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Research on the impact of parental self-affirmation on educational anxiety: a moderated chain mediation model

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Zhang Ke¹, student of School of Education Science
 Li Qi-bo², teacher
 Liu Jing-fei³, teacher
 Yu Zhan-yu*¹, tutor of master of School of Education Science

¹Jiangsu Normal University, Xuzhou (China)

*E-mail: yzhany@jsnu.edu.cn

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Abstract: Based on the data of parents of primary school students in Lianyungang City, Jiangsu Province, China, this paper explores the impact of parental self-affirmation on educational anxiety, as well as the mechanism of parental trust in children's autonomy, parental expectation, and family intimacy. A total of 983 parents of primary school students were surveyed using the GHQ-Self-Affirmation Scale, Parental Expectation Questionnaire, Parental Trust in Children's Autonomy Questionnaire, Parental Education Anxiety Questionnaire, and the Chinese Version of FACES II, focusing on the dimension of close relationships. There is a significant positive correlation between parental self-affirmation and educational anxiety (r=0.17, p<0.01), and self-affirmation positively predicts educational anxiety (β =0.07, P<0.05). In other words, the higher the level of parental self-affirmation, the higher the degree of parental educational anxiety. Parental trust in children's autonomy, and parental expectation play a chain mediating role between parental self-affirmation, and educational anxiety. The effect of parental self-affirmation on parental expectation is moderated by family intimacy. The study shows that parental trust in children's autonomy, and parental expectation, serve as a mediating bridge between parental self-affirmation and educational anxiety, and family intimacy can significantly positively moderate the impact of parental self-affirmation on parental trust in children's autonomy.

Keywords: educational anxiety; parental self-affirmation; parental expectation; family intimacy; parental trust in children's autonomy.

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INTRODUCTION

Reasons for this study

In recent years, with the increasing importance that parents attach to their children's education, news about the behaviour of parent education involution has continuously sparked widespread discussions, in all sectors of society. Education involution not only poses a threat to the physical and mental health of students and parents, but also seriously affects the healthy development of the education cause. In July 2021, the General Office of the CPC Central Committee and the General Office of the State Council issued the "Opinions on Further Reducing the Burden of Homework and Off-campus Training on Compulsory Education Students". The "double reduction" policy aims to ensure the fairness of basic education, return the main position of basic education to the classroom, and promote high-quality development of basic education in China. In this context, exploring the causes of family education involution, and

alleviating educational anxiety have become important topics for academic research.

The influence of self-affirmation on parental educational anxiety

Self-affirmation is a behaviour that focuses on the important aspects of the self, such as personal values and characteristics [1]. Self-esteem is often considered one of the mediating factors of self-affirmation [2]. Positive self-affirmation is beneficial for the formation of self-esteem, and the development of self-confidence.

Existing research has shown that self-esteem is significantly positively correlated with upward social comparison [3]. In general, upward social comparison can bring more threat effects [4], and these threat effects can lead to negative emotions, such as anxiety and depression in individuals [5]. As a state anxiety generated in the context of education, educational anxiety is a negative emotion such as worry, panic, and sadness, that parents experience in the process of educating their children, due to their own high expectations

²Fangshan Primary School in Donghai County, Lianyungang (China)

³Central Primary School in Qinghu Town, Donghai County, Lianyungang (China)

for their children and uncertainty about the process and outcome of educating their children [6]. It may also be influenced by individual self-affirmation. Therefore, this study hypothesises, that self-affirmation, significantly positively predicts educational anxiety (H1).

The mediating role of parental trust in children's autonomy

Parental trust in children's autonomy is an important component of parent-child trust and has a decisive impact on parent-child acceptance and children's growth. Parental trust in children's autonomy refers to the trust that parents have in their children's ability to make rational decisions in important areas of life, through independent thinking and self-regulation, and mainly relies on their own strength to achieve goals. Autonomy is very important for children's development. The level of parental trust, in children's autonomy, directly affects the content and extent of parental support for children's autonomous development. If parents trust their children's autonomy, they will provide them with opportunities for autonomy. Conversely, they will not provide sufficient support for their autonomous development [7].

Existing research has shown that self-affirmation is significantly positively correlated with self-esteem [8]. Furthermore, self-esteem is closely related to parent-child trust. Parental self-esteem is significantly positively correlated with parent-child trust [9]. Additionally, research has shown that parents with high self-esteem have higher levels of interaction, and satisfaction with their children [10]. Highly self-esteemed mothers are more likely to communicate well with their children, care about their behaviour, provide them with greater decision-making freedom, and view their children as more independent. Highly selfesteemed fathers have better communication with their children, and are less likely to use corporal punishment. This suggests that highly self-esteemed parents are more likely to believe in their children's ability to be autonomous, provide them with more opportunities for autonomy, and establish a good parent-child relationship. Therefore, parental self-affirmation may affect their trust in their children's autonomy.

At the same time, trust and anxiety are closely related. Research has shown that trust and anxiety are significantly negatively correlated [11]. When individuals have a higher level of trust, they are less likely to experience anxiety. Therefore, when parents have a high level of trust in their children's autonomy, their level of educational anxiety may be lower.

In addition, Maslow's Hierarchy of Needs Theory, points out, that individuals have the needs for security and belonging and love. The need for security refers to ensuring that individuals' safety is not infringed upon, while the need for belonging and love refers more to individuals' desire for close relationships and being accepted and dependent on groups. When these needs are not met, individuals may experience anxiety [12]. In the family, adolescents seek more fulfillment of their needs in parent-child relationships. When trust between parents and children is broken, adolescents' ideas are often not recognised by their parents. They often feel rejected in parent-child communication, feel that their parents cannot understand their true inner thoughts, and cannot accurately express their purposes.

They often fall into a vicious circle of self-denial, which directly affects the fulfillment of adolescents' needs for belonging and love, leading to more anxiety in adolescents [12].

The intergenerational transmission of anxiety can occur both from parents to children, and from children to parents [13]. Parents of anxious children are more prone to developing anxiety disorders themselves [13]. The Tripartite Model of the Impact of the Family, on Children's Emotion Regulation and Adjustment, also highlights that the emotional atmosphere within the family can influence the emotional capabilities of both parents and children [14]. The development of children's academic anxiety is significantly influenced by their parents [15]. When parents have insufficient trust in their children, it can lead to increased feelings of anxiety in the children, which can in turn affect the parental own anxiety levels. Therefore, parental trust in children's autonomy may have an impact on their educational anxiety. Based on the above analysis, this study hypothesises that parental trust in children's autonomy mediates the relationship between parental self-affirmation and educational anxiety (H2).

The mediating role of parental expectation

Parental expectation is likely to be one of the factors that affect the development of educational anxiety. Parental expectation, refers to the beliefs and goals that parents hold about their children's future performance, and achievements in areas such as education, career, etc. Parental expectation, is an attitude that refers to parental hopes and aspirations for their children in certain areas, such as academic and career success [16].

Self-affirmation can stimulate individuals' motivation, and promote them to achieve their goals, thus obtaining a high level of self-worth. Self-worth is also an affirmation of the importance of the self. People with high self-affirmation have a higher sense of self-worth, because self-affirmation can activate the motivation for self-improvement, thereby enhancing their sense of self-worth [17].

At the same time, an important aspect of self-worth is self-efficacy [18]. Parental self-efficacy is reflected in the parenting domain as parenting self-efficacy [19], which reflects whether parents believe in their ability to organise and execute tasks related to child rearing. Previous study has shown a significant positive correlation between parenting self-efficacy, and parental expectation [20]. Therefore, self-affirmation may affect parental expectation.

In addition, parental expectation is closely related to their educational anxiety [21]. Generally speaking, parental educational anxiety can arise at different developmental stages of their children, and depends on the level of achievement that their children meet their parental expectations. If parents have unrealistically high expectations for their children's educational outcomes, and their children fail to meet these expectations, it can lead to anxiety in the parents [16; 22].

