Effects of Parental Educational Anxiety on Self-efficacy in High School Students: A Mediating Role of Parental Psychological Control

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Abstract. Educational anxiety is gradually becoming an urgent problem in China. This study surveyed the current situation of parental educational anxiety, parental psychological control, and general self-efficacy among high school students, and explored the relationships between these three variables. In this study, 427 high school students and their parents were investigated. The results show that: (1) there is no significant difference in parental educational anxiety. (2) Parents' educational anxiety, parents' psychological control and self-efficacy have significant differences in the gender of their children, which is higher in boys than girls. (3) Parents' education anxiety and psychological control, and parental education anxiety and children's self-efficacy. (4) Parents' psychological control and children's self-efficacy, and the relationship was not significant, and the mediation model was not established. This study provides a reference program for the education anxiety of high school parents: parents should be aware of the impact of their own education anxiety on their children, properly solve or transfer their education anxiety, and appropriately carry out home-school cooperation to cultivate their children in many aspects.

Keywords: Parents education anxiety, parents psychological control, self-efficacy, high school students.

1. Introduction

1.1. Research Background

As the old saying goes, "hold high hopes for one's child", Chinese parents frequently have high expectations for their children's schooling. It is normal for Chinese parents to have expectations for their children's education. However, with the development of society, parents' investment and expectation in their children's education increase, education policies and education environment change. The employment situation of young people is becoming increasingly severe, and the phenomenon of parents' education anxiety is increasing. According to data released by CCTV Finance, 36.19 percent of respondents in 2020 said "children's education" was the most difficult problem for families, more than double that in 2019 [1]. Parents' educational anxiety has become a topic of discussion.

1.2. Previous Studies

Parents' educational anxiety (PEA) refers to the stress, worry, anxiety, annoyance, and other feelings brought on by the uncertainty of their children's educational process and outcomes [2]. China's educational system is constantly being developed and improved, which brings more challenges to education work. At the same time, the disharmony between national spiritual development and social material development will also lead to more and more serious competition, hostility and fear, which will lead to the alienation of education, and the essence of such alienation is educational anxiety [3]. Educational anxiety is widely found in parents, students, teachers and other groups, and its influence in the parent group is the concern of this paper. Parents themselves are also victims of educational anxiety, and their strict requirements and control of their children affect the healthy growth of their children. Thus, it's important to assuage parents' anxiety about their children's education [4].
Psychological control was first proposed by Schaefer in 1965, and became an important topic in developmental psychology in the 1990s. In China, the debate of parental psychological control has grown in recent years, and the level of parental psychological control was quite high [5]. According to some researchers, parental control can be divided into behavioral control and psychological control. Psychological control is defined as the intrusive parenting behavior of parents that disturbs children's thoughts and emotions, and researchers have come to the conclusion that psychological control includes the structures of inducing guilt, withholding care, and restricting expression [6]. The definition of parental psychological control (PPC) in this research is that parents have a parenting style that hinders their children's growth by making them feel guilty, withdrawing attention, requiring compliance, and in other ways.

Wang Zhan et al. previously conducted a survey on hundreds of students and their fathers in a junior high school in China by issuing questionnaires. According to the statistical research, the three aspects of parental psychological control (producing guilt, withholding love, and exercising authority arbitrarily) were strongly connected with the level of fathers' anxiety [7]. Lin Xingyan et al. conducted a questionnaire survey on hundreds of students in a high school in China, and found that in terms of gender and grade, there was not a distinction between parents' psychological control and educational anxiety, and there was a significant positive correlation between them [8]. It is worth mentioning that the parental anxiety scale used in the study as well as the parental psychological control scale are consistent with those used in this study. But to facilitate the test, the study changed the parental anxiety scale, which should have been completed by parents, to a sentence pattern measuring students. In addition, a study conducted a survey of senior three students and their parents, and discovered a substantial positive association between the anxiety of parents and the aspect of parental control over their children's education [9].

Self-efficacy was first proposed by Bandura, which is the individual’s self-belief in the ability to fulfill established abilities [10]. Self-efficacy is often used in a specific field, but this study used the general definition of self-efficacy, an overall confidence in dealing with challenges from different environments or new things (general self-efficacy, GSE) [11]. Research through the questionnaire survey of college students, found that the boys perceived parents psychological control was stronger than girls, boys general self-efficacy significantly higher than that of girls, and parents psychological control and college students general self-efficacy significant negative correlation, parents high excessive psychological control will let children will doubt their ability, reduce self-confidence [12]. Another researcher conducted a survey of domestic junior high school students and their parents, and found that parents' psychological control would significantly reduce their children's academic self-efficacy performance [13]. However, some studies selected students and their parents for five to eight years as research objects and found that all three dimensions of parental psychological control were positively associated with child self-efficacy, and two of these dimensions were significantly associated [14]. From this point of view, the current research focuses on the age group from junior high school students to college students, the number of related studies in each age group is limited. As the research results are different, further research is still needed.

