

STUDY ON RELATIONSHIP BETWEEN FAMILY COHESION AND ADAPTABILITY, AND QUALITY OF LIFE OF CAREGIVERS OF CHILDREN WITH ASD

Xianmei Lei

*College of the Special Education, Leshan Normal University,
Leshan, Sichuan, China*

Abstract

The present study aimed at exploring the status of family cohesion, adaptability, and quality of life of caregivers of children with ASD, as well as the relationship between family cohesion and adaptability, and quality of life. One hundred and sixty-three caregivers of children with ASD from Sichuan province in China were investigated by the Chinese version of Family Adaptability and Cohesion Scale and Beach Center Family Quality of Life Scale. The results showed that: (1) Caregivers of children with ASD had higher level of family cohesion, lower level of adaptability, and medium level of quality of family life; (2) Family cohesion and quality of life were significantly correlated, and adaptability and quality of life were also significantly correlated; (3) Family cohesion and adaptability had a positive impact on quality of family life.

Keywords: *caregivers of children with ASD, family cohesion, family adaptability, quality of family life.*

Introduction

Autism Spectrum Disorder (ASD) is a life-long pervasive developmental disorder, which is characterized by qualitative impairments in social communication and social interaction, and the presence of restricted and repetitive behaviors or interests (APA, 2013). According to Center for Disease Control (CDC) in America, the prevalence of Autism Spectrum Disorder was 1 in 59 school-aged children. The rise in prevalence rates implies that an increasing number of families are being faced with the challenges that accompany the diagnosis of ASD (Ekas et al., 2016). Families play an irreplaceable role in educating children with ASD. They are often the earliest discoverer of the abnormal behavior of their children, and have to take responsibilities to get available interventions for their children. Besides, the children with ASD are dependent on their parents for diagnostic assessment, treatment selection and support, so parents who are mentally and physically healthy are best prepared to cope with the ramifications of the diagnosis of ASD and be supportive advocates for their children (Johnson et al., 2011; Kantor & Ludikova, 2015). However, children with ASD usually have difficulties in understanding

social cues and facial expressions, issues expressing emotions in conventionally recognizable ways, inflexibility and discomfort with change, and difficulty adapting to new tasks and routine (Wehman et al., 2012), which means family members are stressed with long-term caring and then may experience difficulty participating in their own daily activities and social activities (Lin et al., 2011), finally displaying a variety of psychological symptoms including depression, anxiety, and pessimism (Gau et al., 2012). Therefore, it is important to consider the family environment while studying children with ASD.

Studies showed that factors such as family functioning (Baker et al., 2011) and quality of family life (Guan et al., 2015) would help family members cope with the challenges. As one dimension of family functioning, family cohesion refers to the emotional bonding that family members have toward one another, which includes the amount of time family members spend together and the involvement family members have in each other's activities, as well as communication among family members (Ekas et al., 2016). Family adaptability is another dimension of family functioning, and it is the family's ability to change its roles and relationships in response to stress (Lin et al., 2011). Researches examining family cohesion and adaptability have found that mothers of children with autism perceived less marital satisfaction, affection expression, family adaptability and cohesion as compared to the mothers of typically developing children (Gau et al., 2012; Higgins et al., 2005). Ekas et al. (2016) also reported that the score in family cohesion among Hispanic parents was lower than that among non-Hispanic White parents. But some other findings reported that the mothers of children with ASD had higher levels of family cohesion and lower levels of family adaptability (e.g., Rodrigue et al., 1990). Given these discrepant findings, there is a need for further research on family cohesion and adaptability of caregivers of children with ASD. Besides, quality of family life means the degree family members' needs are satisfied, including the degree of spending time with family members, enjoying life together, and doing important things for oneself (Hu & Wang, 2012). Luo (2014) investigated 90 caregivers with autistic children in Chengdu Sichuan province and found that the total satisfaction of these caregivers was at low and middle level. Li (2016) surveyed 211 caregivers with autistic children in Shanghai and also found the satisfaction of the majority caregivers was in low and middle level. Ma (2014) reported that the score on quality of family life among 97 parents with autistic children was significantly lower than the parents with typically developing children. All the results of the studies indicated that quality of life of families of children with ASD was at unsatisfactory level.

