






Effectiveness of Emotion-Focused Therapy on Self-Efficacy and Posttraumatic Growth in Women with Breast Cancer

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ABSTRACT

Objective: The aim of this study was to examine the effectiveness of emotion-focused therapy on self-efficacy and posttraumatic growth in women with breast cancer.

Methods: This quasi-experimental study (pre-test - post-test with control group) involved 30 women with breast cancer in Sari (2021) who were selected through purposive sampling and randomly assigned into two groups of 15 participants each, an experimental group and a control group. The measurement instruments used were the General Self-Efficacy Scale by Schwarzer and Jerusalem (1979) and the Posttraumatic Growth Inventory by Tedeschi and Calhoun (1996), completed by the participants. Subsequently, participants in the experimental group attended 10 sessions of 60-minute emotion-focused therapy over a period of ten weeks. However, no therapy sessions were conducted for the control group. Ultimately, data analysis was performed using the covariance analysis method.

Findings: The analysis revealed that after the intervention, there was a significant difference between the control and experimental groups in both variables of self-efficacy and posttraumatic growth ($p \leq .05$). Significant differences were observed in the components of self-efficacy (general self-preparedness and social self-efficacy) and three components of posttraumatic growth (relating to others, personal strength, and appreciation of life) between the women in the experimental and control groups ($p \leq .05$); however, no significant differences were observed in the components of new possibilities and spiritual change.

Conclusion: The use of emotion-focused therapy is an appropriate intervention to enhance self-efficacy and posttraumatic growth in women with breast cancer, which can be beneficial for improving psychological well-being and better coping with the disease and treatment.

Keywords: Emotion-focused therapy, self-efficacy, posttraumatic growth, breast cancer

1. Introduction

Breast cancer is the most common cancer among women worldwide and the second leading cause of cancer-related deaths among women. In Iran, this cancer accounts for approximately 27% of all female cancer cases, with about 30% of these patients under the age of 40 (Omidbeygi et al., 2020).

Current psychological research indicates that despite acknowledging the prevalence of negative and unpleasant events, the process of learning and finding meaning from the suffering and stress caused by trauma promises positive changes that had never been experienced before. These positive changes, referred to as posttraumatic growth, were introduced by Tedeschi and Calhoun (1992) and are now used to describe such positive and constructive experiences. Posttraumatic growth is the experience of positive changes that are the achievement of struggling with life's challenging crises (Tedeschi & Calhoun, 1996). These positive changes lead to individual growth in five areas, including a greater appreciation of life and a sense of change in priorities and goals, warmer and more intimate relationships with others, increased personal strength, enhanced spirituality, and finding new paths and opportunities (Calhoun & Tedeschi, 2012; Ebrahimi et al., 2022). Crises that have led to posttraumatic growth include cancer (McDonough et al., 2014; Sawyer et al., 2010), diagnoses of immune deficiency, heart attacks, accidents, bereavement, home fires, abuse of children and women, refugee experiences, hostage victims, and natural disasters (Heidarzadeh et al., 2015; Martz et al., 2018). However, studies related to posttraumatic growth and posttraumatic stress in women who have experienced trauma show that a small percentage of women exhibit symptoms of posttraumatic stress, while the majority experience posttraumatic growth (Calhoun & Tedeschi, 2012).

Another variable examined in this research is self-efficacy. Introduced by Bandura, self-efficacy refers to an individual's confidence and belief in their abilities to control thoughts, emotions, activities, and also their effective functioning in stressful situations (Bozorgkhoo et al., 2022). As a personality variable, self-efficacy plays a significant role in an individual's confrontation with life's issues (Sadeghzadeh Mofrad et al., 2022) and is recognized as a personality trait in relation to posttraumatic growth. Numerous studies have shown that self-efficacy is a key psychological resource in adapting to chronic illnesses (Merluzzi et al., 2019) and that an individual's level of self-efficacy plays a fundamental role in how they adapt to the