In summary, this study hypothesises that parental self-affirmation may affect their educational anxiety through parental expectation. Based on the above analysis, this study proposes the hypothesis that parental expectation mediates the relationship between parental self-affirmation and educational anxiety (H3).

The chain mediation effect of parental trust in children's autonomy and parental expectation

Parents' views on parent-child relationships can affect their level of trust in their children [23]. Parental trust, in turn, can also affect the quality of the parent-child relationship [24]. A good parent-child relationship and parental trust form a positive feedback loop. Parental trust in children's autonomy is an important component of parent-child trust, and it may also be influenced by the parent-child relationship.

The parent-child relationship also affects parental expectation. Previous study has shown that there is a significant positive correlation, between parent-child relationship and parental expectation [25]. Therefore, the level of parental trust in children's autonomy may affect the level of parental expectation. If parents believe that their children have the ability to achieve the set goals, their expectations for their children will be higher [26]. Based on the above analysis, this study proposes the hypothesis that parental trust in children's autonomy and parental expectation act as a chain of mediators between self-affirmation and educational anxiety (H4).

The moderating effect of family intimacy

The individual-environment interaction model points out, that the impact of family as an external environment cannot be ignored in the process of individual development [27]. When the relationship between variables in the family environment is positive and beneficial, individuals will also develop in a positive and healthy direction [28]. The ecological systems theory also believes that the family is one of the most influential microsystems on individual development, and a good family atmosphere is crucial for individual development [29]. The environment in which individuals are situated can directly influence their internal experiences [30]. Family intimacy, as an important indicator of measuring family atmosphere, refers to the degree of emotional connection individuals feel with their family members.

Self-affirmation can effectively buffer the negative impact of threatening events on individuals, and individuals living in families are influenced by various aspects within the family. Family systems theory posits that families are composed of interacting subsystems, and all subsystems are interdependent. Previous research has shown that family intimacy is significantly negatively correlated with parents' negative emotions [31], and significantly positively correlated with parent-child communication [32]. Families with low levels of family intimacy lack communication among family members, which may make it difficult for parents to gain a deep understanding of their children. However, parental trust is mainly based on understanding of their children's daily activities, and if this understanding is gained through children's self-disclosure, the level of parental trust will be high [33].

Therefore, based on the above research, this study considers three aspects: individuals (parental self-affirmation), environment (family intimacy), and parent-child interaction (parental trust in children's autonomy), and hypothesises that family intimacy positively moderates the relationship between self-affirmation and children's autonomous trust (H5).

In summary, this study aims to explore the impact of parental self-affirmation on their educational anxiety. Meanwhile, it selects parental trust in children's autonomy and

parental expectation as mediating variables, and family intimacy as a moderating variable.

It aims to investigate the development mechanism of educational anxiety to effectively buffer the phenomenon of educational in-tension.

METHODS

Subjects

By using random sampling method, parents of primary school students from different schools were selected as subjects to participate in online questionnaire surveys. The questionnaire instructions emphasised the authenticity of responses and the principle of confidentiality of the survey before the start. A total of 1219 questionnaires were collected, and after checking the completion of the questionnaires and excluding invalid questionnaires, 983 valid questionnaires were ultimately collected, with an effective recovery rate of 80 % (demographic variables are shown in Table 1).

Measures

Self-affirmation

Self-affirmation was measured using the GHQ-Self-Affirmation Scale [34]. The questionnaire consists of 9 questions. The scoring method used in this study was "yes – no", with "yes" scoring 1 point and "no" scoring 0 points. The score range was 0–9, with higher scores indicating higher levels of self-affirmation. The Cronbach's alpha coefficient of the scale analysis was 0.69, indicating a high level of reliability and validity.

Parental Expectation

Parental expectation was measured using the Parental Expectation Questionnaire [35]. The questionnaire consists of 24 items, including 6 reverse-scored items, and is composed of 5 dimensions: academic performance, future achievement, character performance, interpersonal relationship and the health and psychological quality. The questionnaire uses a 5-point scale, ranging from 1 indicating "totally inconsistent" to 5 indicating "totally consistent". The higher the score, the higher the expectation. The overall internal consistency coefficient of the questionnaire is 0.93, indicating good reliability, and meeting the standards of psychological measurement. The standardised factor loadings of each item on various factors are above 0.40, meeting the requirements of psychological measurement, indicating that the questionnaire has good validity.

Parental Trust in Children's Autonomy

Parental trust in children's autonomy was measured using the Parental Trust in Children's Autonomy Questionnaire [20]. The questionnaire consists of 21 items and includes 4 dimensions: the trust in self-reliance, the trust in self-regulation, the trust in self-control, and the trust in self-assertion. The questionnaire uses a 4-point scale, ranging from 1 indicating "totally disbelief" to 4 indicating "total belief". The higher the score, the higher the level of parental trust in children's autonomy. The Cronbach's alpha coefficient of the scale analysis is 0.95, indicating a high level of reliability and validity.

Table 1. Basic Information of Subjects (N=983)

Таблица 1. Основная информация об участниках исследования (N=983)

The Name of Demographic Variables	Category	Number of people	Percentage (%)	
Powerful Condon	Male	321	32.7	
Parental Gender	Female	662	67.3	
	Primary or Junior High School	222	22.6	
Parental Education Background	High School or Technical Secondary School	266	27.1	
	College or above	495	50.4	
	Two-parent Family	922	93.8	
Family Structure	Single-parent Family	45	4.6	
	Re-married Family	16	1.6	
	Below 1000	19	1.9	
	1000–3000	71	7.2	
Monthly Household Income	3000–5000	184	18.7	
	5000–7000	234	23.8	
	7000 and above	475	48.3	
	Administrative Staff	83	8.4	
	Teacher	80	8.1	
Donantal Occupation	Worker	126	12.8	
Parental Occupation	Businessman	107	10.9	
	Farmer	75	7.6	
	Other	512	52.1	
Child Condon	Boy	552	56.2	
Child Gender	Girl	431	43.8	
Is the Child on Only Child	Yes	180	18.3	
Is the Child an Only Child	No	803	81.7	

Parental Education Anxiety

Parental education anxiety was measured using the Parental Education Anxiety Questionnaire [36]. This instrument comprises 21 items, organised into 4 dimensions: learning anxiety, school-choice anxiety, health-related anxiety, and peer relationship anxiety. Responses were rated on a 5-point scale ranging from 1 (completely inconsistent) to 5 (completely consistent). Higher scores indicated elevated levels of parental educational anxiety. The internal consistency, as measured by Cronbach's alpha, was 0.94 in this study, signifying strong reliability and validity.

Family Intimacy

Family intimacy was measured using the Chinese Version of FACES II [37]. The questionnaire consists of 16 items and measures the intimacy dimension. It uses a 5-point scale,

ranging from 1 indicating "no" to 5 indicating "always". The higher the score, the higher the family intimacy. The Cronbach's alpha coefficient of the scale analysis is 0.80, indicating a high level of reliability and validity.

Procedures and data processing

Data collection

This study collected data in the form of electronic questionnaires. The questionnaire was distributed through a questionnaire star link and QR code. Prior to the survey, the school personnel's consent was obtained, and then the electronic questionnaire was distributed to students and parents by the class teacher. Before the formal response, the purpose of the survey and the principle of confidentiality were emphasised, and the subjects were asked to complete all items independently according to the requirements

and their actual situation. There was no right or wrong answer. After the questionnaire was collected, invalid questionnaires with missing questions, duplicate responses, or complete non-responses were eliminated.

