The Effect of Parent-Child Attachment Relationships on Anxiety Levels in Early Childhood

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Abstract. This study investigated 90 early aged children to explore the effect of parent-child attachment and anxiety symptoms in early childhood. This study uses the Screen for Child Anxiety-Related Emotional Disorders (SCARED) Scale to evaluate children's anxiety symptoms and uses the Kerns Attachment Security Scale to evaluate parent-child attachment security. The result is: There is a negative correlation between parent-child attachment security and the anxiety level of children. The higher the attachment security is, the lower the anxiety level of children. This study also discusses the five factors that categorize anxiety symptoms: somatization/panic, generalized anxiety, separation anxiety, social phobia, and school phobia, and uses data to evaluate the relationship between these emotions and parental attachment.

Keywords: parent-child attachment; early childhood; anxiety symptom.

1 INTRODUCTION

Anxiety is an unpleasant emotional state made by people about upcoming situations in the environment that may cause danger and difficulty. It consists of subjective feelings such as tension, anxiety, worry, and fear. Anxiety disorder is a neurosis that is not caused by anxiety stimuli or cannot be reasonably explained by anxiety stimuli. [1] The overall incidence of anxiety disorders in children and adolescents is approximately 2% to 9%. [2] Existing studies have shown that children diagnosed with anxiety disorders are physically prone to restlessness, fatigue, muscle tension, or sleep disorders. At the same time, some psychologically negative effects such as depression, problematic behavior, and poor academic performance will continue to affect their adolescence and lead to disability in adulthood. [3] Given the high prevalence of anxiety disorders in children and their many adverse effects, numerous studies have investigated the causes of anxiety disorders in children and ways to prevent them.

Numerous studies have shown that parent-child attachment in infancy can affect the occurrence and development of anxiety in children. Parent-child attachment refers to the solid and ongoing emotional bond between a child and his or her significant caregivers (usually parents). [4] Attachment theory roughly divides children into secure and insecure attachments based on their interactions with their parents. Securely attached

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children show that they can engage in intimate relationships and feel comfortable in this mutual attachment; insecurely attached children show that they feel uncomfortable in establishing relationships with others and have higher levels than securely attached children. Neuroticism also has relatively low emotional stability. Thus, securely attached children may have lower anxiety levels, and insecurely attached children may have higher anxiety levels. Empirical studies have also shown a significant negative correlation between parent-child attachment and children's anxiety levels. The safer the attachment model, the lower the children's anxiety levels. [5]

However, most studies use a cross-sectional design, which cannot reflect the continuum of individual development and is confounded by factors such as intergenerational effects and age. However, according to Bowlby's attachment theory, in the context of early parent-child interactions, all individuals will develop internal representations of self and others, known as internal working models. Among them, self-image refers to the representation of "whether or not one can elicit an effective response from the attachment figure"; other-image refers to "the attachment figure is someone who will respond even when they need support and protection." characterization. After the working model is formed, the individual will continue to develop and evolve through the process of assimilation and adaptation as the individual encounters new relationships or changes in relationships [6]. This internal working model affects people's future relationships. Therefore, the inner working model provides the basis for the persistence of attachment styles. Empirical research also shows that the negative emotions of securely attached children play a role in communication and can elicit emotional responses from others; the negative emotions of insecurely attached children cannot elicit effective responses, so they learn to suppress or exaggerate emotional responses, which in turn leads to Sick emotional expressions and adverse reactions from others [7]. Based on this, this study will focus on investigating a group of similar aged children to investigate the early childhood attachment Model.

In addition, in most existing studies, researchers usually only regard the mother as the child's important attachment figure and view others as the secondary attachment figure. In recent years, however, fathers have become increasingly involved in the upbringing of children as people no longer assign parenting styles entirely by gender. According to the integration model of attachment networks proposed by Dagan and Schwartz, children can be divided into four categories by judging the interrelated attachments formed by children and their fathers and mothers. All are insecure attachment, secure attachment to father and insecure attachment to mother, secure attachment to mother, and insecure attachment to father [8]. A previous study proves that children's secure attachment to both parents will have a more positive impact on one's secure attachment, and a child's secure attachment to one parent will affect the other parent's secure attachment by improving symptoms of anxieties [5]. This study will examine the development of parent-child attachment and early childhood anxiety to analyze and compare the combined effects of mother-child attachment, father-child attachment, and mutual attachment.