Since family cohesion and adaptability play an important role in promoting positive experience in family life, that means family cohesion and adaptability may be a powerful predictor of quality of family life. However, less is known about the relationship in families of children with ASD. Fortunately, researchers have already studied the relationship between family cohesion and adaptability, and family quality of life among patients with diseases, and so on. For example, Lei et al. (2013) investigated 96 patients on continuous ambulatory peritoneal dialysis, finding that patients with higher family cohesion and adaptability tended to have higher scores in the quality of life. Tao et al. (2013) surveyed 57 adolescents with type 1 diabetes mellitus and also found that patients with higher family cohesion and better adaptability had higher quality of life. Wang et al. (2009) investigated 205 cases with early-stage breast cancer and found that quality of family life of enmeshed type was higher than that of connected and separated types among different types of family cohesion, and quality of family life of chaotic type was better than that of the other three types among different types of family adaptability. Rodríguez-Sánchez et al. (2011) conducted a study including 153 caregivers of

dependent relatives and reported an association between family functionality and the caregiver's quality of life. All those researches indicated that there is a positive correlation between family cohesion and adaptability, and quality of life. Although there is a growing literature examining family cohesion and adaptability, and quality of family life, there is a paucity of research that includes caregivers having a child with ASD. Besides, despite intensive studies in western countries, no similar studies have been conducted in China. Hence, the current study attempted to explore the relationship between family cohesion and adaptability, and quality of life among Chinese caregivers having children with ASD. It is expected that higher family cohesion and adaptability would predict higher quality of family life. Specifically, the present study was designed to address three research questions: (1) What are family cohesion, adaptability, and quality of family life like for caregivers of children with ASD? (2) What is quality of family life like for caregivers with different family cohesion and adaptability types? (3) What is the relationship between family cohesion and adaptability, and quality of family life? Having a better understanding of the relationship between family cohesion and adaptability, and quality of family life will help practitioners provide more available services for families of children with ASD, and then create a better family environment for the children.

The object of the research: family cohesion, adaptability, and quality of family life of caregivers of children with ASD.

The aim of the research: to disclose the status of family cohesion, adaptability, and quality of family life of caregivers of children with ASD, and then analyze the relationship between family cohesion and adaptability, and quality of family life.

Participants

In the present study, a sample of 163 caregivers from Sichuan province of China parenting a child with ASD was recruited via special education schools for this study. Inclusion criteria were being the caregivers of children with a clinically diagnosis of ASD by the board-certificated child psychiatrists, 0-18 years old. The majority of the respondents were mothers (n=92, 56.4%), and the remaining were fathers (n=35, 21.5%), grandparents (n=31, 19.0%), or others (n=5, 3.1%). Participants were largely married (n=139, 85.8%), and the others were divorced or separated (n=18, 11.1%), or widowed (n=5, 3.1%). Most participants had no jobs (n=75, 46.3%), others had full time jobs (n=59, 36.4%), part time jobs (n=16, 9.9%), or were looking for jobs (n=12, 7.4%). Most participants had received a primary school degree (n=46, 28.2%), while others had a middle school (n=31, 19.0%), high school (n=27, 16.6%), college (n=26, 16.0%), university (n=28, 17.2%), or master degree (n=3, 1.8%). A majority of participants had income more than 2000 RMB per month (n=118, 72.4%), others had below 2000 RMB (n=45, 27.6%). Most participants lived in cities (n=81, 49.7%), others lived in towns (n=34, 20.9%) and villages (n=48, 29.4%). Children ranged in age from 2 to 17 years (M=9.77, SD=2.969). The gender of the children are mostly males (n=108, 66.7%), others are females (n=54, 33.3%). The severity of children's disorder ranged in mild (n=27, 16.7%), moderate (n=59, 36.4%), severe (n=64, 39.5%), and extremely severe (n=12, 7.4%).

Procedure

A letter describing the purpose and procedures of the study was sent to families of children with a diagnosis of ASD in special education schools in Sichuan province. If the caregivers agreed to participate and the study criteria were met, he/she was asked to fill out the questionnaires.

Measures

The objective of the study was to gain a better understanding of the relationship between family cohesion and adaptability, and quality of family life. Participants were firstly asked to complete the demographic questions, including the gender, birthday, and the severity of the child's disorder. Moreover, the marital status, employment status, and educational levels of the caregivers, and the family income and residence were also surveyed. In addition to this basic information, two scales were used to measure the key constructs of the study: family cohesion and adaptability, and quality of family life.

