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ORIGINAL RESEARCH Parents' Educational Anxiety Under the "Double Reduction" Policy Based on the Family and Students' **Personal Factors**

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Introduction: Educational anxiety is a true portrayal of Chinese parents. As an endogenous problem in the development of modern education system, the pressure of students' entrance examination continues to rise.

Methods: Based on the empirical survey data of education in 3298 families, this study uses the analysis method of multiple linear regressions to analyze the influencing factors of parental education anxiety and finds that educational anxiety has become a common social emotion.

Results: After the regression analysis of the four-layer model was established, it was found that different school segments, school priorities, and student achievements had a significant impact on parents' educational anxiety, and factors such as annual family income, educational satisfaction and family parenting style had a significant impact on parental educational anxiety. It is worth noting that the gap in parental expectations has a significant positive effect on educational anxiety, and the greater the expectation gap, the higher the educational anxiety of parents.

Discussion: Therefore, it is suggested that governments at all levels should conscientiously implement the task of "reducing burdens" and rationally allocate high-quality educational resources; parents and teachers should start from the needs of children to establish a scientific concept of education and the concept of becoming a talent; the whole society should put forward reasonable educational expectations in education, and be good at adjusting expectations on time so that education can return to a rational natural growth state and eliminate parents' educational anxiety.

Keywords: parental expectation gap, educational anxiety, educational expectations, Chinese students

Overview of Educational Anxiety in Parents

Educational anxiety has become an important issue in family education in China. Educational anxiety refers to that, in the process of parents' educating their children, parents put forward too high educational expectations for their children, implement improper educational behaviors, bring serious psychological pressure to children, cause behavior disorders or depression, and lead to parental educational anxiety.

Education released the "China Parent Education Anxiety Index Report", and the comprehensive anxiety index of Chinese parents in education reached 67 points in 2018, and the overall anxiety was in a relatively anxious state.¹ In February 2018, the General Office of the Ministry of Education and other four departments jointly issued the "notice on Effectively Reducing the Extracurricular Burden of Primary and Secondary School Students and Carrying out Special Governance Actions for Off-campus Training Institutions",² and various localities have successively carried out the "Special Governance Action for Rectifying Off-campus Training Institutions"; in August 2018,³ and the governance of education and training institutions has thus become the key work in the field of education in 2018, but parents are more wait-and-see, and fewer really withdraw from off-campus training In December 2018, the Ministry of Education and nine other departments issued the "Measures to Reduce the Burden on Primary and Secondary School Students",⁴ and new

regulations on burden reduction in education departments in various places were frequently introduced to follow up, but these new regulations encountered "soft resistance" from parents. 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 Homework Burden and Off-campus Training Burden of Students in the Compulsory Education Stage, proposing the work goal of "effectively reducing the burden of students' excessive homework and off-campus training, family education expenditure and the corresponding energy burden of parents within one year.⁵ It can be seen that the Chinese government has made great efforts to reduce the academic pressure on Chinese students.

At present, the "double reduction" policy has been implemented for more than half a year. The anxiety of parent education caused by "school choice fever" and "excessive homework burden" has been alleviated. Studies have confirmed that burden reduction positively improves learning and promotes high-quality education development.⁶ However, some forms of parent education anxiety still exist and spread even further in a small range.⁷ The excessive burden on students and widespread anxiety in education has become the main obstacles to China's high-quality and balanced development.⁸ From the "school district housing", "school choice fever" and "training fever" before the implementation of the "double reduction" policy, to the "high-end home economics", "crowdfunding private training", "study tours and research", and online class fever after the implementation of the "double reduction" policy, "chicken baby", "tiger mother and wolf father", "maternal broker" have always been synonymous with "Chinese-style education", ⁷ and it is also the "educational anxiety" that parents have nowhere to put. Based on historical experience, many parents still have doubts about the final effect of the policy, fearing that their children will become victims of the policy, while some parents are considering responding with "crowdfunding private training" and "one-on-one" tutoring.⁹ Therefore, educational anxiety has become a true mental portrayal of Chinese parents, running through the whole process and cycle of educational activities. In order to reduce the academic burden of students, especially the burden of extracurricular training, it is first necessary to relieve parents' educational anxiety.