Moreover, Thomas and Chess's goodness of fit level model describes how temperament and environmental stress combine to affect the development of children. This view holds that when a child responds in a way that is in harmony with the demands of

the environment, its developmental prospects are more optimistic. [9] Therefore, the family environment is an essential factor affecting the emotional development of children. Second, the "goodness-of-fit level" is also highly correlated with cultural values and living conditions. For example, the evaluation of children's anxiety level varies by cultural background. In western countries, shy and withdrawn children are considered to lack social communication skills, but in Chinese culture, shyness is sometimes viewed as a positive characteristic of children for their modesty and quietness. Therefore, this study will investigate the interactive effects of parent-child attachment on early childhood anxiety levels in urban China.

Suppose the following hypotheses:

1. There is a negative correlation between parent-child attachment security and the anxiety level of children. The higher the attachment security is, the lower the anxiety level of children.

2. Father-child attachment security level of children is lower than the mother-child attachment security level of children.

2 METHODOLOGY

2.1 Sample

The subjects of this study were 90 children. There were 42 males and 48 females. In addition, among the 90 subjects, 71 children were usually raised by their parents, five children were mainly raised by their fathers, and 14 children were raised primarily by their mothers. The scales in the questionnaire are mostly written by the parents of the children or filled out by the children themselves by recalling their childhood experiences and feelings.

2.2 Research Tools

The Screen for Child Anxiety-Related Emotional Disorders (SCARED).

This study uses The Screen for Child Anxiety-Related Emotional Disorders, SCARED, which was originally developed by Birmaher in 1997. It can be used for self-assessment of anxiety disorders in children or adolescents aged 8 to 18 years. It contains 38 items with five factors that categorize anxiety disorders: somatization/panic, generalized anxiety, separation anxiety, social phobia, and school phobia. According to Spence's research, the scale has good internal consistency reliability (Cronbach's α = 0.92).

In this study, the Chinese version revised and compiled in China by researchers Linyan Su and Kai Wang is used, which contains a total of 41 items. According to the previous research, the scale has good applicability in the Chinese cultural background, the expression is clear and easy to understand, and the content is not affected by cultural differences between the East and the West [10]. In this study, each item is graded on a 0-2 points scale; the five factors corresponding to the classification of anxiety disorders are scored separately and record the total score for all options. The higher the total score recorded, the higher the anxiety level of the representative sample.

The Security Scale.

The Safety Scale (erns, Klepac, & Cole, 196) is used to assess the safety of parent-child relationships in children. (APA PTests Database Record (c) 2019)

This study used the Chinese version of the Kerns Attachment Security Scale revised by Haiqin Yu (2002). There are 15 items in total, covering multiple perspectives: 1) To what extent the child perceives a particular attachment image as responsive and usable 2) To what extent the child is interested in communicating with attachment 3) When the child is stressed and disturbed, the extent to which they rely on attachment. Each item is graded on a 4-point scale. The higher the score, the more secure attachments.

This study collects the mother-child attachment security level and father-child attachment security level. The contents of mother-child and father-child attachment questionnaires are the same.

2.3 Test procedure

In this study, questionnaires were distributed online to collect data. The researcher of this study is a student trained in psychology. Before collecting the data, the questionnaire reminds the subjects that they participate in this study voluntarily, explains the purpose and significance of participating in the study to the subjects, and assures the subjects of the confidentiality of the answering results. Some questions in the questionnaire contain relevant explanations to ensure that the subjects can understand the meaning of the questions and complete the questionnaire.

2.4 Data analysis

This study uses SPSS29.0.0.0(241) for data entry and analysis and conducts statistical analysis to calculate the median number, standard deviation, and Pearson correlation coefficient.

