

Intergenerational Transmission of Attachment and Its Effect on children's Anxiety

Yanrong Zhu *, Jie Chen

Institute of Psychology, Chinese Academy of Sciences, Beijing, China

yoyoyukkuri@outlook.com

*Corresponding Author

Keywords: Intergenerational transmission of attachment, Parent-child relationship, Children's anxiety

Abstract: Objective: To investigate whether parents attachment style can affect children's anxiety and whether this influence is mediated by the parent-child attachment relationship. Methods: 478 children aged 2-6 years and their mothers were included in this study. The children's social emotion questionnaire, parent-child relationship questionnaire and adult attachment questionnaire were used to measure. Results :(1) grandmother-secure attachment and grandfather-secure attachment were significantly negatively correlated with the conflict-type parent-child relationship and children's anxiety and shyness, and significantly positively correlated with an intimate parent-child relationship. (2) Anxiety and shyness are positively correlated with conflict type parent-child relationship, while negatively correlated with intimacy type parent-child relationship. (3) Parent-child relationship played a mediating role in mothers' attachment style to grandmothers and children's anxiety. (4) Parent-child relationship played a mediating role in maternal attachment style to grandfather and children's anxiety. Conclusion: Attachment pattern has intergenerational transmission. Parent attachment (secure attachment pattern) has significant positive and negative predictive effects on the parent-child relationship and children's anxiety, and the parent-child relationship has significant positive and negative predictive effects on children's anxiety. To some extent, a good parent-child relationship can mitigate the negative effects of insecure attachment patterns on children's anxiety.

1. Introduction

Anxiety is one of the common emotional problems in children, and it tends to younger age [1]. Preschoolers often face many inner conflicts and unfamiliar physical or interpersonal environments in the process of growing up with ever-changing physical and psychological conditions. Under such circumstances, children are prone to anxiety. Anxiety has a variety of different emotional externalization due to the severity of the reaction, such as shyness and nervousness, uneasy and worry, worry and fear and so on. Children who are often in a state of high anxiety are prone to many psychological and physical problems, which affect their interpersonal communication and personal growth [2]. Chinese scholars have pointed out in the follow-up study of preschool children's anxiety that the anxiety status of preschool children is quite stable [3]. Most children's anxiety in early childhood is significantly correlated with their anxiety disorders and related psychological problems in later childhood, adolescence and even adulthood [4]. This indicates that the negative effects of anxiety on children are not only shown in early childhood but also extended into adolescence and adulthood.

Research shows that the parent-child relationship is the most influential factor causing children's development problems and psychopathological problems [5], and the relationship between parents and children will be affected by the caregivers' attachment pattern [6]. Therefore, this study aims to investigate whether parents attachment style affects children's anxiety, and whether this effect is mediated by the parent-child attachment relationship.

1.1 The Influence of Parent-Child Relationship on Children's Anxiety

The parent-child relationship is the earliest interpersonal relationship established by children, and the safe attachment between parents and children is where the individual relies on all emotions in early childhood [7]. Studies have found that parent-child relationship, especially the mother-child relationship, plays an important role in the development of implicit problems in early childhood [8]. Studies have shown that children with secure mother-child attachment in early childhood will show fewer problem behaviors and psychopathological symptoms throughout childhood and adolescence [9]. According to attachment theory, the sensitivity of caregivers to their children's responses is the mechanism of attachment transmission, and anxiety stems from the uncertainty of infants' availability to their caregivers [10]. The troubles and pains that children encounter in the parent-child relationship may become the precursor of children's anxiety [11].

The parent-child relationship includes parent-child conflict and parent-child intimacy. Studies have shown that parent-child conflict can affect children's emotional and behavioral problems such as shyness, anxiety, and early establishment of parent-child intimacy can reduce children's anxiety level [12]. Scholars studying attachment theory believe that the development of anxiety is related to early insecure attachment [13]. Insecure attachment is associated with higher levels of anxiety and internalization problems [14]. Children with insecure attachments are chronically anxious about whether their needs will be met, and often show more social withdrawal and anxiety problems. Chinese scholars have also found in their studies that parent-child attachment has an impact on children's anxiety [15]. Moreover, both mother-child attachment and parent-child attachment have significant effects on children's anxiety. The more secure the parent-child attachment is, the lower the level of children's anxiety is. Children with double secure attachment have the lowest level of anxiety [16].