Parental Educational Anxiety Performance

Educational anxiety refers to the different forms and degrees of anxiety experienced by all educational participants in educational activities. Educational participants are divided into parents, teachers, and students.¹⁰ Educational anxiety in this study mainly refers to the nervousness, uneasiness, anxiety, worry, panic and other emotions experienced by parents in the process of educating their children and due to the uncertainty brought about by educational results, which is manifested as excessive panic among parents about their children's academic performance, employment prospects, and life prospects, and excessive sensitivity to their children's test scores, learning attitudes, and learning progress.¹¹ Parental educational anxiety is state anxiety that fluctuates with changes in the child's grades or other educational anxiety may be alleviated or even disappear.¹² At present, educational anxiety has become a common phenomenon in society, which is detrimental to students' physical and mental health and personality development and increases parents' ideological pressure, emotional disorders, and cognitive biases. From the perspective of performance behavior, the phenomenon of educational anxiety in China is closely related to factors such as improper parental expectations, poor order of educational anxiety in China social transformation and development.^{11,13}

Types of Anxiety in Parent Education

In terms of the types of parental education anxiety, scholars such as Diao Shengfu have divided parents' educational anxiety into three types: oppressive educational anxiety, dazed educational anxiety, and imaginative educational anxiety.¹⁴ Oppressive educational anxiety is mainly caused by parents' excessive concern for their children's academic performance and excessive and unreasonable educational expectations. Confusion education anxiety is mainly due to some uncertainties. Parents in the face of their children's education problems appear hesitant in the situation, such as parents in the face of school selection and choice of extracurricular classes. The anxiety of imaginative education mainly stems from parents' misunderstanding of education and blindly attaching importance to the external value of education. Parents with imaginative education anxiety believe that education is omnipotent. They are overly linked to some factors such as future employment, future, fate, marriage, etc., and worry that the failure of education will directly lead to the

failure of their children's lives. The three types of educational anxiety, oppressive, dazed and imaginary, are intertwined and run through family education, which will impact children's entire learning and physical and mental development.^{15,16}

Causes of Educational Anxiety in Parents

There are more reports on the introduction and evaluation of parental education anxiety, based on social media reports and researchers' observation experience or experience in the data literature, summarizing the basic symptoms of parental education anxiety in China, highlighted in the following aspects: First, the national birth policy; the long-term implementation of the "only child" and "less eugenics" birth policy has made the family's attention to education suddenly heat up, a child carries the hope of a family, and the child's education has become the "top priority" of the family. Parents do their best to provide the best education for their children and continue to invest in education.¹⁷ The second is the unfairness of education; the uneven distribution of educational resources and the scarcity of highquality educational resources have made parents carry out a battle for educational resources,¹⁸ "key schools" and "school district rooms" have become the "battlefield" for parents to grab first, and the trend of grabbing this resource continues to expand downwards, key middle schools \rightarrow key primary schools \rightarrow key kindergartens \rightarrow early education \rightarrow prenatal education.¹⁹ parents are worried that their children lose on the starting line and desperately "rush to run". The third is the parents' excessively high educational expectations; "Wangzi Jackie Chan" and "Wangnu Chengfeng" are almost the common aspirations of all parents, and the so-called "Dragon Phoenix" and "Becoming Talented" is from the perspective of parents' educational goals to be admitted to key universities.²⁰ Yu Xiulan showed through qualitative and quantitative research results that more than 90% of parents in China hope that their children can go to university. About 65% of parents hope that their children will go to famous schools' original 211 and 985 classes. Parents attach importance to the necessity of education itself and value the functional value of education.²⁰ The reality is that the results of China's education statistics in 2021 show that the gross enrollment rate of higher education is 57.8%, and it is estimated that the enrollment rate of China's 211 key universities at this stage is about 5%, the admission rate of 985 key universities is only 2%, and the huge realistic gap between the expected target faced by parents and the admission rate of 2%-5%. When the "double reduction" policy has pushed the "burden reduction" problem to a new height, the level of anxiety of parents does not seem to be alleviated, but in some aspects, there is a tendency to aggravate further. Parents are worried: will my child learn well when the amount of homework is reduced, and there is no written homework and no written tests in primary school's first and second grades. When training institutions are banned in large numbers, and it is difficult to "want to enroll children in a class", how should they cope with the college entrance examination?²¹

Advance Research and Theoretical Assumptions

The famous Pygmalion Effect in educational psychology proves that when teachers consistently believe and expect students to achieve greater academic success, it can benefit students' motivation to learn and eventually become a reality.^{22–24} The expectation value theory developed on this basis is widely used in parents' expectations of their children's education, and some studies have confirmed the application of this theory. Numerous studies have shown that parental expectations significantly affect adolescent academic performance.^{25–27} Parental expectations are critical to improving adolescents' academic expectations and achievements, and passing positive expectations.²⁸ The expectation that parents will have their children go to college has a significant positive impact on their college expectations.²⁹ There is a cyclic effect of the "Pygmalion effect" between parental expectations of student-athlete academic success are associated with higher professional adaptability of student-athletes.³¹