challenges posed by cancer as a chronic illness (Tonga et al., 2020). Self-efficacy implies a person's belief in how well they can be successful in change (Bozorgkhoo et al., 2022; Dehghani et al., 2011) and refers to a concept that points to self-efficacy feelings, to individuals' beliefs about their abilities to organize motivations, cognitive resources, and control over a specific event (Havyer et al., 2017). Self-efficacy is a constructive power by which human cognitive, social, emotional, and behavioral skills are effectively organized (Herts et al., 2017). A person with high self-efficacy strives to overcome difficult situations and has a greater commitment to goals (Baik et al., 2020). Research has shown that self-efficacy beliefs in a cancer patient affect adherence to treatment, hope for the future, and improvement in coping strategies (Pugh et al., 2019), indicating better mental health, higher adherence to treatment, facilitated recovery, and more successful therapeutic responses (Grimmett et al., 2017). Individuals confident in their abilities consider critical situations as challenges, assured that they can control threatening situations (Bozorgkhoo et al., 2022; Dehghani et al., 2011; Tonga et al., 2020).

Therefore, it is necessary to identify effective interventions for increasing levels of self-efficacy and posttraumatic growth in individuals with cancer. One of the short-term therapeutic strategies to assist women dealing with breast cancer in managing emotional disturbances is emotion-focused therapy. Addressing emotions is among the recent movements in family therapy and is part of the activities and services of psychotherapy (Greenberg & Goldman, 2019). Change in emotion-focused therapy occurs when therapists help patients alter elements related to destructive issues. When the negative cycle is disrupted, and responses begin to change, a more positive cycle emerges that helps women move towards adaptation. The goal of emotion-focused therapy is to enable women to access and reprocess the emotional responses that underlie their negative interaction patterns. Then, women can send new emotional signals that allow interaction patterns to progress towards more accessibility and responsiveness, resulting in adaptation (Connolly-Zubot et al., 2020). The change process in the emotion-focused approach shows that this therapy helps women access and express their underlying and primary injured emotions. Revealing underlying vulnerable emotions becomes crucial in breaking the cycle of ineffective coping strategies (McKinnon & Greenberg, 2013).

Diagnosis and treatment methods such as surgery, chemotherapy, and hormone therapy for women with breast cancer are accompanied by stress and anxiety; the specific features of this cancer, such as its prevalence, treatability, and the younger average age of those affected, coupled with significant advancements in medical science in treating this disease, have resulted in many patients being treated and having a long lifespan. Additionally, these individuals need psychological support during and after diagnosis and treatment (Omidbeygi et al., 2020). For this reason, in recent years, there have been many efforts in the field of psychological treatments to address the negative effects of this disease on patients' psyches; given this, the current research aims to examine the effectiveness of emotion-focused therapy on self-efficacy and posttraumatic growth in women with breast cancer.

2. Methods

2.1. Study design and Participant

The present study was a quasi-experimental (pre-test-post-test with a control group) research. The population under study included female breast cancer patients in Sari (2021), selected through purposive sampling based on inclusion and exclusion criteria. The inclusion criteria were no chronic physical or mental illnesses based on medical records, at least six months and no more than three years since the disease diagnosis, and consent to participate in the study and therapy sessions. The exclusion criteria included the inability or lack of consent to continue participation in the research or absence from more than two sessions. Considering that a minimum of 15 participants per group is recommended for intervention studies, participants were randomly assigned into two groups of 15 each, experimental and control. Ethical considerations in the study included assurances regarding the confidentiality of questionnaire results, obtaining consent, having an ethical code for participation in the research, informing about confidentiality principles, and ensuring therapist availability for participants after the study. Subsequently, data collection tools were provided to participants. A pre-test was administered to both the control and experimental groups, followed by the administration of the General Self-Efficacy Scale by Schwarzer and Jerusalem (1979) for measuring self-efficacy and the Posttraumatic Growth Inventory by Tedeschi and Calhoun (1996) for assessing posttraumatic growth to the experimental group. After completing the therapy sessions, both groups were asked to complete the questionnaires

again. To examine the sustainability of the intervention's effects, participants were contacted two months after the study's conclusion, and the research instruments were made available online for them to respond to in a follow-up phase.

