

The Relationship between Parental Emotional Warmth Perceived by College Students and Self-esteem: The mediating role of parent-child relationships

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ABSTRACT

This study, with 389 college students as the research subjects, explores the mechanism of parental emotional warmth on self-esteem and the mediating role of parent-child relationships based on social learning theory and family systems theory. The Short Parenting Style Questionnaire (S-Embu), Self-esteem Scale and Parent-Child Relationship Scale were used for measurement. Descriptive statistics, correlation analysis and Bootstrap mediating effect test were used to reveal the relationships among the variables. The results showed: (1) Parental emotional warmth exhibited a significant positive association with self-esteem ($r=0.55$, $p<0.01$) and parent-child relationship ($r=0.28$, $p<0.01$); (2) Parent-child relationship served as a partial mediator between parental emotional warmth and self-esteem. The mediating effect coefficient measured 0.21, representing 30.43% of the overall effect size. This study provides empirical evidence for family mental health education and suggests improving the self-esteem level of college students by enhancing parent-child interaction patterns.

KEYWORDS

Parental emotional warmth; Self-esteem; Parent-child relationship; College students; Mediating effect

1 Introduction

In recent years, the state has attached great importance to the mental health and all-round development of teenagers, and relevant policies have frequently focused on family education and the optimization of parent-child relationships. The Family Education Promotion Law, implemented in 2021, clearly emphasizes that family education should not only focus on children's academic achievements, but also on their mental health and personality development. The report of the 20th National Congress of the Communist Party of China further emphasized the necessity to "build harmonious family relationships and promote the all-round development of teenagers", incorporating parent-child relationships and emotional support into the important scope of family education. These policies provide important guidance for the study and practice of family education, and also show the great significance of parents' emotional care for their children's psychological development.

However, in real life, many families still face a series of problems in educating their children. Some parents, due to the pressure of social competition and the accelerated pace of life, neglect emotional support for their children; In contrast, the traditional concept of education that focuses on grades makes many children feel the lack of emotional support from their parents and even think they are not truly accepted and understood. This long-term lack of emotion can lead to psychological inferiority or lack of confidence in children, which in turn can have a negative impact on their self-esteem and personality development. At the same time, the diversity of modern family structures (such as single-parent families, grandparent upbringing) and intergenerational conflicts of ideas further exacerbate communication barriers and emotional estrangement between parents and children. For example, parents in single-parent families may face double financial and time pressures and pay relatively less emotional attention to their children; In grandparent-raised families, conflicts in emotional communication and educational concepts are more pronounced due to the generational differences between grandparents and grandchildren. These realities have led some college students to show lower levels of self-esteem and unmet emotional needs in their mental health and personality development as they enter early adulthood.

In the academic field, research has shown that parental emotional warmth is an important factor influencing children's mental health and personality development, especially having a profound impact on college students' self-esteem levels. But in terms of specific mechanisms, the mediating role that parent-child relationships play between parental emotional warmth and college self-esteem has not been fully studied.

Based on national policy orientation and social reality issues, this project explores the intrinsic connection between parental emotional warmth, parent-child relationship and college students' self-esteem, hoping not only to conduct further research, but also to provide theoretical support and practical inspiration for building harmonious parent-child relationships and advancing the mental health promotion among college students.

2 Literature review

Mental health among college students has received widespread attention in recent years. Studies have shown that lower self-esteem among college students can lead to various mental problems (Wang Shanshan et al., 2021). Self-esteem problems may persist into adulthood and have a lasting impact on teenagers' lives and interpersonal relationships (HUANG et al., 2024). Self-esteem reflects the difference in state between the perceived real self and the expected self. People with higher levels of self-esteem have a higher core self-evaluation and are better adapted to social life (Ge Xiaoyu, Hou Yubo, 2021). Therefore, it is crucial to pay attention to the factors influencing self-esteem among college students.

