University of Hormozgan

Iranian Journal of Educational Research

Print ISSN: 1735 - 563X Online ISSN: 2980 - 874X

Homepage: http://ijer.hormozgan.ac.ir

Educational and Behavioral Research Center

Study of Coping Strategies and Hardiness among Mothers of Children with Cancer and Typical Children in Hamedan City

Mina Ghasemi Rahmatabadi[1], Nasrolah Erfani[2]✉

1. MA student in Educational Psychology, Payam Noor University, Tehran, Iran

2. Associate Professor, Department of Psychology, Payame Noor University (PNU), Tehran, Iran, erfani@pnu.ac.ir

Article Info

Article type:

Research Article

Article history:

Received 14 Feb. 2024

Received in revised form 13 Apr. 2024

Accepted 2 Jun. 2024

Published online 01 Mar. 2025

Keywords:

Coping Strategies,
Hardiness,
Children with Cancer,
Typical Children,
Mothers

ABSTRACT

Objective: The current investigation was undertaken with the objective of examining the coping mechanisms and psychological hardiness of mothers with children diagnosed with cancer in comparison to those with typically developing offspring.

Methods: The methodological framework of this inquiry adhered to a descriptive, causal-comparative design, with the statistical population encompassing all mothers of pediatric oncology patients receiving treatment at Ekbatan Children's Hospital in Hamadan, alongside mothers of typically developing children within Hamadan during the year 2024. Employing the Cochran formula, a sample consisting of 100 mothers of children with cancer and 100 mothers of children without cancer was selected. The empirical data were subjected to analysis through the Coping Strategies Questionnaire and the Kobasa hardiness questionnaire, utilizing SPSS software and multivariate analysis of variance for statistical evaluation.

Results: The findings of the study elucidated that there exist significant disparities in coping strategies and psychological hardiness between mothers of children with cancer and those of normal children. Furthermore, the outcomes of the two sub-hypotheses of the study corroborated the presence of differences in both emotion-oriented and problem-oriented coping strategies as well as in the hardiness levels of mothers of children with cancer compared to those with normal children.

Conclusions: In light of these findings, it was observed that emotion-oriented coping strategies are more prevalent among mothers of children with cancer, while problem-oriented strategies are more frequently employed by mothers of normal children. Additionally, psychological hardiness was found to be significantly greater in mothers of normal children compared to mothers of children with cancer.

Cite this article: Ghasemi Rahmatabadi, M. & Erfani, N. (2025). Study of coping strategies and hardiness among mothers of children with cancer and typical children in Hamedan city. *Iranian Journal of Educational Research*, 4 (1), 345-360.

DOI: https://doi.org/10.22034/4.1.345

© The Author(s).

Publisher: University of Hormozgan.

DOI: https://doi.org/10.22034/4.1.345

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

Introduction

According to empirical data, an estimated fifty million fatalities occur globally each year, with over five million of these cases being linked to neoplastic diseases. Mortality rates associated with cancer in pediatric populations under the age of 14 surpass those attributed to other medical conditions (Shafiee et al., 2019). Childhood malignancies represent approximately 4.6-5% of the overall cancer incidence, and in the context of Iran, around 2.5% of the pediatric demographic is diagnosed with cancer (Abdollahi et al., 2021). It has been evidenced that cancer stands as one of the foremost conditions necessitating informal caregiving (Haghighat Lotfi et al., 2014). Despite advancements in therapeutic interventions for pediatric cancer patients and an increase in survival rates, the duration of treatment for this formidable illness continues to impose significant psychological stress on both the affected children and their caregivers (Tahmasebi et al., 2023). Generally, parents exhibit immediate and foreseeable emotional responses characterized by sentiments of despair, sorrow or melancholia, isolation, apprehension, indignation, and confusion. They endure enduring emotional states such as pervasive remorse and a continual sense of inadequacy. According to Kubler-Ross, individuals typically navigate through five distinct stages: Denial: the individual refuses to acknowledge the diagnosis and avoids engaging in discussions regarding it with medical professionals. 1. Denial serves as a mechanism of self-preservation, enabling the individual to confront reality at a self-determined pace. 2. Anger: the individual becomes cognizant of the limited time available and the necessity to relinquish their aspirations, which incites feelings of rage. 3. Bargaining: the individual engages in negotiations with a higher power, such as vowing to dedicate their existence to altruism if granted life. 4. Depression: upon the ineffectiveness of denial, anger, and bargaining, the individual descends into a state of depression. Such depression may manifest in two forms: reactive depression, characterized by feelings of sadness rooted in past events, and preparatory depression, where the individual mourns anticipated future losses. 5. Acceptance: the individual reaches an accord with themselves and the adverse circumstances encountered. In essence, the individual capitulates to this distressing experience (Bregman, 2017). Prolonged hospitalizations for medical treatment can hinder the ability to maintain a semblance of normalcy in life. The psychological ramifications of a cancer diagnosis on both children and their parents have led to a significant portion of treatment being conducted within the home environment, thereby imposing additional responsibilities on parents