Chinese version of Family Adaptability and Cohesion Evaluation Scales (FACES-CV). Family cohesion and adaptability were measured with the scales which were developed by Olson et al. in 1982 and revised by Phillips et al. in 1991. They consist of 30 items that assess family functioning by measuring family cohesion (16 items) and family adaptability (14 items). Caregivers rated the frequency of a described behavior from 1=almost never, to 5=almost always. Family cohesion refers to the degree of emotional bonding between and among family members, which is classified as disengaged (very low), separated (low to moderate), connected (moderate to high), and enmeshed (very high). Family adaptability refers to the family's ability to change its roles and relationships in response to stress, which is described as rigid (very low), structured (low to moderate), flexible (moderate to high), and chaotic (very high). The FACES-CV was reported to be a reliable and valid measure, in which the test-retest reliability for Cohesion and Adaptability were 0.84 and 0.91, and the coefficients of internal consistency for Cohesion and Adaptability were 0.85 and 0.73 (Phillips et al., 1998). The internal consistency of the two subscales of this scale was 0.83 and 0.85 in this study.

Chinese version of Beach Center Family Quality of Life Scale (BCFQOL). This scale, revised by Shuxian Zeng and Kai Liu, was used to measure quality of family life and consisted of 25 items across five dimensions: Family Interaction, Parenting, Emotional Well-Being, Physical/Material Well-Being and Disability-Related Support. For each item, caregivers rated their satisfaction from 1=very dissatisfied, to 5=very satisfied. Responses were summed to form a total score, and reported as a mean total score, ranging from 0 to 125. Higher scores indicated higher satisfaction with family life. The revised scale has been proved with high internal consistency (Li, 2016). In this study, the Cronbach's alpha (α) for internal consistency of the five subscales ranged from 0.72 to 0.84.

Statistical analysis

The research data calculation was done using 18 SPSS software. Descriptive statistics was used in analyzing demographic data, family cohesion and adaptability, and quality of family life. Discrepancies scores were calculated for the items on BCFQOL in different types of family cohesion and adaptability. Pearson r correlations and stepwise linear regression were also used to examine the relationship of the study variables: family cohesion and adaptability, quality of family life.

Results

Family cohesion and adaptability

Descriptive statistics for family cohesion and adaptability of caregivers of children with ASD were reported in Table 1. The mean scores of family cohesion and adaptability were 65.56 ± 10.186 and 45.40 ± 8.729 . Compared with the Chinese norm, the score on family

cohesion of caregivers of children with ASD was significantly higher ($p<0.05$), and the score on family adaptability was significantly lower ($p<0.001$).

Table 1. Descriptive statistics of family cohesion and adaptability

	Caregivers of children with ASD Mean±SD	Chinese norm Mean±SD	t	p
Cohesion	65.56±10.186	63.90±8.00	2.052*	0.042
Adaptability	45.40±8.729	50.90±6.20	-7.922***	0.000

* $p<0.05$, *** $p<0.001$

As Table 2 shows, the most frequent type of family systems was structurally connected (15.4%). On the whole, the majority of the families were mid-range types (44.9%), others were balanced types (32%) and extreme types (23.1%).

Table 2. Descriptive statistics of 16 types of family system

Adaptability	Cohesion							
	Disengaged		Separated		Connected		Enmeshed	
	Frequency (%)		Frequency (%)		Frequency (%)		Frequency (%)	
Chaotic	Extreme	0 (0.0)	Mid-range	0 (0.0)	Mid-range	2 (1.3)	Extreme	11 (7.1)
Flexible	Mid-range	0 (0.0)	Balanced	3 (1.9)	Balanced	13 (8.3)	Mid-range	16 (10.3)
Structured	Mid-range	3 (1.9)	Balanced	10 (6.4)	Balanced	24 (15.4)	Mid-range	9 (5.8)
Rigid	Extreme	23 (14.7)	Mid-range	23 (14.7)	Mid-range	17 (10.9)	Extreme	2 (1.3)

Quality of family life

Statistics in Table 3 presented that the mean score on quality of family life of caregivers of children with ASD was 3.39 ± 0.62 , which was between the general level (3 points) and the satisfaction level (4 points). The mean score on satisfaction in each dimension from high to low was in Family Interaction, Parenting, Disability-Related Support, Emotional Well-Being, and Physical/Material Well-Being.

