

The Influence of Family Learning Environment on Preschool Children's Social Adaptability: The Mediating Role of Learning Quality

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Abstract: The family learning environment plays an important role in the development of preschool children's social adaptability. A good learning environment and diversified learning activities can lay a solid foundation for preschool children's social ability development in future. Some studies have explored the relationship between the family learning environment and social adaptability, but the mechanism between the two remains unclear. Therefore, in order to further understand the relationship between family learning environment and social adaptability, as well as the mediating role of learning quality. A total of 759 pre-school children from six kindergartens were investigated in China Jiangxi province, Ganzhou city. The results shown that: (1) there were significant correlations between the dimensions of family learning environment, social adaptability and learning quality; (2) Family learning environment significantly predicted preschool children's social adaptability; (3) Learning quality plays a partial mediating role between family learning environment and social adaptability. The results provided an empirical evidence for the effect of family learning environment on preschool children's social adaptability and made a certain contribution to the future research of the preschool children's social adaptability development.

Keywords: Family learning environment; Social adaptability; Learning quality

1. Introduction

Preschool education is the beginning of child's lifelong education, and the family serves as the foundation for establishing a scientific education concept for children in early stage. The family environment is the earliest and most exposed environment for preschool children, and it has a profound impact on all aspects of children^[1]. Especially, the impact of family learning environment on children is not only reflected in their learning attitude and habits, but also has a long-term impact on the cultivation of social abilities. Social ability refers to the various abilities of an individual to adapt to the social environment, successfully establish and maintain relationships with others in the process of social interaction, and is an important indicator that affects the social development of preschool children. Peer interaction, problematic behavior, learning and entertainment are all inevitable problems that preschool children encounter during development process. Social ability is an important factor in how to properly solve these problems.

As an important place for children's social development, the quality of the family learning environment determines the level of social ability of children in the future. A study found that the material facilities in the learning environment have a significant impact on aged 3-6 children's learning quality. The placement of game materials has the deepest impact on children's exploration and curiosity quality, and the display of children's works has the deepest impact on their reflection.^[2] Feng conducted a survey of 160 urban and rural families found that the family learning environment has a significant impact on the school preparation scores of both urban and rural children, and compared to rural children, urban children have better scores^[3]. A study clearly pointed out that the influence of family learning environment on children's social abilities is greater than that of factors such as parents' education level, social status, income, and emphasizes that "what parents do is more important than who they are"^[4]. A good family learning environment can help children establish better emotional communication and interpersonal interaction abilities, and has a positive impact on their cognitive development, learning ability, and social development^{[5][6]}. The theory of family function suggests that good family function can significantly enhance children's social abilities, while poor family function leads to a series of

psychological and behavioral problems on children.^[7] Based on this, this study proposes hypothesis 1(H1): Family learning environment positively predicts preschool children's social abilities.

Various signs indicate that learning quality plays a mediating role between family learning environment and preschool children's social adaptability. Learning quality is a series of traits related to learning, such as tendencies, attitudes, habits, styles, traits, etc. Specifically, it includes curiosity and interest in learning, focus, willpower, and exploratory ability, which are the core of children's social development.^[8] A large sample study found that family factors can strongly explain the development of early learning quality in children, and the proportion of family learning environment explanation is the highest.^[9] And there is a close relationship between preschool children's learning quality and social adaptability. Research shown that children who perform better in learning qualities such as curiosity, focus, and persistence tend to have stronger social communication skills and better emotional control abilities.^[10] Li further clarified the impact of learning quality on children's social development through situational testing, and found that children's learning quality has a significant promoting effect on their cognitive development, language development, and social development.^[11] Kurt Lewin's field dynamics theory^[12] points out that an individual's behavior depends on the interaction between their internal system tension and the external environment. Individuals in a specific living space often generate tension, and to eliminate this tension and achieve psychological balance, they constantly adjust their own state, cognitive concepts, motivation levels, etc. to achieve better coexistence with the environment. Children in a good family learning environment will recognize the importance of learning, promoting the improvement of their learning quality, better adapt to this family environment, and thus promote the improvement of social adaptability. Therefore, we proposed hypothesis 2(H2): Learning quality plays a mediating role between family learning environment and preschool children's social adaptability.