1.3. Purposes of Research

This study sought to comprehend the current state of high school pupils' general self-efficacy, parental psychological control, and educational anxiety. To fill a vacuum in the literature, this study will investigate the link between the PEA, PPC, and GSE as well as the impact of parental educational anxiety on high school kids' overall self-efficacy. In addition, this paper discusses the possible problems and solutions in the family education and parent-child relationship of Chinese high school students. This study assumes that PEA affects the degree of PPC, which further affects the GSE of senior high students (see Figure 1).
2. Methodology

2.1. Samples

The high school students from several ordinary high schools in a city of Anhui Province were selected as the survey objects. At present, 427 paired questionnaires have been collected, and after the screening of time and single repeated options, 349 questionnaires are retained. The response rate of the questionnaire was 81.7%.

2.2. Measurement

2.2.1. Parents questionnaire

Parental educational anxiety questionnaire: The parent educational anxiety questionnaire compiled by Li Lin was used. The questionnaire is divided into three dimensions, questions 1, 2, 3, 4 are health anxiety, 5, 6, 10, 11 are test anxiety, 7, 8, 9, 12, 13, 14; 14 questions. The scoring method is used at five points. The questionnaire had an α coefficient of 0.865 and a half reliability of 0.766 [15]. For statistics purposes, reverse scoring was used, and higher scores indicating higher anxiety.

2.2.2. Children's questionnaire

Parental mental control questionnaire: Wang et al. translated and revised the Chinese version of the PPC questionnaire. With a total of 18 questions, the questionnaire comprises three dimensions: The dimension of child guilt is question 1-10, the withdrawal of affection is question 11-15, and the dimension of arbitrary authority is question 16-18. The α coefficient of the questionnaire was 0.89 and the construct validity was 0.94, with good confidence validity. The whole questionnaire adopted the five-point Likert scoring method, which was 1 point "completely inconsistent" and 5 points "very consistent". The greater the score on the questionnaire, the greater the reported level of parental psychological control [16].

The general self-efficacy questionnaire: The Chinese version of the General Self-efficacy Scale (GSES) was first used by Zhang Jianxin and Schwarzer (1995). The reliability and validity of GSES have been proven. GSES adopts the form of Likert 4-point scale, all items were scored 1 to 4 [17].

2.3. Procedure

After communication and approval from the school, according to the group sampling method, the selected high school took the class as the unit. The questionnaire contains detailed instructions, which require all participants and their parents (parents or parents) to participate in the questionnaire. Each participant completes the corresponding questionnaire independently and carefully, and explains to the participants that the relevant information is confidential for analysis only. The main test of the questionnaire is the head teacher of each class, and all know the test rules.

2.4. Analytic procedure

SPSS 27.0 software with the PROCESS 4.1 plugin was used to analyze the data.
3. Results

3.1. Gender t-test for parents and children

3.1.1. Current status of parental educational anxiety and gender differences

Table 1. Current status of parental educational anxiety and gender differences

<table>
<thead>
<tr>
<th></th>
<th>Male (M±SD)</th>
<th>Female (M±SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Educational Anxiety</td>
<td>46.51±13.56</td>
<td>46.23±12.19</td>
<td>0.18</td>
<td>0.86</td>
</tr>
</tbody>
</table>

The outcomes are displayed in Table 1. It shows that the gender difference in parental educational anxiety was not significant (ps<0.05).

3.1.2. The state of psychological control, self-efficacy and gender differences

Table 2. The state of psychological control, self-efficacy and gender differences

<table>
<thead>
<tr>
<th></th>
<th>Male (M±SD)</th>
<th>Female (M±SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Educational Anxiety</td>
<td>47.92±12.96</td>
<td>45.01±12.10</td>
<td>2.17</td>
<td>0.03*</td>
</tr>
<tr>
<td>Parental Psychological Control</td>
<td>54.96±17.60</td>
<td>51.29±16.18</td>
<td>2.03</td>
<td>0.04*</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>2.58±0.57</td>
<td>2.38±0.53</td>
<td>3.36</td>
<td>0.00**</td>
</tr>
</tbody>
</table>

The outcomes are displayed in Table 2. There were all significant gender differences in PEA, PPC and GSE. (ps<0.05).

3.2. Correlation analysis

Relevant analysis of parental educational anxiety, parental psychological control and child self-efficacy was performed using SPSS 27 software (see Table 3).

Table 3. Relation between parental educational anxiety, self-efficacy and parental psychological control

<table>
<thead>
<tr>
<th></th>
<th>X</th>
<th>M</th>
<th>Y</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0.332**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>-0.155**</td>
<td>-0.02</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1</td>
<td>0.314**</td>
<td>0.968**</td>
<td>0.05</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td>0.275**</td>
<td>0.930**</td>
<td>-0.55</td>
<td>0.841**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>M3</td>
<td>0.352**</td>
<td>0.845**</td>
<td>-0.26</td>
<td>0.742**</td>
<td>0.731**</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).