2.2. Measures

2.2.1. Self-Efficacy

The General Self-Efficacy Scale by Schwarzer and Jerusalem (1979) originally consisted of 23 items with two subscales—general self-preparedness and social self-efficacy—which was later refined in 1981 into a unidimensional scale of 10 four-point items (1 = Not at all true to 5 = Completely true), assessing the degree of agreement or disagreement with each statement. The score range is 20 to 80, with 10 to 40 in each subscale. Scores above 50 indicate high self-efficacy. Schwarzer and Jerusalem (1979) obtained a Cronbach's alpha coefficient of .89 for this scale. They also established its divergent validity with a correlation of -.55 with the Psychological Distress Scale and confirmed its construct validity through confirmatory factor analysis, supporting a single latent variable for self-efficacy. In Iran, Dehghani et al. (2006) standardized this scale on a sample of 417 male and female students at Ferdowsi University of Mashhad, confirming its construct validity with good model fit and reliability with a Cronbach's alpha of .83 and a retest reliability of 77%. The reliability of this scale in the research by Sadeghzadeh et al. (2022) was determined using Cronbach's alpha, which resulted in .78. The reliability of this tool in the current study was determined using Cronbach's alpha, resulting in .87 (Sadeghzadeh Mofrad et al., 2022).

2.2.2. Posttraumatic Growth

This refers to the score obtained from responses to the Posttraumatic Growth Inventory by Tedeschi and Calhoun (1996), which is designed to measure posttraumatic growth. The scale ranges from 22 to 105. It is a self-report instrument with 21 items scored on a six-point Likert scale (0 = Experienced no change to 5 = Experienced a very great change), comprising five subscales: 1) Relating to others, 2) New possibilities, 3) Personal strength, 4) Spiritual change, and 5) Appreciation of life. The validity of this questionnaire in Iran was determined through a correlation coefficient of .94 for scores obtained from two administrations, and its reliability was confirmed with a Cronbach's alpha of .92 for the entire test and a range of .66 to .90 for the subscales.

Heidarezadeh et al. (2015) examined the psychometric properties of the Persian version of the Posttraumatic Growth Inventory in adult cancer patients, showing acceptable fit in confirmatory factor analysis and validation of the five-factor structure of the tool. The Cronbach's alpha for the entire tool was .57, with coefficients for the components of the main five-factor scale ranging from .57 to .77. The reliability of this tool in the current study was determined using Cronbach's alpha, resulting in .84 (Heidarzadeh et al., 2015).

2.3. Intervention

2.3.1. Emotion-Focused Therapy

The protocol consists of 10 sessions, each lasting 60 minutes, conducted weekly. The validation of the protocol was carried out by several researchers (Chawla & Kafescioglu, 2012; Connolly-Zubot et al., 2020; Ebrahimi et al., 2022; Elliott et al., 2004; Furrow et al., 2011).

Phase One: Identification and Slowing Down of the Cycle over Five Sessions

Session One: This initial session focuses on conducting a pre-test, establishing a therapeutic alliance, and clarifying conflict-generating issues for the participants. The therapist works to create a safe and trusting environment, setting the stage for effective therapeutic engagement.

Session Two: This session aims to create a sense of acceptance and understanding through the use of reflective listening and validation skills. By validating the participants' feelings and experiences, the therapist helps foster a deeper sense of empathy and connection within the therapeutic relationship.

Session Three: The focus here is on identifying and examining the interactive cycle that traps the individual and alienates them from close relationships. This process involves an ongoing intimate and persuasive interview between the therapist and the participants, aiming to uncover underlying patterns and dynamics.

Session Four: In this session, the goal is to access unrecognized underlying emotions within the individuals' interactional stance. The therapist uses tracking and marking techniques and pays close attention to both verbal and non-verbal behaviors to guide participants towards their primary emotions, validating and acknowledging these emotions to facilitate deeper understanding and processing.

Session Five: This session involves reframing the problem associated with the cycle along with underlying emotions and attachment needs. It focuses on addressing the

negative cycle and its impacts on relationships, and reframing these cycles to highlight potential positive interactions and outcomes.

Phase Two: Changing Interactional Stances in Three Sessions

Session Six: This is a crucial intrapsychic phase that involves enhancing identification with denied attachment emotions, needs, and aspects of the self often encompassing fear, shame, and grief. The therapist assists participants in expressing these emotions, facilitating a deeper emotional processing and understanding.

Session Seven: The therapist helps participants in accepting their new emotional experiences and expanding their insight and responses to others. This session supports individuals in either withdrawal or blaming positions to reconstruct their relationships and foster healthier interaction patterns.

Session Eight: This session facilitates the expression of needs and desires to restructure interactions based on new experiences and perceptions. Withdrawn individuals are encouraged to engage more fully in relationships, articulate their needs and desires, while blaming individuals are guided towards more understanding and constructive interactions, fostering new positive interaction cycles.