Family function theory holds that the positive development of family members is achieved through the benign collaboration of the basic functions of the family system. Family intimacy, which refers to the degree of emotional connection among family members (Li Lu et al., 2020), is an important indicator for measuring family function. More studies have focused on the impact of family intimacy as a dimension of family function on self-esteem (Guo Zhibin, Lin Lihua, 2018), finding that self-esteem, as a core factor of personality, is closely related to the family environment, especially the harmonious emotional atmosphere among family members, and there is a significant correlation between family intimacy and self-esteem. Poor closeness among family members leads to low self-esteem and a greater likelihood of behavioral problems.

In addition, the theory of biological ecology holds that the development of an individual's psychology and behavior is influenced by the external ecosystem, among which the family environment, as the innermost microsystem of the ecosystem, has a profound impact on an individual's physical and mental development (Bronfenbrenner U, Evans GW, 2009). First of all, the parent-child relationship represents an indispensable dimension of the familial environment and exhibits a profound association with adolescents' psychological well-being. Empirical investigations have consistently revealed that a positive parent - child relationship serves as a stable and emotionally nurturing support system for adolescents, which can effectively promote the physical and mental well-being of the individual; Conversely, a negative parent - child relationship may obstruct the holistic development of adolescents' physical and mental health, thereby escalating the probability of emotional and physical complications. (Bradford AB et al., 2017).

Parenting style has been identified as a key predictive factor for self-esteem (YAO M et al., 2014), and studies have classified parenting styles into positive and negative ones, with parental emotional warmth being used to measure positive parenting styles. (Li Yongzhan, 2018). Parenting style is the educational approach that parents have long adopted towards their children. Parenting style can effectively influence an individual's interpersonal relationships and anxiety levels: children reared in unfavorable family environments tend to exhibit elevated anxiety levels, whereas those nurtured in supportive familial settings demonstrate lower anxiety propensities (Li Zuoshan, 2001). Parenting styles also affect the formation of personality and have a significant impact on self-esteem. Positive parenting styles positively predict self-esteem, while negative parenting styles negatively predict self-esteem. Individuals with high self-esteem levels can provide sufficient resources to maintain self-control behavior, thereby improving self-control ability (Guo Zhiying, 2023). From this, it can be concluded that parenting styles of college student parents can influence self-esteem (Liu et al., 2024). Drawing from the foregoing literature, the present study posits the following hypotheses:

Hypothesis H1: The perceived emotional warmth from parents by college students significantly positively predicts their self-esteem levels; Hypothesis H2: Parent-child relationship plays a mediating role in the relationship between parental emotional warmth and self-esteem.

3 Methods

3.1 Subjects

A total of 389 undergraduate students were randomly selected from universities across the country by questionnaire survey. Specifically, the sample comprised 178 male students (45.76%) and 211 female students (54.24%); The average age was 21.13 ± 1.45 years. All participants participated voluntarily, and the effective recovery rate of the questionnaire was 99.5%.

3.2 Research tools

3.2.1 Brief parenting style questionnaire (S-embu)

The scale was developed by Arrindell et al., revised by Chiang et al. The questionnaire comprises 21 items, systematically categorized into three distinct dimensions: emotional warmth, rejection, and overprotection. A four-point scale (from 1 "never" to 4 "always") will be used, referring to previous studies, combining the parent and parent dimensions as the parent dimension, with a higher total score indicating a stronger degree. The Cronbach's α coefficient for the scale in this study was 0.81.

3.2.2 Self-esteem scale

The scale was developed by Rosenberg and revised by Ji Yifu et al. The scale consists of 10 items such as "I hope I could gain more respect for myself." A 4-point scale (ranging from 1 "very inconsistent" to 4 "very consistent") was used, where higher scores reflected greater self-esteem among participants. The scale employed in the present study demonstrated acceptable internal consistency, with its Cronbach's α coefficient recording 0.78.