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

that extend beyond traditional parental duties, resulting in a transformation of their usual lifestyle and parental roles. Consequently, family dynamics undergo alterations for either a transient or extended duration (Mahmoud Fakheh et al., 2018). The constructs of femininity and masculinity subsequently yield implications for mental health. Gender disparities in the externalization of psychological issues manifest during childhood and adolescence, periods during which the social dimensions of identity become increasingly salient. In comparison to their male counterparts, females exhibit a more negative self-assessment, a trend that tends to exacerbate during the adolescent phase. For instance, women frequently report diminished feelings of agency or control and lower self-esteem relative to men, and this adverse self-perception contributes to detrimental outcomes concerning their mental well-being (Van der Meer, 2014). Empirical findings have indicated that maternal figures are more prominently engaged in the caregiving responsibilities of their children than paternal figures (Finley et al., 2008). These occurrences have compelled mothers to occasionally curtail their professional engagements to attend to their own and familial obligations, necessitating their presence alongside their children in medical facilities (Ball & Bindler, 2008). For a subset of individuals, the role of caregiver may extend over multiple years, functioning as a surrogate for a full-time employment commitment (Haghighat Lotfi et al., 2014). A predominant concern among numerous mothers stems from an insufficient comprehension of the disease trajectory (Adelman et al., 2014). Conversely, elevated rates of morbidity and mortality exert detrimental effects on both the child and their maternal figures (Black et al., 2008). Furthermore, a study conducted by Taleghani et al. (2012) revealed that mothers of children diagnosed with cancer exhibit significantly heightened levels of post-traumatic stress disorder when compared to their paternal counterparts. Additionally, mothers endure greater levels of psychological distress than fathers, potentially attributable to differing role expectations; for instance, women manifest elevated psychological strain and demonstrate a higher incidence of physical symptoms as a reaction to stress (Krantz et al., 2004). This illness directly undermines their aspirations and indirectly engenders caregiving-related challenges, such as diminished quality of life and sleep disturbances (Abdollahi et al., 2021). One critical variable emerging from our evaluations pertains to coping strategies. Over the past decade, the construct of "coping" has garnered significant scholarly interest (Eskandari et al., 2022; Motamedi et al., 2020). As articulated by Geravand et al. (2019), this traumatic experience necessitates that mothers of

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

children with cancer employ maladaptive coping mechanisms that may be detrimental in their own right.

A salient variable warranting examination in mothers of children afflicted with cancer is the repertoire of coping strategies (Zahiri & Vaziri, 2024). Lazarus (1999) underscores the dynamic interplay between the individual and their environmental context within his theoretical framework. He posits that our interpretations of events render them either threatening or benign, independent of the events themselves; consequently, when an individual (either consciously or unconsciously) perceives an event as hazardous, they will engage with that stress accordingly. Nevertheless, coping is a developmental process designed to mitigate tension. During the initial phase of this process, the individual conducts a preliminary appraisal, which may or may not be influenced by their personality traits. The subsequent evaluation occurs when the individual perceives the situation as potentially perilous and seeks avenues to alleviate such stress. Effective coping necessitates resources, the most critical of which are health and vitality. The secondary resource is "positive belief," wherein the individual maintains a conviction in their capacity to surmount the resultant stress. The third resource encompasses "problem-solving skills," the fourth resource pertains to "social skills," and the final resource is "financial resources" (Nejad ahmadi & Moradi, 2014). One of the predominant concerns pertains to the financial implications and the apprehension regarding the potential recurrence of the disease in the pediatric patient post-treatment (Kim et al., 2022). Coping is conceptualized as a dynamic process that encompasses the responses and ramifications associated with stress-inducing stimuli. Individuals may develop divergent perceptions and evaluations of a given event. In essence, coping strategies serve as instruments for articulating emotions, thoughts, and engaging with established personality frameworks (Kim et al., 2022). These coping strategies may encompass a broad spectrum of methodologies, ranging from soliciting emotional support from social networks to employing problem-solving tactics. Caregivers of children afflicted with cancer frequently utilize coping mechanisms such as seeking social support, acquiring information regarding their child's medical condition, and adopting positive cognitive frameworks to (mitigate stressors associated with their child's illness (Cousino & Hazen, 2013). These coping modalities emphasize the regulation of the emotional repercussions stemming from distressing situations, with prevailing research indicating that emotion-focused coping is correlated with adverse adjustment outcomes. A prevalent approach for navigating a