Table 3. Descriptive statistics of quality of family life and its dimension

Dimension	Mean±SD
Family Interaction	3.57±0.77
Parenting	3.48±0.72
Emotional Well-Being	3.26±0.76
Physical/Material Well-Being	3.25±0.77
Disability-Related Support	3.34±0.76
Total	3.39±0.62

Differences in the quality of family life with different cohesion and adaptability types

According to the scores, the types of family cohesion included disengaged, separated, connected, and enmeshed, while the types of adaptability consisted of rigid, structured, flexible, and chaotic. The differences in the quality of family life were compared among different types of family cohesion and adaptability. As shown in Table 4, there were significant differences in the scores of quality of family life in different cohesion and adaptability types ($p<0.001$). In

detail, the scores on quality of family life in different cohesion types ranged from high to low was enmeshed, connected, separated, and disengaged. The scores on quality of family life in different adaptability types ranged from high to low was chaotic, flexible, structured, and rigid.

Table 4. Differences in the quality of family life with different cohesion and adaptability types

	Type	Family Interaction	Parenting	Emotional Well-Being	Physical/ Material Well-Being	Disability-Related Support	Total
Cohesion	Disengaged Mean±SD	17.15±2.80	18.73±3.16	11.65±2.31	14.38±3.24	12.50±2.75	74.42±9.49
	Separated Mean±SD	20.25±3.26	19.34±3.08	12.17±2.95	15.33±3.25	12.36±2.28	79.20±10.53
	Connected Mean±SD	20.95±4.33	20.16±4.23	12.58±2.94	16.16±3.94	13.09±2.93	82.75±14.96
	Enmeshed Mean±SD	25.95±3.40	24.62±3.84	15.31±2.38	18.28±3.56	14.95±2.96	99.10±12.91
	F	33.350***	18.594***	13.088***	7.302***	6.806***	24.864***
	p	0.000	0.000	0.000	0.000	0.000	0.000
Adaptability	Rigid Mean±SD	19.25±3.32	19.46±3.38	11.97±2.95	15.24±4.06	12.27±2.66	78.42±12.65
	Structured Mean±SD	21.80±4.61	20.89±4.44	13.09±2.84	16.22±3.56	13.87±2.65	85.59±14.88
	Flexible Mean±SD	22.50±4.69	21.41±4.41	14.19±2.88	17.13±3.18	13.88±3.15	89.09±15.04
	Chaotic Mean±SD	27.15±4.30	25.92±4.23	15.08±3.30	19.46±3.43	15.31±3.71	102.92±15.52
	F	15.549***	9.898***	6.695***	5.488**	6.083**	12.771***
	p	0.000	0.000	0.000	0.001	0.001	0.000

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Correlation between family cohesion and adaptability, and quality of family life

The correlation analysis on family cohesion and adaptability, and quality of family life showed that (see Table 5) there were significant correlations between family cohesion and adaptability, and quality of family life of caregivers of children with ASD ($p < 0.001$). Concretely, cohesion and quality of life were significantly correlated ($p < 0.001$), and adaptability and quality of life were also significantly correlated ($p < 0.001$). That is to say, families with higher cohesion and better adaptability would display higher quality of family life.

Table 5. Correlation between family cohesion and adaptability, and quality of family life

	Cohesion	Adaptability	Quality of family life
Cohesion	1.000		
Adaptability	0.758***	1.000	
Quality of family life	0.552***	0.482***	1.000

*** $p < 0.001$

To further examine the relationship between family cohesion and adaptability, and quality of family life, stepwise regression analysis was used with family cohesion and adaptability as independent variables and quality of family life as dependent variable. The result showed

that family cohesion and adaptability of the two predictor variables could explain 32% of the total variance in quality of family life (see Table 6). As for the size of their contribution to the quality of family life, family cohesion could explain 30.2% of the total variance in quality of family life, while family adaptability could explain 1.8%. According to the standardized regression coefficients, the beta of two predictor variables in the regression model were 0.394 and 0.205, showing that family cohesion and adaptability have a positive impact on the quality of family life.