Phase Three: Consolidation and Integration in Two Sessions

Session Nine: This session focuses on facilitating the emergence and creation of new solutions to old problems, with a more action-oriented session focus. Participants discuss financial and occupational concerns and their impact on relationships and life, utilizing new strategies for old issues.

Session Ten: The final session focuses on consolidating new stances and attachment behavior cycles. As the conclusion of the therapy, the emphasis is on addressing any concerns about reverting to negative cycles. The therapist strives to keep participants on track, enhance the psychological security of their relationships, and finally, conducting post-tests with participants from both groups to assess outcomes and improvements.

2.4. Data Analysis

In this study, collected data were analyzed using statistical methods in two parts: descriptive and inferential. Descriptive statistics included frequency indices, percentage, mean, and standard deviation. The Kolmogorov-Smirnov test was used to evaluate the normality of the data.

For inferential analysis, repeated measures ANOVA was employed using SPSS version 23.

3. Findings and Results

The study was conducted with the participation of 30 women diagnosed with breast cancer. The mean age and

standard deviation of the experimental group was 43.03 (SD = 8.43) and for the control group was 45.30 (SD = 9.61). An independent t-test showed that the groups were homogeneous in terms of age and there was no significant difference between them ($t = 0.687, p > .05$). Descriptive indices of self-efficacy and posttraumatic growth are reported in [Table 1](#).

Table 1

Mean and Standard Deviation of Self-Efficacy and Posttraumatic Growth at Pre-test, Post-test, and Follow-up

Variable	Group	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	Follow-up Mean	Follow-up SD
General Self-Efficacy	Experimental	19.07	3.674	26.4	3.562	26.33	3.352
	Control	19.00	3.798	21.8	6.109	22.07	5.725
Social Self-Efficacy	Experimental	18.07	4.114	27.27	4.148	27.6	4.641
	Control	17.87	4.274	18.6	3.269	18.4	3.18
Relating to Others	Experimental	18.47	3.563	24.2	3.342	25.13	3.27
	Control	17.33	3.994	17.00	3.854	17.4	3.439
New Possibilities	Experimental	22.47	3.563	23.8	3.629	24.67	3.792
	Control	22.13	3.523	22.8	2.957	22.87	3.159
Personal Strength	Experimental	7.4	3.291	14.47	2.669	15.00	2.39
	Control	7.67	3.2	8.4	2.444	8.6	2.23
Spiritual Change	Experimental	3.07	1.624	3.67	1.496	4.33	1.589
	Control	3.53	1.807	3.8	1.74	3.67	1.718
Appreciation of Life	Experimental	4.53	1.552	7.2	1.521	7.33	1.633
	Control	4.13	1.885	4.27	1.534	4.6	1.595

The assumptions for conducting mixed ANOVA with repeated measures were first examined. The results of the Kolmogorov-Smirnov test confirmed the normality of the data, and Levene's test confirmed the homogeneity of variances for General Self-Efficacy ($F = 0.456, p = .510$), Social Self-Efficacy ($F = 0.316, p = .410$), Relating to Others ($F = 0.118, p = .200$), New Possibilities ($F = 0.120, p = .200$), Personal Strength ($F = 0.133, p = .186$), Spiritual Change (F

$= 0.144, p = .115$), and Appreciation of Life ($F = 0.131, p = .199$). The results showed that homogeneity of variance-covariance matrices for the variables of the study was achieved ($p < .05$). Sphericity was not assumed for the variables (except for Personal Strength and Spiritual Change); therefore, Greenhouse-Geisser correction was used for reporting within-group effects. Mixed ANOVA results are reported in [Table 2](#).