1.2 The Influence of Parental Attachment Style on the Parent-Child Relationship

The intergenerational transmission of attachment refers to that “the security of the attachment relationship between infants and special caregivers can be predicted according to the psychological state of special caregivers (usually parents) regarding attachment, that is, the attachment pattern of the father and the attachment pattern of the offspring can be transmitted” [17]. Adults' attachment style can influence their behavioral expression in intimate relationships, affect their sensitivity to children's behavioral responses, and influence infant attachment. Studies have proved that, compared with mothers with less sensitive reactions, mothers with more sensitive reactions are more likely to establish a secure attachment relationship with their children [18]. In the study of Fonagy and Steel et al. (1991), it was found that the children of parents who were rated as securely attached often showed secure attachment patterns to their parents. The children of parents who were rated as insecure tended to exhibit insecure attachment patterns to their parents. Cohn et al. (1992) showed in their study that if both parents are insecure attached, their children are more likely to have insecure attachment styles [19]. Van Ijzendoorn et al. (1995) confirmed in a meta-analysis of attachment that there was a 75% correspondence between the attachment security of parents and children [17]. In conclusion, attachment patterns are intergenerational transmission within families, that is, there is a strong correlation between parents' attachment patterns and children's attachment patterns. In other words, parents' early attachment experience will influence the shaping of their attachment relationship with their children. Early parents with secure attachment pattern are more likely to form a secure attachment with their children and establish an intimate parent-child relationship. Otherwise, it is easy to form insecure attachment and establish a conflict-type parent-child relationship.

1.3 The Influence of Intergenerational Transmission of Attachment on Children's Anxiety

Based on the literature review, the following hypotheses are proposed in this study : (1) mothers' insecure attachment is significantly positively correlated with children's anxiety; (2) maternal attachment is positively correlated with parent-child attachment; (2) Parent-child relationship plays a mediating role between maternal attachment and children's anxiety.

2. Objects and Methods

2.1 Object of

This study samples 478 families in China as the subjects. The children ranged in age from 2 to 6, with 258 boys (54%) and 220 girls (46%). The children's mothers completed the children's social-emotional questionnaire, parent-child relationship questionnaire, adult attachment questionnaire tests.

2.2 Measurement Tools

2.2.1 Children's Social Emotion Questionnaire

The children's shyness anxiety was evaluated using the Children's Social Competence and Behavioral Evaluation Scale-30 (SCBE-30) (Lafreniere, P. J., & Dumas, J. E., 1996) on the shyness anxiety dimension (11 items), using a score of 1 (never) to 6 (always), filled out by the child's mother according to the child's past two months. The scale is mainly used to measure the social competence, emotional management, emotional expression and difficulty adaptability of preschoolers. It has very good reliability and validity in western groups and has been widely used. The Chinese version of the scale was used in this study (Liu Yu et al., 2012), and the internal consistency coefficient of the subscale was 0.85.

2.2.2 Parent-Child Relationship Questionnaire

Parent-child Relationship quality was measured using the Chinese version of Pianta's (1998) Child-parent Relationship Scale (CPRS). The scale was scored from 1 (complete disagreement) to 5 (complete agreement). This study uses two dimensions of the scale: Conflict and Closeness. The conflict and intimacy dimensions of both English and Chinese versions of the scale have good reliability and validity (Pianta, 1998; Zhang Xiao et al., 2008). In this study, the internal consistency coefficient of the parent-child conflict subscale was 0.81, and the internal consistency coefficient of the parent-child intimacy subscale was 0.786.

