refugee camp.[46]

3. METHOD

Research Design

This study employed a pre-experimental design with one group (pre-test/post-test) to examine the effectiveness of a psychological program in enhancing psychological resilience and improving physiological indicators among abused women. This design was chosen due to the ethical considerations and practical constraints of working with a vulnerable population in a refugee camp setting.

Research Population and Sample

The research population consisted of all abused women in the Domiz refugee camp in Duhok, Kurdistan Region of Iraq. The sample for this study included 20 abused women who were selected through a purposive sampling technique based on specific inclusion criteria. The criteria for inclusion were: (1) being a woman who has experienced any form of violence (physical, psychological, sexual, economic), (2) residing in the Domiz refugee camp, (3) age between 20-49 years, (4) willingness to participate in the study, (5) not currently receiving any psychological treatment, and (6) consenting to have blood drawn twice to measure cortisol and C-reactive protein levels. The sample was diverse in terms of age, marital status, and educational level. The age distribution included 3 women aged 20-29 years, 10 women aged 30-39 years, and 7 women aged 40-49 years. Regarding marital status, 7 women were married, 2 were single, 7 were divorced, and 4 were widowed. In terms of educational level, 4 women were illiterate, 11 had elementary education, and 5 had intermediate education.

Research Tools

Psychological Resilience Scale

The researcher developed a psychological resilience scale based on theoretical frameworks and previous studies. The scale consisted of 28 items distributed across five dimensions: emotional balance, self-efficacy, social relationships, patience, and problem-solving. Each item was rated on a three-point scale (always, sometimes, never), with scores ranging from 28 to 84.

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The scale was validated through expert judgment, and its reliability was established using Cronbach's alpha coefficient, which was 0.722.

Physiological Measures

Cortisol levels were measured in blood samples collected in the morning (11:00-12:00 AM) to control for diurnal variation. The samples were analyzed using enzyme-linked immunosorbent assay (ELISA) technique. C-reactive protein (CRP) levels were also measured in blood samples using immunoturbidimetric assay. These analyses were conducted in a certified laboratory by trained professionals.

Psychological Program

The researcher designed a psychological program aimed at enhancing psychological resilience among abused women. The program consisted of 16 sessions, each lasting 60 minutes. It is conducted twice or sometimes three times a week for a period of seven weeks. The sessions covered various topics including understanding trauma and its effects, developing emotional regulation skills, enhancing positive thinking, building problem-solving abilities, strengthening social support networks, and establishing a sense of purpose and meaning. The program incorporated various therapeutic techniques such as cognitive restructuring, relaxation exercises, mindfulness practice, role-playing, group discussions, and homework assignments. The theoretical framework of the program is based on psychoanalytic theory, behavioral theory, cognitive theory, and social theory. The program incorporated various therapeutic techniques such as cognitive restructuring, relaxation exercises, mindfulness practice, role-playing, group discussions, and homework assignments. The theoretical framework of the program drew from cognitive-behavioral therapy, positive psychology, and trauma-informed care.

Research Procedures

Prior to implementing the research, ethical approval was obtained from the relevant authorities, including the ethics committee at the university and the administration of the Domiz refugee camp. Informed consent was obtained from all participants after explaining the purpose of the study, the nature of their participation, and assuring them of confidentiality and the voluntary nature of participation. The implementation of the research followed several stages. First, the researcher conducted a preliminary assessment of psychological resilience using a standardized psychological resilience scale, and collected blood samples to analyze cortisol and C-reactive protein (CRP) levels as indicators of physiological resilience. Second, the psychological program was implemented over a period of seven weeks. Third, a post-assessment of psychological resilience using the same scale, along with the collection of blood samples for cortisol and CRP analysis, was conducted immediately after the completion of the program.

Statistical Methods

The researcher used several statistical methods to analyze the data, including the Kolmogorov-Smirnov test to check the normality of data distribution. The Wilcoxon test was used for non-parametric data (pre-test of psychological resilience), and the paired samples t-test was applied to parametric data (post-test of psychological resilience and levels of cortisol and CRP). Chi-square tests were also used to analyze demographic variables.

4. RESULT AND DISCUSSION

RESULT

First Hypothesis: Is there a statistically significant difference at level (0.05) between the arithmetic mean of psychological resilience pre-test for the whole sample and the hypothetical mean?

