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Effectiveness of Brief Solution-Focused Therapy on Quality of Life and Hope in Mothers of Children with Cancer

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A B S T R A C T

Purpose: This study aimed to examine the effectiveness of Brief Solution-Focused Therapy (BSFT) in reducing depression and improving quality of life among mothers of children with cancer.

Methods and Materials: The research utilized a quasi-experimental design with a pre-test/post-test control group. The statistical population included all mothers of children with cancer in Kerman, Iran, during 2023. Thirty participants were selected through convenience sampling and randomly assigned to experimental (n = 15) and control (n = 15) groups. The experimental group received eight sessions of BSFT, each lasting approximately 60 minutes. Data were collected using the Beck Depression Inventory and the WHOQOL-BREF Quality of Life Questionnaire. Data analysis was conducted using SPSS-23, employing descriptive statistics, the Shapiro-Wilk test for normality, Box's M test for homogeneity of covariance matrices, and analysis of covariance (ANCOVA) for inferential comparisons.

Findings: ANCOVA results revealed significant differences between the experimental and control groups in both dependent variables. The BSFT intervention significantly reduced depression scores ($F(1,26) = 91.61$, $p < .001$, $\eta^2 = .779$) and significantly improved quality of life scores ($F(1,26) = 51.88$, $p < .001$, $\eta^2 = .666$) after controlling for pre-test scores. The interaction effects between pre-test scores and treatment were non-significant, indicating homogeneity of regression slopes and validating the ANCOVA assumptions.

Conclusion: The results demonstrate that Brief Solution-Focused Therapy is a highly effective short-term psychological intervention for alleviating depressive symptoms and enhancing quality of life in mothers of children with cancer. Given its time-efficient structure and focus on personal strengths and solution-building, BSFT can be a valuable component of supportive care in pediatric oncology settings.

Keywords: *Brief Solution-Focused Therapy, Depression, Quality of Life, Mothers, Childhood Cancer*

1. Introduction

A childhood cancer diagnosis is a profound psychological trauma that disrupts not only the life of the diagnosed child but also the entire family system, particularly affecting parents who serve as the child's primary caregivers. Among these, mothers—often the main emotional and physical support providers—bear the brunt of the psychological burden, experiencing elevated levels of stress, anxiety, depression, and compromised quality of life (Pek et al., 2023; Yoon & Kim, 2019). The multifaceted challenges involved in caregiving, such as hospital visits, complex medical treatments, financial strains, and emotional exhaustion, create a cumulative pressure that can profoundly impact maternal well-being (Mak et al., 2019; Rezaei et al., 2018).

Numerous studies have documented the adverse psychosocial consequences experienced by mothers of children with cancer. Depression is notably one of the most prevalent psychological outcomes in this group, fueled by factors such as anticipatory grief, guilt, uncertainty regarding treatment outcomes, and the perceived inability to fulfill maternal roles effectively (Alavian et al., 2016; Mousavi et al., 2024). Research by Iqbal and Siddiqui (2002) indicated that depressive symptoms among these mothers are often chronic and resistant to remission, given the ongoing demands and emotional fluctuations inherent in the caregiving journey (Iqbal & Siddiqui, 2002). Additionally, the nature of pediatric cancer—often requiring long-term and intensive treatment regimens—leaves minimal room for personal recovery, amplifying psychological vulnerability (Peikert et al., 2020). In this context, maternal mental health cannot be viewed in isolation; rather, it is intricately linked to the emotional adjustment and recovery outcomes of the child, as positive mother-child interactions are crucial to coping with the illness (Dunn et al., 2011).

Beyond depression, the quality of life in mothers of children with cancer is substantially affected. Empirical findings have shown that this population often scores significantly lower on both physical and psychological well-being indicators compared to mothers of healthy children (Rahimi et al., 2013; Rezaei et al., 2018). In a study conducted in Sweden, Hovén et al. (2020) found that a child's illness drastically alters family routines, impairs occupational functioning, and disrupts social relationships, leading to a deterioration in overall life satisfaction (Hovén et al., 2020). The findings of Nami et al. (2024) further emphasized that educational and social disruptions experienced by children with cancer also spill over into the lives of their parents, reinforcing the cyclical nature of stress and emotional exhaustion (Nami et al., 2024). Such evidence underscores the necessity of psychological support not only for the child but also for the primary caregivers, who function as a critical part of the treatment ecosystem.