3.2.3 Parent-child relationship scale

The Parent-Child Closeness Scale (PCCS), originally constructed by Buchanan, Maccoby, and Dornbush (1991), was used to evaluate the relationship between father and son and between mother and son, with a total of 9 items, on a 5-point scale ranging from 1 as "never" to 5 as "always". In this study, the mean scores were employed to reflect parent-child relational quality, wherein higher scores denoted a closer affiliative bond between adolescents and their father or mother. The Cronbach's coefficient of the scale in this study was 0.94 (with the father subscale) and 0.93 (with the mother subscale).

4 Results

Descriptive and correlational analyses were executed using SPSS 21.0 for statistical computation. Correlation analysis was used to study the degree of correlation between variables; The Bootstrap mediating effect test was conducted using the Process plugin developed by Hayes (Model 4) with 95% confidence intervals set.

4.1 Variable descriptive statistics and correlation matrices

According to Table 1, parental emotional warmth ($M=2.20\pm0.47$), parent-child relationship ($M=3.31\pm1.10$), and self-esteem ($M=2.55\pm0.59$) were all normally distributed, and there was a statistically significant positive association was identified among the three ($p<0.01$). Parental emotional warmth showed a moderate positive correlation with self-esteem ($r = 0.55$), a weaker association with parent-child relationship ($r = 0.28$), whereas parent-child relationship exhibited a strong positive correlation with self-esteem ($r = 0.71$), preliminarily supporting hypothesis H1.

Table 1 Descriptive statistics of variables and correlation matrices

	M $\pm$ SD	Parental Emotional Warmth	Self-esteem	parent-child relationships
Parental Emotional Warmth	2.20 $\pm$ 0.47	1		
Self-esteem	2.55 $\pm$ 0.59	0.55**	1	
parent-child relationships	3.31 $\pm$ 1.10	0.28**	0.71**	1

** $p<0.01$

4.2 The mediating role of parent-child relationship between parental emotional warmth and self-esteem

To explore the underlying mechanism of the significant positive effect of parental emotional warmth on self-esteem, parent-child relationship was further introduced as a mediating variable in the study and substituted into the structural equation model. The mediating effect was tested by using Model4 in the SPSS macro program Process, and the mediating effect was validated through the Bootstrap technique developed by Hayes.

The path coefficients of parent-child relationship among the three variables of parental emotional warmth and self-esteem are shown in Figure 1.

As Table 2 indicates, the 95% Bootstrap confidence intervals for the mediational effect of parental emotional warmth on the association between parent-child relationship and self-esteem do not include zero, indicating that parental emotional warmth not merely exerts a direct influence on self-esteem but additionally mediates this association via

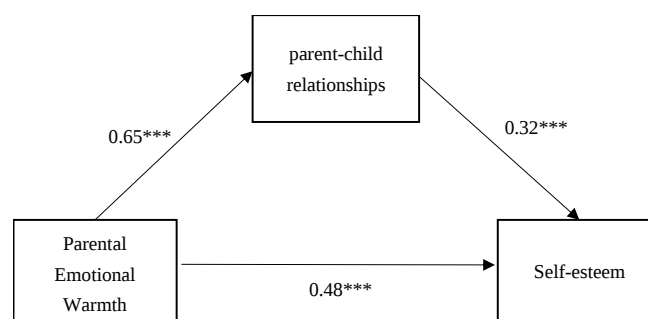


Figure 1 Shows the path coefficient diagram of parental emotional warmth, parent-child relationship and self-esteem

*** $p<0.001$, ** $p<0.01$, * $p<0.05$, the same below

parent-child relationship. The direct effect (0.48) constituted 69.57% of the total effect (0.69), with the mediating effect (0.21) comprising the remaining 30.43%, hypothesis H2 holds.

Table 2 Decomposition of total effect, direct effect and mediating effect

	Effect value	se	LLCI	ULCI	effect size
Total Effect	0.69	0.05	0.59	0.80	
Direct Effect	0.48	0.04	0.40	0.56	69.57%
Mediating Effect	0.21	0.05	0.12	0.30	30.43%

** $p < 0.01$ (bilateral test)

5 Discussion

5.1 The direct Impact of parental emotional warmth on self-esteem

This study found that parental emotional warmth can directly increase the self-esteem level of college students, which is consistent with domestic and foreign research (Trzesniewski et al., 2003; Zhang Ye, 2016. Emotional warmth forms a positive self-concept in children by passing on "unconditional positive attention" to make them feel recognized for their own worth (Rogers, 1951). For example, emotional support behaviors such as parents' daily listening and encouraging words can reduce college students' self-doubt and enhance their confidence in facing academic pressure.