Table 2

Results of ANOVA for Within-Group and Between-Group Differences

Variables	Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	p-value	Eta Squared
General Self-Efficacy	Test	523.756	1.146	456.861	26.576	.001	.487
	Group Membership	199.511	1	199.511	4.835	.036	.147
	Test × Group Membership	95.756	1.146	83.526	4.859	.030	.148
Social Self-Efficacy	Test	500.067	1.282	389.969	26.746	.001	.489
	Group Membership	816.011	1	816.011	28.458	.001	.504
	Test × Group Membership	382.422	1.282	298.226	20.454	.001	.422
Relating to Others	Test	190.689	1.645	115.909	48.677	.001	.635
	Group Membership	645.344	1	645.344	18.607	.001	.399
	Test × Group Membership	201.622	1.645	122.555	51.468	.001	.648
New Possibilities	Test	33.689	1.554	21.679	13.963	.001	.333
	Group Membership	24.544	1	24.544	0.738	.398	.026
	Test × Group Membership	8.089	1.554	5.205	3.353	.056	.107
Personal Strength	Test	335.489	2	167.744	89.03	.001	.761
	Group Membership	372.1	1	372.1	19.946	.001	.416
	Test × Group Membership	211.667	2	105.833	56.171	.001	.667

Spiritual Change	Test	7.489	2	3.744	4.829	.012	.147
	Group Membership	0.011	1	0.011	0.002	.968	.001
	Test × Group Membership	5.089	2	2.544	3.281	.045	.105
Appreciation of Life	Test	46.822	1.556	30.091	32.703	.001	.539
	Group Membership	92.011	1	92.011	14.183	.001	.336
	Test × Group Membership	29.756	1.556	19.123	20.783	.001	.426

Based on Table 2, scores for the variables in the within-group section and the Test*Group interaction in the studied groups across three measurement stages are significant ($p < .05$). In the between-group section, the results show significant differences in mean scores for General Self-Efficacy ($F = 4.835, p = .036$) with an effect size of 14.7% and Social Self-Efficacy ($F = 28.458, p = .001$) with an effect

size of 50.4%. Differences were also significant between groups for scores in Relating to Others ($F = 18.607, p = .001$), Personal Strength ($F = 19.946, p = .001$), and Appreciation of Life ($F = 14.183, p = .001$), with the intervention explaining 39.9%, 41.6%, and 33.6% of the variance in scores for Relating to Others, Personal Strength, and Appreciation of Life, respectively.

Table 3

Bonferroni Post-Hoc Test (Pairwise Comparisons of Variables)

Variable	Comparison	Mean Difference	Standard Error	Significance Level
General Self-Efficacy	Pre-test – Post-test	-5.067*	0.977	.001
	Pre-test – Follow-up	-5.167*	0.962	.001
	Post-test – Follow-up	-0.1	0.301	1
Social Self-Efficacy	Pre-test – Post-test	-4.967*	0.903	.001
	Pre-test – Follow-up	-5.033*	0.946	.001
	Post-test – Follow-up	-0.067	0.399	1
Relating to Others	Pre-test – Post-test	-2.700*	0.352	.002
	Pre-test – Follow-up	-3.367*	0.431	.001
	Post-test – Follow-up	-0.667	0.286	.081
New Possibilities	Pre-test – Post-test	-1.000*	0.282	.004
	Pre-test – Follow-up	-1.467*	0.344	.001
	Post-test – Follow-up	-0.467	0.209	.101
Personal Strength	Pre-test – Post-test	-3.900*	0.365	.001
	Pre-test – Follow-up	-4.267*	0.409	.001
	Post-test – Follow-up	-0.367	0.276	.586
Spiritual Change	Pre-test – Post-test	-0.433	0.197	.108
	Pre-test – Follow-up	-0.700*	0.269	.044
	Post-test – Follow-up	-0.267	0.021	.644
Appreciation of Life	Pre-test – Post-test	-1.400*	0.237	.001
	Pre-test – Follow-up	-1.633*	0.254	.001
	Post-test – Follow-up	-0.233	0.151	.398

The comparisons of means indicate that the intervention was effective in changing scores for self-efficacy and posttraumatic growth. Differences from post-test to follow-up were not significant ($p > .05$). This means that the results obtained in the follow-up phase were maintained, and the effectiveness of emotion-focused therapy on self-efficacy and posttraumatic growth in women with breast cancer was sustained.

The objective of this research was to examine the effectiveness of emotion-focused therapy on self-efficacy and posttraumatic growth in women with breast cancer. Data analysis indicated that after the intervention, there was a significant difference between the control and experimental groups in both variables of self-efficacy and posttraumatic growth. Significant differences were observed in the components of self-efficacy (general self-preparedness and social self-efficacy) and three components of posttraumatic growth (relating to others, personal strength, and appreciation of life) among the women with breast cancer in the experimental and control groups. However, no significant differences were observed in the new possibilities

4. Discussion and Conclusion

and spiritual change components. Therefore, it can be concluded that using emotion-focused therapy is an appropriate intervention to enhance self-efficacy and posttraumatic growth in women with breast cancer, which can be used to improve psychological conditions and better cope with the disease and treatment.

