Original Article

The influence of fathers' parenting participation with disabled children on parenting stress in mothers

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Abstract. [Purpose] The purpose of this research was two-fold: (1) to evaluate the effects of father's parenting participation on parenting stress among mothers with disabled children and (2) more specifically, to investigate the importance of fathers' parenting participation in decreasing mothers' parenting stress. [Subjects and Methods] To examine these relationships, this study recruited 82 mothers with disabled children from rehabilitation centers in the Gwangju city. The common characteristics of parents and children, father's parenting participation, and mother's parenting stress were assessed using standard questionnaires. [Results] Based on mother reports, findings suggest that as fathers' parenting participation increases mothers' parenting stress decreases. [Conclusion] The present study reveals a need for improvement in parenting education and in providing fathers of disabled children with a temporary leave of absence from work. Specifically, this research highlights the importance of shared parenting responsibilities among family members. Finally, our findings suggest that developing a standardized national program for assisting parents with disabled children may help decrease parenting stress in mothers. **Key words:** Disabled children, Parenting, Stress

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INTRODUCTION

Parenting stress escalates at a much faster rate among mothers of disabled children in comparison to mothers of non-disabled children. A disability affects not only the individual, but the family as well¹). The addition of a disabled child to a family requires parents to adopt new roles and responsibilities and, in turn, creates a change in the function of the family system. Indeed, disabled children often demand more effort in daily activities and social integration than non-disabled children. For example, in terms of social integration, disabled children who rely on others for an extended period of time due to a lack of independence tend to cause long-term parenting stress in mothers. Therefore, mothers may experience similar levels of stress as their disabled child²).

The personal growth and psychological development of children appear to be influenced by parental attitudes. Specifically, parents' mental stability and psychological traits have been found to significantly impact disabled children¹). Further, the behavior and disposition of disabled children are largely affected by their social surroundings and thus, their parents' stress³). Parents who experience repeated parenting stress typically react negatively to children and, due to their parents' adverse reaction, children respond with behavior that, once again, evokes poor parenting behavior. Not surprisingly then, higher levels of mother-reported parenting stress are associated with higher levels of denial and coercive parenting behavior. Therefore, parenting stress is considered a salient predictor of inappropriate parenting behavior among mothers^{1, 3}).

Parenting stress among mothers is elicited by psychological and child-related factors as well as environmental factors, such as family income, and supporting factors, including fathers' parenting participation^{4–7}). Previous studies focused on the role of fathers in reducing the experience of parenting stress among mothers, because, traditionally, they are mothers' closest companions^{8, 9}). By assuming the role of an androgynous father, fathers reduce the negative effects of gender roles by interacting at a deeper level with their children. Therefore, the need to socially introduce a new concept regarding the role of family members through research on fathers' parenting participation is being magnified⁸). However, fathers' parenting participation as a factor

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for parenting stress in mothers with disabled children has not been adequately studied. Thus, the objective of this study was to examine a novel concept regarding the role of fathers by investigating the relationship between fathers' parenting participation and the parenting stress experienced by mothers who are primary caregivers for disabled children. Broadly, this research will examine traditional parenting approaches, which places responsibility on the mother, against more egalitarian parenting.

SUBJECTS AND METHODS

The sample consisted of mothers with disabled kindergarteners who attended a day care center or a rehabilitation center for the disabled in Gwangju. One hundred questionnaires were distributed to randomly selected participants, while 83 were completed and returned. As one questionnaire was returned with missing data, 82 were included in the analyses. The study was carried out in accordance with the International Ethical Guidelines and the Declaration of Helsinki and was approved by the local Institutional Review Board. All participants signed consent forms.