After observing that the data for this variable was not normally distributed through applying the Smirnov test (see Table 1), where the value of (sig.) was less than (0.05), the researcher extracted the sum of positive and negative ranks for the data and then applied the Wilcoxon test for one sample. The result was then converted to a Z-value and included in Table 1.

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Table 1. Results Of Smirnov Test For Normal Distribution

Application of psychological resilience scale	Smirnov test value	Degrees of freedom	Sig.
Pre-test	0.219	20	0.013

Looking at Table 1, it's clear that the Kolmogorov-Smirnov test value for the psychological resilience scale data in the pre-application was (0.219) with a degree of freedom (20), and the significance level value was (0.013), which is less than the significance level approved in the research (0.05), confirming that the psychological resilience data in the pre-application does not follow the normal distribution.

Table 2: Z-Value For The Pre-Application Of Psychological Resilience

Number	Mean		Ranks Sum		Wilcoxon Value		Z-value	
	Hypothetical	Arithmetic	Positive	Negative	Calculated	Tabulated	Calculated	Tabulated
20	56	50.35	0	210	0	52	3.9	1.96

Table 2 shows the results of the Wilcoxon test for one sample comparing the arithmetic mean of psychological resilience in the pre-measurement among the sample members with the hypothetical average of the scale. The sample consisted of (20) abused women, and their average score on the psychological resilience scale was (50.35), which is less than the hypothetical average of the scale (56). The sum of positive ranks was (0), meaning that no case recorded a score higher than the hypothetical average, while the sum of negative ranks was (210), meaning that all sample members recorded scores lower than the hypothetical average. The calculated Wilcoxon value was (0), which is less than the tabular value of (52) at a significance level of (0.05) and a degree of freedom (20), indicating statistically significant differences between the arithmetic mean and the hypothetical mean.

The calculated Z-value was (3.9), which is greater than the tabular Z-value of (1.96) at a significance level of (0.05), confirming the rejection of the null hypothesis and acceptance of the alternative hypothesis indicating a statistically significant difference between the arithmetic mean and the hypothetical mean in favor of the hypothetical mean, meaning that the sample members have a low level of psychological resilience.

Second Hypothesis: Is there a statistically significant difference at level (0.05) between the pre-test and post-test in psychological resilience among the research sample members?

To verify this hypothesis, the researcher extracted the arithmetic mean for the sample members in both applications, then the arithmetic mean and standard deviation for the difference between them, and then applied the t-test for two related samples and included the results in Table 10.

Table 3: T-Value For Two Related Samples In Psychological Resilience Among The Research Sample Members

Psychological Flexibility Scale	Arithmetic Mean	Number	Mean of Differences	Standard Deviation of Differences	T-value		Significance
					Calculated	Tabulated	
Pre-application	50.35	20	23.3	4.692	22.21	2.09	Significant in favor of post-application
Post-application	73.65					(0.05) (df-19)	

Table 3 shows the results of the t-test for two related samples comparing the scores of the sample members in the pre and post measurements on the psychological resilience scale. The arithmetic mean for the pre-measurement was (50.35) points, while the arithmetic mean in the post-measurement increased to (73.65) points, an increase of (23.3) points, which is a

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significant increase indicating a notable improvement in the level of psychological resilience among the sample members after applying the psychological program.

The standard deviation of the differences between the two measurements was (4.692), which is a relatively small standard deviation indicating the homogeneity of the sample members in responding to the program and the amount of improvement in their level of psychological resilience. The calculated t-value was (22.21), which is much greater than the tabular t-value of (2.09) at a significance level of (0.05) and a degree of freedom (19), indicating statistically significant differences between the pre and post measurements in favor of the post measurement. This result indicates the effectiveness of the applied psychological program in improving the level of psychological resilience among abused women, as their level of psychological resilience increased significantly and statistically after applying the program.

DISCUSSIONS

The results of the current research reveal the reality of psychological resilience among abused women in the Domiz refugee camp, and also highlight the positive effectiveness of the applied psychological program in enhancing psychological resilience. These results are consistent with the general perception of the psychological challenges faced by abused women in conditions of asylum and displacement, where women are exposed to double pressures as a result of the violence they have been subjected to on one hand, and the challenges of asylum and living in camps on the other hand. The low level of psychological resilience among abused women in the research sample reflects a psychological and social reality characterized by the accumulation of stresses and psychological traumas, which weakens the ability of these women to adapt to challenges and overcome the negative effects of violence and trauma. The targeted group in this research represents a category that is highly sensitive and affected by environmental and psychological pressures, where the effects of violence, war traumas, displacement, and difficult asylum conditions combine.

