PERINATAL JOURNAL

Original Article

Perinatal Journal 2026; 34(1):311-321

https://doi.org/10.57239/prn.26.03410034

Effects of a solution-focused family adaptation program on families of children with cancer

Gune Gu, PhD[1], Sung Hee Lee, PhD[2]*

[1]Professor, Department of Nursing, Daegu Science College, Daegu, Republic of Korea
[2]Professor, College of Nursing, Kyungpook National University, Daegu, Republic of Korea

Abstract

In families of children with cancer, the accumulation of unresolved distress can progressively undermine overall family functioning, ultimately resulting in maladjustment. Such maladjustment may not only compromise the child's treatment and prognosis but, in severe cases, also lead to family dissolution. This study aimed to examine the impact of a solution-focused family adaptation program (SFAP) for families of children with cancer. This study adopted a two-group non-randomized quasi-experimental design, with the SFAP used as an intervention in the experimental group. Thirty-five family members of patients with childhood cancer were recruited, with 16 in the experimental group and 19 in the control group. From July to October 2018, the SFAP was conducted over eight sessions, twice a week, for 50 minutes each time. Outcome variables were related to family adaptation: integration, psychosocial stability, and medical service use. Measurements were taken at the following time points: pre-test (before the intervention) and post-test (immediately post-intervention). The effectiveness of the intervention in the two groups was analyzed using Quade's Rank Analysis of Covariance using the SPSS 21.0 software. After the SFAP, when baseline scores were adjusted for, the experimental group demonstrated significantly higher outcomes than the control group in family adaptation (95% CI: 3.56–20.27, p = .005), family integration (95% CI: 2.07–9.06, p = .002), and family psychosocial stability (95% CI: 0.84–6.25, p = .016). The SFAP was effective in improving family adaptation in families of children with cancer. To ensure its practical utility, the program needs to be customized based on the unique characteristics of these families in the community, both individually and collectively.

Keywords: Cancer, Social support, Family and child

Introduction

"Childhood cancer" collectively refers to various types of this malignant disease in individuals under the age of 18. Despite recent advances in medical technology, cancer has the highest fatality rate among childhood illnesses in South Korea. Furthermore, between 1,200 and 1,300 children in South Korea are diagnosed with childhood cancer each year [1]. Childhood cancer is considered a chronic disease that requires continuous treatment and management after its onset owing to a high risk of recurrence both during and after treatment [2].

Parents often experience negative emotions such as shock, confusion, and guilt upon their child's cancer diagnosis [3]. Families affected by childhood cancer face constant challenges associated with psychosocial distress, such as anxiety, depression, posttraumatic stress, and marital problems [4]. Furthermore, patients' socio-behavioral issues can lead to financial difficulties [5] and increased stress levels among their families [6]. The accumulation of unresolved distress can cause an imbalance in overall family functioning over time, resulting in a state of maladjustment [6], which severely affects the treatment and prognosis of children with cancer [7], potentially leading to the dissolution of the family [5].

Despite experiencing devastation after a childhood cancer diagnosis, relatives often adjust their functioning and systems to achieve balance and adaptation. Family adaptation refers to a state in which a family collaborates amidst a crisis, achieves psychosocial stability, and attains harmony and balance through the use of medical services [8]. Furthermore, positive family adaptation facilitates the development of positive cognitions, reduction of negative emotions, and improvement of overall life satisfaction in patients and their relatives [9]. Moreover, families that adapt well to a crisis can promote positive changes in the local community [6].

McCubbin and McCubbin [6] developed a "theory of resilience" for stress, adjustment, and adaptation in families under stress during a crisis. According to this theory, the family's level of adaptation is determined by interactions, type of functioning, evaluation of stress factors, resources, social support, and problem-solving skills in distressing situations [6]. Family resilience plays an important role in evaluating family functioning and stress factors, which have been confirmed to have a strong influence in these cases. Family resilience is

Correspondence: Sung Hee Lee, Professor College of Nursing, Kyungpook National University, Daegu, Republic of Korea, **e-mail:** leesh@knu.ac.kr,
Received: October 25, 2025 **Accepted:** December 1, 2025

improved when tension is low and family hardiness, social support, and problem-solving skills are high [10]. Therefore, it is necessary to seek ways to promote family resilience with the goal of enhancing family adaptation in crisis situations [10, 11].