3 RESULT

Table 1. The safety of parent-child relationships and the anxiety level of early-age children **(**self-drawn**)**

	Gender			
	Male		Female	
	M	SD	M	SD
Father-child attachment (total 60)	48.79	6.36	50.02	5.35
Mother-child attachment (total 60)	49.55	6.2	49.08	5.46
Parent-child attachment (total 120)	98.33	12.26	99.1	10.57
Somatic (total 26)	3.45	1.83	4.33	1.61
Generalized anxiety (total 18)	3.57	1.29	3.98	1.07
Separation anxiety (total 16)	3.1	1.27	3.94	1.01

Social phobia (total 14)	3.45	1.4	3.48	1.19
School phobia (total 8)	1.05	1.09	0.98	0.88
Total anxiety (total 82)	14.62	4.3	16.71	3

Table 2. Pearson correlation coefficient of attachment security level and anxiety level of early-aged children (male) **(**self-drawn)

	Pearson Correlation				
	FC	MC	PC		
FC	1	.915**	.978**	N=48	**. Correlation is significant at the 0.01 level (2-tailed).
MC	.915**	1	.979**		
PC	.978**	.979**	1		
Somatic	-.508**	-.482**	-.506**		
Generalized anxiety	-.404**	-.385**	-.403**		
Separate anxiety	-0.262	-0.272	-0.273		
Social phobia	-0.175	-0.224	-0.204		
School Phobia	-0.191	-0.126	-0.161		
Total anxiety level	-.631**	-.613**	-.636**		

Table 3. Pearson correlation coefficient of attachment security level and anxiety level of early-aged children (female) **(**self-drawn)

	Pearson Correlation				
	FC	MC	PC		
FC	1	.906**	.977**	N=42	**. Correlation is significant at the 0.01 level (2-tailed).
MC	.906**	1	.976**		
PC	.977**	.976**	1		
Somatic	.573**	-.633**	-.617**		
Generalized anxiety	-.547**	-.401**	-.486**		
Separate anxiety	-0.048	-0.122	-0.086		
Social phobia	-.500**	-.475**	-.500**		
School Phobia	-.558**	-.360*	-.472**		
Total anxiety level	-.726**	-.671**	-.716**		

Parent-child attachment and anxiety symptoms in early childhood.

In this study, mother-child and father-child attachment were used as dependent variables to count five factors of children's anxiety. The results were classified by children's gender, and the data were repeated mean and standard deviation analyses. It was found that the effect of child gender was significant: girls were significantly higher than boys in the scores of mother-child attachment (49.55), father-child attachment (48.79), and parent-child attachment (98.33).

In addition, with the five anxiety symptoms as dependent variables, there were significant gender differences in other anxiety symptoms except for social anxiety and school phobia. Girls scored significantly higher than boys in the categories of somatic stress, generalized anxiety, and separate anxiety. The overall level of stress in girls is significantly higher than that in boys.

Moreover, in the scores of male and female subjects, father-child attachment security was generally lower than mother-child attachment security.

3.1 Relationship between parent-child attachment and anxiety symptoms in early childhood

Table 2 and Table 3 show the significant correlation between parent-child attachment and anxiety symptoms. Among them, in both genders, parent-child attachment has significant correlation with somatic anxiety and generalized anxiety. In girls' scores, parent-child attachment has a relatively weak correlation with separation anxiety, and parent-child attachment strongly correlates with school and social phobia. In boys' scores, parent-child attachment had a fairly strong correlation with separation anxiety, and parent-child attachment had a relatively weaker correlation with school and social phobia.

4 Discussion

4.1 Parent-child attachment and anxiety symptoms in early childhood

In both genders, the overall attachment to the mother was significantly higher than the overall attachment to the father. In previous research, the researchers believe that the strength of attachment does not vary by gender [11]. Although in recent years, fathers have become increasingly involved in children's growth. Mothers are still the preferred attachment figure in Eastern cultures. Under Chinese cultures, the traditional parenting style in which the mother assumes the primary responsibility for parenting. The father's role in parenting is to provide enough material requirements to support the family. The fathers may participate in parenting but are rarely involved in the day-to-day childcare work. This explains the higher overall attachment to the mother than to the father.

The study finds that mother-child and father-child attachment security in girls are higher than in boys, which may be related to the different socialization processes experienced by boys and girls. The concept of gender identity and gender roles gives expectations on how a person should behave through the models of specific feminine and masculine behavior. Girls usually seek provisions that fulfill emotional needs. Parental support and intimate relationships provide girls security. Thus, they tend to be more

affectionate with their parents. Boys usually seek companionship and enjoyment and tend to participate in shared activities with other friends and family members [12]. These gender differences might explain the reason behind girls' relatively higher attachment level than boys.