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

challenging circumstance involves the active confrontation of the stressor and the endeavor to transform it. This approach is referred to as problem-focused coping. Problem-focused coping strategies encompass the pursuit of additional information to modify the problem's structure cognitively, alongside the prioritization of steps aimed at addressing the issue (Schoenmakers et al., 2015). Another variable of interest concerning mothers of children diagnosed with cancer is the construct of hardiness. The term "hardiness" is conventionally utilized to characterize individuals who exhibit greater resilience in the face of adverse circumstances and are less vulnerable to illness compared to their peers (Maddi, 2002). Kobasa et al. (1982) were among the inaugural researchers to endeavor to discern the moderating variables of stressors grounded in the theoretical framework posited by Hans Selye (Perdrizet, 1997). Such individuals frequently perceive themselves as possessing enhanced control over their lives, exhibit a greater attachment to their activities, and display increased adaptability to novel changes (Haidarabadi, 2014). Indeed, hardiness represents a facet of personality that enables individuals in high-stress scenarios to evolve positively rather than succumb to adversity through transformative processes (Eschleman et al., 2010). Resilient individuals invariably recognize that commitment interweaves with numerous dimensions of life, including familial, occupational, and interpersonal domains, thereby facilitating a comprehension of life's meaning and purpose. The struggle embodies the conviction that change constitutes a fundamental aspect of existence, wherein both favorable and unfavorable circumstances that necessitate adjustment are perceived not as threats but as opportunities for personal growth and learning. Resilience is not merely an intrinsic quality but rather a cultivated and acquired attribute. The genesis of this favorable characteristic as a facet of personality can be traced to diverse and beneficial childhood experiences, which progressively evolve into a pervasive attribute within the behavioral and emotional landscape of the individual. Such individuals exhibit a diminished struggle with the adverse aspects of their identity and existence, maintain elevated self-esteem, and prioritize positive occurrences over negative ones, often disregarding the significance of challenges, while actively endeavoring to address the resultant issues (Lee et al., 2015). Given that the quality of maternal relationships with family members has been empirically validated to influence both physical and mental health, as well as the success and psychosocial adaptation of couples and their offspring across various individual and societal dimensions, the orientation of coping mechanisms in forecasting psychological well-being, the

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

maternal experiences of children diagnosed with cancer (Furlong, 2017), and the concept of hardiness (Nasim Sobhan & Bgheri, 2016) assume considerable significance.

In light of the aforementioned considerations, it appears that mothers of children afflicted with cancer tend to employ more emotion-focused coping strategies and demonstrate lower levels of hardiness. Furthermore, the findings from the researcher's investigations indicate that there has been a lack of initiatives in Hamedan aimed at enhancing and adjusting the circumstances of these mothers, and this neglect has engendered a substantial void within the esteemed framework of the family and its societal repercussions. Consequently, this research endeavors to address the inquiry: Are there significant differences in the coping strategies and resilience between mothers of children with cancer and those of typically developing children in Hamedan?

Material and Methods

This investigation is classified as a causal-comparative study. The statistical population for this inquiry encompasses all mothers, both those with children diagnosed with cancer and those without, residing in Hamadan during the year 2024. There exists a deficiency of precise statistical data regarding the exact quantification of the aforementioned statistical population. According to statistics derived from Hamadan University of Medical Sciences, the estimated number of children under the age of 12 afflicted with cancer in Hamadan is approximately 130. Consequently, utilizing the Cochran formula, the determined sample size for this statistical population is 97 individuals, which was subsequently augmented to 100 individuals to enhance the accuracy of the research findings. Moreover, a sample size of 100 individuals was similarly established from the parallel population, specifically, mothers of healthy children devoid of cancer. The statistical samples were acquired through the available sampling technique employing a matching method. For the purpose of data analysis, SPSS version 28 software was utilized alongside multivariate analysis of variance and the independent groups t-test.