Data processing

The data were processed and analysed using SPSS 26.0 and the SPSS macro-Process programme developed by Hayes, for descriptive statistics, correlation analysis, and model testing. The moderated chain mediation model was tested, using the SPSS PROCESS macro programme for bias-corrected nonparametric percentile bootstrap testing [38]. This method involves resampling the original data with replacement to generate a certain number of samples for testing. In this study, 5000 samples were resampled with replacement, and the moderated chain mediation effect was estimated using model 83 and a 95 % confidence interval.

RESULTS

Test for common method deviation

Due to the use of questionnaire survey method, there may be a certain degree of common method deviation among some questions. Therefore, before conducting data analysis, the common method deviation of all items in the questionnaire used in this study, was tested using Harman's one-factor test. The cumulative variance explained by the first factor was 20.31 % (<30 %). Therefore, no serious common method bias was observed in this study.

Descriptive statistics and associated analyses

The descriptive statistics and correlation analysis results of each variable (see Table 2), indicate that self-affirmation is positively correlated with parental expectation, parental trust in children's autonomy, educational anxiety, and family intimacy; parental expectation is positively correlated with parental trust in children's autonomy, educational anxiety, and family intimacy; parental trust in children's autonomy is positively correlated with educational anxiety and family intimacy; and educational anxiety is positively correlated with family intimacy.

The test of moderated mediation model

The moderated chain mediation model was tested using PROCESS 4.1's Model 83 to test the mediating effects of parental expectation and parental trust in children's autonomy between self-affirmation and educational anxiety, as well as the moderating effect of family intimacy. To reduce the impact of multicollinearity, all predictor variables were standardised in the regression analysis [39]. The results are shown in Tables 3–5. In equation 1, self-affirmation significantly positively predicted parental trust in children's autonomy (β =0.27, p<0.001), and the interaction between selfaffirmation and family intimacy significantly positively predicted parental trust in children's autonomy (β =0.07, p<0.01) (see Table 3); in equation 2, self-affirmation significantly positively predicted parental expectation (β =0.16, p<0.001), and parental trust in children's autonomy significantly positively predicted parental expectation (β=0.30, p<0.001) (see Table 4); in equation 3, self-affirmation significantly positively predicted educational anxiety (β =0.07, p < 0.05), and parental trust in children's autonomy and parental expectation significantly positively predicted educational anxiety (β =0.22, p<0.001; β =0.22, p<0.001) (see Table 5). The moderated mediation model is shown in Fig. 1.

Simple effect analysis of the moderating effect

To test the moderating effect of family intimacy on the impact of self-affirmation on parental trust in children's autonomy. As shown in Table 3, the interaction between selfaffirmation and family intimacy significantly positively predicts parental trust in children's autonomy (β=0.07, p<0.01). Further simple slopes analysis was conducted, with the scores of family intimacy divided into high and low groups, based on the mean ± 1 standard deviation. The results are shown in Fig. 2 and Table 6. Under the condition of low family intimacy (M-1SD), self-affirmation significantly positively predicts parental trust in children's autonomy (β =0.19, p<0.001); under the condition of high family intimacy (M+1SD), the positive predictive effect of self-affirmation on parental trust in children's autonomy is stronger (β =0.34, p<0.001). Subsequently, the mediating effects of parental trust in children's autonomy, and parental expectation on the relationship between self-affirmation, and parental trust in children's autonomy were analysed at different levels of family intimacy (M-1SD, M, M+1SD). The results are shown in Table 7. The results obtained from simple effect analysis, are consistent with those from the mediating effect analysis. Although the mediating effects of parental trust in children's autonomy, and parental expectation are significant at different levels of family intimacy, they increase as the level of family intimacy increases.

DISCUSSION

The summary of the study

The purpose of this study is to explore the development mechanism of parents' educational anxiety. The study found that parental self-affirmation significantly positively predicts educational anxiety, and that parental trust in children's autonomy and parental expectation, play a chain mediating role in the impact of parental self-affirmation on educational anxiety. At the same time, family intimacy positively moderates the impact of parental self-affirmation on parental trust in children's autonomy.

The predictive effect of parental self-affirmation on educational anxiety

The results of this study indicate that parental selfaffirmation can significantly predict educational anxiety (hypothesis 1). Individuals with high self-affirmation typically have high self-esteem, and hold more positive self-evaluations [40]. The self-evaluation maintenance model suggests that humans have a fundamental need to maintain positive selfevaluations. Social comparison is not done to reduce uncertainty about abilities and opinions, but rather to maintain positive self-evaluations [41]. Moreover, individuals hold more positive self-evaluations after reading information, about upward comparison targets compared to downward comparison targets [42]. However, upward social comparison is significantly positively correlated with educational anxiety. Interactive situations in class groups can stimulate upward social comparison among group members, leading to anxiety as they perceive a downgrade in social status [43].

Table 2. Descriptive Statistics and Correlation Analysis of Each Variable **Таблица 2.** Описательная статистика и корреляционный анализ каждой переменной

Variables	M±SD	1	2	3	4	5
1. Self-affirmation	7.10±1.47	1				
2. Parental Expectation	102.74±12.45	0.27**	1			
3. Parental Trust in Children's Autonomy	63.49±10.43	0.35**	0.36**	1		
4. Educational Anxiety	74.80±13.05	0.17**	0.28**	0.23**	1	
5. Family Intimacy	60.01±8.79	0.32**	0.35**	0.44**	0.12**	1

Note. **P<0.01.

Примечание. **Р<0,01.

Table 3. Parental Trust in Children's Autonomy: Regression Analysis of Predictor Variables **Таблица 3.** Родительское доверие к детской автономии: регрессионный анализ предикторных переменных

Variables	Parental Trust in Children's Autonomy					
variables	β	se	t	LLCI	ULCI	
Self-affirmation	0.27	0.03	8.37***	0.20	0.33	
Family Intimacy	0.37	0.03	12.64***	0.31	0.43	
Self-affirmation × Family Intimacy	0.07	0.03	2.78**	0.02	0.12	
Parental Trust in Children's Autonomy						
Parental Expectation						
R ²			0.25			
F			107.79***			

Note. **P<0.01, ***P<0.001.

Примечание. **Р<0,01, ***Р<0,001.

Table 4. Parental Expectation: Regression Analysis of Predictor Variables **Таблица 4.** Родительские ожидания: регрессионный анализ предикторных переменных

Variables	Parental Expectation					
	β	se	t	LLCI	ULCI	
Self-affirmation	0.16	0.03	5.14***	0.10	0.22	
Family Intimacy						
Self-affirmation × Family Intimacy						
Parental Trust in Children's Autonomy	0.30	0.03	9.53***	0.24	0.36	
Parental Expectation						
R^2			0.15			
F			86.01***			

Note. ***P<0.001.

Примечание. ***Р<0,001.

Table 5. Educational Anxiety: Regression Analysis of Predictor Variables **Таблица 5.** Тревожность, связанная с образованием: регрессионный анализ предикторных переменных

Variables	Educational Anxiety					
	β	se	t	LLCI	ULCI	
Self-affirmation	0.07	0.03	2.07*	0.01	0.13	
Family Intimacy						
Self-affirmation × Family Intimacy						
Parental Trust in Children's Autonomy	0.22	0.03	3.80***	0.06	0.20	
Parental Expectation	0.22	0.03	6.53***	0.15	0.28	
R ²			0.10			
F			36.47***			

Note. *P<0.05, ***P<0.001.

Примечание. *Р<0,05, ***Р<0,001.