Table 6. Regression analysis of family cohesion and adaptability, and quality of family life

	R	R ²	ΔR ²	F	ΔF	B	β
Cohesion	0.550	0.302	0.302	65.816***	65.816***	0.594	0.394
Adaptability	0.566	0.320	0.018	35.526***	3.956*	0.363	0.205

*p<0.05, ***p<0.001

Discussion

The purpose of the current study was to explore the relationship between family cohesion and adaptability, and quality of life. Basically, the status of family cohesion and adaptability, and quality of family life were firstly examined. As regards family cohesion and adaptability, the results indicated that the score on family cohesion of caregivers of children with ASD was significantly higher than the national norm, and the score on family adaptability was significantly lower than the national norm, suggesting family cohesion is better than family adaptability. This is consistent with previous studies (e.g., Rodrigue et al., 1990; Zhang et al., 2017; Shan et al., 2016), but inconsistent with the researches of Gau et al. (2012) and Higgins et al. (2005). All their studies found that caregivers of children with ASD had lower levels of family cohesion and family adaptability. Since caregivers would experience shock, denial, sadness, anxiety, fear, anger, and finally acceptance after their children be diagnosed with one disability (Drotar et al., 1975), but there is no doubt that different caregivers show different reactions to their disabled children. For some caregivers, they still could not accept their disabled children well after many years, but for some others, the appearance of disabled children could even improve their quality of life and marital status (Heward, 2006). In this study, family members of children with ASD could communicate more with each other and the emotional bonding increased while raising their children, but the ability to change their roles and relationships in response to stress was limited. Probably it is related to appraisal styles. Reframing, one type of appraisal wherein individuals interpret a situation in a more positive light, has been associated with more positive family functioning among mothers of children with ASD (Ekas et al., 2016), because it allows caregivers to view their children more positively, which could in turn facilitate more positive feelings of emotional closeness within the family. Besides, it is worth mentioning that high family cohesion outside the healthy range may become enmeshment and is recognized as a maladaptive form of family cohesion (Higgins et al., 2005). As Olson (2011) mentioned, both of these extremes may be detrimental, and that balanced cohesion was most beneficial for families. It suggests that helping family members present a healthy form of family cohesion is needed. As to the lower adaptability, it may be strongly linked with the challenges while raising the children. Children with ASD often exhibit defects involving social interaction, language, IQ, stereotyped behavior, and restricted interest, which may, in turn, impact family members' relationships with one another. Just as one study showed, the difficulty and pressure of raising children with ASD was bigger than for

caregivers of children with other disabilities (Guan et al., 2015). In addition, caregivers usually have to face kinds of challenges, such as smaller range of interpersonal relationships, reduction in income, changes in family structure, limited specific guidance of rehabilitation methods, and so on (Sun, 2011). Furthermore, families usually report feeling socially isolated, possibly contributing to the worse adaptability to deal with unusual situations. Moreover, the caregivers lacking of the knowledge on autism might also explain the lower adaptability of this study. Although Leo Kanner reported 11 children with ASD 75 years ago, many people still have a limited knowledge on real autism. Some greedy institutions even cheat parents of children with ASD trying useless and even harmful therapies to gain exorbitant profits, which leads to the situation that many caregivers constantly demonstrate hope and then disappointment. It suggests that we should further strengthen our work to give publicity to the knowledge on autism, guiding caregivers developing better understanding of autism and educating their children with effective interventions, which have been proved.

With respect to quality of family life, the quality of family life of caregivers of children with ASD was between general level and satisfaction level, which means that the total satisfaction of quality of family life was at medium level. It lends evidence to support prior researches that caregivers of children with ASD perceived unsatisfactory level of quality of family life (Luo, 2014; Li, 2016; Ma, 2014; Xue, 2014; Hu, 2016; Hu & Wang, 2012; Hu et al., 2016). As for each dimension, caregivers had the highest satisfaction on Family Interaction. The result is consistent with previous findings of Luo (2014), Li (2016), and Hu et al. (2012). It further shows that family members interact more with each other while raising children with ASD. However, caregivers had the lowest satisfaction on Physical/Material Well-Being (such as transport, health care, daily living expenses and so on). This finding is consistent with the study of Hu and Wang (2012), but inconsistent with some other studies showing lowest satisfaction on Disability-Related Support (Luo, 2014; Li, 2016) in families of autism. These differences could be partially associated with different places of participants. Caregivers of children with ASD are stressed with caring for their child and usually have to give up their jobs, which leads to lower income. Additionally, the welfare policies for families of children with ASD vary in different areas. So the caregivers showed different satisfaction on Physical/Material Well-Being, highlighting the need for strengthening financial support and material benefits to help families coping with challenges and stress.