Among Table 3, X is educational anxiety, M is psychological control, and Y is self-efficacy, M1-M3 corresponds to the dimensions of inducing guilt, withdrawing love and requiring compliance in psychological control. There was a significant positive correlation between PEA and PPC, PEA was significantly negatively correlated with GSE, PPC was negatively correlated with GSE, but the relationship was not significant.
3.3. Mediation analysis of parental educational anxiety, parental psychological control, and child self-efficacy

![Figure 2. Model Result](image)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Effect</th>
<th>BootSE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental psychological control</td>
<td>0.0005</td>
<td>0.0009</td>
<td>-0.0012</td>
<td>0.0024</td>
</tr>
</tbody>
</table>

Among Figure 2 and Table 4, there was not a significant connection between PPC and GSE, and the mediation model was invalid.

4. Discussion

According to the results of Table 1, the level of parental educational anxiety was not associated with parental gender differences, and the fathers and mothers had the same level of educational anxiety. The results in Table 2 show that parents' educational anxiety, psychological control and child self-efficacy all differ in child gender. Compared to girls, boys exhibited a much higher sense of self-efficacy. For boys, parents showed much higher degrees of educational worry and psychological control. This is consistent with the findings of Yan Xia [12]. This may be because in traditional thinking, boys should shoulder more responsibility and therefore have more expectations, leading to parents' educational anxiety and higher psychological control over high school boys. This is true: in the past, it was widely felt that having boys meant having a successor to their family, and the family would have an advantage in social relationships. Boys were told that they are powerful and responsible, and they were required by their parents and the school to achieve greater achievements in study and career, while their parents rarely had high requirements for girls, and there was widespread contempt and degradation for girls. That's why most parents in China have preferred to raise boys in the past many years. However, with the development of society and the popularization of knowledge among the whole people, the situation has improved significantly in the past decade, with more and more parents treating their children equally.

Table 3 results indicate that parental educational anxiety and psychological control were significantly positive correlation, which is consistent with the results of previous studies. The results also accord with the general common sense that the higher parents' educational anxiety, the more strict psychological control measures will be taken for children; parents' educational anxiety has a significant negative correlation with children's self-efficacy, indicating that improving parents' educational anxiety will reduce children's self-efficacy. According to Figure 2 and Table 4, there was not a significant connection between PPC and GSE, therefore the mediation model was invalid. but according to Table 2, the "trigger child guilt" dimension (i.e., variable M1) was positively associated with self-efficacy. Other studies have also obtained this result, which shows that high school efficacy is positively correlated with the guilt factor in parents' psychological control [18]. About the M1 dimension and self-efficacy, perhaps because when people feel guilty, they have higher self-efficacy and try to act to achieve positive results [19, 20].

Usually, this study expect a teenager to be more self-efficacy, because it means they have more confidence to solve problems, which is also a sign of their healthy growth. This provides a reference
for the education of Chinese parents: perhaps parents should be aware that their education anxiety is having an unexpected impact on children, and properly solve or transfer their education anxiety, pay attention to cultivating children to avoid excessive education anxiety on their children; and parents should not exert more pressure on boys by placing more expectations. At the same time, it also suggests that schools and families should pay more attention to home-school cooperation, jointly seek more soothing education mode under the existing high-pressure education environment, and provide high school students with self-efficacy support from more aspects. Parents and schools should not link the evaluation of teenagers with education and study; high school students themselves should capture parents' excessive education anxiety, try to communicate, express their demands, and prepare for parents' education anxiety, so as to reduce the negative impact. In addition, this study also suggests that parents should exercise moderate psychological control. Excessive psychological control may affect their children's self-efficacy, but moderate psychological control can play a positive role.

5. Conclusion

In this study, high school students and their parents in Anhui Province were investigated to investigate the current situation of educational anxiety, psychological control and general efficacy in China. From the perspective of parents' educational anxiety, this paper discusses how parents should help teenagers grow up healthily in the current educational environment. This experiment fills the gap in the current research on the relationship between PEA and GSE of high school students, and provides a reference scheme for the urgent problem of parental education anxiety of high school students. This study provides advice on parents, home-school cooperation, and high school students. At present, this experiment is mainly investigated in a high school, and most of the participants are sophomore students. The effective sample size and representativeness are limited. As is known to all, the third year of high school is when Chinese regular high school pupils are most under pressure academically, which may make the survey results have certain grade differences, which may be the reason for the non-significant correlation between PPC and GSE, and the unestablished model. In addition, although this experiment collected the gender information of the participants, which could understand the differences between different variables in sex, and the factors considered were still very limited. Future studies can choose to increase the sample size and investigate different types of high schools. Future studies could also appropriately consider the influence of other factors, such as whether parental educational anxiety influences their self-efficacy differently for high school students with different attachment types. In addition, with the policy trend, the impact of parents' education anxiety on their children in multiple fetal families will also become a hot research issue in the future.

References