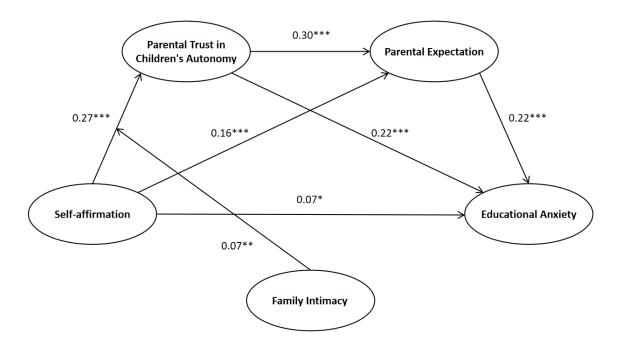


Fig. 1. Moderated Mediation Model Puc. 1. Модель модерируемой медиации

Table 6. Conditional Effect Analysis of Self-affirmation on Parental Trust in Children's Autonomy **Таблица 6.** Анализ обусловленного влияния самоутверждения на родительское доверие к детской автономии

Moderating Variable	Moderation Level	Effect Size	t	LLCI	ULCI
Family Intimacy	M-1SD	0.19	6.02***	0.13	0.26
	М	0.27	8.37***	0.20	0.33
	M+1SD	0.34	6.97***	0.24	0.43

Note. ***P<0.001.

Примечание. ***Р<0,001.

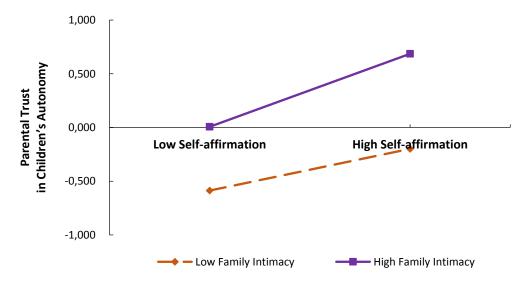


Fig. 2. The Moderating Effect of Family Intimacy on the Impact of Self-affirmation on Parental Trust in Children's Autonomy Puc. 2. Модерирующее воздействие семейной близости на влияние самоутверждения на родительское доверие к детской автономии

Table 7. Moderating Mediation Effects and Difference Analysis (Self-Affirmation – Parental Trust in Children's Autonomy – Parental Expectation – Educational Anxiety) **Таблица 7.** Модерирующее воздействие медиации и разностный анализ (самоутверждение – родительское доверие к детской автономии – родительские ожидания – учебная тревожность)

Result Types	Indicator	Effect Size	BootSE	BootLLCI	BootULCI
Moderated Mediation Effects	Eff1(M-1SD)	0.01	0.00	0.01	0.02
	Eff2(M)	0.02	0.00	0.01	0.03
	Eff3(<i>M</i> +1 <i>SD</i>)	0.02	0.01	0.01	0.03
Comparison of Moderated Mediation Effects	Eff2–Eff1	0.01	0.00	0.00	0.01
	Eff3–Eff1	0.01	0.00	0.00	0.02
	Eff3–Eff2	0.00	0.00	0.00	0.01

In addition, the cultural phenomenon of regarding "the child as the family's sole hope" has engendered an atmosphere of intensive parenting, and heightened anxiety. High self-affirming parents tend to engage in upward social comparison and are therefore more eager for high-quality educational resources. However, this parental mindset, coupled with the scarcity of high-quality educational resources, fierce competition, and societal transformations, has culminated in persistent anxiety [44].

The chain mediation effect of parental trust in children's autonomy and parental expectation

This study found that parental trust in children's autonomy and parental expectation play mediating roles between self-affirmation and educational anxiety (hypothesis 2 and 3), respectively, and also act as a chain mediator between self-affirmation and educational anxiety (hypothesis 4). Self-affirmation can improve interpersonal perception.

Compared to individuals who do not engage in self-affirmation, individuals who engage in self-affirmation have more positive feelings towards others, such as more love and compassion [45], as well as a stronger sense of belonging when threatened. After engaging in self-affirmation, individuals are more likely to focus on others' misfortune and recognise their suffering. Research has shown that empathy is associated with trust [46]. Parents with high empathy are more likely to consider the reasons for their children's thoughts and behaviours [47], deepening their understanding of their children and providing them with more opportunities for autonomy.

At the same time, existing research suggests that there is a significant positive correlation between parental trust in children's autonomy, and parental expectation [20]. Parental trust in children's autonomy also reflects their evaluation of children's abilities. Moreover, the relationship between parental expectation and their evaluation of children's abilities becomes stronger as children age [48]. In this process, the more parental trust in their children's autonomous abilities, the higher their expectations become.

In addition, parental anxiety is closely related to parental cognition, specifically to parental expectation [21]. Existing research also shows a significant positive correlation between parental expectation, and exam anxiety in parental education anxiety [49]. Chinese parents generally have high expectations for their children, which is followed by the spread of education anxiety.

This study also found an interesting phenomenon that parental trust in children's autonomy is significantly positively correlated with educational anxiety, which is contrary to previous studies. Trust, as an attitude, is a subjective tendency and desire to believe that others' behaviours or the surrounding order conform to one's wishes [50]. However, when individuals engage in sufficient cognitive processing of the situation, their choices are no longer entirely based on implicit attitudes [51]. Therefore, parental trust in children's autonomy may only reflect their explicit attitudes, which needs further verification in the future.

The moderating effect of family intimacy

The results of this study indicate that family intimacy positively moderates the effect of parental self-affirmation, on parental trust in children's autonomy (hypothesis 5). Self-esteem is an individual's evaluation of oneself that is typically held, expressing an attitude of affirmation or negation [52]. High family intimacy can improve individuals' self-esteem levels [53], leading to more self-affirmation.

At the same time, positive family communication is positively associated with higher family relationship satisfaction, and less family conflict [54]. Families with high intimacy have close relationships among family members, a harmonious family atmosphere, mutual trust, rich emotional communication, strong family belonging and reliance. In such families, there is more parent-child communication, and parents have a better understanding of their children's abilities, which can increase parental trust in their children's abilities to some extent. Conversely, family members in families with low intimacy have less communication, which can also lead to lower levels of parent-child trust.

Limitations and future research directions

It is essential to consider the limitations inherent in this study, while interpreting its outcomes. On the one hand, in terms of the selection of research methods, this study mainly adopted questionnaire survey methods, and relied on parents' self-reporting. This can only show the level of parental trust in children's explicit autonomy, and may not necessarily reflect their true level. Therefore, in the future, implicit association tests can be used to measure parental trust in children's implicit autonomy, and further investigate the level of parental trust in children's autonomy.

On the other hand, in terms of the selection of the subject group, this study mainly measured parents of elementary school students. In the future, it can be considered to measure the explicit and implicit trust of parents of junior high school and high school students in their children's autonomy. At the same time, it can also measure the trust status of children towards their parents, thereby enriching the research on parent-child trust.

CONCLUSION

The main conclusions of this study are as follows:

- 1) parental self-affirmation significantly positively predicts educational anxiety;
- 2) parental trust in children's autonomy and parental expectation play a chain mediating role between self-affirmation and educational anxiety;
- 3) the effect of parental self-affirmation on parental trust in children's autonomy is moderated by family intimacy.