Instruments

Coping Strategies Questionnaire: The Lazarus Coping Strategies Questionnaire was conceived from the Coping Strategies Inventory devised by Folkman et al. (1986). Coping strategies encompass a collection of cognitive and behavioral endeavors undertaken by an individual aimed at interpreting, evaluating, and ameliorating a stressful circumstance, ultimately facilitating a

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

decrease in the resultant distress. It evaluates a comprehensive spectrum of cognitive processes and behaviors that individuals employ when confronted with both internal and external stressors. Given that the strategies delineated are those individuals have reported employing in response to the demands posed by stressful circumstances, the Lazarus Coping Strategies Questionnaire possesses face validity. In Iran, the instrument was standardized by Saffari et al. on a cohort of 763 second and third-year high school students. Within this analysis, the reliability was assessed, yielding Cronbach's alpha coefficients that ranged from 0.61 to 0.79. According to the findings, the validity of the questionnaire was deemed satisfactory (Saffari et al., 2015).

Hardiness Questionnaire: To evaluate this construct, the Kobasa Hardiness Questionnaire (Kobasa et al., 1982) was employed. The Kobasa Hardiness Scale serves as a reliable instrument for assessing hardiness and mental well-being. This assessment comprises three dimensions: challenge, commitment, and control, each encompassing 9 items, 7 items, and 4 items, respectively, which are elaborated upon subsequently. The Hardiness Questionnaire consists of 20 items, designed to evaluate the degree of hardiness and its associated factors among individuals. The scoring methodology of the Hardiness Questionnaire delineates that the response options of never, rarely, sometimes, and most of the time correspond to scores of 4, 3, 2, and 1, respectively. The aggregate of the total scores from these items is regarded as the individual's hardiness score, with a higher score indicating a greater level of hardiness in the respondent, and conversely. Kobasa et al. (1982) reported a correlation coefficient of 0.85 for the commitment dimension, 0.65 for the control dimension, and 0.70 for the challenge dimension, with his findings aligning with numerous studies on hardiness. Ghorbani and Watson (2005) translated this questionnaire for use in Iran, where its face and content validity were assessed and necessary modifications were implemented. In the preliminary validation of the Persian Hardiness Scale questionnaire, conducted across three cohorts of students, athletes, and patients, the psychometric properties were reported as follows: Cronbach's alpha coefficients varied from 0.88 to 0.93 for the commitment subscale, from 0.85 to 0.94 for the control subscale, from 0.89 to 0.95 for the combativeness subscale, and from 0.87 to 0.94 for the overall hardiness score, indicating robust internal consistency of the scale. The correlation coefficients of the scores, calculated over an interval of two to four weeks, ranged from 0.82 to 0.90 for the commitment subscale, from 0.80 to 0.88 for the control subscale, from 0.79 to 0.87 for the struggle subscale, and from 0.80 to 0.88 for the total

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

hardiness score, signifying adequate test-retest reliability for the scale. In the present study, the reliability of the questionnaire was determined utilizing the Cronbach's alpha method, yielding a coefficient of 0.82 for the commitment component, 0.71 for the control component, 0.56 for the struggle component, while the total Cronbach's alpha coefficient was recorded at 0.88.

Results

Main hypothesis: There exists a significant difference between coping strategies and hardiness among mothers of children diagnosed with cancer and those with typically developing children. To empirically evaluate this hypothesis, a multivariate analysis of variance was employed. The subsequent tables elucidate the findings derived from the assessment of this hypothesis:

Table 1. Comparative Analysis of Coping Strategies and Hardiness Among Mothers of Children with Cancer and Typically Developing Children

Variable	Group	N	Mean	SD	indices					
					S.S	DF	MS	F	P	Eta
Emotion-center strategies	Typical children	100	33.98	10.38	1788.02	1	1788.02	13.46	0.001	0.064
	Children with cancer	100	39.96	12.57						
Problem-center strategies	Typical children	100	36.92	12.02	2009.78	1	2009.78	15.74	0.001	0.074
	Children with cancer	100	30.58	10.53						
Hardiness	Typical children	100	41.36	6.18	327.68	1	327.68	11.72	0.001	0.056
	Children with cancer	100	38.80	4.21						