The survey comprised a series of questions about general characteristics (Table 1), parenting participation by fathers, and parenting stress in mothers. The characteristics were categorized into parent information and child information. The former included age, mother's employment status, education level, type of family couple's co-residence status, and family income, while the latter included gender, age, diagnosis, cause of disease, gestation period, birth weight, and birth order. The study used a modified version of a questionnaire designed by Lamb the validity and reliability of which was verified in a previous study on fathers' parenting participation, support of a spouse, and parenting role satisfaction¹⁰⁾. The questionnaire of fathers' parenting participation consisted of 30 questions: 10 relating to interaction with family, 10 on guidance, 5 on housekeeping activities, and 5 on recognition and leisure activities. For each question, a 5-point Likert scale with responses from "not at all (1)" to "strongly agree (5)" was used, and the score ranged from 30 points to 150 points. Thus, a high score overall implied high levels of the aforementioned areas of participation. This study measured the parenting stress in mothers by using the Parenting Stress Index/Short Form (PSI/SF), which is based on the 101 questions of the Parenting Stress Index developed by Abidin¹¹). The PSI/SF is divided into 3 broad subscales based on the source of the mothers' stress-parental distress, parent-child dysfunctional interaction, and difficult childfor a total of 35 questions. For each question, a 5-point Likert scale ranging from "not at all (1)" to "strongly agree (5)" was used. Total scores could range from 35 points to 175 points, whereby higher scores are associated with higher levels of parenting stress. A total score higher than 90 points may indicate that the participant requires professional help.

SPSS version 20.0 for Windows (SPSS Inc., Chicago, IL, USA) was used to analyze the data. A frequency analysis was conducted to examine the demographic characteristics of the participants. To examine the reliability of the questionnaire, Cronbach's alpha was computed on the parenting participation and parenting stress scales. Subsequently,

Table 1.	General	characteristics	of the	household	(N=82)	
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Classification	1	Frequency (number)	Percentage (%)
Employ status	Employed	28	34.1
of mothers	Unemployed	54	65.9
	Couple	75	91.5
	Children	82	100.0
Co-residing	Father in law	4	4.9
family	Mother in law	6	7.3
members	Father	2	2.4
	Mother	4	4.9
	Others	2	2.4
	No	75	91.5
Reason of	Occupational issues	3	3.7
couple's	Couple issues	0	0.0
separation	Divorce	3	3.7
	Death	1	1.2
Child's	Male	50	61.0
gender	Female	32	39.0
	Brain lesions	45	54.9
	Down's syndrome	3	3.7
Diagnosis of	Intellectual disability	12	14.6
child	Developmental disorder	6	7.3
	Autism	3	3.7
	Others	13	15.8
	No response	8	9.8
A as af shild	3-6 years old	42	51.2
Age of child	7-12 years old	29	35.4
	Older than 13 years old	3	3.7

descriptive statistics were conducted. Fibally, the Pearson's product-moment correlation coefficient was used to examine a correlation between parenting participation by fathers and parenting stress in mothers.

RESULTS

The fathers' parenting participation mean score was 105.9 points, which indicates that, on average, fathers showed greater than moderate participation in parenting. The mean score on fathers' "interaction with family", "guidance", and "recognition, play, and leisure activities" were 35.6, 35.9, and 16.5 points respectively. Accordingly, when the scores on each of the subscales were converted to 100 points, the effective score was mostly found to be over 70 points (Table 2). Out of the highest possible score of 175 points, the average mothers' parenting stress was 92.7 points. When this was converted into 100 points, the score was found to be about 52 points, indicating that parenting stress in mothers with disabled children was moderate (Table 3).

A higher level of parenting participation by fathers was associated with a lower level of parenting stress in mothers. With reference to the subscales of parenting participation by fathers and parenting stress experienced by mothers, fathers' scores on "interaction with the family," "guidance,"

Classification

Guidance

Total score

Interaction with family

Housekeeping activities

Recognition, play, leisure activities

Table 3. Descriptive statistics on the sub-scales of parenting	
participation by mothers $(N=82)$	

Classification	Mean	Standard deviation
Distress of mothers	34.0	7.6
Dysfunctional interaction with children	29.1	6.8
Difficult child	29.6	6.2
Total score	92.7	17.2