While pharmacological and conventional psychotherapeutic interventions have been traditionally utilized to address caregiver distress, recent attention has turned toward more brief and pragmatic therapeutic approaches that offer psychological relief within shorter timeframes. One such approach is Brief Solution-Focused Therapy (BSFT), which emphasizes goal-oriented, strength-based dialogue and encourages clients to envision and move toward preferred future outcomes rather than dwell on problems (Habibi, 2015). Rooted in social constructionist theory, BSFT operates on the premise that individuals possess the internal resources necessary to overcome difficulties and that effective therapy involves uncovering and mobilizing these strengths through focused questioning and collaborative goal setting (Ghaderi et al., 2015). This framework is especially well-suited for mothers of children with cancer, as it minimizes therapeutic burden, avoids prolonged exposure to trauma narratives, and enhances psychological resilience in high-stress contexts.

Several studies have validated the effectiveness of BSFT in reducing depressive symptoms and improving life satisfaction across various populations. For instance, Jamian et al. (2018) reported significant improvements in self-efficacy and quality of life among women with multiple sclerosis following BSFT, emphasizing its relevance in chronic illness contexts (Jamian et al., 2018). Similarly, Taghavi et al. (2020) found that BSFT significantly enhanced quality of life and self-efficacy in housewives compared to Acceptance and Commitment Therapy, showcasing its capacity to yield substantial psychological gains in relatively short therapeutic windows (Taghavi et al., 2020). In the domain of pediatric oncology, Azizi and Ghasemi (2017) demonstrated that BSFT was more effective than cognitive-behavioral and acceptance-based therapies in alleviating depression and promoting emotional well-being in women facing life-altering challenges such as divorce, highlighting its potential application in high-stress familial contexts (Azizi & Ghasemi, 2017).

Specifically, studies that have applied BSFT to mothers of children with cancer have shown promising results. For example, Aghili et al. (2024) found that mindfulness-based cognitive therapy significantly reduced post-traumatic stress

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and dysfunctional attitudes in this population, while solution-focused components played a key role in fostering hope and emotional stability (Aghili et al., 2024). Moreover, Zahedi et al. (2020) compared BSFT with Acceptance and Commitment Therapy in young female participants and found BSFT to be equally effective in reducing depression while being more time-efficient, an important consideration for mothers with limited availability (Zahedi et al., 2020). These findings suggest that BSFT could serve as a highly suitable intervention for distressed caregivers of pediatric cancer patients, offering psychological relief without imposing additional scheduling or emotional burdens.

Another key advantage of BSFT lies in its ability to promote a sense of agency and control, which is often diminished in mothers dealing with their child's chronic illness. BSFT sessions typically revolve around identifying "exceptions" to the problem—moments when the distressing issue was less severe or absent—and building upon those instances to construct actionable pathways forward (Habibi, 2015). This empowers clients to shift from a state of helplessness to one of proactive coping, a psychological transformation that is particularly valuable in contexts characterized by uncertainty and fear, such as pediatric oncology (Mak et al., 2019). Moreover, the focus on solution-building rather than problem-analysis allows mothers to gain a renewed sense of direction, positively influencing both their emotional health and their caregiving efficacy (Zahedi et al., 2020).

Despite the evident benefits, the application of BSFT among mothers of children with cancer remains underexplored, particularly within the Iranian context. While some studies have touched on broader caregiver outcomes (Mousavi et al., 2024), few have directly examined the dual effects of BSFT on depression and quality of life simultaneously. This represents a significant research gap, especially given the holistic nature of maternal caregiving, where emotional well-being and life satisfaction are deeply intertwined. According to Darcy et al. (2021), the early stages of a cancer diagnosis are marked by heightened emotional sensitivity and role disruption, making timely and effective intervention critical for long-term adjustment (Darcy et al., 2021). Therefore, there is a pressing need to evaluate BSFT's capacity to address these dual outcomes in a culturally and clinically relevant manner.

