



Parental Emotional Parenting Influences Undergraduate Prosocial Behavior: the Mediating Role of Empathy

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Abstract. The purpose of this study is to deeply explore the influence of parenting style on the prosocial behavior of college students, and to explore the mediating role of empathy in it. Through the review of relevant studies and CiteSpace visual analysis, it is found that the research of parenting style is increasing year by year, and mainly focuses on children and adolescents, especially emphasizing the role of mothers in the parenting process. The keyword analysis of parenting style based on CNKI and WOS databases shows that the research hotspots and frontiers in this field involve multiple aspects, including parenting style, adolescents, behavior, patterns, family, children, etc. The research hypotheses include a positive correlation between parental emotional parenting level and prosocial behavior of college students, that empathy plays a mediating role in the relationship, and that improving the empathy ability of college students can indirectly promote their prosocial behavior development. Questionnaire data were collected from 216 college students (aged 20 ± 2 years) and their parents, and data processing was conducted using SPSS. This study will help to promote the development of prosocial behavior among college students, and has great significance for cultivating future citizens with a high sense of social responsibility and good social relations. The results not only enrich the theories in the field of emotional upbringing and prosocial behavior, but also provide practical guidance for improving the prosocial behavior of college students.

Keywords: parents; college students; pro-social behavior; empathy.

1 Introduction

With the advancement of globalization and the profound change of social structure, the correlation between family education and individual growth has increasingly attracted the attention from researchers. As one of the core contents of family education, the emotional upbringing of parents has an increasingly prominent influence on the prosocial behavior of college students, especially under the intermediary effect of the psychological mechanism of empathy, it is particularly critical [8]. The background of do-

mestic and foreign literature in this study mainly focused on the two themes of parenting style and prosocial behavior [5]. At the domestic research level, China is in the period of social transformation, and the concept and way of family education are also undergoing profound changes. Domestic research has mainly focused on the impact of parenting style on students psychological development, especially on students emotional cognition and emotional regulation[3]. Previous research through the CNKI (CNKI) in the relevant literature keyword analysis, found that "parenting", "the research field to" college students ", " teenagers ", " junior students "and" students " group as the main research object, it shows that parenting throughout the entire learning career, and to the students mental health has the importance of [10]. Especially in college students, parents emotional parenting style, namely, the emotional regulation ability and emotional expression style shown by parents in the process of education, have a profound impact on students emotional development[1]. Parents emotional education is no longer just the traditional sense of strict discipline or indulgence, but gradually turned to a more scientific and reasonable emotional guidance and education, parents emotional upbringing in the growth of psychology and behavior, especially for the special group of college students, their prosocial behavior development for individual social adaptation and future development is of great significance [4].

At the international research level, western scholars have paid close attention to the relationship between family education and individual growth earlier, and have conducted a lot of research on the emotional upbringing of parents. Through CiteSpace and other visual analysis tools to review the relevant literature in WOS (Web of Science), it was found that the research hotspots and trends in this field are similar to those in China, all focusing on children and adolescents. Moreover, foreign studies have particularly emphasized the key role of mothers in parenting practices[6]. In terms of prosocial behavior, foreign studies focus on the influence of external factors (such as framework effect, power and video games, etc.) and internal factors (such as self-concept and emotion, etc.) on prosocial behavior [7]. For example, it has been shown that the relationship situation with siblings can positively predict prosocial behavior, where people with good sibling relationships may show more prosocial behavior. They generally believe that parents emotional upbringing has a significant impact on their childrens cognitive, emotional and behavioral development. Meanwhile, as an individuals ability to understand and feel others emotions, empathy plays an important role in individual social interaction and interpersonal communication [11]. However, despite the extensive study of parental emotional parenting, empathy and prosocial behavior by domestic and foreign scholars, there are still relatively few studies that integrate these factors to deeply explore the mechanisms of interaction between them. Especially under the cultural background of Our country, parents emotional parenting style, childrens empathy ability and pro-social behavior all have their own uniqueness[9]. Therefore, it is necessary to combine the actual situation of China and explore the relationship between these factors to provide targeted guidance and suggestions for family education. Therefore, it has important theoretical and practical value to deeply explore the influence mechanism of parents emotional parenting on prosocial behavior [4].