Table 4. Correlations between the subscales of parenting participation by fathers and parenting stress in mothers (N=82)

Standard

deviation

7.8

7.3

6.2

4.4

22.4

Mean

35.8

35.9

17.7

16.5

105.9

	Distress of mothers	Dysfunctional interaction with children	Difficult child	Total score on parenting stress in mothers
Interaction with the family	-0.355**	-0.195	-0.141	-0.284**
Guidance	-0.369**	-0.271^{*}	-0.218^{*}	-0.348^{**}
Housekeeping activities	-0.329**	-0.199	-0.299^{**}	-0.331**
Recognition, play, and leisure activities	-0.367**	-0.191	-0.109	-0.276*
Total score on parenting participation by fathers	-0.407^{**}	-0.249*	-0.225^{*}	-0.358**

*p<0.05, **p<0.01

"housekeeping activities," and "recognition, play, and leisure activities" showed a significant negative correlation on mothers' distress score. However, with reference to the subscales of mothers' parenting stress, the score on "dysfunctional interaction with children" revealed a significant negative correlation with fathers' participation in "guidance" as well as the total score on parenting participation by fathers. Further, the "difficult child" subscale score had a significant negative correlation with "guidance," "housekeeping activities," and fathers' parenting participation total score. Finally, all subscales of parenting stress in mothers were negatively correlated with the total score on parenting participation by fathers (Table 4).

DISCUSSION

The present study aimed to examine the relationship between parenting participation by fathers and parenting stress experienced by mothers with disabled children. It also aimed to provide baseline data for facilitating positive parenting participation by fathers in order to decrease parenting stress experienced by mothers. Results show that higher levels of mother-perceived father participation in parenting are associated with lower levels of distress among mothers. However, although "dysfunctional interaction with children" and "difficult child" had significant positive correlations with both fathers' parenting participation and mothers' parenting stress, the correlation was below a moderate level. The fathers' "interaction with the family" and "recognition, play and leisure activities" with the child were not significantly correlated.

Recently, several studies examined the relationship between fathers' parenting participation and mothers' parenting stress by focusing on parents with disabled children^{8, 9)}. Son examined a structural relationship among parenting participation by fathers, parenting stress of mothers, and parenting efficacy, and verified a mediating effect of mothers' parenting stress on the relationship between fathers' parenting participation with disabled children, and fathers' parenting efficacy. Furthermore, Son found a mediating role of mothers parenting stress on the relationship between fathers' parenting participation with disabled children and mother's parenting efficacy⁸). In support of this, the present study also found a negative relationship between fathers' parenting participation, as perceived by mothers, and mothers' self-rated parenting stress. Notably, Son's study found that the fathers' interaction with the family had the strongest correlation with mothers' parenting stress. According to the mothers' reports, fathers' interactions with their families reflected that fathers respected the mothers' opinions, felt responsible for parenting, and tried to respond to their disabled children's questions with enthusiasm. This further implied that high-interaction fathers were committed to investing in and developing a relationship of trust with their children through encouraging and respecting their curiosity. This is particularly true for a family context in which fathers have moved away from a patriarchal role. Such a family context, for instance, would include fathers and mothers resolving family issues together, discussing important topics with each other, and similarly prioritizing the family system. Therefore, fathers may no longer be conceptualized as patriarchal and authoritative by mothers, but rather as key players who invest equally into the family. Furthermore, when fathers participate in parenting, mothers experience a feeling of solidarity, satisfaction, and trust in them. Therefore, mothers with disabled children can feel emotionally and mentally stable in their parenting, which in turn is believed to decrease parenting stress.

The present study explored the relationship between fathers' parenting participation, as perceived by mothers and mothers' parenting stress. Future research investigating the factors that influence fathers' parenting participation may be useful as this has yet to be studied. Additionally, because the study's sample size was relatively small (82 participants) and the survey was limited to the Gwangju area, results may not be generalizable.

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