REFERENCES

- 1. Chen Wei-Ju, Nelson A.M., Johnson H.B., Fleming R. Effects of self-affirmation on emotion and cardiovascular responses. *Stress and Health*, 2020, vol. 37, no. 2, pp. 201–212. DOI: 10.1002/smi.2986.
- Zhong Yi-ping, Chen Zhi-young, Luo Xi, Wang Xi-ai, Yi Wen-ting. Effects of Self-affirmation on Self-esteem and Self-evaluation. *Chinese Journal of Clinical Psychology*, 2014, no. 3, pp. 390–393. DOI: <u>10.16128/</u> j.cnki.1005-3611.2014.03.049.
- Ding Qian, Zhang Yongxin, Zhou Zongkui. The Effect of Social Network Site Usage on Envy: The Mediating Role of Upward Social Comparison and the Moderating Role of Self-Esteem. *Journal of Psychological Science*, 2017, vol. 3, pp. 618–624. DOI: <u>10.16719/j.cnki.1671-</u> 6981.20170317.
- 4. Han Xiao. The Self-Threat of Unsolicited Social Comparison and Its Balance. *Acta Psychologica Sinica*, 2012, vol. 12, pp. 1628–1640.
- Okano H., Nomura M. Examining social anxiety and dual aspects of social comparison orientation: the moderating role of self-evaluation of social skills. *Frontiers In Psychology*, 2023, vol. 14, article number 1270143. DOI: 10.3389/fpsyg.2023.1270143.
- Yu Shuo, Zheng Jiansong, Xu Zhibin, Zhang Tao. The Transformation of Parents' Perception of Education Involution Under the Background of 'Double Reduction' Policy: The Mediating Role of Education Anxiety and Perception of Education Equity. *Frontiers In Psychology*, 2022, vol. 13, article number 800039. DOI: <u>10.</u> 3389/fpsyg.2022.800039.
- Cao H.J., Fang X.Y., Qian Z.L. The characteristics of self-determination for junior high middle school students with hearing disabilities and the effect of social support. *Chinese Journal of Applied Psychology*, 2012, vol. 2, pp. 109–119.
- 8. Hu J., Zhang J., Lu Y.Q., Dai X.J. Relationship among self-assertiveness, communication competence and self-esteem of under graduates in the military medical university. *Military Nursing*, 2018, vol. 20, pp. 64–68.
- Tian Weiyi, Xu Jianjie, Lyu Guanglin, Wang Yinan. Parental Self-esteem and Adolescents' Subjective Wellbeing: The Chain Mediating Roles of Parent-adolescent Trust and Adolescents' Self-esteem. *Psychological Development and Education*, 2022, vol. 3, pp. 331–338. DOI: 10.16187/j.cnki.issn1001-4918.2022.03.04.
- Ghaziri N.E., Darwiche J. Adult Self-Esteem and Family Relationships. *European Journal of Psychology Open*, 2018, vol. 77, no. 3, pp. 99–115. DOI: <u>10.1024/1421-0185/a000212</u>.

- Xu F., Li H., Ma F.L. Relationship between Trust Propensity and Personality in University Students. *Chinese Journal of Applied Psychology*, 2011, vol. 3, pp. 202–211.
- Feng Xiaohang. Adolescent Parent-Child Trust Crisis. Science & Technology Information, 2021, vol. 13, pp. 252–256. DOI: <u>10.16661/j.cnki.1672-3791.2012-5042-9984</u>.
- Cooper P.J., Fearn V., Willetts L., Seabrook H., Parkinson M. Affective disorder in the parents of a clinic sample of children with anxiety disorders. *Journal of Affective Disorders*, 2006, vol. 93, no. 1-3, pp. 205–212. DOI: 10.1016/j.jad.2006.03.017.
- 14. Morris A.S., Silk J.S., Steinberg L., Myers S.S., Robinson L.R. The Role of the Family Context in the Development of Emotion Regulation. *Social Development*, 2007, vol. 16, no. 2, pp. 361–388. DOI: 10.1111/j.1467-9507.2007.00389.x.
- Milgram N., Toubiana Y. Academic anxiety, academic procrastination, and parental involvement in students and their parents. *British Journal of Educational Psychology*, 1999, vol. 69, no. 3, pp. 345–361. DOI: <u>10.1348/000709999157761</u>.
- 16. Kumar S., Kinra A. Impact of parental expectation on self-concept of adolescent. *Indian Journal of Health & Wellbeing*, 2017, vol. 8, no. 11, pp. 1357–1360.
- 17. Taylor S.E., Lobel M. Social comparison activity under threat: downward evaluation and upward contacts. *Psychological Review*, 1989, vol. 96, no. 4, pp. 569–575. DOI: 10.1037/0033-295x.96.4.569.
- 18. Qin Y.G. On self-esteem. *Journal of Southwest University (Social Sciences Edition)*, 1997, vol. 4, pp. 73–77.
- 19. Huang X.M., Wang L.X., Sun Q.Q. The Relationship between Parents' Growth Mindset and Young Children's Approaches to Learning: The Chain Mediating Effect of Parenting Self-Efficacy and Children's Self-Efficacy. Chinese Journal of Clinical Psychology, 2023, vol. 5, pp. 1225–1228. DOI: 10.16128/j.cnki.1005-3611.2023. 05.039.
- Yang Z., Chen M.Y. Hearing-Impaired Children's Parenting Self-Efficacy and Parenting Expectations: The Mediating Effect of Their Parents' Trust in Their Autonomy. *Chinese Journal of Special Education*, 2017, vol. 3, pp. 53–58.
- 21. Orchard F., Cooper P.J., Creswell C. Interpretation and expectations among mothers of children with anxiety disorders: associations with maternal anxiety disorder. *Depression and Anxiety*, 2015, vol. 32, no. 2, pp. 99– 107. DOI: 10.1002/da.22211.
- Otterpohl N., Lazar R., Stiensmeier-Pelster J. The dark side of perceived positive regard: When parents' well-intended motivation strategies increase students' test anxiety. *Contemporary Educational Psychology*, 2019, vol. 56, pp. 79–90. DOI: 10.1016/j.cedpsych.2018.11.002.
- 23. Kerr M., Stattin H., Trost K. To know you is to trust you: parents' trust is rooted in child disclosure of information. *Journal of Adolescence*, 1999, vol. 22, no. 6, pp. 737–752. DOI: <a href="total-total
- 24. Sugimura K., Hihara S., Hatano K., Nakama R., Saiga S., Tsuzuki M. Profiles of Emotional Separation and Parental Trust from Adolescence to Emerging Adulthood: Age Differences and Associations with Identity and Life Satisfaction. *Journal of Youth Adolescence*, 2023, vol. 52, pp. 475–489. DOI: 10.1007/s10964-022-01716-z.

- 25. Wang Wenjing. The influence mechanism of the parent-child relationship on adolescent academic performance: The serial mediating effect of parental expectations and self-expectations. *Studies in Educational Evaluation*, 2024, vol. 81, article number 101323. DOI: 10.1016/j.stueduc.2024.101323.
- Räty H., Leinonen T., Snellman L. Parents' Educational Expectations and their Social-Psychological Patterning. Scandinavian Journal of Educational Research, 2002, vol. 46, no. 2, pp. 129–144. DOI: <u>10.1080/003138302</u> 20142164.
- 27. Lerner R.M., Almerigi J.B., Theokas C., Lerner J.V. Positive Youth Development A View of the Issues. *The Journal of Early Adolescence*, 2005, vol. 25, no. 1, pp. 10–16. DOI: 10.1177/0272431604273211.
- 28. Ma Yue, Wu Jie, Zha Shi-qi, Yang Chun. Can relationship patterns be transferred? The influence of parentchild attachment on interpersonal harmony among adolescents. *Science vector of Togliatti state university*. *Series: Pedagogy, psychology*, 2023, no. 4, pp. 45–55. DOI: 10.18323/2221-5662-2023-4-45-55.
- 29. Cox M.J., Paley B. Families as systems. *Annual Review of Psychology*, 1997, vol. 48, pp. 243–267. DOI: <u>10.</u> 1146/annurev.psych.48.1.243.
- Yu Haiying, Cui Yushan, Fu Haifan. Study on the influence of social support on the effect of science education in rural primary schools. *Science vector of Togliatti state university. Series: Pedagogy, psychology*, 2023, no. 3, pp. 37–49. DOI: 10.18323/2221-5662-2023-3-37-49.
- 31. Guo Xiangrong, Zhou Yulai, Xu Jian, Hu Yuelai, Liu Zhiwei. The Association of Maternal Emotional Status With Child Over-Use of Electronic Devices During the COVID-19 Pandemic. *Front in Pediatrics*, 2021, vol. 9, article number 760996. DOI: 10.3389/fped. 2021.760996.
- 32. Shen Jianguo. Intergenerational Transmission Effect of Home Physical Activity among Mothers and Offspring: The Value Added Contribution of Parent-child Communication and Family Cohesion. *Journal of Tianjin University of Sport*, 2022, no. 4, pp. 475–481. DOI: 10.13297/j.cnki.issn1005-0000.2022.04.015.
- 33. Zhang F.J., Liu C.L. Study on personality characteristics of hearing impaired children. *Chinese Journal of Special Education*, 1999, no. 3, pp. 22–25.
- 34. Li H., Mei J.R. Assessing Psychological Well-being of College Student: Psychometric Properties of GHQ-20. *Psychological Development and Education*, 2002, vol. 18, pp. 75–79.
- 35. Chai Caixia, Feng Xizhen, Liu Liping. Effect of parenting expectation on parenting stress in primary school students' parents: A mediating effect of parenting sense of competence. *China Journal of Health Psychology*, 2020, vol. 10, pp. 1514–1518. DOI: 10.13342/j.cnki.cjhp.2020.10.018.
- 36. Du X.T., Li X.Y. Longitudinal impact of parental educational expectations on academic anxiety and academic performance of high school students. *Journal of Bioeducation*, 2023, vol. 4, pp. 290–296.
- 37. Fei L.P., Shen Q.J., Zhen Y.P., Zhao J.P., Jiang S.A., Wang L.W., Wang X.D. Preliminary evaluation of Chinese version of FACES II and FES: comparison of normal families and families of schizophrenic patients. *Chi*nese Mental Health Journal, 1991, no. 5, pp. 198–202.