In contrast to recent family therapy models, a solution-focused approach is more effective, particularly because participants take responsibility for change and treatment. In addition, a solution-focused approach facilitates positive changes based on past successful experiences [12]. In a previous study, a group program that applied a solution-focused approach positively affected resilience in children with school maladjustment and their families [13]. Moreover, the camp program, which aimed to increase resilience in divorced families, showed a mild change in family adaptation [14,24].

According to the theory of family resilience, the purpose of an intervention is to identify and use family resources to simultaneously yield positive results and gain positive experiences by overcoming a crisis [15]. Furthermore, solution-focused group counseling promotes a continuous positive effect through information sharing and mutual support among participants with similar challenges [15]. Both the theory of family resilience and solution-focused group counseling place limited emphasis on the family's maladjustment or pathological problems while highlighting the resources and capabilities required to mitigate stress and adversity.

Interventions aimed at improving family resilience using a solution-focused approach include the application of miracle, scaling, coping, and exception-finding questions, as well as implementing counseling breaks, delivering messages to members, and setting goals [16].

The conceptual model of this study

The theoretical framework of this study was grounded in the Resiliency Model of Family Stress, Adjustment, and Adaptation proposed by McCubbin and McCubbin [6]. This framework was employed to verify the effects of the solution-focused family resilience enhancement program on family adaptation among families of children with cancer. Specifically, the program was designed to reduce the level of family tension while simultaneously strengthening family hardiness, enhancing perceived social support, and improving family problem-solving coping. It was hypothesized that these mechanisms would collectively contribute to a higher level of family adaptation (Figure 1).

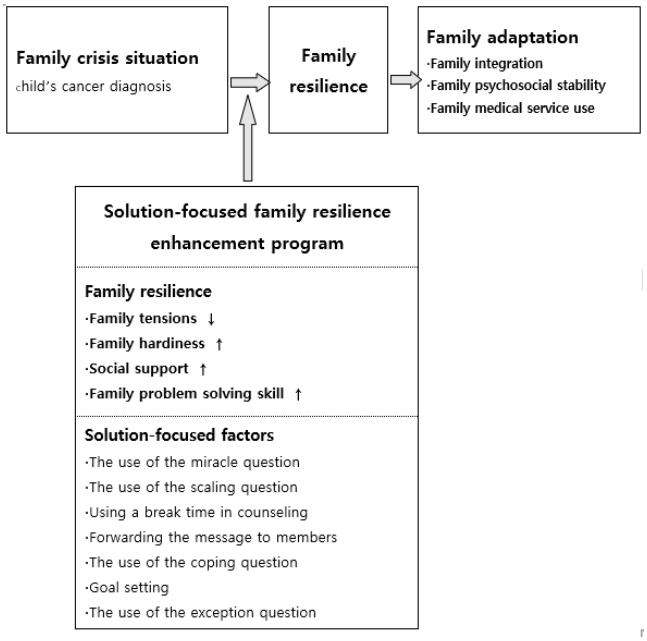

Figure 1. The conceptual model of this research

Methods

Study design

This study employed a two-group non-randomized quasi-experimental design. The SFAP was administered only to the experimental group, while both the experimental and control groups completed a pretest at baseline and a posttest after the intervention period.

Participants

The participants were family members of children undergoing pediatric cancer treatment at four university hospitals located in A and B cities, S. Korea as well as children registered with the Korea Childhood Leukemia Foundation. The inclusion criteria were as follows: (1) family members of children undergoing treatment post-remission of childhood cancer for a minimum of two months, (2) those able to read and comprehend the questionnaire, and (3) those who agreed to participate in the study after understanding its significance and purpose.

The rank-transformed ANCOVA (Quade test) is known to provide stable results when there are at least 15 participants per group [17]. Considering

the potential dropout rate and the relatively weak statistical power of nonparametric tests, 20 participants were assigned to both the experimental and control groups.