2. Method

2.1 Participant

The participants of this study were from 6 kindergartens in China, Ganzhou City. Before the formal questionnaire was distributed, the researchers explained the theme and purpose of this study to the principals and teachers of various kindergartens, and modified the sentences of some items in the questionnaire with suggestions, ultimately forming a formal questionnaire. The questionnaire was mainly filled out by the parents of the child, and a total of 806 questionnaires were distributed. There were 759 valid questionnaires, with an effective rate of 94%.

2.2 Materials

2.2.1 Family learning environment

The measurement of family learning environment was conducted using self-designed "Preschool Family Learning Environment" scale by Yang, which consists of 31 items and includes three dimensions: cultural materials, learning activities, and life experience^[13]. The Cronbach α of the scale in this study is 0.897, and for each dimension are 0.756, 0.869, and 0.787, respectively.

2.2.2 Social adaptability

The children's social adaptation questionnaire (CSAQ-30) by Freniere and Dumas was used in this study for evaluating preschool child's social adaptability. To better adapt to this research, we used a revised version by Chinese scholars Liu and Liang.^[14] The Cronbach α of this scale is 0.806.

2.2.3 Learning quality

The Preschool Learning Behavior Scale (PLBS) developed by American scholar McDermott in 2002 was used for this study. The scale consists of 21 items, divided into three dimensions: ability motivation, attention/persistence, and learning strategies. It has been proven that the scale is suitable for Chinese cultural background and has good reliability.^[15] The reliability test results also show that the internal consistency of the scale is good, the Cronbach α of the total scale is 0.840.

2.3 Common method deviation test

This study collected data through questionnaires, which may lead to common method bias. Therefore, we used the Harman method to test for common method bias.^[16] The results showed that there were 20

factors with eigenvalues greater than 1, and the variance explanatory rate of the maximum factor was 15.04%, which is below the critical value standard of 40%, indicating that there not exists common method bias in this study.

3. Result

3.1 Describe statistical results and correlation analysis

We first conducted a preliminary analysis of the data using SPSS 22.0. The descriptive statistical results of family learning environment, preschool children's social adaptability, and learning quality are shown in Table 1.

The correlation analysis results shown that: (1) there is a significant positive correlation between the family learning environment with social adaptability and learning quality; (2) learning quality has a significant positive correlation with social adaptability.

Table 1: Descriptive statistical and correlation result

Variables(N=759)	M±SD	1	2	3	4	5	6
1.Cultural materials	3.29±0.55	-					
2.Learning activities	2.61±0.75	0.78**	-				
3.Life experience	2.65±0.83	0.87**	0.53**	-			
4.Family learning environment	2.87±0.58	0.80**	0.46**	0.54**	-		
5.Social adaptability	3.49±0.45	0.24**	0.32**	0.17**	0.13**	-	
6.Learning quality	2.33±0.32	0.44**	0.40**	0.34**	0.40**	0.42**	-

Note:**p<0.01;***p<0.001

3.2 The mediating role of learning quality between family learning environment and social adaptability

We constructed a structural equation model by using AMOS 16.0, and with learning environment as exogenous latent variable, learning quality and social adaptability as endogenous latent variable. The results of confirmatory factor analysis(CFA) shown that the various fitting index of the model are good (GFI=0.98>0.9,CFI=0.98>0.9,IFI=0.98>0.9,RMSEA=0.06<0.08). Subsequent analysis shown that the family learning environment significant positively effect on social adaptability ($\beta=0.28, p<0.001$). The positive predictive effect of children's learning quality on social adaptability is also significant ($\beta=0.98, p<0.001$)(see fig.1).