The data presented in Table 1 reveal that the test outcomes substantiate a statistically significant variance across all three dependent variables—emotion-focused strategies, problem-focused strategies, and hardiness —between mothers of typically developing children and those of children afflicted with cancer. This assertion is supported by the obtained F-statistics for the aforementioned variables, which were (13.461; 15.744; and 11.722), respectively, at a confidence level exceeding the requisite threshold (0.95 and <0.05 Sig). Consequently, the mean score for emotion-focused strategies among mothers of typically developing children was recorded at 33.98, whereas for mothers of children with cancer, it was 39.96; the mean score for problem-focused strategies among mothers of typically developing children was 36.92 compared to 30.58 for those of children with cancer; and the mean score for hardiness among mothers of typically developing children was 36.41, in contrast to 38.80 for mothers of children with cancer. This data leads to the

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]
[DOI: 10.22034/4.1.345]

conclusion that there are significant discrepancies in coping strategies and hardiness between mothers of children with cancer and those of typically developing children, with problem-focused strategies and assertiveness being more pronounced in mothers of typically developing children, while emotion-focused strategies were more prevalent among mothers of children with cancer.

First sub-hypothesis: There exists a significant difference in the coping strategies employed by mothers of children with cancer compared to those with typically developing children.

An independent groups T-test was utilized to rigorously test this hypothesis. The ensuing tables present the results obtained from this investigation.

Table 2. Comparative Analysis of Coping Strategies of Mothers of Children with Cancer and Typically Developing Children

Variable	Group	N	Mean	SD	Equality of Variances		T		
					F	P	T	DF	P
Emotion-center strategies	Typical children	100	33.98	10.38	3.26	0.072	-3.66	198	0.001
	Children with cancer	100	39.96	12.57					
Problem-center strategies	Typical children	100	36.92	12.02	1.02	0.31	3.96	198	0.001
	Children with cancer	100	30.58	10.53					

The findings delineated in Table 2 illustrate that the test results reveal a significant difference in the dependent variables, specifically both emotion-focused and problem-focused coping strategies, between mothers of typically developing children and those of children diagnosed with cancer. This conclusion is supported by the t-statistics obtained for these two variables, which were (-3.669 and 3.968), respectively, indicating a level of statistical significance surpassing the minimum acceptable threshold (0.95 and <0.05 Sig.). Additionally, the results demonstrated that the condition of homogeneity of variance for both coping strategies under investigation was satisfied, as the homogeneity of variance results between the two groups yielded an error level greater than 0.05 (Sig=0.072 and 0.313). Consequently, the statistically significant difference identified between these two groups in the realm of emotion-focused and problem-focused strategies is deemed valid, leading to the rejection of the null hypothesis and the affirmation of the research hypothesis.

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

Second sub-hypothesis: There exists a significant difference in the hardiness of mothers of children with cancer compared to those with typically developing children.

The Independent Samples T-test was employed to evaluate this hypothesis. The subsequent tables provide the findings derived from the examination of this hypothesis:

Table 3. Comparative Analysis of Hardiness in Mothers of Typically Developing Children and Mothers of Children with Cancer

Variable	Group	N	Mean	SD	Equality of Variances		T		
					F	P	T	DF	P
Hardiness	Typical children	100	41.36	6.18	2.63	0.106	3.42	198	0.001
	Children with cancer	100	38.80	4.21					

According to the data presented in Table 3, the results of the test reveal a statistically significant difference in the dependent variable, specifically hardiness, between mothers of typically developing children and those of children with cancer. This is evidenced by the t-statistic obtained for this variable, which was calculated at (3.424), exceeding the predetermined threshold for statistical significance (0.95 and <0.05 Sig). Moreover, supplementary results indicate that the mean resilience score for mothers of typically developing children was 36.41, whereas for mothers of children with cancer it was 80.38. Furthermore, the assessment of homogeneity of variance between the two participant groups yielded a p-value greater than 0.05 (Sig=0.106). Consequently, the statistically significant difference observed between these two groups in terms of hardiness is deemed valid, leading to the rejection of the null hypothesis and the affirmation of the research hypothesis.