2 Methods

2.1 Subjects

The data of this study were pre-tested and post-tested for students of Shandong University of Traditional Chinese Medicine. First, we designed a set of questionnaires containing three dimensions of emotional upbringing, empathy and prosocial behavior and distributed them through an online platform. Then, we collated the collected data in Excel format and imported the data through SPSS software.

2.2 Data Cleaning and Pre-Processing

After importing the data, we first cleaned and pre-processed the data. By examining the data, we removed the invalid and duplicate cases and treated the missing values appropriately, such as using mean interpolation or regression interpolation. In addition, we have standardized the data for subsequent statistical analysis.

2.3 Research Tools, Instruments and Materials

Parents Emotional Parenting Style. Parents emotional parenting behavior was measured by the Parental Response Style Questionnaire[®], which is designed to assess parents emotional response and parenting style during parenting, and is highly professional and effective. The questionnaire was designed and validated by rigorous psychological and sociological experts to ensure an accurate and comprehensive reflection of parental parenting characteristics in emotional expression, emotional support, and emotional management. This study uses multiple dimensions, such as parental emotional warmth, severe punishment, and denial denial, which can comprehensively reflect multiple aspects of emotional parenting. The questionnaire was scored at 5 points, with 0-4 points from "completely noncompliance" to "full compliance", the higher the score, the more emotional parenting behavior.

Empathy. The interpersonal response index scale (IRI) was used to measure empathy among college students. There are 28 items in the scale, with 5 points, from "completely inconsistent" to "fully consistent", which are divided into four dimensions: opinion selection, empathy care, fantasy and personal pain. Among them, opinion selection (perspective taking) and empathy care (empathic concern) measured the cognitive and emotional components of empathy (Zhang Fengfeng et al., 2010), and existing studies showed that the two dimensions of selection and empathy care in this scale best represent the ability of empathy. The Cronbachs α coefficient of university students in this study was 0.95.

Pro-Social Behavior of College Students. Carlo and Randa (Prosocial Tendencies Measure), PTM is produced by Carl, And those written by Randall, It includes 6 sub-scales: openness, compliance, altruism, anonymity, urgency, and emotion, Flat is

graded by the 5-point scoring method, The scale was later translated and revised by Kou Yu et al. in combination with the results of the study on Chinese youth, The internal consistency reliability of the revised dimensions were 0.71,0.74,0.76,0.78,0.56,0.73, respectively, Using the Likert Level 5 assessment method, In order to improve scale validity, three additional items were added to improve validity, A total of 26 entries, The Cronbachs α coefficient of the scale was 0.90. The revised scale is recognized by domestic scholars and widely used in domestic prosocial behavior research, and the Cronbachs α coefficient of university students empathy ability in this study was 0.90.

3 SPSS Data Processing and Analysis

The data were cleaned, sorted and analyzed with SPSS software, including descriptive statistics (Table 1), correlation analysis (Table 2), regression analysis (Table 3). Data analysis was performed using SPSS21.0, the SPSS macro program PROCESS. First, the correlation coefficient among the study variables was calculated using Pearson product-difference correlation. Secondly, the PROCESS macro program Model4 (mediation effect) and the latent variable structural equation model were used to test the mediation effect of empathy ability (Fig. 1).