During the intervention, two participants from the experimental group withdrew owing to the hospitalization of their children, and one participant dropped out to care for the patient's sibling. Another participant could not complete the eight sessions of the program, resulting in a total dropout rate of four participants for the experimental group. Additionally, one participant from the control group could not be contacted for the post-test. Consequently, this study included 16 and 19 participants in the experimental and control groups, respectively (Figure 2).

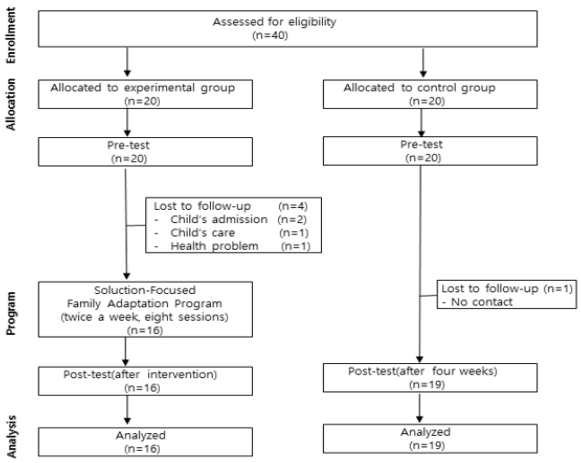

Figure 2. Flowchart of this study

Ethical considerations

This study was conducted in accordance with the ethical principles of the Declaration of Helsinki. Approval was obtained from the Institutional Review Board of Kyungpook National University (IRB No: 2018-0086). All participants were informed about the purpose and procedures of the study, and written informed consent was obtained prior to participation.

Measurements

Family adaptation

Tak and Lee's adaptation [18] of McCubbin et al.'s [19] Coping Health Inventory for Parents was employed after obtaining the authors' permission. The inventory consists of three factors—family integration, family psychosocial stability, and family medical service use—encompassing 45 items measured using a four-point Likert scale ranging from 1 (never) to 4 (always). Cronbach's α was 0.79 at the time of tool development and 0.91 in this study.

Family integration

Family integration evaluation comprised 19 of the 45 items and assessed the effort of family members in maintaining family stability, partners helping each other to care for their sick children, and trust in the medical institution for the children's treatment. The total score ranged from 19 to 76 points, and higher scores indicated higher levels of family integration. Cronbach's α was .79 at the time of tool development and .79 in this study.

Family psychosocial stability

Family psychosocial stability evaluation comprised 18 of the 45 items and assessed whether family members ate and slept appropriately and their efforts toward self-development. The total score ranged from 18 to 72 points, and higher scores indicated higher levels of family psychosocial stability. Cronbach's α was 0.71 at the time of tool development and 0.79 in this study.

Family medical service use

Family medical service use evaluation comprised 8 of the 45 items and assessed communication with individuals with similar problems and reading about the illness. The total score ranged from 8 to 32 points, and higher scores indicated higher levels of family medical service use. Cronbach's α was 0.71 at the time of tool development and 0.71 in this study.

Intervention: The SFAP

The SFAP for families of children with cancer was divided into three stages: early, middle, and late. During the early stage, emphasis was placed on forming relationships and setting goals. During the middle stage, the goal was to identify various strengths and resources within the family. Finally, the focus in the late stage was on strengthening problem-solving and coping skills and expanding the various strengths and resources identified in the middle stage. The solution-oriented questioning technique focused on improvements based on the interaction of group members, in addition to the representative questioning technique appropriate

for enabling the accomplishment of the goal for each session based on activities.

The SFAP for families of children with cancer was provided directly to the experimental group over eight sessions held twice a week for four weeks. Each session consisted of 10, 30, and 10 minutes of introduction, development, and wrap-up, respectively. Furthermore, solution-focused activities were conducted through group counseling, education, presentation, and discussion to reduce family stress and improve the primary factors associated with family resilience. The details of each program session are shown in Table 1.