Discussion

In elucidating this research outcome, it is pertinent to acknowledge that the diagnosis of cancer in pediatric patients constitutes not merely a physical and medical dilemma for the affected individual; it also holds significant implications for their immediate social circle, particularly for maternal figures, thereby engendering substantial emotional adversities, with mood disorders, heightened emotional responses, and an augmented susceptibility to fragility in personal, social, and familial relationships being among the most salient challenges. Although an exploration into the stressors and underlying determinants of mood and behavioral disorders in mothers of children

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

diagnosed with cancer necessitates comprehensive needs assessment research, it is noteworthy that a certain extent of such disorders, including emotion-centered coping strategies and diminished inflexibility, is inherently present in all mothers confronting the exigencies of acute illnesses in their offspring; however, taking into account the researchers' engagement with mothers throughout the data collection process and the researchers' implicit perceptions, it appears that, in addition to the absence of fundamental stress management competencies, specific deficiencies in support during the treatment trajectory of pediatric cancer patients, including financial burdens of treatment, constitute additional factors that exacerbate these disorders. This underscores the imperative for the provision of psychological services to mothers throughout the continuum of diagnosis and treatment of their children, as well as the recognition that alleviating disorders such as depression, stress, and anxiety among these mothers necessitates supportive interventions and the expansion of health insurance services.

In conclusion, it is essential to articulate that enduring severe and chronic illnesses represents a unique psychological predicament that jeopardizes both the physical and mental well-being of children and their familial units. The manifestation of a chronic illness exerts a profound influence on the trajectories of the child's and family's existence. Chronic conditions, particularly cancer, are concomitant with psychological complications that directly and indirectly impact the treatment course and the quality of life for both patients and their families. Certain scholars, such as Kamau et al. (2007), assert that cancer, as a chronic physical-psychological affliction, disrupts the continuum of life as a coherent and uninterrupted process; a disruption that may yield numerous psychological ramifications for the family and their associates.

Given its inherently challenging characteristics and unpredictable outcomes, the experience of cancer is invariably linked with elevated levels of ambiguity and emotional as well as psychological fluctuations for both the child and family from the point of diagnosis and throughout the treatment period (Taleghani et al., 2012). Undeniably, parents play a pivotal role in the physical and emotional maturation of their children. Within the familial context, the mother emerges as the primary individual possessing a direct and intimate relationship with the child, not solely during gestation but also in the postnatal environment. Consequently, during the trajectory of a child developing cancer and throughout the subsequent treatment for pediatric malignancies, the maternal figure is significantly more engaged in emotional struggles compared to others and

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

demonstrates a heightened need for perseverance and resilience. Empirical psychological and clinical investigations have indicated a rising prevalence of mental health disorders, including depression and anxiety, among parents of children afflicted with chronic illnesses (Barlow & Ellard, 2006). Mothers who are confronted with the diagnosis of their child's cancer endure a profoundly distressing situation within their familial context; they experience episodes of shock and disbelief upon receiving the diagnosis and are compelled to manage a dual burden. The illness of the child exerts considerable influence on the family unit, often resulting in parents resorting to emotional rather than rational decision-making in the face of the illness's challenging circumstances, consequently diminishing the overall quality of life for family members (Cohn et al., 2020). Given that mothers of children suffering from cancer frequently encounter a series of stressful events and persistent states of anxiety, worry, and confusion, their psychological resilience tends to diminish, leading to a reliance on more emotional coping mechanisms, which further impairs their ability to navigate difficult situations. Thus, the psychological resilience of parents is adversely affected, and this decline in resilience hampers individuals' adaptability to varying circumstances. Furthermore, the deterioration of resilience, accompanied by an increase in negative emotions, correlates with a decline in mental health and a corresponding reduction in life satisfaction. The experience of cancer inflicts a comprehensive array of stressors, including physical pain, disabilities, and limitations, upon both the child and the family. The findings substantiate that the escalation of psychological distress, manifesting as various disorders, is notably pronounced among mothers of children diagnosed with cancer (van Oers et al., 2014).

In conclusion, one of the limitations inherent in the present study is the insufficient consideration of the social, economic, and educational circumstances of the parents of the research participants, which may have yielded divergent results. Additionally, acknowledging the substantial influence of problem-oriented coping strategies and the psychological resilience of parents of children with cancer, it is recommended that, alongside pharmacological interventions, these factors be duly regarded; moreover, the identification of maladaptive coping strategies should be undertaken by psychologists and clinical counselors in conjunction with pharmacological treatments.

Data availability statement

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by the ethics committee of Islamic Azad University. The patients/participants provided their written informed consent to participate in this study.

Author contributions

All authors contributed to the study conception and design, material preparation, data collection, and analysis. All authors contributed to the article and approved the submitted version.