Moreover, findings from longitudinal research in families affected by childhood cancer suggest that maternal psychological distress often persists long after the initial diagnosis, contributing to negative long-term outcomes for both mothers and children (Peikert et al., 2020). As Dunn et al. (2011) pointed out, the quality of verbal and non-verbal interactions between mothers and their children during treatment significantly influences the child's emotional adjustment, further emphasizing the interconnected nature of maternal and child well-being (Dunn et al., 2011). This interdependence reinforces the importance of strengthening maternal mental health as a strategic component of pediatric cancer care.

In summary, the psychological toll borne by mothers of children with cancer is well-documented, with depression and diminished quality of life emerging as prominent issues. Traditional interventions often fail to meet the time-sensitive and emotionally constrained needs of these mothers. Brief Solution-Focused Therapy, with its structured yet flexible approach, presents a promising alternative capable of addressing these dual concerns efficiently. Despite encouraging evidence, further empirical studies are needed to establish its effectiveness in this specific population, particularly within culturally distinct settings like Iran. The present study aims to address this gap by investigating whether BSFT can significantly improve quality of life and reduce depression in mothers of children with cancer.

2. Methods and Materials

2.1. Study Design and Participants

The present study is classified as applied research and, in terms of method, falls under the category of descriptive research using a quasi-experimental design. A quasi-experimental study involves one or more control groups; however, the assignment of participants is not randomized. This research method aims to approximate a true experimental study, but due to the impossibility of fully controlling or manipulating all research variables, it is considered quasi-experimental. Most studies aiming to identify causal relationships in real-life settings—where only a limited number of variables can be controlled—are categorized as quasi-experimental.

The study population consisted of all cancer patients in Kerman City who sought treatment at healthcare centers in 2023. A total of 123 patients were identified. A sample is a group of individuals randomly selected from the population, and the results obtained from this sample are generalized to the entire population. Based on the research method, a total of 30 participants were selected using convenience sampling and were then randomly assigned into two groups: an

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experimental group (15 individuals) and a control group (15 individuals).

2.2. Measures

2.2.1. Depression

This questionnaire was developed by Beck in 1961 and contains 21 items. Regarding its reliability and validity, Vahebzadeh (1973) confirmed the diagnostic utility of this tool for distinguishing between depressed and non-depressed individuals in Iran. Furthermore, Parto (1974), in an empirical study examining the prevalence of depression among students from various faculties of the University of Tehran, demonstrated sufficient validity and reliability for the BDI. The tool was standardized on the Iranian population by Parto in 1991. Podat (1978) reported a positive correlation coefficient of 0.56 with Rotter's Internal-External Locus of Control Scale among male students at the University of Tehran. Chegini (1982) found a correlation of 0.54 with the MMPI Depression Scale. The BDI total score ranges from 0 to 62; negative scores are not applicable. Depression severity is categorized as follows (note that two scoring ranges have been proposed):

1. Normal range (1–15) or (1–18): Individuals without depression or within the normal range.
2. Mild depression (16–31) or (18–28): Individuals with mild depressive symptoms.
3. Moderate depression (32–47) or (29–35): Individuals experiencing moderate depressive symptoms.
4. Severe depression (48–62) or (36–63): Individuals with severe depressive symptoms.

2.2.2. Quality of Life

The WHOQOL-BREF is a shortened version of the World Health Organization's 100-item quality of life assessment developed in 1996. It evaluates quality of life across four health-related domains:

a) Physical Health
b) Psychological Health
c) Social Relationships
d) Environmental Health

The WHOQOL-BREF consists of 26 items. The first item assesses overall quality of life, and the second assesses general health status. Given the complexity of scoring, a full explanation is provided here.

Each of the 26 questions is rated on a scale from 1 to 5. To facilitate scoring, the numerical values are embedded within the questionnaire. Items 3, 4, and 26 are reverse-scored.