5.2 Mediating mechanisms of parent-child relationship

Parent-child relationship serves as a partial mediator in the association between parental emotional warmth and self-esteem, indicating that emotional warmth not merely exerts a direct influence on self-esteem but also conveys an indirect effect on its development by improving the quality of parent-child interaction. This result supports the family systems theory that parenting styles affect individual psychological development by influencing the family subsystem (parent-child relationship) (Minuchin, 1974). Specifically, in families with high emotional warmth, communication between parents and children is more open and trusting, and this secure attachment relationship provides psychological support for children to explore themselves, making them more inclined to positively interpret external evaluations and thereby boosting self-esteem (Bowlby, 1969).

5.3 Practical insights

5.3.1 Family intervention

Strengthening the quality of emotional interaction suggests that parents improve their emotional expression skills through methods such as "active listening training" and "family communication workshops". For example, set a regular time for family communication every week, avoid didactic communication, and instead use "I see... I feel..." Empathetic expression enhances children's emotional involvement.

5.3.2 School support

Parent-child relationship counseling Colleges and universities' mental health centers can offer "Family Relationships and Self-growth" group counseling to help students understand the ways parents convey emotional warmth through role-playing, case analysis, etc., and learn skills to improve parent-child communication (such as nonviolent communication).

5.3.3 At the individual level

Enhancing self-awareness skills guide college students to identify positive emotional signals in the family, and by writing "Family Warmth diaries" to record supportive behaviors of parents, strengthen the perception of emotional warmth, thereby improving parent-child relationship satisfaction and self-esteem levels.

5.4 Research limitations and prospects

This study includes three limitations: First, the cross-sectional design employed here restricts the ability to establish causal associations, as temporal sequence cannot be determined, and further research is required to explore dynamic effects over time, providing a longitudinal perspective on temporal relationships; Second, the majority of the samples were concentrated in the eastern region, lacking regional diversity, and more samples from universities in the central and western regions could be included for comparison. Third, this study solely examined the mediating role of parent-child relationships, and the moderating effects of external factors such as peer relationships and school environment were not considered. It is suggested that a multi-dimensional influence model be constructed in subsequent studies.

6 Conclusion

This study confirmed that parental emotional warmth was found to directly facilitate college students' self-esteem, with this effect being partially transmitted via parent-child relationship. The results indicate that enhancing parent-child interaction dynamics represents a pivotal strategy for promoting self-esteem in college students, providing an intervention logic of "emotional support - relationship optimization - self-esteem enhancement" for mental health education in families and schools.