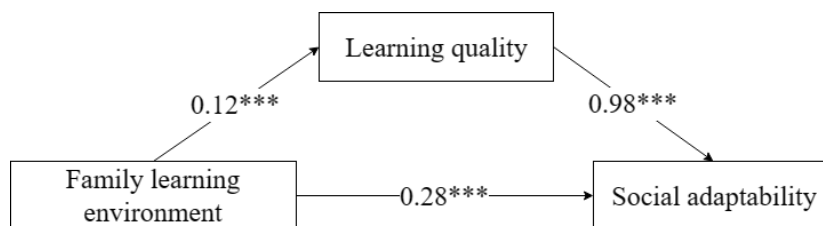


Figure 1: The mediation model diagram; Note. ***p<.001.

Table 2: The mediating role of learning quality

	Std effect	95%CI lower bound	95%CI upper bound
Total effect	0.51	0.44	0.58
Direct effect	0.36	0.29	0.44
Indirect effect	0.15	0.11	0.20

Note: Std means Standardization; CI means Confidence interval;

The Bootstrap analysis was used to test the mediating effect of learning quality, with setting 5000 repeated samples and 95% confidence interval. Results shown that the direct effect of family learning environment on social adaptability is 0.36, 95CI [0.29, 0.44]. The standardized indirect effect value of learning quality is 0.15, 95% CI[0.11,0.20], not including 0, indicating a significant mediating effect and mediating effect accounts for 29.4% (see Table 2). That is to say, learning quality plays a partial mediating role between the family learning environment and social adaptability.

4. Discussion

This study examined the impact of family learning environment on preschool child's social adaptability and the mediation role of learning quality. The results found that family learning environment positively affect children's social adaptation ability. After adding the mediating variable learning quality, the direct predictive effect is still holding, and learning quality significant positively effect on preschool child's social adaptability. Result indicating that learning quality plays a partial mediating role between family learning environment and social adaptability.

4.1 Family learning environment and social adaptability

Results indicated that the family learning environment are significantly positively correlated with the social adaptability of preschool children, which means that the better the family learning environment, the higher the social adaptability of children. Kyrios (1990) believed that leading children to participate in entertainment activities and purchasing toys for children have a positive impact on social communication abilities^[17]. A good learning environment and abundant learning materials(cultural resources) can not only meet the basic needs of children's growth and development, but also enable them to receive more love and care. This kind of love and care will promote a positive communication of parents with children, which can better interact with peers and promote the development of social adaptability. Li also pointed out that rich life experience in the family learning environment is an important predictor of early social skills in children^[18]. The family learning environment can directly or indirectly affect the social development of preschool children to some extent. Paying attention to and participating in children's growth, telling stories, reading poetry, playing games, listening to music together, or taking children to museums, traveling, etc., will helping them learn how to interact with others and developing their social ability.^[19]

4.2 The mediation role of learning quality

Results also shown that learning quality plays a partial mediating role between family learning environment and social adaptability. This reflects that a good family learning environment will be beneficial for cultivating children's learning quality, and the improvement of learning quality can stronger child's social adaptability. Razza pointed out that learning quality is an important factor affecting young children's academic and social adaptation abilities, and this prediction exceeds individual intelligence, parental income, and education level^[20]. A good family learning environment is conducive to cultivating children's learning qualities. A positive family learning environment can stimulate children's learning motivation and interest, which is beneficial for children to develop interest in learning and have sustained learning motivation. The family learning environment also plays an important role in supporting and guiding children's learning. The participation and attention of parents can provide children with learning support guidance, which indirectly improving child's learning quality. In addition, appropriate learning resources can motivate children's curiosity, expand their knowledge, and promote the improvement of learning quality. On the other hand, the development of learning quality can promotes children's communication and expression abilities, enabling them to better communicate with others. These excellent qualities contribute to the development of children's social adaptability. Therefore, it can be considered that parents can establish a good learning environment to promote the development of their children's social abilities. A positive and learning environment in a family can help cultivate children's learning qualities and promote the development of their social adaptability.

5. Conclusion

This study examined the impact of family learning environment on the social adaptability of preschool children, as well as the mediation role of learning quality. This can to some extent draw attention from educators and researchers to the family learning environment, children's social adaptation ability, and learning quality, and help parents understand the significance of their own created learning environment in cultivating children's social adaptability and learning quality.

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