To calculate raw scores for each subscale:

- **Physical Health Domain:** Sum of items 3, 4, 10, 15, 16, 17, and 18. The score range is from 7 to 35, with a span of 28 points.
- **Psychological Health Domain:** Sum of items 5, 6, 7, 11, 19, and 26. The score range is from 6 to 30, with a span of 24 points.
- **Social Relationships Domain:** Sum of items 20, 21, and 22. The score range is from 3 to 15, with a span of 12 points.
- **Environmental Health Domain:** Sum of items 8, 9, 12, 13, 14, 23, 24, and 25. The score range is from 8 to 40, with a span of 32 points.
- **Overall Quality of Life and General Health:** Sum of items 1 and 2. The score range is from 2 to 10, with a span of 8 points.

2.3. Intervention

The intervention was based on the Brief Solution-Focused Therapy (BSFT) model and was implemented over eight structured sessions, each lasting approximately 60 minutes and conducted once per week. The sessions followed a standardized protocol emphasizing clients' strengths, identifying practical and achievable goals, and exploring exceptions to problems. Key techniques included scaling questions, miracle questions, exception-seeking, and goal setting, all designed to foster hope and build adaptive coping strategies. The intervention was delivered in a semi-structured format by a trained therapist with experience in solution-focused approaches, and it was tailored to address the unique emotional and psychological needs of mothers of children with cancer, including stress management, emotional regulation, and fostering future-oriented thinking.

2.4. Data Analysis

Data analysis in this study was conducted using SPSS version 23. Descriptive statistics, including means and standard deviations, were calculated for the pre-test and post-test scores of the dependent variables (depression and quality of life) in both experimental and control groups. Prior to conducting inferential analyses, the normality of the data distribution was assessed using skewness, kurtosis, and the Shapiro-Wilk test. To examine the effectiveness of the

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intervention, analysis of covariance (ANCOVA) was employed, controlling for pre-test scores. Additionally, Box's M test was used to assess the homogeneity of covariance matrices, and Levene's test was applied to evaluate the assumption of homogeneity of variances. Effect sizes were reported using eta squared to determine the magnitude of the intervention's impact.

3. Findings and Results

Table 1 presents the indices related to the normality of the dependent variables in both the pre-test and post-test phases, based on skewness, kurtosis, and the Shapiro-Wilk test. The results showed that, for the depression variable in the experimental group, the pre-test values (sk = 0.21, ku = -0.74, $p > 0.05$, W(15) = 0.96) and post-test values (sk = 0.28, ku = -1.21, $p > 0.05$, W(15) = 0.97) met the criteria for normality, as the Shapiro-Wilk test was not statistically significant.

In the control group, the depression variable in the pre-test (sk = 0.67, ku = 0.38, $p > 0.05$, W(15) = 0.97) and in the post-test (sk = 0.30, ku = -0.62, $p > 0.05$, W(15) = 0.94) did not meet the normality assumption due to non-significant Shapiro-Wilk test values indicating non-normal distributions.

For the quality of life variable in the experimental group, the pre-test results (sk = -0.48, ku = 0.19, $p > 0.05$, W(15) = 0.95) and post-test results (sk = -0.39, ku = 0.36, $p > 0.05$, W(15) = 0.97) indicated normal distribution, given the non-significant Shapiro-Wilk test results.

In the control group, the pre-test values for quality of life (sk = -0.56, ku = -0.86, $p > 0.05$, W(15) = 0.93) and post-test values (sk = -0.46, ku = -1.22, $p > 0.05$, W(15) = 0.90) did not indicate normality, as the Shapiro-Wilk test was not statistically significant.