- 38. Wen Z.L., Ye B.J. Analyses of Mediating Effects: The Development of Methods and Models. *Advances in Psychological Science*, 2014, no. 5, pp. 731–745.
- Fang Jie, Wen Zhonglin, Liang Dongmei, Li Nini. Moderation Effect Analyses Based on Multiple Linear Regression.
 Journal of Psychological Science, 2015, no. 3, pp. 715–720. DOI: 10.16719/j.cnki.1671-6981.2015.03.001.
- 40. Zhong Yi-ping, Chen Zhi-yong, Luo Xi, Wang Xi-ai, Yi Wen-ting. Effects of Self-affirmation on Self-esteem and Self-evaluation. *Chinese Journal of Clinical Psychology*, 2014, no. 3, pp. 390–393. DOI: <u>10.16128/j.cnki.1005-3611.2014.03.049</u>.
- 41. Xing S.F., Yu G.L. A Review on Research of Social Comparison. *Advances in Psychological Science*, 2005, vol. 13, no. 1, pp. 78–84.
- 42. Colpaert L., Muller D., Fayant M.-P., Butera F. A mind-set of competition versus cooperation moderates the impact of social comparison on self-evaluation. *Frontiers in Psychology*, 2015, vol. 6, article number 1337. DOI: 10.3389/fpsyg.2015.01337.
- 43. Liu Yang. Communication impetus of group anxiety: research of WeChat parenting groups based on media affordances theory. *Journalism and Mass Communication*, 2020, no. 10, pp. 40–49. DOI: <u>10.15897/j.cnki.cn51-1046/g2.2020.10.005</u>.
- 44. Sattin-Bajaj C., Roda A. Opportunity Hoarding in School Choice Contexts: The Role of Policy Design in Promoting Middle-Class Parents' Exclusionary Behaviors. *Educational Policy*, 2018, vol. 34, no. 8, pp. 566– 580. DOI: 10.1177/0895904818802106.
- 45. Thomaes S., Bushman B.J., de Castro B.O., Reijntjes A. Arousing "gentle passions" in young adolescents: Sustained experimental effects of value affirmations on prosocial feelings and behaviors. *Developmental Psychology*, 2012, vol. 48, no. 1, pp. 103–110. DOI: 10.1037/a0025677.
- 46. Feng J., Lazar J., Preece J. Empathy and online interpersonal trust: A fragile relationship. *Behaviour & Information Technology*, 2004, vol. 23, no. 2, pp. 97–106. DOI: 10.1080/01449290310001659240.
- 47. Lovett B.J., Sheffield R.A. Affective empathy deficits in aggressive children and adolescents: A critical review. *Clinical Psychology Review*, 2007, vol. 27, no. 1, pp. 1–13. DOI: 10.1016/j.cpr.2006.03.003.
- 48. Räty H. What comes after compulsory education? A follow-up study on parental expectations of their child's future education. *Educational Studies*, 2006, vol. 32, no. 1, pp. 1–16. DOI: 10.1080/03055690500415837.
- 49. Le X.Y., Gu Y.B., Liu L. The relationship among parental educational expectations, perception of children's psychological reatance and parent test anxiety. *Journal of Jilin Medical University*, 2022, no. 5, pp. 339–343.
- 50. Zheng Y.F. Trust: origin and definition. *Social Sciences of Beijing*, 1999, no. 4, pp. 118–123. DOI: 10.13262/j. bjsshkxy.bjshkx.1999.04.046.
- 51. Zhang Ying, Bian Yufang. Parents' Implicit Attitudes Toward Emotional Word Associations and Their Relationship to Empathic Forecasting: Findings based on the Implicit Association Test (IAT). *Psychology: Techniques* and Applications, 2019, no. 12, pp. 714–722. DOI: <u>10.</u> 16842/j.cnki.issn2095-5588.2019.12.002.
- 52. Wang Y.N., Wu Y.Y., Zeng C.W., Wang H.M., Zhang S.J., Zhang B. The impact of alexithymia on problematic mobile phone use: The sequence mediating effect of

- self-esteem and subjective well-being. *China Journal of Health Psychology*, 2024, vol. 32, no. 2, pp. 1–9.
- 53. Ren B., Gao J., Ma C. Relationship Between Undergraduates' Life Values and Family Adaptability and Cohesion. *Journal of Tianjin University (Social Sciences)*, 2014, no. 1, pp. 93–96.
- 54. Jackson S., Bijstra J., Oostra L., Bosma H. Adolescents' perceptions of communication with parents relative to specific aspects of relationships with parents and personal development. *Journal of Adolescence*, 1998, vol. 21, no. 3, pp. 305–322. DOI: <u>10.1006/jado.1998.0155</u>.