However, studies have also shown that unrealistically high expectations can exacerbate children's school burnout, and ma Y. et al have confirmed that parents' expectations differ significantly from depression in adolescents, and the higher the parents' expectations, the more obvious the children's depression.²⁵ Parental expectations are negatively correlated with children's interest in academics, and boys are higher than girls,³² and excessive parental expectations can easily cause children to have rebellious psychology and form behavioral contrasts, which will affect school behavior and bring disadvantages to children's growth.^{33,34} Unrealistically high parents' expectations cause children to feel that their parents

are more stressed and have lower grades.^{35,36} Under excessive expectations, children have withdrawn behaviors such as avoidance and boredom due to excessive pressure, and lose self-confidence due to too many difficulties and setbacks for a long time, resulting in psychological problems such as student anxiety.^{37,38}

Parent Expectation Gap & Parental Education Anxiety

Based on previous studies, parental expectations do not always play a positive role, and when educational expectations are too high, they can have a negative impact on children's psychology and affect academic performance. Further, the child's academic performance will increase the gap between parents' expectations, resulting in parental psychological imbalance at this time. Suppose parents do not adjust in time to reduce expectations. In that case, there will be more and more serious frustration, continue to experience tension, anxiety, fear, and many negative emotions. Many studies have found that anxiety is characterized by intergenerational transmission, and in the family environment, the more obvious the anxiety of parents, the more likely children are to develop anxiety tendencies.³⁹ At the same time, the most direct response to parental education anxiety is to increase the child's learning intensity, reduce the child's entertainment and leisure time, and prematurely and over-develop the child's cognitive ability. In this way, under the dual pressure of spirit and academics, children are prone to boredom and fear of learning, and parents treat their children with excessive intervention and control, which can easily cause their children's test anxiety.⁴⁰ Family education thus falls into a vicious circle.⁴¹

Based on the previous research on educational expectations, parental educational expectations are a double-edged sword, on the one hand, it can promote children's academic performance, on the other hand, it will also play a reverse inhibition effect, the key lies in whether the gap between the expected value and its control school standard is in a reasonable range, that is, the gap between the parents' expected score and the child's actual performance studied in this paper, that is, the expectation gap, which leads to the model 1 hypothesis.

Hypothesis 1: Parental expectation gap hypothesis. Does the gap in parental expectations has a significant predictive effect on educational anxiety, and the larger the expectation gap, the higher the educational anxiety of parents?

Individual Characteristic Factors & Parental Educational Anxiety

In a small number of empirical studies on parental education anxiety, mainly concentrated on the parents of children of special age or special diseases, such as Weng Lin and other scholars conducted an empirical study of 395 children aged 0–7 years in three countries, found that Chinese parents had the highest educational anxiety, reaching 86.52%.⁴² In Sang Wenhua's research on parents of students before the college entrance examination, the gender of parents, their educational attainment, and the source of psychological control over their children's education can predict parents' anxiety.⁴³ For key schools, it is concluded that the differences in the child's condition such as grade level, gender, and school focus will affect the parents' educational anxiety, and the model 2 hypothesis is derived.

Hypothesis 2: Hypothesis of individual differences in children. Does factors such as the child's school attendance, gender, whether they are only children, and school priorities significantly affect educational anxiety?

Family Socioeconomic Status & Parental Education Anxiety

The higher the family's socioeconomic status, the higher the parents' expectations for their children's academic achievement.^{44–46} Because in general, the higher the education of parents, the more they will realize the importance of education for personal development throughout their education, and therefore pay more attention to the academic achievements of their children, expecting their children to receive a higher level of education.^{47,48} At the same time, they are more likely to motivate their children to have higher educational expectations than lower-educated parents.⁴⁹ Moreover, parents with higher education, especially those who have received college and above, tend to receive more cultural and social capital in the process of studying, and naturally can provide their children with better and richer education-related information, making it easier for children to form higher educational expectations.⁵⁰ In addition, the higher the family income, the more parents will want their children to receive a higher level of education.⁵¹ Higher social values can be realized through education, and the family's economic status can be maintained even improved. A quasi-experimental study by researchers also found that lower-educated parents in high-income groups had higher educational

expectations than higher-educated parents, while for low-income groups, there was no significant difference between higher-educated parents and other parents.⁵² In summary, parents' background conditions, such as education level, occupational status, economic income, etc., will also become factors affecting educational anxiety, leading to the model 3 hypothesis.

Hypothesis 3: Family socioeconomic status assumptions. Does the difference in the family socioeconomic status have a significant predictive effect on educational anxiety?

Family Education Concepts & Parents' Educational Anxiety

Liu Liqiong and other scholars pointed out in their research that in the life of children-centred parents, parents will pay more attention to their children's learning, the higher the expectations of their children, it is more difficult to face the failure of their children, and it is easy to produce anxiety.^{53–55} Parents' attitudes and perceptions about the success of educating their children affect their emotional performance, cognitive tendencies, and educational styles, affecting children's emotional experience and behavior.⁵³ Different parenting styles and educational satisfaction can impact parental educational anxiety, which leads to model 4.