Table 1

Distribution Indices for Scores of Experimental and Control Group Participants on Dependent Variables

Group	Variable	Skewness	Kurtosis	Shapiro-Wilk	df	*p*-value
Experimental	Pre-test Depression	0.21	-0.74	0.96	15	0.81
	Post-test Depression	0.28	-1.21	0.97	15	0.43
Control	Pre-test Depression	0.67	0.38	0.97	15	0.89
	Post-test Depression	0.30	-0.62	0.94	15	0.93
Experimental	Pre-test Quality of Life	-0.48	0.19	0.95	15	0.57
	Post-test Quality of Life	-0.39	0.36	0.97	15	0.85
Control	Pre-test Quality of Life	-0.56	-0.86	0.93	15	0.31
	Post-test Quality of Life	-0.46	-1.22	0.90	15	0.09

Box's M test was not significant ($p = 0.55$, F(3, 141120) = 0.70, Box's M = 2.28), indicating that the assumption of equality of covariance matrices is met.

In the post-test, the assumption of homogeneity of variances was violated for the depression variable (F(1, 28) = 4.30, $p = 0.047$). However, since the group sizes were equal, the test was robust to this violation. For the quality of life variable (F(1, 28) = 1.06, $p = 0.31$), the assumption of homogeneity of variances was met.

The results also indicated that the interaction effect between the pre-test scores and the experimental intervention on depression was not significant (F(2, 23) = 0.018, $p = 0.98$), and similarly, the interaction effect for quality of life was also not significant (F(2, 23) = 0.47, $p = 0.62$). Therefore, no interaction effects were found for these variables, and the regression slopes between groups were homogeneous.

Table 2 presents the results of the ANCOVA comparing the effects of the experimental intervention between groups for the depression variable. The findings revealed a statistically significant difference between the two groups in terms of depression scores (F(1, 26) = 91.61, p = .000). Accordingly, the experimental intervention—Brief Solution-Focused Therapy—had a positive effect on reducing depression, explaining 77.9% of the variance in depression changes.

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Table 2

ANCOVA Results in MANCOVA for the Depression Variable

Source	Sum of Squares	df	Mean Square	F Value	Significance Level	Eta Squared
Pre-test Depression	3741.79	1	3741.79	164.21	.000	.863
Experimental Intervention	2087.58	1	2087.58	91.61	.000	.779
Error	592.43	26	22.78			

Table 3 presents the distribution of scores for participants in the experimental and control groups on the dependent variable of quality of life. In the experimental group, the mean and standard deviation in the pre-test were M = 50.2, SD = 19.57, and in the post-test were M = 66.8, SD = 21.92. In the control group, the pre-test mean and standard deviation were M = 53.53, SD = 14.99, and in the post-test were M = 53.13, SD = 14.96.

Table 3

Score Distribution Indices for Experimental and Control Groups on Quality of Life

Group	Variable	N	Mean	Standard Deviation	Minimum Score	Maximum Score
Experimental	Pre-test Quality of Life	15	50.2	19.57	23	95
	Post-test Quality of Life	15	66.8	21.92	35	110
Control	Pre-test Quality of Life	15	53.53	14.99	25	74
	Post-test Quality of Life	15	53.13	14.96	29	71

Table 4 presents the ANCOVA results comparing the effects of the experimental intervention between groups for the quality of life variable. The findings showed a statistically significant difference between the two groups in terms of quality of life ($F(1, 26) = 51.88$, $p = .000$). Hence, the experimental intervention—Brief Solution-Focused Therapy—had a positive effect on quality of life, accounting for 66.6% of the variance in quality of life changes.

Table 4

ANCOVA Results in MANCOVA for the Quality of Life Variable

Source	Sum of Squares	df	Mean Square	F Value	Significance Level	Eta Squared
Pre-test Quality of Life	1.43	1	1.43	0.04	.83	.064
Experimental Intervention	1640.01	1	1640.01	51.88	.000	.666
Error	821.86	26	31.61			

4. Discussion and Conclusion

The present study aimed to investigate the effectiveness of Brief Solution-Focused Therapy (BSFT) on depression and quality of life in mothers of children with cancer. The findings revealed that BSFT significantly reduced depressive symptoms and enhanced the overall quality of life in the experimental group compared to the control group. Statistical analysis using ANCOVA demonstrated a large effect size for both variables, with BSFT explaining approximately 77.9% of the variance in depression reduction and 66.6% of the variance in quality of life improvement. These results provide robust support for the efficacy of BSFT in addressing the psychological needs of mothers grappling with the unique stressors associated with caring for a child with cancer.