The results of research by Hedayati and colleagues (2020) on women with breast cancer demonstrated the effectiveness of emotion-focused therapy for these patients, aligning with the findings of this study which showed that emotion-focused therapy has a significant enhancing effect on all dimensions of self-efficacy (Hedayati et al., 2020). Similarly, the study by Ebrahimi, Ahmadi, and Farokhi (2022) indicated that the use of emotion-focused therapy is a suitable intervention for increasing psychological capital and posttraumatic growth in patients with multiple sclerosis, aligning with findings on the increase of posttraumatic growth dimensions in women with breast cancer (Ebrahimi et al., 2022), consistent with some other studies (McDonough et al., 2014; McKinnon & Greenberg, 2013; Sawyer et al., 2010).

In explaining the results, it can be said that the nature of posttraumatic growth includes reevaluating the event and alleviating or reducing emotional reactions (Martz et al., 2018). Shaping and reevaluating the problem are key steps in emotion-focused therapy, and with an awareness of one's feelings in a safe and empathetic space, one can express and soothe their feelings (Leahy, 2019). This awareness of feelings and reassessment of the issue or illness helps an individual adapt better to the illness, and the improved quality of personal relationships enables greater personal strength, increases the sense of life's value, and consequently impacts posttraumatic growth (Chawla & Kafescioglu, 2012). Emotion-focused therapy, while focusing on emotions, is a structured and step-by-step treatment that helps patients control their negative emotions and improve their adaptability through awareness of their feelings (Gili et al., 2020). As evidenced in the statistical results, emotion-focused therapy has increased scores in relating to others, personal strength, and appreciation of life among the dimensions of posttraumatic growth.

On the other hand, in elucidating these results, it should be mentioned that emotion-focused therapy involves accessing and regulating maladaptive emotional patterns as one of the primary tasks of the therapist, who also encourages the expression of the client's feelings and actions through empathy, validation, and various verbal techniques (Elliott et al., 2004). In emotion-focused therapy, a safe

therapeutic space is created for individuals to confront their emotions, which can lead to increased resilience. In treatment and facilitating new solutions for old problems and consolidating new positions and attachment behavior cycles, the therapist reviews the achievements of the client by emphasizing the cycle of initial negative interactions and replacing them with new positive ones, which can increase hope and optimism (Leahy, 2019). This therapy not only mitigates the negative emotional consequences of cancer but also aids in adhering to health and treatment recommendations and can facilitate lifestyle changes and thus strengthen self-efficacy.

The simplicity, ease, and minimal time required for exercises in emotion-focused therapy also offer a new method of dealing with disruptive emotions. This treatment, by challenging individual thoughts and reducing cognitive errors, attempts to change beliefs and attitudes. Additionally, it may increase pleasurable activities and impact the scope and quality of relationships, thereby affecting self-efficacy and potentially increasing the adaptability of women with breast cancer to their challenges. Individuals may also reduce their negative emotions by correctly using emotions, awareness of emotions, accepting them, and expressing especially positive emotions in life situations, which in turn will improve their self-efficacy (Atadokht et al., 2019). Additionally, their psychological issues might cause them to evaluate themselves negatively in social situations and engage less in social settings, which could negatively impact their self-efficacy and quality of life. However, this therapy helps them become aware of negative emotions and their impacts and reassess their emotions in various situations to maintain emotional health, thereby reducing their psychological problems and specifically their maladjustment (Elliott et al., 2004; Furrow et al., 2011).

5. Suggestions and Limitations

Finally, due to their physical condition, especially in the early sessions, the participants in the study were initially unmotivated to participate. Also, limiting the sample to women and the city of Sari are constraints of this study. Given that emotion-focused therapy was effective in increasing the components of posttraumatic growth and also impacted the components of self-efficacy, increasing it in women with breast cancer, it can be used as a counseling method to improve mental health and increase the coping ability of women with cancer. It is recommended that future

research apply emotion-focused therapy to both men and women with cancer with a larger sample.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

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