Table 1. Descriptive statistics

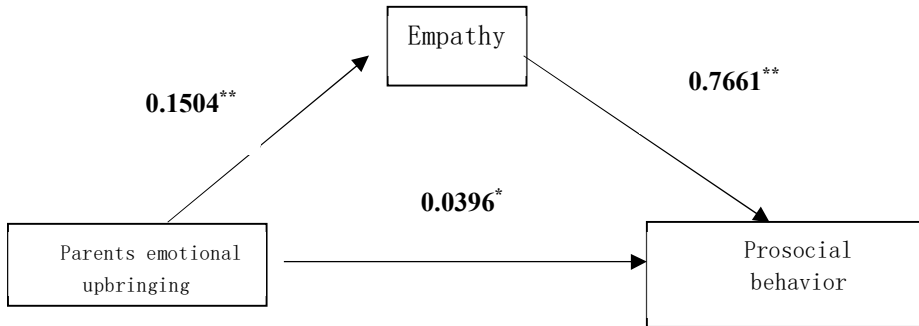
	Average	Standard deviations	Cases
Emotional education	3.6293	2.53028	179
Empathy	3.3960	.98486	179
Pro-social Behavior	3.4711	.97567	179

Table 2. Correlation analysis

	Emotional education	Empathy	Pro-social	
Emotional education	Earson correlation	1	.386**	.401**
	Sig.		.000	.000
	Case	179	179	179
Empathy	Earson correlation	.386**	1	.813**
	Sig.	.000		.000
	Case	179	179	179
Pro-social	Earson correlation	.401**	.813**	1
	direct effect	Sig.	.000	.000
	Mesomeric effect	Case	179	179

Table 3. Regression analysis

	Effect value	Se	LLCI	ULCI	Effect quantity
Gross effect	0.1548	0.0265	0.1024	0.2072	
Direct effect	0.0396	0.0181	0.0038	0.0753	25.58%
Mesomeric effect	0.1152	0.1161	0.0487	0.4301	74.61%



Attention: ***P<0.001, **P<0.01, *P<0.05

Fig. 1. Model 4

4 Conclusion

The results showed that the parental emotional parenting level was positively associated with the prosocial behavior of college students. Specifically, the higher the emotional parenting level of parents, the more positive the prosocial behavior. Further analysis revealed that empathy plays a partially mediating role between parental emotional upbringing and prosocial behavior of college students. This means that parental emotional parenting can not only directly affect the prosocial behavior of college students, but also indirectly promote the development of their prosocial behavior by improving empathy. Specifically, positive emotional parenting by parents helps to foster empathy among college students, which then promotes their prosocial behaviors. This finding has an important guiding significance for family education and school education.

5 Discussion

The results support previous conclusions that emotional parenting has a positive effect on childrens prosocial behavior. By processing and analyzing the experimental data with SPSS software, we obtained the influence of parents emotional upbringing on prosocial behavior and the mediating effect of empathy. These results provide useful reference and enlightenment for family education, school education and social policy mak-

ing. This study mainly focused on students from Shandong University of Chinese Medicine and had a relatively narrow age range (18 – 26 years), which limited the representativeness of the sample. This particular group may not fully reflect the situation of all college students, especially in the group of college students from different regions, different majors and different cultural backgrounds. Furthermore, the scale used in the study may have some measurement error or bias, which may lead to inaccuracy of the results. Furthermore, respondents may have memory bias or subjectivity when assessing their own behavior and feelings. In real life, the factors affecting the prosocial behavior of college students are complex and diverse, including personal personality characteristics, family environment, social and cultural background, etc. This study failed to fully consider these factors, which may have some impact on the interpretation of the findings.

Future studies could expand the selection of the sample to include college students from different regions, specialties and cultural backgrounds to improve the representativeness and universality of the study. Meanwhile, further development and validation of more accurate and effective measurement tools to reduce measurement error and bias and improve the accuracy of the study. Moreover, future studies should comprehensively consider more factors that may influence the prosocial behavior of college students, such as personal personality, family environment, and socio-cultural background, so as to gain a more comprehensive understanding of the influencing factors and mechanisms of the prosocial behavior of college students. In addition to questionnaire survey and scale analysis, future studies can also use experimental studies, case studies, interviews and other methods to more deeply explore the manifestations and causes of prosocial behaviors among college students. Moreover, future studies can further explore how to cultivate and promote prosocial behavior of college students through family education and social education, and provide more comprehensive guidance for family education and social education, so as to reveal the influence mechanism of parental emotional upbringing on prosocial behavior of college students.

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