Funding

The authors did (not) receive support from any organization for the submitted work.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

Abdollahi, F., Sadeghi, N., & Moghimian, M. (2021). The effect of reality therapy on the hope of mothers of children with cancer [Research]. *Iranian Journal of Pediatric Nursing*, *7*(3), 36-42. http://jpen.ir/article-1-490-fa.html

Adelman, R. D., Tmanova, L. L., Delgado, D., Dion, S., & Lachs, M. S. (2014). Caregiver burden: a clinical review. *Jama*, *311*(10), 1052-1060.

Ball, J., & Bindler, R. M. (2008). *Pediatric nursing: Caring for children*. Prentice Hall.

Barlow, J. H., & Ellard, D. R. (2006). The psychosocial well-being of children with chronic disease, their parents and siblings: An overview of the research evidence base. *Child: care, health and development*, *32*(1), 19-31.

Black, R. E., Allen, L. H., Bhutta, Z. A., Caulfield, L. E., De Onis, M., Ezzati, M., . . . Rivera, J. (2008). Maternal and child undernutrition: global and regional exposures and health consequences. *The lancet*, *371*(9608), 243-260.

Bregman, L. (2017). Dying in five stages: Death and emotions in Kübler-Ross and her influence. *Pakistan Journal of Historical Studies*, *2*(2), 33-61.

Cohn, L. N., Pechlivanoglou, P., Lee, Y., Mahant, S., Orkin, J., Marson, A., & Cohen, E. (2020). Health outcomes of parents of children with chronic illness: a systematic review and meta-analysis. *The Journal of pediatrics*, *218*, 166-177. e162.

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

Cousino, M. K., & Hazen, R. A. (2013). Parenting stress among caregivers of children with chronic illness: a systematic review. *Journal of pediatric psychology*, *38*(8), 809-828.

Eschleman, K. J., Bowling, N. A., & Alarcon, G. M. (2010). A meta-analytic examination of hardiness. *International journal of stress management*, *17*(4), 277.

Eskandari, A., Marziyeh, A., & Pourghaz, A. (2022). Impact of Identity Style on Teachers' Academic Optimism Through Mediating Role Self-Management Strategies. *Iranian Evolutionary Educational Psychology Journal*, *4*(3), 504-515.

Finley, G. E., Mira, S. D., & Schwartz, S. J. (2008). Perceived paternal and maternal involvement: Factor structures, mean differences, and parental roles. *FATHERING-HARRIMAN-*, *6*(1), 62.

Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of personality and social psychology*, *50*(3), 571.

Furlong, E. P. (2017). Protecting: A grounded theory study of younger children's experiences of coping with maternal cancer. *Cancer nursing*, *40*(1), 13-21.

Geravand, P., Manshaei, G., & Nadi, M. a. (2019). Effectiveness of hope-oriented teaching through cognitive-spiritual method on psychological wellbeing and life quality of the mothers of the children suffering from cancer. *medical journal of mashhad university of medical sciences*, *62*(5), 1786-1796. https://doi.org/10.22038/mjms.2019.15250

Ghorbani, N., & Watson, P. (2005). Hardiness scales in Iranian managers: Evidence of incremental validity in relationships with the five factor model and with organizational and psychological adjustment. *Psychological reports*, *96*(3), 775-781.

Haghighat Lotfi, A., Monirpour, N., & Zargham Hajabi, M. (2014). The relationship between early maladaptive schemas and coping strategies with helplessness in families of cancer patients' caregivers. Bi-Quarterly Journal of Psychological Studies of Adolescents and Young Peopl. *Bi-Quarterly Journal of Psychological Studies of Adolescents and Young People*, *3*(1), 123-136.

Haidarabadi, Z. G. (2014). The comparison of effectiveness of reality therapy, positive looking and integrated model on increase of mothers hardiness (who have blind children) of tehran city. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, *3*(9), 130-145.

Kamau, R., Osoti, A., & Njuguna, E. (2007). Effect of diagnosis and treatment of inoperable cervical cancer on quality of life among women receiving radiotherapy at Kenyatta National Hospital. *East African medical journal*, *84*(1), 24-30.

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

Kim, J. H., Shim, Y., Choi, I., & Choi, E. (2022). The role of coping strategies in maintaining well-being during the COVID-19 outbreak in South Korea. *Social Psychological and Personality Science*, *13*(1), 320-332.

Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: a prospective study. *Journal of personality and social psychology*, *42*(1), 168.