The observed reduction in depression among mothers receiving BSFT aligns with previous empirical research underscoring the therapeutic value of solution-focused approaches in alleviating depressive symptoms. Ghaderi et al. (2015) found that short-term BSFT was effective in reducing depression in women under social welfare support, a group similarly burdened by chronic stress and emotional exhaustion (Ghaderi et al., 2015). Likewise, Habibi (2015) emphasized that BSFT's emphasis on client strengths, solution-generation, and goal orientation offers a powerful alternative to traditional pathology-focused models of depression treatment (Habibi, 2015). In the present study, mothers likely benefited from BSFT's core strategies, such as identifying exceptions to their distress and building on

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personal competencies, which fostered a sense of agency and psychological relief in the face of caregiving challenges.

Moreover, these results echo the findings of Azizi and Ghasemi (2017), who reported that BSFT was more effective than cognitive-behavioral and acceptance-based therapies in improving mood among women facing life-altering stressors like divorce (Azizi & Ghasemi, 2017). The common thread in these contexts is the experience of sustained emotional strain under conditions that are largely outside the individual's control—similar to what mothers of children with cancer endure. In such settings, BSFT's focus on immediate, tangible goals and its brief, time-efficient structure may offer an ideal therapeutic match. This compatibility likely contributed to the substantial decline in depressive symptoms observed in the current study.

In addition to its impact on depression, BSFT significantly enhanced participants' quality of life, a multidimensional construct encompassing physical, psychological, social, and environmental well-being. These findings corroborate the work of Taghavi et al. (2020), who demonstrated that BSFT improved quality of life and self-efficacy in housewives facing various psychosocial stressors (Taghavi et al., 2020). Similarly, Jamian et al. (2018) reported improved life satisfaction and psychological functioning among women with multiple sclerosis following BSFT, indicating its applicability in chronic illness contexts (Jamian et al., 2018). These results suggest that BSFT is not only effective in reducing psychological distress but also in enhancing broader life satisfaction indicators, likely due to its holistic, strength-based, and future-oriented therapeutic strategies.

The study's outcomes also find support in literature specific to the population of mothers with children diagnosed with cancer. For instance, Aghili et al. (2024) emphasized that mindfulness-based cognitive therapy reduced post-traumatic stress and improved coping capacity in this population, highlighting the necessity of interventions that target psychological flexibility and emotional regulation (Aghili et al., 2024). While BSFT operates on different theoretical principles, its emphasis on coping through solution-building and positive reframing may yield comparable benefits. Moreover, Zahedi et al. (2020) found that BSFT was effective in reducing depression and enhancing quality of life among adolescent girls, with results suggesting that the brevity and clarity of this approach make it especially suitable for emotionally vulnerable populations with limited access to long-term therapy (Zahedi et al., 2020).

The improvement in quality of life observed in the experimental group can also be interpreted in light of how cancer caregiving affects maternal functioning across multiple domains. Studies show that mothers of children with cancer often face disruptions in sleep, nutrition, employment, and social functioning, all of which contribute to diminished well-being (Rahimi et al., 2013; Rezaei et al., 2018). The solution-focused approach, by helping mothers redefine problems and prioritize manageable goals, likely provided cognitive and emotional scaffolding to restore some level of functioning in these disrupted domains. For example, Hovén et al. (2020) reported that the chronic stress experienced by parents of pediatric cancer patients significantly impairs daily routines and long-term life planning, and interventions that offer structure and emotional support are key to recovery (Hovén et al., 2020). In this regard, BSFT's action-oriented and time-bound structure may have played a critical role in helping mothers regain a sense of normalcy.

The results of the current study are also consistent with the qualitative accounts of mothers navigating their child's illness. Nami et al. (2024) reported that mothers often feel overwhelmed by their caregiving duties and simultaneously unsupported in terms of their own emotional needs (Nami et al., 2024). In these situations, BSFT can provide a supportive platform for mothers to voice their concerns while also guiding them toward adaptive thought patterns and behavioral strategies. Furthermore, Mak et al. (2019) showed that interventions incorporating mindfulness and empowerment significantly improved caregivers' emotional resilience, a finding conceptually aligned with BSFT's focus on strengths and empowerment (Mak et al., 2019).