References

- [1] Ge Xiaoyu, Hou Yubo. A gentleman without worry or fear: The gentleman's personality and mental health - a chain of mediators between self-control and authenticity [J]. *Acta Psychologica Sinica*, 2021, 53(4): 374-386.
- [2] Guo Zhibin, Lin Lihua. A study on the relationship between adolescent self-esteem, family closeness and rebelliousness [J]. *Journal of Fujian Medical University (Social Science Edition)*, 2018(1).
- [3] Guo Zhiying. The relationship between parenting style and Self-control of Migrant children: A chain mediating effect of family function and self-esteem. *Psychological and Behavioral Research*, 2023, 21(4): 503-509.
- [4] Hu Yiqiu, He Zhen, Zeng Zihao, et al. The effect of parent-child relationship on aggressive behavior in adolescents: The mediating role of mindfulness and the moderating role of NR3C1 gene rs41423247 polymorphism [J/OL]. *Psychological Development and Education*, 2025, (04): 561-570[2024-11-28].
- [5] Jiang Jiang, Lu Zhengrong, Jiang Jing, Xu Yan. (2010). Preliminary revision of the Chinese version of the Questionnaire on Simplified Parenting Styles. *Psychological Development and Education*, 26(1), 94-99.
- [6] Liu Lihao. (2023). The relationship between Parental emotional warmth and Body Image Dissonance in Junior high school students: A Study on the Mediating role and Intervention of Core Self-evaluation (Master's Thesis, Central China Normal University). Master's Degree.
- [7] Li Yongzhan. The Impact of Parental Parenting Styles on High School Students' Learning Engagement: A Chain Mediating Effect Model [J]. *Psychological Development and Education*, 2018, 34(5).
- [8] Li Lu, Ye Baojuan, Ni Linying, et al. The influence of family closeness on prosocial behavior among college students: a moderating mediating effect [J]. *Chinese Journal of Clinical Psychology*, 2020(1).
- [9] Liu Lihua, Fu Chao, Shi Huiju. College students' parents upbringing affect self-esteem: a regulating intermediary function [J]. *Journal of psychologies*, 2024, 12 (12) : 101-105. The DOI: 10.19738 / j.carol carroll nki psy. 2024.12.027.
- [10] Li Zuoshan. A study on mental health and parenting styles among transitional junior high school students [J]. *Psychological Science*, 2001, 38 (4): 445-448, 511.
- [11] Tian Lumei, Li Shuang. Analysis of the Concept of self-esteem [J]. *New Psychology Exploration*, 2005, (02): 26-29.
- [12] Wang Shanshan, Jiang Tao, Zhang Min. The influence of parenting styles of college students on mental health - the mediating role of self-esteem [J]. *Educational Teaching Forum*, 2021, 12(27): 57-60.
- [13] Wang Mingzhong, Zhou Zongkui, Chen Wu. (2013). Parental emotional warmth and interpersonal skills of adolescents: Indirect effects of emotional expression ability and sociability. *Chinese Journal of Clinical Psychology*, 21(2), 288-291.
- [14] Zhao Gai, Kong Fanchang, Liu Zhaojun, Feng Yameng, Huang Shengpu, Wang Yadan, Zhou Zongkui. (2018). The influence of parental emotional warmth on adolescent gratitude: The mediating role of responsibility and Belief in a Just world. *Psychological Development and Education*, 34(3).
- [15] Zhang Ye, Li Dan, Liu Guangzeng. Relationship between Parenting Style and adolescent Self-esteem: The mediating role of psychological capital [J]. *Chinese Journal of Clinical Psychology*, 2016, 24 (3): 528-531.
- [16] Bowlby, J. (1969). *Attachment and Loss: Volume 1. Attachment*. Basic Books.
- [17] Bradford AB, Burningham KL, Sandberg JG, et al. The association between the parent-child relationship and symptoms of anxiety and depression: The roles of attachment and perceived spouse attachment behaviors. *Journal of Marital and Family Therapy*, 2017, 43(2): 291-307.
- [18] Bronfenbrenner U, Evans GW. Developmental science in the 21 century: Emerging questions, theoretical models, research designs and empirical findings. *Social Development*, 2000, 9(1): 115-125.
- [19] HUANG, YITING, PAN, et al. A Review of the Impact of Parenting Styles on Adolescents' Self-Esteem [J]. *Journal of Education, Humanities and Social Sciences*, 2024, 26: 869-873.
- [20] Minuchin, S. (1974). *Families and Family Therapy*. Harvard University Press.
- [21] Rogers, C. R. (1951). *Client-Centered Therapy: Its Current Practice, Implications and Theory*. Houghton Mifflin.
- [22] Trzesniewski K H, Donnellan M B, Robins R W. Do today's young people think they are so special? An examination of secular trends in narcissism and self-esteem [J]. *Psychological Science*, 2003, 14(4): 308-315.
- [23] YAO M Z, HE J, KO D M, et al. The influence of personality, parental behaviors, and self-esteem on Internet addiction: a study of Chinese college students [J]. *Cyber Psychol Behav Soc Netw*, 2014(2).