Table 1. Solution-Focused family adaptation program

Session	Main factors in family adaptation	Main factors in family resilience	Goals	Activities	Solution-focused approach
1		•Family Tensions	•Creating Relationships	• Greetings and introductions with the researcher	•Relationship formation
	•Family Psychosocial Stability			• Introducing the program's goals and content	•Using a break time in counseling
			•Reducing Tensions	• Member introduction and relationship formation	
				• Exploring the family members' understanding of childhood cancer	
2	•Family Medical Service Use	•Family Hardiness		• Education: Appropriate understanding of childhood cancer	•Use of the miracle question
			•Identifying Problems	• Identifying the current location of the family members	•Use of the scaling question
				• Future location of the family members	•Forwarding the message to members
			•Exploring Specific Goal Setting	• Drawing a scale graph	
				• Praising	
				• Challenge: Thinking about what will change if you scored one point on your current scale	
3	•Family Integration	•Social Support	•Setting specific goals	• Questions about change since the last session	•Focusing on the change
			•Exploring diverse family strengths and resources	• Setting a small, family-friendly, and feasible goal	(EARSa)
				• Exploring the family strengths and resources	•Goal setting

					•Use of the exception question
					•Using a break time in counseling
4		•Family Hardiness	•Exploring diverse strengths and resources around your family	• Exploring social resources for patients with pediatric cancer and their families	•Use of the coping question
	•Family Psychosocial Stability	•Family Problem-Solving Coping Skill		• Drawing a scale graph	•Use of the scaling question
				• Praising	•Forwarding the message to the members
				• Challenge: Trying to increase your current score by one point	
5	•Family Integration	•Family Hardiness	•Strengthening diverse family strengths and resources	• Exploring and reinforcing effective problem-solving strategies for the families	•Focusing on the change
		•Social Support		• Education: Effective communication methods for the families	(EARSa)
		•Family Problem-Solving Coping Skill			•Use of the exception question
					•Using a break time in counseling
6	•Family Integration	•Family Hardiness	•Strengthening Solution-Focused Problem Coping Ability	•Family counselors' activities for families of children with pediatric cancer	•Use of the scaling question
	•Family Psychosocial Stability	•Social Support		• Drawing a scale graph	•Forwarding the message to the members
	•Family Medical Service Use	•Family Problem-Solving Coping Skill		• Praising	
				• Challenge: Trying to increase your current score by one point	
7	•Family Integration		•Amplifying diverse strengths and resources	• Expanding diverse strengths and resources available to the families	•Focusing on the change
	•Family Psychosocial Stability			• Expanding diverse resources for the families and neighborhoods using relationships and resource maps	(EARSa)

	•Family Medical Service Use				•Use of the relationship question
					•Using a break time in counseling
8			•Maintaining and Amplifying Positive Changes	• Sharing methods for maintaining and expanding positive changes	
				• Reviewing the entire program	•Use of the scaling question
				• Drawing a scale graph and checking target points	•Forwarding the message to members
				• Praising	
				• Organizing the program and sharing your impressions	

aEARS: Elicit, Amplify, Reinforce, Start again

Data analysis

The data were analyzed using SPSS 21.0 WIN software (IBM Corp., Armonk, NY, USA). The t-test was employed to assess the homogeneity of the dependent variables, while the Shapiro–Wilk tests was used to examine their normality. Because the measurement variable did not meet the assumption of normality, Quade's Rank Analysis of Covariance was used to assess the differences between the experimental and control groups before and after program.

Results

Homogeneity test of general characteristics and dependent variables

The results of the homogeneity test of the participants' general characteristics and dependent variables did not show any statistically significant differences between the experimental and control groups, indicating that both groups were homogeneous (Table 2,3).