2.2.3 Questionnaire on the Relationship between Parental Attachment Patterns

Parental attachment patterns were measured using the Chinese version of the Intimacy Relationship Structure Questionnaire (Fraley et al., 2011), which scores from 1 (strongly disagree) to 7 (strongly agree). In this study, the scale was used to measure the attachment of mothers to grandmothers and grandfathers, respectively, to assess two basic attachment dimensions: avoidance and anxiety. Higher scores for avoidance and anxiety were associated with higher levels of insecure attachment. In this study, in the mother-grandmother relationship scale, the internal consistency coefficient of the subscale of the avoidance dimension was 0.899, and that of the anxiety dimension was 0.828. In the mother-grandfather relationship scale, the internal consistency coefficient of the subscale of the avoidance dimension was 0.912, and the internal consistency coefficient of the anxiety dimension was 0.881.

3. Results

3.1 Description of Statistics and Correlation Analysis

Table 1 Correlation of Main Variables

variable	Mean \pm standard deviation	1	2	3	6	7
1 Conflict parent-child relationship	14.12 \pm 4.74	-				
2. Intimate parent-child relationship	31.09 \pm 3.86	-0.446**	-			
3. Anxiety and Shyness	21.68 \pm 5.70	0.342**	-0.258**	-		
4. Grandmother secure attachment	-24.59 \pm 10.94	-0.256**	0.207**	-0.132**	-	
5. Grandfather-secure attachment	-27.59 \pm 11.63	-0.257**	0.204**	-0.193**	0.562**	-

Note: ** at level 0.01 (double-tailed), the correlation is significant.

Correlation analysis found (see Table 1) that grandmother-secure attachment and grandfather-secure attachment were significantly negatively correlated with the conflict-type

parent-child relationship. While Children's anxiety and shyness, which significantly positively correlated with an intimate parent-child relationship. Anxiety and shyness are positively correlated with conflict-type parent-child relationships, while negatively correlated with intimacy-type parent-child relationships.

3.2 The Influence of Paternal Attachment on Children's Anxiety: the Mediating Role of Parent-Child Relationship

3.2.1 The Mediating Role of Parent-Child Relationship between Grandmother Secure Attachment and Anxiety and Shyness

Using grandmother secure attachment as a predictor and child anxiety as the dependent variable, the mediating effect of the parent-child relationship between them was tested. From Table 2, grandmother secure attachment has a significant negative predictive effect on conflict parent-child relationship ($\beta=-0.11$, $P < 0.001$), and it has a significant positive predictive effect on intimate parent-child relationship ($\beta=0.07$, $P < 0.001$). The conflict parent-child relationship and intimacy parent-child relationship had significant positive and negative predictive effects on children's anxiety, respectively ($\beta=0.40$, $P < 0.001$; $\beta=-0.36$, $P < 0.001$), indicating that parent-child relationship mediated the relationship between parental attachment and child anxiety. When parent-child relationship is the mediating variable between paternal attachment and children's anxiety, the predictive effect of paternal attachment on children's anxiety becomes insignificant, while the predictive effect of the parent-child relationship is still significant, indicating that the mediating effect is complete. The direct effect value of conflict-type parent-child relationship on grandmothers' secure attachment and children's shyness anxiety was $C'=-0.024$. Indirect effect value $a*b=-0.044***$. The direct effect of the intimate parent-child relationship on grandmothers' secure attachment and children's shyness anxiety was $C'=-0.043$. The indirect effect value is $A * B = -0.025***$.

Table 2 Test of The Mediating Effect of Parent-Child Relationship between Grandmother Secure Attachment and Anxiety and Shyness

steps	The dependent variable	Predictor variable	B	β	R	ΔR^2	F
—	Anxiety is shy	Grandmother secure attachment	-0.068**	-0.132**	0.132	0.015	8.389**
—	Conflict type parent-child relationship	Grandmother secure attachment	-0.111***	-0.256***	0.256	0.064	33.448***
	Intimate parent-child relationship	Grandmother secure attachment	0.073***	0.207***	0.207	0.041	21.209***
—	Anxiety is shy	Grandmother secure attachment	-0.024	-0.047	0.345	0.115	32.105***
		Conflict type parent-child relationship	0.396***	0.330***			
	Anxiety is shy	Grandmother secure attachment	-0.043	-0.082	0.270	0.069	18.686***
		Intimate parent-child relationship	-0.356***	-0.241***			