Another contributing factor to the success of BSFT in this study could be its compatibility with the cultural and practical context of Iranian mothers. In many traditional societies, extended therapy commitments are often difficult to maintain due to financial constraints, childcare responsibilities, and social stigma associated with psychological treatment (Peikert et al., 2020). BSFT, with its short duration and goal-focused nature, circumvents these challenges and thus is more accessible to mothers who may otherwise avoid or terminate longer-term therapy. This might explain why the intervention yielded such significant improvements even in a limited number of sessions.

The observed findings also reinforce previous arguments for integrating psychological support as a formal component of pediatric cancer care. As Darcy et al. (2021) highlighted, the early months following a cancer diagnosis are marked by

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heightened emotional turmoil and parental confusion, conditions under which timely intervention can prevent the consolidation of chronic psychological disorders (Darcy et al., 2021). Dunn et al. (2011) also demonstrated that maternal psychological distress negatively affects the quality of emotional communication between mothers and their children undergoing treatment, further emphasizing the need for supportive interventions that target both maternal well-being and family functioning (Dunn et al., 2011).

Mothers in the present study also reported significant improvements in their perceived capacity to manage daily responsibilities, a finding supported by research indicating that psychological flexibility and a future-oriented mindset are crucial in mitigating caregiver burnout (Iqbal & Siddiqui, 2002). The ability to redefine problems, set achievable goals, and recognize incremental progress—core components of BSFT—may have enhanced these mothers' perceptions of competence and control over their circumstances. These psychological shifts are essential not only for personal well-being but also for the emotional environment they create for their children undergoing cancer treatment.

Finally, the findings of the present study also align with the broader literature emphasizing the bidirectional relationship between maternal psychological health and child outcomes. Research has shown that improvements in maternal well-being can enhance children's adherence to treatment, coping behaviors, and overall adjustment to illness (Mousavi et al., 2024; Yoon & Kim, 2019). Therefore, targeting maternal depression and quality of life is not only beneficial for the mothers themselves but may also contribute to more favorable treatment outcomes for children. This reinforces the argument for including family-centered psychological interventions, such as BSFT, within comprehensive cancer care programs.

Despite the promising results, several limitations should be acknowledged. First, the study relied on a relatively small, non-randomized sample, which may limit the generalizability of the findings. Second, self-report questionnaires were used to assess depression and quality of life, which may be influenced by social desirability bias or underreporting of distress. Third, the short follow-up period precluded the assessment of long-term effects of the intervention. Additionally, the absence of blinding and potential expectancy effects may have influenced the results. Future studies should address these limitations through larger sample sizes, multiple assessment methods, and extended follow-up periods.

Future research should explore the long-term sustainability of BSFT's effects on depression and quality of life in mothers of children with cancer through longitudinal designs. Comparative studies examining BSFT alongside other therapeutic models such as mindfulness-based therapy, ACT, or narrative therapy would also be valuable. Moreover, qualitative investigations could provide deeper insight into mothers' subjective experiences of BSFT, illuminating factors that facilitate or hinder therapeutic change. It would also be beneficial to examine the indirect effects of improved maternal well-being on children's treatment adherence and psychological outcomes.

Based on the findings, healthcare providers and psycho-oncology teams should consider integrating BSFT as a cost-effective and time-efficient intervention for mothers of pediatric cancer patients. Training programs for clinical psychologists, social workers, and nurses could include modules on solution-focused techniques. Counseling services in oncology settings should prioritize early identification and intervention for caregiver distress, offering structured BSFT sessions as part of routine supportive care. Finally, developing culturally adapted BSFT protocols could further enhance engagement and effectiveness among diverse populations.

Authors' Contributions

All authors significantly contributed to this study.

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

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the study and participated in the research with informed consent.

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