`Table 2. Homogeneity test of general characteristics (n = 35)

	Characteristics	**Categories**	**Exp. (n = 16)**	**Cont. (n = 19)**	**χ 2**	***p***
			n (%)	n (%)		
Family	Relationship	Mother	14 (87.5)	17 (89.5)	.03	.855
		Father	2 (12.5)	2 (10.5)		
	Age (yrs.)	≤ 30	9 (56.3)	12 (63.2)	.17	.678
		≥ 31	7 (43.7)	7 (36.8)		
	Educational level	High school	5 (31.2)	6 (31.6)	< .01	.983
		College or higher	11 (58.8)	13 (68.4)		
	Religion	Yes	8 (50.0)	11 (57.9)	.22	.640
		No	8 (50.0)	8 (42.1)		
	Monthly income (10,000 won)	< 300	9 (56.3)	7 (36.8)	1.40	.496
		300–499	3 (18.7)	6 (31.6)		
		≥ 500	4 (25.0)	6 (31.6)		
	Caring time (hrs.)	≤ 12	5 (31.2)	3 (15.8)	1.18	.278
		≥ 13	11 (68.8)	16 (84.2)		
Children	Sex	Male	12 (75.0)	11 (47.8)	1.13	.280
		Female	4 (25.0)	8 (66.7)		

	Age (yrs.)	≤ 6	8 (50.0)	9 (47.4)	.02	.870
		7–12	8 (50.0)	10 (52.6)		
	Diagnosis	Leukemia	13 (81.3)	14 (73.7)	.06	.803
		Others	3 (18.7)	5 (26.3)		
	Time since diagnosis (yrs.)	< 1	6 (37.5)	6 (31.6)	.14	.932
		1–> 2	4 (25.0)	5 (26.3)		
		≥ 2	6 (37.5)	8 (42.1)		
	Treatment status	Consolidation	2 (12.5)	6 (31.6)	1.79	.181
		Maintenance	14 (87.5)	13 (68.4)		

Cont.: Control group; Exp.: Experimental group Verification of the impact of the program

Table 3. Homogeneity Test of the variables in the pretest (n = 35)

Variables	Exp. (n = 16)	Con. (n = 19)	T	*p*
	M ± SD	M ± SD		
Family Adaptation	141.3 ± 14.0	137.9 ± 13.90	.72	.475
Family Integration	61.7 ± 5.42	59.7 ± 6.00	1.03	.312
Family Psychosocial Stability	52.9 ± 6.00	51.4 ± 5.80	.73	.472
Family Medical Service Use	26.8 ± 3.62	26.8 ± 2.88	.04	.972

After adjusting for the pretest scores, the adjusted mean family adaptation score was 150.13 (SE = 3.33) in the experimental group and 138.21 (SE = 2.67) in the control group. The between-group difference of 11.91 points was statistically significant (95% CI: 3.56–20.27, p = .005). Among the subdomains of family adaptation, the adjusted mean score for family integration was 64.25 (SE = 1.43) in the experimental group and 58.68 (SE = 1.07) in the control group, showing a significant difference of 5.57 points (95% CI: 2.07–9.06, p = .002). The adjusted mean score for family psychosocial stability was 57.44 (SE = 1.40) in the experimental group and 52.90 (SE = 1.21) in the control group, with a significant difference of 4.54 points (95% CI: 0.84–6.25, p = .016). In contrast, the adjusted mean score for family utilization of medical services was 28.44 (SE = 0.80) in the experimental group and 26.63 (SE = 0.51) in the control group; although the difference of 1.81 points favored the experimental group, it did not reach statistical significance (95% CI: –0.06–3.67, p = .057)(Table 4, Figure 3).

Table 4. Adjusted means and pairwise comparisons of post-test adaptation by group (ANCOVA) (n = 35)

Categories	Group	Adjusted Mean	SE	Mean Difference	SE	95%CI (Lower-Upper)	*p*
Family adaptation	Exp.	150.13	3.33	11.91	4.27	3.56-20.27	.005
	Con.	138.21	2.67				
Family integration	Exp.	64.25	1.43	5.57	1.78	2.07-9.06	.002
	Con.	58.68	1.07				
Family psychosocial stability	Exp.	57.44	1.40	4.54	1.89	.84 - 6.25	.016
	Con.	52.90	1.21				
Family medical service use	Exp.	28.44	.80	1.81	.95	-.06 - 3.67	.057
	Con.	26.63	.51				