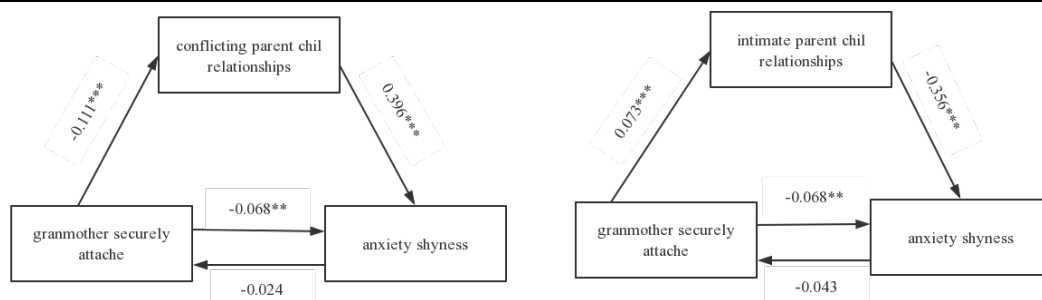


Fig.1 Conflicting Parent-Child Relationships

3.2.2 The Mediating Role of Parent-Child Relationship between Grandfather Secure Attachment and Anxiety and Shyness

Using grandfather-secure attachment as the predictor and children's anxiety as the dependent variable, the mediating effect of parent-child relationship between them was tested. As can be seen from Table 3, paternal secure attachment has a significant negative predictive effect on conflict parent-child relationship ($\beta = -0.11$, $P < 0.001$), and a significant positive predictive effect on intimate parent-child relationship ($\beta = 0.07$, $P < 0.001$). The conflict parent-child relationship and intimacy parent-child relationship had significant positive and negative predictive effects on children's anxiety, respectively ($\beta = 0.38$, $P < 0.001$; $\beta = -0.34$, $P < 0.001$), indicating that parent-child relationship mediated the relationship between parental attachment and child anxiety. When the parent-child relationship is the mediating variable between father attachment and child anxiety, the predictive effect of father attachment on child anxiety is still significant, indicating that this variable has a mediating effect. The direct effect value of the conflict-type parent-child relationship between grandfather-secure attachment and children's anxiety and shyness was $C' = -0.055^*$; The indirect effect value was $a*b = -0.040^{**}$. The direct effect value of the intimate parent-child relationship between grandfather-secure attachment and children's anxiety and shyness was $C' = -0.072^*$; The indirect effect value is $A * B = -0.023^{***}$.

Table 3 Test of The Mediating Effect of Parent-Child Relationship on Grandfather-Secure Attachment and Anxiety and Shyness

steps	The dependent variable	Predictor variable	B	β	R	ΔR^2	F
—	Anxiety is shy	Grandfather-secure attachment	-0.095***	-0.193***	0.193	0.035	18.488**
—	Conflict type parent-child relationship	Grandfather-secure attachment	-0.105***	-0.257***	0.257	0.064	33.606***
	Intimate parent-child relationship	Grandfather-secure attachment	0.068***	0.204***	0.204	0.040	20.625***
≡	Anxiety is shy	Grandfather-secure attachment	-0.055*	-0.113*	0.359	0.125	35.155***
		Conflict type parent-child relationship	0.376***	0.313***			
	Anxiety is shy	Grandfather-secure attachment	-0.072*	-0.147*	0.295	0.083	22.692***
		Intimate parent-child relationship	-0.337***	-0.228***			

