



# A Study on Mother Empathy and Social Support Affecting Emotional Regulation of Children with ADHD Symptoms

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## KEYWORDS

Children with ADHD symptoms, Mother empathy, Social support, Emotional regulation, ADHD.

## ABSTRACT

The purpose of this study was to identify the effects of mother empathy and social support to emotional regulation in children with ADHD symptoms. SPSS version 20.0 for Windows was used for data analysis to verify the relations and effects. Relations and regression tests were conducted. The results of this study are summarized as follows. Mother empathy showed the highest positive correlation with social support and emotional regulation. In the relationship between mother empathy and emotional regulation, it was found that mother empathy directly affects emotional regulation. This study has significance in terms of proving the effects of a mother's empathy and social support on the emotional regulation of children with ADHD symptoms.

## 1. Introduction

ADHD is one of the neurobehavioral disorders with inattention, impulsivity, and hyperactivity as main symptoms (American Psychiatric Association, 2013), social maladaptation including problems with parents, peers, and teachers, and emotional problems such as low self-esteem or depression. It is one of the childhood developmental disorders accompanied by cognitive, emotional, and behavioral defects that represent secondary symptoms (Barkley, 2006).

The number of children diagnosed with ADHD is showing a high increase in most countries, and in foreign literature studies, the prevalence of ADHD is estimated to be approximately 3-7% of school-age children, although there are differences among scholars (American Psychiatric Association, 2013; Barkley, 2006). A research team led by Professor Wei Bao of the University of Iowa School of Public Health, USA, analyzed data from the National Health Interview Survey conducted annually on 35,000 households nationwide, and found that the prevalence of ADHD in children under 18 was 6.1% compared to 1997. showed an increase to 10.2% in 2016(Xu et al., 2018). In Korea, according to the announcement of the Korean Adolescent Psychiatric Association in 2018, the prevalence of ADHD in Korea is estimated to be 5-10% in the case of 5-14 years old, about 360,000 people.

To be diagnosed with ADHD, six or more of the symptoms of inattention, hyperactivity, and impulsivity must appear continuously in two or more scenes for more than six months (American Psychiatric Association, 2013). Regarding this, previous studies raise the question of whether it is possible to judge that children with 4 or 5 symptoms are less functionally impaired than children with 6 or more symptoms. In other words, children with four symptoms also show behavioral patterns similar to those of ADHD (Biederman et al., 2005; Cho et al., 2009). In other words, previous studies have shown that maladaptive problems such as depression, school maladaptation, and Internet addiction occur at the same level as those diagnosed with ADHD, such as depression, school maladaptation, and Internet addiction, even though they are not diagnosed because they do not meet the diagnostic criteria. It has already been identified (Lewinsohn et al., 2004).

Emotional regulation is known to be a prominent factor in a person's life, and school maladaptation in childhood can lead to social maladaptation problems in adulthood (Cho et al., 2009), so children who have difficulty adjusting to school due to ADHD symptoms It is very meaningful to explore related variables to help students adapt well to school life and develop positive behaviors. A parent's ability to empathize affects the child's ability to regulate emotions, allowing the child to better recognize their own and others' feelings and emotions, and furthermore, becomes a strong antecedent factor that helps with desirable adaptation after childhood (Kim & Lee, 2015). In the case of parents lacking empathy, infants expressed anger, were disobedient, and had significantly poor emotional control abilities

(Gottman & Katz. 1989).

The period of infancy is considered important because it is the time to acquire emotion regulation skills, such as controlling one's emotions while learning emotion-related knowledge, rules, and social expectations (Ashiabi. 2007). Emotion regulation, which is the regulation of internal states that restrains and controls emotional experiences or expressions (Saarni. 1999), begins around the age of 2 when infants' cognitive abilities such as memory and representational abilities develop, and progresses rapidly between the ages of 3 and 5. It causes developmental changes (Branson. 2000; Kopp, 1982).

Mother empathy ability is the ability to control and adjust oneself to carry out necessary actions to the end to achieve what one wants, and is essential for individual growth, development and adaptation (Sarsani, 2007; Yoon, 2007). Children with ADHD often have poor mother empathy. In other words, they do not recognize or be aware of various stimuli, so they act spontaneously or impulsively, and they do not judge actions that are considered inappropriate, resulting in hyperactivity. It is reported that children with low mother empathy ability show psychological problems due to high depressive tendencies, and have low social adaptation ability due to social anxiety or withdrawal (Yoon, 2007).