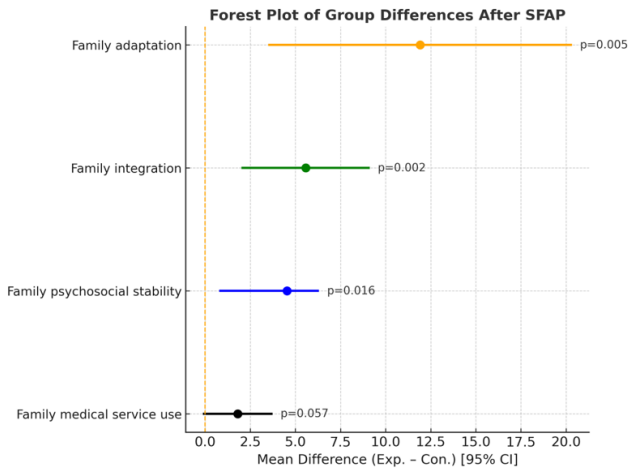

Figure 3. Forest plot of group differences after SFAP
Note. Points represent mean differences (Exp.–Con.); horizontal lines indicate 95% confidence intervals; the vertical dashed line denotes no difference (0). p-values are shown to the right of each outcome.

Discussion

After program completion, the family integration score was significantly higher in the experimental group than in the control group. This finding was consistent with the results of a study by Tvrdik [20], who reported significant changes in the level of family integration after providing structured interventions on health care for parents of children with Prader-Willi Syndrome. In the present study, the family members participated in the "Drawing a Tree of Strength" activity using a worksheet, in which the tree signified various strengths of the family members, while the surrounding raindrops represented various resources. This activity was intended to remind the family members of the various support systems accessible to them and to help them understand the importance of these resources. To enhance their solution-focused problem-solving skills, the family members learned and practiced the use of an "I-message," a representative method of efficient communication. This activity was informed by the importance of communication as a strategy for family problem-solving [6]. The purpose of this training was to enable the family members to use an "I-message" when communicating and conveying external problem behaviors or situations in a robust yet polite manner. Furthermore, to promote family hardiness and problem-solving skills, the researcher asked the participants exception-finding questions such as, "When did the problem not occur?" The purpose of these questions was to help distance the participants from the center of the problem and to realize their successful experiences to reinforce their strengths. Therefore, the level of family integration among the participants appeared to improve through activities promoting family hardiness, social support, and problem-solving skills.

The experimental group exhibited a significantly higher family psychosocial stability score than the control group. This finding is consistent with that reported in a study conducted by Kim and Kim [21], wherein psychosocial adaptation improved self-esteem and communication skills while reducing aggression upon implementing the solution-focused group intervention program among children living in poverty. The present results further support the finding that psychosocial stability is closely associated with the coping skills of the families of children with epilepsy [22]. In the study by Kim and Kim [21], the counselor delivered a message to the participants at the end of the program that was intended to compliment, recognize, and reinforce their strengths and good practices during the program. In the current study's program, the researcher delivered messages, including compliments, to family members at the end of each week. This activity aimed to provide positive feedback as an important strategy for problem-solving counseling [22]. Furthermore, the study rewarded participants during the program and reinforced their strengths to enhance self-esteem, helping them re-recognize and reinforce their experiences during challenging situations and support their families in overcoming difficult situations.

After completion of the program, no significant difference was observed between the experimental and control groups in family utilization of medical services. This finding contrasts with McCubbin et al. [8], who reported that communication with health professionals and with other parents in similar situations facilitated understanding of the medical context and subsequently increased the use of medical services by family members. In the present study, participants were positioned as "experts" on childhood cancer to strengthen social support and problem-solving skills. Through the "Family Counseling Committee" activities, participants assumed the role of childhood cancer health experts, sharing and presenting successful family experiences. These activities were designed to encourage the exchange of advice on challenges faced, to foster reciprocal psychological dynamics, and to reinforce problem-solving capacity. Therefore, it was anticipated that enhanced

problem-solving would lead to increased utilization of medical services. However, James et al. [23] noted that families of children diagnosed with cancer already demonstrate higher medical service utilization than those dealing with general illnesses, due to the need for more diverse and specialized care. In line with this, the present study suggests that the high baseline level of family medical service utilization may have masked the effect of the program, indicating a ceiling effect.