Krantz, G., Forsman, M., & Lundberg, U. (2004). Consistency in physiological stress responses and electromyographic activity during induced stress exposure in women and men. *Integrative Physiological & Behavioral Science*, *39*, 105-118.

Lazarus, R. S. (1999). Hope: An emotion and a vital coping resource against despair. *Social research*, 653-678.

Lee, K. J., Lim, S. Y., & Kim, S. J. (2015). The relationship among stress, hardiness and self-esteem in middle-aged woman. *The journal of the Convergence on Culture Technology*, *1*(4), 51-57.

Maddi, S. R. (2002). The story of hardiness: Twenty years of theorizing, research, and practice. *Consulting psychology journal: practice and research*, *54*(3), 173.

Mahmoud Fakheh, H., Khademi, A., & Tasbihsazan, S. (2018). An Investigation into the Effectiveness of Logotherapy on the Happiness and Psychological Well-Being of the Mothers Having Cancer-Affected Children. *The Islamic Journal Of Women and The Family*, *6*(2), 113-132. http://pzk.journals.miu.ac.ir/article_1949_ac151e101e020c96ea80baecd3f0b9ba.pdf

Motamedi, H., Samavi, A., & Fallahchai, R. (2020). Effectiveness of group-based acceptance and commitment therapy vs group-based cognitive-behavioral therapy in the psychological hardiness of single mothers. *Journal of Research and Health*, *10*(6), 393-402.

Nasim Sobhan, F., & Bgheri, N. (2016). The prediction of life satisfaction based on coping style and hardiness in the mothers of mentally retarded children. *Empowering Exceptional Children*, *7*(1), 85-94. https://www.ceciranj.ir/article_63647_2eb532c84b8945c5f8f228b87390331e.pdf

Nejad ahmadi, N., & Moradi, A. (2014). Relationship between Mindfulness, Coping and Perceived Stress with Quality of Life in Cancer Patient. *Journal of Modern Psychological Researches*, *9*(35), 171-188. https://psychologyj.tabrizu.ac.ir/article_4036_4c9ef70a1cfe84e273158d587fe69d5d.pdf

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]

Perdrizet, G. A. (1997). Hans Selye and beyond: responses to stress. *Cell stress & chaperones*, *2*(4), 214.

Saffari, M., Pakpour, A. H., Yaghobidoot, M., Al Zaben, F., & Koenige, H. G. (2015). Cross-cultural adaptation of the spinal cord lesion-related coping strategies questionnaire for use in Iran. *Injury*, *46*(8), 1539-1544.

Schoenmakers, E. C., Van Tilburg, T. G., & Fokkema, T. (2015). Problem-focused and emotion-focused coping options and loneliness: how are they related? *European journal of ageing*, *12*, 153-161.

Shafiee, F., Shariatmadar, A., & Farahbakhsh, K. (2019). Investigating lived experiences of psychological stresses of cancerous children and their families at different stages of the disease. *Health Psychology*, *8*(31), 119-138. https://doi.org/10.30473/hpj.2019.41705.4094

Tahmasebi, Z., Roshanzadeh, M., & Tajabadi, A. (2023). Effectiveness of painting art therapy on fatigue of children with cancer undergoing chemotherapy: A randomized trial [Descriptive]. *Payesh (Health Monitor) Journal*, *22*(2), 215-221. https://doi.org/10.52547/payesh.22.2.215

Taleghani, F., Fathizadeh, N., & Naseri, N. (2012). The lived experiences of parents of children diagnosed with cancer in Iran. *European Journal of Cancer Care*, *21*(3), 340-348.

Van der Meer, P. H. (2014). Gender, unemployment and subjective well-being: Why being unemployed is worse for men than for women. *Social Indicators Research*, *115*(1), 23-44.

van Oers, H. A., Haverman, L., Limperg, P. F., van Dijk-Lokkart, E., Maurice-Stam, H., & Grootenhuis, M. (2014). Anxiety and depression in mothers and fathers of a chronically ill child. *Maternal and child health journal*, *18*, 1993-2002.

Zahiri, M., & Vaziri, K. (2024). Predicting Psychological Hardiness Based on Self-Regulation and Stress Coping Strategies. *Iranian Journal of Educational Research*, *3*(3), 255-266.

[Downloaded from ijer.hormozgan.ac.ir on 2026-11-20]

[DOI: 10.22034/4.1.345]