Previous researches suggest that higher family functioning is related to higher quality of family life (Lei et al., 2013; Tao et al., 2013; Wang et al., 2009; Rodríguez-Sánchez et al., 2011). The current study also found that there was a positive correlation between family cohesion and adaptability, and quality of family life. Specifically, caregivers who were identified with higher cohesion and better adaptability perceived higher quality of family life than those with lower cohesion and worse adaptability, which means that family cohesion and adaptability of caregivers with children with ASD will influence quality of family life. The results of the stepwise regression analysis further showed that family cohesion and adaptability had a significant predictive power on quality of family life. These results indicated that higher family cohesion and adaptability were strongly linked with higher quality of family life. Families with higher cohesion and better adaptability could hold together to cope with the difficulties in raising children with ASD, which further benefit to enhancing quality of family life. It prompted that we should focus on family function of caregivers of children with ASD, therefore strengthening the quality of family life and then providing appropriate family environment for children with ASD. One of the effective ways is to provide more available social support services. Social support refers to the perceived or actual assistance that an individual receives

from another person or institution and can be in the form of either physical and instrumental assistance or emotional and psychological support (Boyd, 2002), which can effectively relieve the stress, upset, and anxiety of families of children with ASD, and then improve the life satisfaction (Dunn et al., 2001) as well as multiple domains of family functioning (Lovell et al., 2012). However, an investigation showed that the family internal support of children with autism was sufficient, but professional rehabilitation education information and education practice support were deficient, and the other social supports were severely deficient (Xiong et al., 2014). Thus, there is a need to provide measures of care and support that would enable families to function at an optimum level within their families, so they may experience a higher quality of family life. Specifically, psychological counseling services, educational support, economic support, and even childrearing and caregiving are strongly recommended. Helping families maintain appropriate family cohesion and adaptability, and quality of family life would finally benefit to children with ASD in the families.

Acknowledgment

Support for this research was provided by a grant from the Research Center of Special Education Development in Sichuan at Leshan Normal University, Leshan, Sichuan, China. The name of the project is Study on Relationship Between Family Cohesion and Adaptability, and Quality of Life of Caregivers of Autistic Children (SCTJ-2017-B03). Moreover, I would like to thank all the families who participated in this research.

References

- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*. Arlington: American Psychiatric Publishing, 50.
- Baker, J. K., Seltzer, M. M., & Greenberg, J. S. (2011). Longitudinal effects of adaptability on behavior problems and maternal depression in families of adolescents with autism. *Journal of Family Psychology, 120*, 465–475.
- Boyd, B. A. (2002). Examining the relationship between stress and lack of social support in mothers of children with autism. *Focus on Autism and Other Developmental Disabilities, 17*, 208–215.
- Drotar, D., Baskiewicz, A., Irvin, N., et al. (1975). The adaptation of parents to the birth of an infant with a congenital malformation: a hypothetical model. *Pediatrics, 56*(5), 710-717.
- Dunn, M. E., Burbine, T., Bowers, C. A., & Tantleff-Dunn, S. (2001). Moderators of stress in parents of children with autism. *Community Mental Health Journal, 37*(1), 39-52.
- Ekas, N. V., Ghilain, C., Pruitt, M., et al. (2016). The role of family cohesion in the psychological adjustment of non-Hispanic White and Hispanic mothers of children with autism spectrum disorder. *Research in Autism Spectrum Disorders, 21*, 10-24.
- Gau, S. S. F., Chou, M. C., Chiang, H. L., et al. (2012). Parental adjustment, marital relationship, and family function in families of children with autism. *Research in Autism Spectrum Disorders, 6*(1), 263-270.
- Guan Wenjun, Yan Tingrui, & Deng Meng. (2015). The characteristics of parenting stress of parents of children with disabilities and their effects on their quality of life: The mediating role of social support [J]. *Psychological Development and Education, 31*(04), 411-419.
- Heward, W. L. (2006). *Exceptional Children: An Introduction to Special Education*, Eighth Edition. Merrill Prentice Hall, 89.
- Higgins, D. J., Bailey, S. R., & Pearce, J. C. (2005). Factors associated with functioning style and coping strategies of families with a child with an autism spectrum disorder. *Autism, 9*(2), 125-137.
- Hu Xiaoyi. (2016). Family quality of life and family support of children with disabilities in China. *Chinese Journal of Rehabilitation Theory and Practice, 22*(10), 1227-1231.
- Hu Xiaoyi, & Wang Mian (2012). On the life quality of families with children with development disabilities in Beijing [J]. *Chinese Journal of Special Education, 07*(3), 10- 29.