In the absence or weakness of psychological and social support services in refugee camps, the difficulty of recovering from the effects of violence and psychological trauma increases, and opportunities for developing the psychological resilience necessary to face ongoing challenges decrease. The surrounding environmental conditions also play an important role in exacerbating this situation, as the low economic level and difficulty in obtaining job opportunities, weak infrastructure and difficulty in accessing basic services, and the absence of rehabilitation and vocational training programs for women, all contribute to increasing pressures on abused women and reducing recovery opportunities. The current study results show that the level of psychological resilience among abused women was significantly low, indicating the impact of violence and psychological trauma on their ability to adapt and cope. This decrease may be due to many psychological, social, and cultural factors, most importantly the cumulative effects of violence and psychological trauma, weak sources of social support, difficult living conditions in refugee camps, and the absence of psychological and social rehabilitation programs.

On the other hand, the results of the study reveal the effectiveness of the applied psychological program in enhancing psychological resilience among abused women, which highlights the importance of organized psychological interventions based on scientific foundations in helping this category to recover. The results showed a notable increase in the level of psychological resilience among the sample members after applying the program, indicating the effectiveness of the program in achieving its objectives. This effectiveness is due to several factors, most importantly the theoretical foundations on which the program was based, the diverse techniques and methods it included, the methodical organization of its sessions, the positive atmosphere that prevailed in those sessions, the good relationship between the researcher and the participants, the positive interaction between the group members, the continuous follow-up, and the homework assignments that contributed to enhancing the transfer of learning effect to the natural environment of the participants.

The applied psychological program targeted the cognitive, emotional, behavioral, and social aspects of personality, which made it more effective in achieving its objectives. From the cognitive aspect, the program focused on modifying negative thoughts related to self, world, and future, and developing positive thinking skills; from the emotional aspect, it focused on developing skills for managing emotions and expressing feelings in healthy ways; from the behavioral aspect, it focused on developing problem-solving and effective communication skills; and from the social aspect, it focused on strengthening social relationships and building social support networks. The psychological literature has pointed to the importance of targeting these different

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aspects in programs to enhance psychological resilience and recovery from the effects of violence and psychological trauma. This explains the effectiveness of the applied psychological program in enhancing psychological resilience among abused women.

The researcher attributes the low level of psychological resilience among abused women before applying the program to a set of interrelated factors, most notably the deep psychological effects of various forms of violence, which manifest in feelings of fear, anxiety, depression, learned helplessness, weak self-confidence and low self-esteem, difficulty expressing feelings and thoughts, and weak problem-solving and effective communication skills. Also, psychological traumas associated with the experience of asylum and displacement, loss of security and stability, and difficulty adapting to the new and foreign environment, constitute additional sources of stress and tension. In addition, the weakness or absence of social support systems in the asylum environment, difficulty accessing psychological and social services, and the absence of work, education, and training opportunities, deepen the state of weakness and fragility among abused women. Challenges related to meeting basic survival needs, such as food, shelter, and health care, in light of resource scarcity and difficult living conditions in the camps, drain the psychological and physical energy of abused women, and reduce opportunities for attention to psychological and emotional aspects.

Regarding the effectiveness of the psychological program in enhancing psychological resilience, the results showed statistically significant differences between the pre and post measurements in favor of the post measurement, confirming the effectiveness of the applied program. This result can be explained in light of the theoretical foundations and therapeutic techniques on which the program was based, which varied between cognitive, emotional, behavioral, and social techniques. The program aimed to modify negative thoughts about self, world, and future, develop skills for managing emotions and expressing feelings, develop problem-solving and effective communication skills, and strengthen social relationships and build social support networks. The program included various sessions targeting different aspects of personality, starting from the definition of psychological resilience and its importance in recovery from the effects of violence and trauma, through the development of positive thinking skills, emotion management, and problem-solving, and ending with enhancing self-confidence, self-esteem, and building social support networks.