This study has significant implications for nursing practice. First, in the context of nursing research, this is the first study to provide an intervention based on a solution-focused approach for families of children with cancer. Second, in the context of nursing theory, this study contributes to expanding existing nursing knowledge by applying and validating a healthcare intervention that combines a solution-focused approach with the theory of family resilience.

Conclusions

This study aimed to verify the impact of an SFAP on families of children with cancer based on the resilience model of family stress, adjustment, and adaptation. The results indicated that family adaptation improved significantly with increasing levels of family integration, psychosocial stability, and medical service use. Therefore, the solution-focused approach emphasizing the strengths of the participants was determined to be effective in enhancing family adaptation. Consequently, the resilience model of family stress, adjustment, and adaptation presented by McCubbin and McCubbin [6] was verified empirically. The proposed program can be employed as a nursing intervention to improve adaptation in families of children with cancer.

Acknowledgements

This article is based on a portion of the first author's doctoral dissertation at the Graduate School of Kyungpook National University.

Orchid Ids

Gune Gu https://orcid.org/0000-0002-0773-55275

Sung Hee Lee https://orcid.org/ 0000-0002-5622-5677

Ethical approved

This study was conducted in accordance with the ethical principles of the Declaration of Helsinki. Approval was obtained from the Institutional Review Board of Kyungpook National University (IRB No. 2018-0086). All participants were informed about the purpose and procedures of the study, and written informed consent was obtained prior to participation.

Consent for publication

Not applicable

Author contributions

- Gune Gu: Conceptulization; Methodology; Investigation; Writing-original draft
- Sung Hee Lee: Conceptulization;Methodology; Formal analysis; Validation; Writing-review&editing

Declaration of conflicting interest

Not applicable

References

1.Park, YR. (2022). A study on the policy of providing medical treatment and integrated support at the national and regional level through analysis of the treatment status of pediatric and adolescent cancer patients. Ministry of Health and Welfare, Republic of Korea.

2.Wallace WHB, Thompson L, Anderson RA, Guideline Development Group. Long term follow-up of survivors of childhood cancer: summary of updated SIGN guidance. BMJ. 2013;346(1):f1190. https://dx.doi.org/10.1136/bmj.f1190

3.Vrijmoet-Wiersma CMJ, van Klink JMM, Kolk AM, Koopman HM, Ball LM, Maarten Egeler R. Assessment of parental psychological stress in pediatric cancer: a review. J Pediatr Psychol. 2008;33(7):694–706. https://dx.doi.org/10.1093/jpepsy/jsn007

4.Yalug I, Corapcioglu F, Fayda M, Aksu G, Basar E, Yalug K, et al. Posttraumatic stress disorder and risk factors in parents of children with a cancer diagnosis. Pediatr Hematol Oncol. 2008;25(1):27–38. https://dx.doi.org/10.1080/08880010701