- Hu Xiaoyi, Yue Xiaolong, & Jia Rui. (2016). The status and relationship between family needs and family quality of life of children with visual and hearing impairment in China. *Researches on People with Disabilities*, 03, 23-27.
- Johnson, N., Frenn, M., Feetham, S., et al. (2011). Autism spectrum disorder: Parenting stress, family functioning and health-related quality of life. *Families, systems, & health*, 29(3), 232.
- Kantor, J., & Ludikova, L. (2015). The families of students with multiple disabilities in the educational process. In V. Lubkina and S. Usca (Eds.). *Sabiedriba Integracija Izglitiba-Society Integration Education III* (pp. 115-125), Latvia: Rezekne.
- Lei Yan, Tang Hongling, Fu Biling, et al. (2013). Effects of family cohesion and adaptability on quality of life of patients on continuous ambulatory peritoneal dialysis. *Journal of Nursing Science*, 15, 18-19.
- Li Li (2016). Research on family quality of life of families with the autistic children in Shanghai. *East China Normal University*.
- Lin, L. Y., Orsmond, G. I., Coster, W. J., et al. (2011). Families of adolescents and adults with autism spectrum disorders in Taiwan: The role of social support and coping in family adaptation and maternal well-being. *Research in Autism Spectrum Disorders*, 5(1), 144-156.
- Lovell, B., Moss, M., & Wetherell, M. A. (2012). With a little help from my friends: psychological, endocrine and health corollaries of social support in parental caregivers of children with autism or ADHD. *Research in Developmental Disabilities*, 33, 682-687.
- Luo Ling (2014). The study of the life quality of families with autistic children in Chengdu. *Sichuan Normal University*.
- Ma Shanjing (2014). Quality of life of autistic children's parents and study on its relevant influence factors. *Shandong University*.
- Olson, D. (2011). FACES IV and the circumplex model: validation study. *Journal of Marital and Family Therapy*, 37, 64-80.
- Phillips, M. R., West, C. L., Shen, Q., et al. (1998). Comparison of schizophrenic patients' families and normal families in China, using Chinese versions of FACES-II and the family environment scales. *Family process*, 37(1), 95-106.
- Rodrigue, J. R., Morgan, S. B., & Geffken, G. (1990). Families of autistic children: Psychological functioning of mothers. *Journal of Clinical Child Psychology*, 19(4), 371-379.
- Rodríguez-Sánchez, E., Pérez-Peñaranda, A., Losada-Baltar, A., et al. (2011). Relationships between quality of life and family function in caregiver. *BMC family practice*, 12(1), 19.
- Shan Shenghua, Yan Zeyu, Zhang Baozhen, et al. (2016). Correlation study on parents' emotion and adaptability of family cohesion in recovery period of patients with HIE. *Chinese Nursing Research*, 30(16), 1957-1961.
- Sun Yumei (2011). *Acknowledging mother's lived experience of raising a child with autism: A phenomenological inquiry*. Central China Normal University.
- Tao Hua, Lin Zheng, Huang Xiaoping, et al. (2013). Correlation between quality of life, and family adaptability and cohesion in adolescents with type 1 diabetes mellitus. *Journal of Nursing Science*, 09, 42-44.
- Wang Fengling, Zheng Xiuxia, Liang Wanning, et al. (2009). Study on the relationship of family cohesion and adaptability with quality of life in patients with breast cancer early-stage postoperation. *China Cancer*, 10, 809-813.
- Wehman, P., Lau, S., Molinelli, A., et al. (2012). Supported employment for young adults with autism spectrum disorder: Preliminary data. *Research and Practice for Persons with Severe Disabilities*, 37(3), 160-169.
- Xiong Xurong, & Sun Yumei (2014). Study on social support and the influencing factors of families with autism spectrum disorder children. *Maternal and Child Health Care of China*, 29(31), 5077-5081.
- Xue Jingke (2014). *Study on the status and influencing factors of the parents' quality of life of disabled children in Beijing*. Shanxi medical university.
- Zhang Wenli, Zhang Yongai, & Zhang Lu (2017). Social support, depression level, family intimacy and adaptability of parents of nephritic syndrome children. *Chinese Journal of Woman and Child Health Research*, 28(10), 1174-1176.