The researcher used various techniques during the program sessions such as discussion and dialogue, brainstorming, role-playing, homework assignments, positive reinforcement, feedback, relaxation and meditation, mental imagery, and other techniques that contributed to achieving the program's objectives. The systematic organization of sessions, the gradual presentation of content, continuous follow-up, and homework assignments, all contributed to achieving the desired objectives of the program. In addition, the positive atmosphere that prevailed in the sessions, the good relationship between the researcher and the participants, and the positive interaction between the group members, were all helping factors in the success of the program.

The researcher attributes the effectiveness of the psychological program in enhancing psychological resilience among abused women to the integrated methodological design of the program, which relied on solid theoretical foundations derived from positive psychology, psychological resilience theories, and trauma recovery, the diversity of techniques and methods used, its focus on building strengths and internal and external resources of the participants, developing positive skills to deal with stresses and challenges, enhancing the feeling of purpose and meaning in life, in addition to continuous follow-up and homework assignments that contributed to enhancing the transfer of learning effect to the natural environment of the participants. Also, the participants' desire for recovery and change, their commitment to attending program sessions and implementing homework assignments, and positive interaction during sessions, all contributed to the program's success. In addition, the program focused on providing a safe and supportive environment for participants, allowing them to express their feelings and thoughts freely without fear of judgment or criticism, which helped build trust and enhance feelings of safety and support, which are essential factors in the recovery process and building psychological resilience.

This result agrees with the study of Amer (2015), which proved the effectiveness of a counseling program in increasing psychological resilience and reducing domestic violence among abused women in Saudi Arabia. It also agrees with the study of Kamal (2021), which confirmed the effectiveness of a counseling program in improving psychological resilience among

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adolescent girls in orphanage care institutions. It is also consistent with the study of Khodabakhsh et al. (2024), which indicated the effectiveness of Imago therapy in improving psychological resilience and difficulty regulating emotions among women victims of domestic violence. It also agrees with the study of Alhalal & Falatah (2020), which showed that psychological resilience was one of the factors influencing the reduction of cortisol levels among abused women.

In light of these results, it can be said that organized psychological interventions based on scientific foundations represent an effective strategy in helping abused women recover from the effects of violence and trauma, and enhancing psychological resilience, especially if they are based on established scientific theories and include various techniques targeting different aspects of personality. This calls for the necessity of generalizing such programs more widely in refugee camps and institutions that provide services to abused women, and considering them part of the preventive and therapeutic strategies to deal with the psychological and social challenges faced by abused women. These results also highlight the importance of raising awareness about the dangers of violence and its psychological effects, and the need to qualify specialized cadres in the field of psychological and social support to work with abused women, and develop specialized programs that respond to their psychological and social needs. In addition, these results highlight the importance of providing a supportive environment for abused women, through developing policies and legislation that protect their rights, enhancing psychological and social services provided to them, providing opportunities for education and vocational training, enhancing their ability for economic and social independence, and building social support networks that support them in facing challenges and the recovery process.

5. CONCLUSIONS

The analysis of the Applied Behavior Analysis (ABA) program's effectiveness in improving desired behaviors among children In light of the results of the current research, the conclusions indicate that abused women in the Domiz refugee camp suffer from low levels of psychological resilience, which was confirmed by the results of the current study; indicating the impact of violence, psychological trauma, and asylum conditions on their ability to adapt and cope. The psychological program based on the principles of positive psychology and psychological resilience theories represents an effective strategy in enhancing psychological resilience among abused women, as confirmed by the results of the current study which showed statistically significant differences between the pre and post applications in favor of the post application.

The recommendations include the necessity of providing psychological and social support services for abused women in refugee camps, through establishing specialized centers to provide these services, and qualifying specialized cadres to work in these centers; the importance of applying psychological programs based on the principles of positive psychology and psychological resilience theories in institutions caring for abused women, to help enhance psychological resilience and recovery from the effects of violence and trauma; and the necessity of training workers in the field of psychological and social support on how to apply psychological resilience enhancement programs for abused women, and providing them with the necessary skills to deal with the psychological and physiological effects of violence and psychological trauma. The suggestions for future research include studying the relationship between psychological resilience and other physiological indicators such as noradrenaline and adrenaline among abused women; studying the effectiveness of counseling programs based on other theories such as cognitive behavioral therapy or acceptance and commitment therapy in enhancing psychological resilience among abused women; and conducting a follow-up study to know the continuity of the effect of the psychological program in enhancing psychological resilience and physiological indicators in the long term.

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