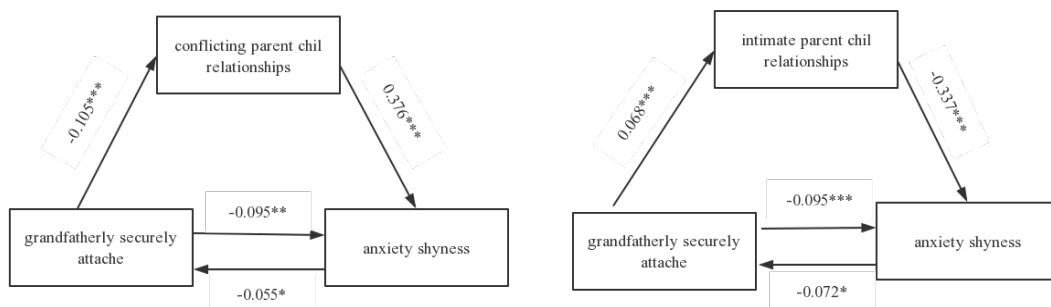


Fig.2 Intimate Parent-Child Relationships

4. Discuss

This study focuses on the family factors that influence children's anxiety, and explores the influence of paternal attachment on children's anxiety and the mediating role of the parent-child

relationship from the perspective of the intergenerational transmission of attachment patterns. The results showed that there were significant correlations among paternal attachment, parent-child relationship and children's anxiety. Parent attachment (secure attachment) has significant positive and negative predictive effects on parent-child relationship and children's anxiety, and parent-child relationship has significant positive and negative predictive effects on children's anxiety; To some extent, a good parent-child relationship can mitigate the negative effects of insecure attachment patterns on children's anxiety.

4.1 The Influence of the Parent-Child Relationship on Children's Anxiety.

A parent-child relationship is an important factor affecting children's psychological and social development. Many studies have shown that parent-child attachment has an impact on children's anxiety [20][21]. The results of this study show that there is a significant positive correlation between anxiety and shyness and conflict type of parent-child relationship, while a significant negative correlation between anxiety and intimacy type parent-child relationship. The conclusion of most previous studies in this field is verified, and the parent-child relationship has a significant positive predictive effect on children's anxiety. Children in an intimate parent-child relationship are less anxious than those in a conflict parent-child relationship.

4.2 The Influence of Maternal Attachment Style on the Parent-Child Relationship.

Consistent with the results of previous studies, this study demonstrates the intergenerational transmission of attachment patterns, and that mothers' early attachment patterns influence the shaping of their attachment relationships with their children. Parent attachment could significantly predict the offspring of the parent-child relationship, early have a secure attachment model's mother, for children in the process of getting along with their children's needs and performance will have a more positive response and feedback, make children can be fully appreciated from the mother love, understanding and support, more easily and children warm, intimate and stable parent-child relationship; On the contrary, it is easy to establish a conflict-type parent-child relationship.

4.3 The Mediating Role of Parent-Child Relationship between Maternal Attachment and Child Anxiety

This study found that parent-child relationship played a mediating role between maternal attachment and child anxiety. That is, maternal attachment style can not only directly affect children's anxiety, but also affect children's anxiety level through parent-child relationship. The mother's secure attachment to grandmother and grandfather affects children's anxiety through direct and indirect ways. The results show that paternal attachment (secure attachment pattern) has a significant negative predictive effect on children's anxiety. The ability of caregivers to respond sensitively to the needs of children is thought to be rooted in their manifestations of attachment [22]. Mothers with secure attachment style are highly sensitive to the needs of children and can well understand and respond to children's emotions and emotional needs, which is conducive to the development of children's social emotions and reduce the generation of children's anxiety. On the other hand, mothers' secure attachment to grandmothers indirectly affects children's anxiety by affecting parent-child relationship. The intense parent-child relationship helps children to have better performance in self-emotional cognition, understanding and control, thus reducing children's anxiety. The difference in the results caused by the different attachment objects of the father may be because when the mother was in childhood, most of the families in our country were in the pattern of the male leading the home and the female leading the home, and the mother undertook more of the task of nurturing children. Therefore, in most families, the mother will be the primary attachment of the children and will have a greater influence on the attachment style of the children as they grow up.