СПИСОК ЛИТЕРАТУРЫ

- Chen Wei-Ju, Nelson A.M., Johnson H.B., Fleming R. Effects of self-affirmation on emotion and cardiovascular responses // Stress and Health. 2020. Vol. 37. № 2. P. 201–212. DOI: 10.1002/smi.2986.
- Zhong Yi-ping, Chen Zhi-young, Luo Xi, Wang Xi-ai, Yi Wen-ting. Effects of Self-affirmation on Self-esteem and Self-evaluation // Chinese Journal of Clinical Psychology. 2014. № 3. P. 390–393. DOI: 10.16128/j.cnki.1005-3611.2014.03.049.
- Ding Qian, Zhang Yongxin, Zhou Zongkui. The Effect of Social Network Site Usage on Envy: The Mediating Role of Upward Social Comparison and the Moderating Role of Self-Esteem // Journal of Psychological Science. 2017. Vol. 3. P. 618–624. DOI: 10.16719/j.cnki.1671-6981.20170317.
- Han Xiao. The Self-Threat of Unsolicited Social Comparison and Its Balance // Acta Psychologica Sinica. 2012. Vol. 12. P. 1628–1640.
- Okano H., Nomura M. Examining social anxiety and dual aspects of social comparison orientation: the moderating role of self-evaluation of social skills // Frontiers In Psychology. 2023. Vol. 14. Article number 1270143. DOI: 10.3389/fpsyg.2023.1270143.
- 6. Yu Shuo, Zheng Jiansong, Xu Zhibin, Zhang Tao. The Transformation of Parents' Perception of Education Involution Under the Background of 'Double Reduction' Policy: The Mediating Role of Education Anxiety and Perception of Education Equity // Frontiers In Psychology. 2022. Vol. 13. Article number 800039. DOI: 10.3389/fpsyg.2022.800039.
- Cao H.J., Fang X.Y., Qian Z.L. The characteristics of self-determination for junior high middle school students with hearing disabilities and the effect of social support // Chinese Journal of Applied Psychology. 2012. Vol. 2. P. 109–119.
- 8. Hu J., Zhang J., Lu Y.Q., Dai X.J. Relationship among self-assertiveness, communication competence and self-esteem of under graduates in the military medical university // Military Nursing. 2018. Vol. 20. P. 64–68.
- Tian Weiyi, Xu Jianjie, Lyu Guanglin, Wang Yinan. Parental Self-esteem and Adolescents' Subjective Wellbeing: The Chain Mediating Roles of Parent-adolescent Trust and Adolescents' Self-esteem // Psychological Development and Education. 2022. Vol. 3. P. 331–338. DOI: 10.16187/j.cnki.issn1001-4918.2022.03.04.
- 10. Ghaziri N.E., Darwiche J. Adult Self-Esteem and Family Relationships // European Journal of Psychology Open. 2018. Vol. 77. № 3. P. 99–115. DOI: 10.1024/1421-0185/a000212.

- 11. Xu F., Li H., Ma F.L. Relationship between Trust Propensity and Personality in University Students // Chinese Journal of Applied Psychology. 2011. Vol. 3. P. 202–211.
- Feng Xiaohang. Adolescent Parent-Child Trust Crisis // Science & Technology Information. 2021. Vol. 13.
 P. 252–256. DOI: <u>10.16661/j.cnki.1672-3791.2012-5042-9984</u>.
- 13. Cooper P.J., Fearn V., Willetts L., Seabrook H., Parkinson M. Affective disorder in the parents of a clinic sample of children with anxiety disorders // Journal of Affective Disorders. 2006. Vol. 93. № 1-3. P. 205–212. DOI: 10.1016/j.jad.2006.03.017.
- 14. Morris A.S., Silk J.S., Steinberg L., Myers S.S., Robinson L.R. The Role of the Family Context in the Development of Emotion Regulation // Social Development. 2007. Vol. 16. № 2. P. 361–388. DOI: 10.1111/j.1467-9507.2007.00389.x.
- 15. Milgram N., Toubiana Y. Academic anxiety, academic procrastination, and parental involvement in students and their parents // British Journal of Educational Psychology. 1999. Vol. 69. № 3. P. 345–361. DOI: 10. 1348/000709999157761.
- 16. Kumar S., Kinra A. Impact of parental expectation on self-concept of adolescent // Indian Journal of Health & Wellbeing. 2017. Vol. 8. № 11. P. 1357–1360.
- 17. Taylor S.E., Lobel M. Social comparison activity under threat: downward evaluation and upward contacts // Psychological Review. 1989. Vol. 96. № 4. P. 569–575. DOI: 10.1037/0033-295x.96.4.569.
- 18. Qin Y.G. On self-esteem // Journal of Southwest University (Social Sciences Edition). 1997. Vol. 4. P. 73–77.
- Huang X.M., Wang L.X., Sun Q.Q. The Relationship between Parents' Growth Mindset and Young Children's Approaches to Learning: The Chain Mediating Effect of Parenting Self-Efficacy and Children's Self-Efficacy // Chinese Journal of Clinical Psychology. 2023. Vol. 5. P. 1225–1228. DOI: <u>10.16128/j.cnki.</u> 1005-3611.2023.05.039.
- Yang Z., Chen M.Y. Hearing-Impaired Children's Parenting Self-Efficacy and Parenting Expectations: The Mediating Effect of Their Parents' Trust in Their Autonomy // Chinese Journal of Special Education. 2017. Vol. 3. P. 53–58.
- 21. Orchard F., Cooper P.J., Creswell C. Interpretation and expectations among mothers of children with anxiety disorders: associations with maternal anxiety disorder // Depression and Anxiety. 2015. Vol. 32. № 2. P. 99–107. DOI: 10.1002/da.22211.
- Otterpohl N., Lazar R., Stiensmeier-Pelster J. The dark side of perceived positive regard: When parents' well-intended motivation strategies increase students' test anxiety // Contemporary Educational Psychology. 2019. Vol. 56. P. 79– 90. DOI: 10.1016/j.cedpsych.2018.11.002.
- 23. Kerr M., Stattin H., Trost K. To know you is to trust you: parents' trust is rooted in child disclosure of information // Journal of Adolescence. 1999. Vol. 22. № 6. P. 737–752. DOI: 10.1006/jado.1999.0266.
- 24. Sugimura K., Hihara S., Hatano K., Nakama R., Saiga S., Tsuzuki M. Profiles of Emotional Separation and Parental Trust from Adolescence to Emerging Adulthood: Age Differences and Associations with Identity and Life Satis-

- faction // Journal of Youth Adolescence. 2023. Vol. 52. P. 475–489. DOI: 10.1007/s10964-022-01716-z.
- 25. Wang Wenjing. The influence mechanism of the parent-child relationship on adolescent academic performance: The serial mediating effect of parental expectations and self-expectations // Studies in Educational Evaluation. 2024. Vol. 81. Article number 101323. DOI: 10.1016/j.stueduc.2024.101323.
- 26. Räty H., Leinonen T., Snellman L. Parents' Educational Expectations and their Social-Psychological Patterning // Scandinavian Journal of Educational Research. 2002. Vol. 46. № 2. P. 129–144. DOI: 10.1080/00313830220142164.
- 27. Lerner R.M., Almerigi J.B., Theokas C., Lerner J.V. Positive Youth Development A View of the Issues // The Journal of Early Adolescence. 2005. Vol. 25. № 1. P. 10–16. DOI: 10.1177/0272431604273211.
- 28. Ma Yue, Wu Jie, Zha Shi-qi, Yang Chun. Can relationship patterns be transferred? The influence of parent-child attachment on interpersonal harmony among adolescents // Science vector of Togliatti state university. Series: Pedagogy, psychology. 2023. № 4. P. 45–55. DOI: 10.18323/2221-5662-2023-4-45-55.
- 29. Cox M.J., Paley B. Families as systems // Annual Review of Psychology. 1997. Vol. 48. P. 243–267. DOI: 10.1146/annurev.psych.48.1.243.
- 30. Yu Haiying, Cui Yushan, Fu Haifan. Study on the influence of social support on the effect of science education in rural primary schools // Science vector of Togliatti state university. Series: Pedagogy, psychology. 2023. № 3. P. 37–49. DOI: 10.18323/2221-5662-2023-3-37-49.
- 31. Guo Xiangrong, Zhou Yulai, Xu Jian, Hu Yuelai, Liu Zhiwei. The Association of Maternal Emotional Status With Child Over-Use of Electronic Devices During the COVID-19 Pandemic // Front in Pediatrics. 2021. Vol. 9. Article number 760996. DOI: <u>10.3389/fped.2021.760996</u>.
- 32. Shen Jianguo. Intergenerational Transmission Effect of Home Physical Activity among Mothers and Offspring: The Value Added Contribution of Parent-child Communication and Family Cohesion // Journal of Tianjin University of Sport. 2022. № 4. P. 475–481. DOI: 10. 13297/j.cnki.issn1005-0000.2022.04.015.
- 33. Zhang F.J., Liu C.L. Study on personality characteristics of hearing impaired children // Chinese Journal of Special Education. 1999. № 3. P. 22–25.
- 34. Li H., Mei J.R. Assessing Psychological Well-being of College Student: Psychometric Properties of GHQ-20 // Psychological Development and Education. 2002. Vol. 18. P. 75–79.
- 35. Chai Caixia, Feng Xizhen, Liu Liping. Effect of parenting expectation on parenting stress in primary school students' parents: A mediating effect of parenting sense of competence // China Journal of Health Psychology. 2020. Vol. 10. P. 1514–1518. DOI: 10.13342/j.cnki.cjhp.2020.10.018.
- Du X.T., Li X.Y. Longitudinal impact of parental educational expectations on academic anxiety and academic performance of high school students // Journal of Bioeducation, 2023, Vol. 4, P. 290–296.
- 37. Fei L.P., Shen Q.J., Zhen Y.P., Zhao J.P., Jiang S.A., Wang L.W., Wang X.D. Preliminary evaluation of