The results showed that separation anxiety, somatic anxiety, and generalized anxiety were significantly higher in girls than in boys. Regarding the gender comparison of anxiety, according to the research of Hankin and Abramson [13], girls' anxiety comes from internal psychological pressure. When girls encounter difficulties, they usually internalize the pressure and digest it by themselves; While boys experience difficulties, they are more inclined to externalize stress and release stress through actions and impulses of behavior. Therefore, the overall anxiety level of girls was significantly higher than that of boys.

4.2 Relationship between parent-child attachment and anxiety symptoms in early childhood

This study finds a negative correlation between parent-child attachment security and the anxiety level of children. The higher the attachment security is, the lower the anxiety level of children. This result is consistent with existing research [14]. The possible reason is that in a secure attachment relationship, the caregivers of young children provide more care and interactions with children than in an insecure attachment relationship. The children will believe that the world is safe from their parents' guidance through difficulties. In an insecure attachment relationship, the absence of comfort and guidance may lead to accumulated stress and pressure levels in children since the caregivers fail to guide their children through difficulties in their growth [15].

5 Evaluation

Based on the existing research, this study further explores the relationship between parent-child attachment and early-child anxiety symptoms and obtains meaningful data and results. But there are also many shortcomings in this study:

First, the main subjects of this study are preschool children. The scales in the questionnaire are mainly written by the parents of the children or filled out by the children themselves by recalling their childhood experiences and feelings. Among them, parents may not fill in their children's true feelings because they want to beautify their image; parents may also fill in inaccurate results because they don't know their children well enough; In addition, fill in the experience and feelings, the child may have problems such as blurred memory of childhood, so the options filled in do not match the facts. In addition, the questionnaires of this study were published on social platforms and filled out through online software, and the questions were all multiple-choice questions, so it was impossible to supervise the seriousness of the respondents when filling out the questionnaires. To conclude, the reported manner of this study may lead to systematic errors in the estimation of the relationship between parent-child attachment and child

anxiety symptoms. Therefore, in future research, researchers should use offline collective samples and select a large number of samples in specific areas, such as collecting samples in schools, kindergartens, and nurseries in class units, to achieve the role of supervision and narrow the system error of estimation of variable relationships.

Furthermore, there is a combination of factors in the children's anxiety symptoms. This study only discusses parent-child attachment theory as one important factor affecting children's anxiety symptoms. Future researchers need to further explore other influences of individual characteristics, such as the genetics perspective and temperament perspective. Temperament is individual differences in reactivity and self-regulation in affective, activity, and attention domains, which are determined primarily by genetic predisposition and are also influenced by social environment (temperament, paternal upbringing, and the general self of an individual in early adolescence). Infant temperament is divided into behaviorally inhibited and non-inhibited temperaments [16]. Behaviorally inhibited children develop vigilance and fear in the face of novel or unfamiliar events. Signs of persistent withdrawal and avoidance responses, with negative emotions such as shyness, fear, and anxiety, significantly increase the risk of later diagnosis of a social anxiety disorder (SAD). Behavioral regulation is to adjust the individual's behavior to environmental needs, Emotional processes [17], such as delayed gratification, persistent behavior, effort control, etc. Regulation ability also plays a critical buffering role in the behavioral development of children with different temperaments. Previous studies have found that behavioral control develops better Approachable children also have better social skills, thus reducing the risk of social anxiety disorder; for inhibited children, excessive behavioral control can instead solidify their inhibitory tendencies, leading to a higher risk of anxiety [18]. To conclude, further studies on exploring other influences of individual characteristics and family environments would fully reveal and explain the cause of anxiety symptoms in children to provide a safe environment for children's growth.

6 CONCLUSION

There is a negative correlation between parent-child attachment security and the anxiety level of children. The higher the attachment security is, the lower the anxiety level of children. The possible reason is that in a secure attachment relationship, the caregivers of young children provide more care and guide their children through difficulties in their growth.

The concept of gender identity can explain the reason behind the lower father-child attachment security level than the mother-child attachment security level of children. The role of the father in the traditional parenting style is to provide enough material requirements to support the family. Mothers are more constantly involved in the day-to-day childcare work. This explains the higher overall attachment to the mother than to the father.

The overall level of stress in girls is significantly higher than that in boys. The different ways of girls and boys dealing with difficulties might explain this result. Girls

usually internalize their pressure, while boys externalize stress and release stress through actions and impulse behaviors.

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