Children with ADHD perceive the level of social support relatively lower than that of general children, and think that they receive less support from teachers, and their parents are less cooperative with school than the parents of normal students. perceived less interest in their friends (Diamantopoulou et al., 2005; Song, 2014). From this, it can be inferred that it will be difficult to perceive that they are experiencing more difficulties in school or social situations and getting positive resources from interpersonal relationships (Han, 2016).

Looking at the previous studies on the relationship between social support perceived by children with ADHD and school adjustment, there was a lack of awareness and knowledge about treatment at home, a deteriorating family environment, teachers' prejudice and ignorance of ADHD at school, impersonal attitude, etc. Various types of negative views from parents, teachers, and friends are suggested as factors that make school adjustment difficult, and positive factors such as interest and support from parents, teachers, and friends are presented as important factors in school adjustment (Ahn, 2016; Harty et al., 2007). In addition, in a qualitative study on the growth of adolescents with ADHD (Kim, 2011), it was found that the favorable attitude of the family including parents in treatment, friends who help when it is difficult, and teachers who empathize, acknowledge, and encourage help solve difficulties encountered at school. It can be expected that the support of family, teachers, and friends is having a positive effect.

Therefore, in this study, the term ADHD symptoms children was used instead of ADHD children. Based on these studies, it is intended to be used as basic data for understanding children who are experiencing difficulties in adaptation due to ADHD symptoms, professional counseling and intervention, and parent education and emotional regulation program development.

## **2. Methodology**

### **Subjects**

This study was conducted in 600 from 4 grade to 6 grade elementary school students in Seoul and Gyunggi-do. The questionnaire was distributed and collected by mail after explaining in detail the purpose of the study, the contents of the measurement tool, and how to fill out the questionnaire to the homeroom teacher for two months from June to August 2022. Before participating in the survey, it was explained to the research participants that they would be treated anonymously throughout the research process to protect their rights, and that their autonomy for the research would be guaranteed (withdrawal). In addition, the purpose and process of the study were explained, and the contents of the survey were not used for any purpose other than the research purpose, and it was explained that the archived data would be discarded after the study was completed.

### **Tool**

The in this study, to measure AHD, a teacher-report questionnaire developed by DuPaul(1991) was constructed and rated on a 5-point Likert-type scale. In this study, reliability (Cronbach's  $\alpha$ ) was Hyperactivity·impulsiveness .78~.87, attention deficit .77~.87, overall reliability .77~.89.

To measure mother empathy, a self-report questionnaire developed by Heo(2004) was constructed and rated on a 5-point Likert-type scale. In this study, reliability (Cronbach's  $\alpha$ ) was .89. Social Support Appraisal Scale of Dubow and Ullman (1989) was used to evaluate children's perceived social support. The composition of the scale consists of a total of 24 items with 8 items each of the three components of friend support, family support, and teacher support. and rated on a 5-point Likert-type scale. In this study, reliability (Cronbach's  $\alpha$ ) was .91. Emotional regulation was developed and used by Kim (1993) and was rated on a 5-point Likert scale. In this study, the internal reliability (Cronbach's  $\alpha$ ) value was .94.

### Data Processing and Analysis

SPSS version 20.0 for Windows was used for data analysis to verify the relations and affects. Relations and regression test were conducted. First, a frequency analysis was conducted to find out the demographic and social characteristics of the survey subjects. Second, descriptive statistical analysis was conducted to confirm basic statistics and normality verification of measurement variables. Third, Pearson-moment correlation analysis was conducted to confirm the correlation between measurement variables. Fourth, a measurement model analysis was conducted to confirm whether the measured variables of social support, mother empathy ability, and school life adaptation had relative regression.