- Chinese version of FACES II and FES: comparison of normal families and families of schizophrenic patients // Chinese Mental Health Journal. 1991. № 5. P. 198–202.
- 38. Wen Z.L., Ye B.J. Analyses of Mediating Effects: The Development of Methods and Models // Advances in Psychological Science. 2014. № 5. P. 731–745.
- 39. Fang Jie, Wen Zhonglin, Liang Dongmei, Li Nini. Moderation Effect Analyses Based on Multiple Linear Regression // Journal of Psychological Science. 2015. № 3. P. 715–720. DOI: 10.16719/j.cnki.1671-6981. 2015.03.001.
- 40. Zhong Yi-ping, Chen Zhi-yong, Luo Xi, Wang Xi-ai, Yi Wen-ting. Effects of Self-affirmation on Self-esteem and Self-evaluation // Chinese Journal of Clinical Psychology. 2014. № 3. P. 390–393. DOI: 10.16128/j.cnki.1005-3611.2014.03.049.
- 41. Xing S.F., Yu G.L. A Review on Research of Social Comparison // Advances in Psychological Science. 2005. Vol. 13. № 1. P. 78–84.
- 42. Colpaert L., Muller D., Fayant M.-P., Butera F. A mind-set of competition versus cooperation moderates the impact of social comparison on self-evaluation // Frontiers in Psychology. 2015. Vol. 6. Article number 1337. DOI: 10.3389/fpsyg.2015.01337.
- 43. Liu Yang. Communication impetus of group anxiety: research of WeChat parenting groups based on media affordances theory // Journalism and Mass Communication. 2020. № 10. P. 40–49. DOI: 10.15897/j.cnki.cn51-1046/g2.2020.10.005.
- 44. Sattin-Bajaj C., Roda A. Opportunity Hoarding in School Choice Contexts: The Role of Policy Design in Promoting Middle-Class Parents' Exclusionary Behaviors // Educational Policy. 2018. Vol. 34. № 8. P. 566–580. DOI: 10.1177/0895904818802106.
- 45. Thomaes S., Bushman B.J., de Castro B.O., Reijntjes A. Arousing "gentle passions" in young adolescents: Sustained experimental effects of value affirmations on prosocial feelings and behaviors // Developmental Psychology. 2012. Vol. 48. № 1. P. 103–110. DOI: 10.1037/a0025677.

- 46. Feng J., Lazar J., Preece J. Empathy and online interpersonal trust: A fragile relationship // Behaviour & Information Technology. 2004. Vol. 23. № 2. P. 97–106. DOI: 10.1080/01449290310001659240.
- 47. Lovett B.J., Sheffield R.A. Affective empathy deficits in aggressive children and adolescents: A critical review // Clinical Psychology Review. 2007. Vol. 27. № 1. P. 1–13. DOI: 10.1016/j.cpr.2006.03.003.
- 48. Räty H. What comes after compulsory education? A follow-up study on parental expectations of their child's future education // Educational Studies. 2006. Vol. 32. № 1. P. 1–16. DOI: 10.1080/03055690500415837.
- 49. Le X.Y., Gu Y.B., Liu L. The relationship among parental educational expectations, perception of children's psychological reatance and parent test anxiety // Journal of Jilin Medical University. 2022. № 5. P. 339–343.
- 50. Zheng Y.F. Trust: origin and definition // Social Sciences of Beijing. 1999. № 4. P. 118–123. DOI: 10.13262/j.bjsshkxy.bjshkx.1999.04.046.
- 51. Zhang Ying, Bian Yufang. Parents' Implicit Attitudes Toward Emotional Word Associations and Their Relationship to Empathic Forecasting: Findings based on the Implicit Association Test (IAT) // Psychology: Techniques and Applications. 2019. № 12. P. 714–722. DOI: 10.16842/j.cnki.issn2095-5588.2019.12.002.
- 52. Wang Y.N., Wu Y.Y., Zeng C.W., Wang H.M., Zhang S.J., Zhang B. The impact of alexithymia on problematic mobile phone use: The sequence mediating effect of self-esteem and subjective well-being // China Journal of Health Psychology. 2024. Vol. 32. № 2. P. 1–9.
- 53. Ren B., Gao J., Ma C. Relationship Between Undergraduates' Life Values and Family Adaptability and Cohesion // Journal of Tianjin University (Social Sciences). 2014. № 1. P. 93–96.
- 54. Jackson S., Bijstra J., Oostra L., Bosma H. Adolescents' perceptions of communication with parents relative to specific aspects of relationships with parents and personal development // Journal of Adolescence. 1998. Vol. 21. № 3. P. 305–322. DOI: 10.1006/jado.1998.0155.

Исследование влияния родительского самоутверждения на учебную тревожность: модель модерируемой цепной медиации

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Чжан Кэ 1 , студент факультета педагогики **Ли Цибо** 2 , учитель **Лю Цзинфэй** 3 , учитель

*Ю Чжанью**1, руководитель программы подготовки специалистов факультета педагогики

*E-mail: yzhany@jsnu.edu.cn

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Аннотация: В работе исследуется влияние родительского самоутверждения на учебную тревожность, а также механизм родительского доверия к автономии детей, родительские ожидания и семейная близость. Опрошены 983 родителя учащихся начальных классов города Ляньюньган провинции Цзянсу, Китай. Использовались следующие методики: шкала самоутверждения опросника общего состояния здоровья, опросник родительских ожиданий, опросник родительского доверия к автономии детей, опросник родительской тревожности, связанной с обра-

¹Цзянсуский педагогический университет, Сюйчжоу (Китай)

²Начальная школа Фаншань уезда Дунхай, Ляньюньган (Китай)

³Центральная начальная школа в Цинху Таун, уезд Дунхай, Ляньюньган (Китай)

зованием (детей), а также китайская адаптация шкалы оценки семейной адаптируемости и сплоченности FACES II, при этом особое внимание уделялось аспекту близких отношений. Наблюдается значительная прямая корреляция между родительским самоутверждением и тревожностью, связанной с образованием (детей) (r=0,17, p<0,01), а самоутверждение напрямую предопределяет учебную тревожность (β =0,07, P<0,05). Иными словами, чем выше уровень родительского самоутверждения, тем выше степень родительской тревожности, связанной с образованием (детей). Родительское доверие к автономии детей и родительские ожидания играют роль медиатора между родительским самоутверждением и тревожностью, связанной с образованием (детей). Влияние родительского самоутверждения на родительские ожидания ослабляется семейной близостью. Показано, что родительское доверие к детской автономии и родительские ожидания служат связующим звеном между родительским самоутверждением и тревожностью, связанной с образованием (детей), а семейная близость может значительно смягчить влияние родительского самоутверждения на родительское доверие к детской автономии.

Ключевые слова: учебная тревожность; родительское самоутверждение; родительские ожидания; семейная близость; родительское доверие к детской автономии.

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