STUDY ON RELATIONSHIP BETWEEN FAMILY COHESION AND ADAPTABILITY, AND QUALITY OF LIFE OF CAREGIVERS OF CHILDREN WITH ASD

Summary

Xianmei Lei, Leshan Normal University, Sichuan, China

Autism Spectrum Disorder (ASD) is a life-long pervasive developmental disorder, which is characterized by qualitative impairments in social communication and social interaction, and the presence of restricted and repetitive behaviors or interests (APA, 2013). As the prevalence rates of ASD is rising, resulting in an increasing number of families are being faced with the challenges that accompany the diagnosis of ASD (Ekas, et al., 2016). Family members are stressed with long-term caring and then may experience difficulty participating in their own daily activities and social activities (Lin, et al., 2011), finally displaying a variety of psychological symptoms including depression, anxiety, and pessimism (Gau, et al., 2012). Therefore, it is important to consider the family environment while studying children with ASD.

Studies showed that factors such as family functioning (Baker, et al., 2011) and quality of family life (Guan, et al., 2015) would help family members cope with the challenges. As one dimension of family functioning, family cohesion refers to the emotional bonding that family members have toward one another, which including the amount of time family members spend together and the involvement family members have in each other's activities, as well as communication among family members (Ekas, et al., 2016). Family adaptability is another dimension of family functioning, which is the family's ability to change its roles and relationships in response to stress (Lin, et al., 2011). Quality of family life means the degree of family members' needs are satisfied, including the degree of spending time with family members, enjoying life together, and doing important things for oneself (Hu & Wang, 2012). Since family cohesion and adaptability play an important role in promoting positive experience in family life, that means family cohesion and adaptability may be a powerful predictor of quality of family life. However, less is known about the relationship between family cohesion and adaptability, and family quality of life in families of children with ASD. The current study attempted to exploring family cohesion, adaptability, and quality of family life of caregivers of children with ASD. The aim of the research is to disclose the status of family cohesion, adaptability, and quality of family life of caregivers of children with ASD, and then analysis the relationship between family cohesion and adaptability, and quality of family life.

In the present study, 163 caregivers from Sichuan province of China parenting a child with ASD were investigated by the Chinese version of Family Adaptability and Cohesion Scale and Beach Center Family Quality of Life Scale. The results showed that: (1) The score on family cohesion of caregivers of children with ASD was higher than the national norm, the score on family adaptability was lower than the national norm, and the satisfaction of quality of life was between general level and satisfactory level, which means that caregivers had higher level of family cohesion, lower level of adaptability, and medium level of quality of family life; (2) Family cohesion and quality of life were significantly correlated, and adaptability and quality of life were also significantly correlated; (3) Caregivers with higher family cohesion and adaptability showed higher quality of life than the caregivers with lower family cohesion and adaptability, and results of the stepwise regression analysis further showed that family cohesion and adaptability had a significant predictive power on quality of family life. These results indicated that higher family cohesion and adaptability were strongly linked with higher quality of family life.

It prompted that we should focus on family functioning of caregivers of children with ASD, therefore strengthening the quality of family life and then providing appropriate family environment for children with ASD. One of the effective ways is to provide more available social support services, including psychological counseling services, educational support, economic support, and even childrearing, and so on. Helping families maintain appropriate family cohesion and adaptability, and quality of family life would finally benefit to the children with ASD.

Corresponding author's email: 1216489621@qq.com