## 3. Results and discussion

### Descriptive Statistics

Table 1: Descriptive statistics of measured variables

Theoretical Variable	Measurement Variable	M	SD
<b>Mother empathy</b>	cognitive	3.15	0.63
	motivating	3.28	0.65
	behavioral	3.09	0.45
<b>social support</b>	friend	3.33	0.76
	family	3.75	0.72
	teacher	3.30	0.75
<b>emotional regulation</b>	environment	3.51	0.73
	teacher	3.67	0.76
	Class	3.20	0.78
	friend	3.45	0.66
	life	3.67	0.65

Descriptive statistics of measured variables showed Table 1. The measurement variables in this study consisted of 3 factors of mother empathy ability, 3 factors of social support and 5 factors of emotional regulation. As a result of the normality test, the skewness appears as a value of -0.026 to -1.058, the absolute value does not exceed 2, and the kurtosis appears as a value of -0.014 to 1.266, and the absolute value appears to be less than 7, satisfying the normal distribution condition of the measurement variable. It has been shown to do.

### Relations of Variables

Table 2: Relations

	Cognitive	Motivating	Behavioral
<b>Environment</b>	.52***	.56***	.37***
<b>Teacher</b>	.48***	.52***	.27***
<b>Class</b>	.63***	.59***	.44***
<b>Friend</b>	.46***	.44***	.29***
<b>Life</b>	.56***	.57***	.41***

\*\*\* $p < .001$ .

Relations showed Table 2. As a result of the analysis, the correlation between each variable was

the highest among class adaptation variable, with all the mother empathy at .63, .59, and .44. and among cognitive factor and emotional regulation was higher than other factors.

### **Effects of Mother Empathy on Emotional Regulation**

Table 3: Effects of mother empathy on emotional regulation

	B	SE	$\beta$	CR
<b>mother empathy → emotional regulation</b>	.65	.06	.58	10.37***
<b>social support → emotional regulation</b>	.62	.09	.46	6.59***

Effects of mother empathy on emotional regulation showed Table 3. Mother empathy was found to have a positive (+) direct effect on emotional regulation ( $\beta=.58$ ,  $p<.001$ ). Effects of social support on emotional regulation showed Table 3. Social support was found to have a positive (+) direct effect on emotional regulation ( $\beta=.46$ ,  $p<.001$ ).

The higher the mother empathy and the higher the level of social support, the better the emotional regulation. Therefore, in order for children with ADHD to adapt to school more easily, they need their own emotional control ability for problem situations, and furthermore, they need the support of teachers, family, and friends more than anything else.

### **4. Conclusion and future scope**

It was found that ADHD children's mother empathy ability had a significant positive effect on emotional regulation. In order to improve emotional regulation of children with ADHD symptoms, not only personal and psychological factors such as mother empathy ability and self-esteem, but also social and environmental factors such as attention and recognition through social networks such as family, friends, and teachers, social support and positive Support has a very important effect on emotional regulation of children with ADHD symptoms, which means that it should be considered as an important factor.

Since social support can change depending on the individual's surroundings or circumstances, it is necessary to create a social environment so that social supporters can stably and continuously provide positive resources. Welfare-level school that develops and provides programs through which children with ADHD symptoms can maintain and improve relationships with family, friends, and teachers through various methods, and at the same time utilize social networks in the right place It shows the need for environmental creation. First of all, family counseling and parent education and training programs should be provided at all times so that families including parents and siblings can have positive interactions. It is necessary to reduce the stress and conflict caused by parental childrearing through counseling or parent education and to enable systematic discipline. In school, a teacher education program should be developed and provided so that appropriate support can be given with attention to the personal characteristics of children with ADHD symptoms. It is necessary to develop a peer counseling program or club activities to establish a school education environment in which friends can build true friendships by recognizing them as opponents to empathize with, encourage, and be together rather than competing with them, and to maintain stable friendships.

In order to help children with ADHD symptoms adapt to school, it is important to develop and apply programs that can improve relationships with parents, teachers, and friends. In addition, it means that it is necessary to develop the ability to understand and support children correctly by actively utilizing peer mentoring and conducting parent education for parents to help children with ADHD symptoms adapt to school.

In actual school scenes, the number of students showing high levels of hyperactivity, impulsivity, lack of attention, and aggression, although not at the level to be diagnosed with ADHD, is increasing, adding to the difficulties of teachers and parents. It is true that there is a lack of empirical and empirical research that can support the specific and practical construction of interventions and programs for

children struggling with ADHD symptoms in the school scene where children usually live. Therefore, it is expected that this study will be used as important basic data for preparing practical intervention and counseling programs for children with ADHD symptoms.

### **Acknowledgements**

Funding for this paper was provided by Namseoul University

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