704048
5 Tremolada M, Bonichini S, Alto, G, Pillon M, Carli M, Weisner TS. Parental perceptions of health-related quality of life in children with leukemia in the second week after the diagnosis: a quantitative model. Support Care Cancer. 2011;19(5):591–8. https://dx.doi.org/10.1007/s00520-010-0854-5
6.McCubbin MA, McCubbin HI. Resiliency in families: a conceptual model of family adjustment and adaptation in response to stress and crisis. Madison: University of Wisconsin System; 1996. p. 1–64.
7.Dolgin MJ, Phipps S, Fairclough DL, Sahler OJZ, Askins M, Noll RB, et al. Trajectories of adjustment in mothers of children with newly diagnosed cancer: a natural history investigation. J Pediatr Psychol. 2007;32(7):771–82. shttps://dx.doi.org/10.1093/jpepsy/jsm013
8.McCubbin HI, Thompson AI, McCubbin MA. Family measures: stress, coping and resiliency. HI: Kamehameha Schools; 2001. p. 274–80.
9.Cadell S, Kennedy K, Hemsworth D. Informing social work practice through research with parent caregivers of a child with a life-limiting illness. J Soc Work End Life Palliat Care. 2012;8(4):356–81. https://dx.doi.org/10.1080/15524256.2012.732021.
10.Luthar SS, Cicchetti D, Becker B. The construct of resilience: a critical evaluation and guidelines for future work. Child Dev. 2000;71(3):543–62. https://dx.doi.org/10.1111/1467-8624.00164
11.Walsh F. Family resilience: a framework for clinical practice. Fam Process [Internet]. 2003 Spring [cited Year month day];42(1):1–18. Available from: https://doi.org/10.1111/j.1545-5300.2003.00001.xs
12.Franklin C, Zhang A, Froerer A, Johnson S. Solution focused brief therapy: a systematic review and meta-summary of process research. J Marital Fam Ther [Internet]. 2017 [cited Year month day];43(1):16–30. Available from: https://dx.doi.org/10.1111/jmft.1219313.
13.Chung MJ, Eo JK. Development and evaluation of a solution-focused group counseling program for maladaptive school children. Korean J Fam Ther. 2004;12(1):107–38.
14.Choi JS, Jeon MH, Yang HW, Kim HS. A study on the development of a family camp program for the enhancement of family resilience for divorced families. Family and Family Therapy. 2015;23(1):23–53. https://doi.org/10.21479/kaft.2015.23.1.23
15.Ryu CH, Eo JK. The effect of solution focused brief group counseling program for improvement of self-esteem, parenting self-efficiency, and social problem-solving ability - mothers of developmentally disabled preschool children. Family and Family Therapy. 2014;22(1):1–28. https://doi.org/10.21479/kaft.2014.22.1.1
16.De Shazer S, Berg IK. 'What works?' Remarks on research aspects of solution focused brief therapy. Fam Ther. 1997;19(2):121–4. https://dx.doi.org/10.1111/1467-6427.00043
17.Zimmerman D W. Validity of the rank transformation test for interaction in factorial designs. *Psychol. Methods. 1998; 3*(3): 354–368. https://doi.org/10.1037/1082-989X.3.3.354
18. Tak YR, Lee HY. Family stress, perceived social support, and coping in family who has a developmentally disabled child. Korean J Child Health Nurs. 1997;3(1):42–9.
19.McCubbin HI, McCubbin MA, Patterson JM, Cauble AE, Wilson LR, Warwick W. CHIP. Coping Health Inventory for parents: an assessment of parental coping patterns in the care of the chronically ill child. J Marriage Fam. 1983;45(2):359. https://dx.doi.org/10.2307/351514
20.Tvrdik T, Mason D, Dent KM, Thornton L, Hornton SN, Viskochil DH, et al. Stress and coping in parents of children with Prader-Willi syndrome: assessment of the impact of a structured plan of care. Am J Med Genet Part A. 2014;167(5):974–82.
21.Kim YS, Kim EY. A solution-focused group approach to helping children in poverty. Korean. J Fam Ther. 2009;17(2):153–73.
22. Hobdell EF, Grant ML, Valencia I, Mare J, Kothare SV, Legido A, et al. Chronic sorrow and coping in families of children with epilepsy. J Neurosci Nurs. 2007;39(2):76–82 https://dx.doi.org/10.1097/01376517-200704000-00003
23.Miser JS, Shia BC, Kso YW, Liu YL, Chen SY, Ho WL. The health care utilization and medical

costs in long-term follow-up of children diagnosed with leukemia, solid tumor, or brain tumor: Population-based study using the national health insurance claims data. JMIR Public Health amd Surveill. 2023;9:e423502023 https://dx.doi.org/doi:10.2196/42350

24. Jam, F. A., Ali, I., Albishri, N., Mammadov, A., & Mohapatra, A. K. (2025). How does the adoption of digital technologies in supply chain management enhance supply chain performance? A mediated and moderated model. Technological Forecasting and Social Change, 219, 124225.