References

- [1] Ekinçi O, Titus J B, Rodopman A A, et al. Depression and Anxiety in Children and Adolescents

- with Epilepsy:Prevalence,Risk Factors and Treatment[J]. *Epilepsy & Behavior*,2009(1):8-18.
- [2] Merikangas KR, Nakamura EF, Rc K. Epidemiology of mental disorders in children and adolescents. *Dialogues in Clinical Neuroscience*, 2009, 11(1): 7-20
- [3] Meifang Wang, Yuting Wang. A follow-up study on anxiety status of preschool children. *Preschool Education Research*, 2008, (05)
- [4] Cole D A; Peeke L G; Martin J M; Truglio R; Seroczynski A DA longitudinal look at the relation between depression and anxiety in children and adolescents. *Journal of Consulting and Clinical Psychology* Volume 66, 1998(3): 451-60
- [5] Masten A S, Garmezy N. Risk, vulnerability and protective factors in developmental psychology. In: Lahey B B, Kazdin A E. *Advances in Clinical Child Psychology* (Vol 8), New York: Plenum, 1985. 1-52
- [6] Verhage Marije L; Schuengel Carlo; Madigan Sheri; Fearon R M Pasco; Oosterman Mirjam; Cassibba Rosalinda; Bakermans-Kranenburg Marian J; van IJzendoorn Marinus H Narrowing the Transmission Gap: A Synthesis of Three Decades of Research on Intergenerational Transmission of Attachment. *Psychological Bulletin* Volume 142, 2016(4). 337-366
- [7] Ainsworth MDS. Attachments beyond infancy. *American Psychologist*. 1989; 44:709–716. [PubMed: 2729745]
- [8] Lafreniere P J, Provost M A, Dubeau D. From an insecure base: Parent-child relations and internalizing behavior in the preschool. *Early Development and Parenting*, 1992, 1:137-148
- [9] Schneider B H, Atkinson L, Tardif C. Child-parent attachment and children's peer relations: A quantitative review. *Developmental Psychology*, 2001, 37:86-100
- [10] Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York: Basic Books.
- [11] Sroufe, L. A. (1996). *Emotional development: The organization of emotional life in the early years*. New York: Cambridge University Press.
- [12] Wang Xin, Su Xiaowei, Wang Yan, et al. The correlation between parenting style and children's anxiety level. *Chinese Journal of Mental Health*, 2000,14 (5)
- [13] Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York: Basic Books.
- [14] Kathryn A. Kerns, Laura E. Brumariu. Is Insecure Parent-Child Attachment a Risk Factor for the Development of Anxiety in Childhood or Adolescence? *Child Dev Perspect*. 2014 March 1; 8(1): 12-17
- [15] Meifang wang, Li liu, Yuting wang, The relationship between parental marital quality, parent-child attachment and infant anxiety. *Chinese Journal of Clinical Psychology*, 2010, 18 (6) : 802-805
- [16] Jinxia zhao, Zhu, C.Q., The relationship between parent-child attachment and children's anxiety. *Chinese Journal of Clinical Psychology*, 2011, 19 (5) : 636-638
- [17] Bernier A, Dozier M, Bridging the attachment transmission gap: The role of maternal mind-mindedness. *Internal Journal of Behavioral Development*, 2003,27(4): 355-365
- [18] De Wolff, M. S., & van IJzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development*, 68, 571–591. <http://dx.doi.org/10.1111/j.1467-8624.1997.tb04218.x>
- [19] Family factors influencing the formation of children's attachment style. *Chinese Journal of Clinical Psychology*, 2001,9 (4) : 190-192

- [20] Wautier, G, Blume, L. B. The effects of ego identity, gender role, and attachment on depression and anxiety in young adults. *Identity*, 2004, 4(1): 59-76
- [21] Shamir, E. G, Ungerer, J. A, & Rapee, R. M. Attachment, Behavioral Inhibition, and Anxiety in Preschool Children. *Journal of Abnormal Child Psychology*, 2005, 33(2)
- [22] Marije L. Verhage and Carlo Schuengel. Narrowing the Transmission Gap: A Synthesis of Three Decades of Research on Intergenerational Transmission of Attachment. *Psychological Bulletin* 2016, Vol. 142, No. 4, 337–366