Hypothesis 4: Family education concept hypothesis. Does the family parenting styles and educational satisfaction have a significant predictive effect on educational anxiety?

Research Models

Based on the above review and research objectives, the research model in this paper is shown in Figure 1.

Objects and Methods

Sample Data

This study used data from the Education Anxiety Survey 2020, and a hierarchical group sampling was used. First, the schools were sampled, then the classes were sampled, and finally, all the students and parents of the sampled classes were surveyed separately. The sampling schools include primary and secondary schools in Hubei, Guangdong, Zhejiang, Jiangsu and other provinces, and the sampling targets are students and parents from the fourth grade of primary school to the third grade of high school. Before implementing the survey, each class teacher first encodes the students and parents. Then the students and parents fill in the questionnaire according to their unique identification codes. Finally, the student's and parents' codes effectively form many matching parent-student questionnaires. A total of 3792 questionnaires were completed, and this study needed to examine the corresponding family conditions, so in the process of cleaning up the data, the samples without parent questionnaires were first deleted, and finally 3298 completely matched the sample size of the survey, with an effective rate of 87%. In the questionnaire, the students accounted for 43.4% in the primary school stage, 42.3% in the junior high school stage, and 14.3% in the high school stage, which constituted the research data in this paper and before providing their comments, all participants were guaranteed anonymity and assured that researchers would adhere to the confidentiality principle of their responses during the analysis and reporting. The researchers informed participant that their information gathered would be used for a specific academic study and informed consent

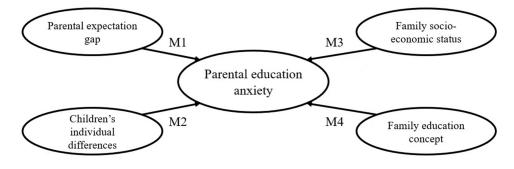


Figure I Study model.

was taken from participants and was not given any incentives. The ethics Committee of the local University's College of Teacher Education approved the study, and it followed the Declaration of Helsinki.

Study Variables

Explanatory Variables

Parental education anxiety is an interpreted variable in this article. Parent education anxiety measurement uses the selfcompiled "Parent Education Anxiety Questionnaire", which is based on the factual survey of family education and reference to relevant literature, which divides parents' educational anxiety about their children into six dimensions: academic performance anxiety, physical condition anxiety, safety anxiety, psychological condition anxiety, future anxiety, and teacher anxiety. The questionnaire was scored on 5 points by Rickett, and the options were 1–5 for "never, almost no, occasionally, sometimes, always", a total of 12 questions, and the higher the score of each question, the higher the level of anxiety. The specific information of the questionnaire is shown in Table 1.

The validity test of the Parent Education Anxiety Questionnaire through SPSS 26.0 found that KMO=0.885 and sig=0.000 were suitable for factor analysis. After the analysis of the AOS 26.0 validating factors, the model fitting indexes were: x2/df = 3.16, RMSEA=0.074, GFI=0.964, AGFI=0.937, CFI=0.953, indicating that the questionnaire structure was good and the α coefficient of the clone Bach for 12 questions was 0.873, indicating that the questionnaire reliability was good.

Core Explanatory Variables

The core independent variable in this study is educational expectation. In the measurement of educational expectations, parents' expectations of their children's achievements and academic qualifications are mainly used "parental expectation gap". However, the current higher education has entered the popularization stage, and the educational level cannot well reflect the differences of educational expectations. Therefore, it is more realistic and universal to use academic achievement expectations to represent parents' educational expectations. In this study, parents' educational expectations are expressed as the gap between parents' expected performance and children's actual performance.

In the questionnaire, "If all subjects are 100 points, how many points do you want your child to achieve on average this semester?" The options use 1 to 5 values to represent "below 60, 60–70, 70–80, 80–90, 90–100", and the parents' answers to the question measure the parents' expectations for their children's grades. In the questionnaire, "Where does your child's academic performance overall stand in the class?" The options use 1 to 5 values to represent "downstream, middle and lower, medium, upper, upstream", and the parents' answers to the question measure the parents' cognition of the child's performance.

Dimensions	Entitle	Estimate	Mean
Academic performance	I. I am worried that the child cannot take a better school.	0.019	3.84
	2. I am worried that the child's grades will not go to the classmates or children of others.	0.020	3.77
Physical conditions	3. I am worried that the child is not good.	0.023	3.22
	4. I am worried that the child is difficult to withstand the current learning task.	0.022	2.67
Security condition	5. I am worried about the child's personal safety (traffic, accident, etc.).	0.020	3.75
	6. I am worried that the child is bullied by others during school.	0.021	2.77
Psychological condition	7. I am worried that the child is poor.	0.021	3.13
	8. I am worried that the child is not good.	0.023	2.79
Future	9. I am worried that the child will not find a good job in the future.	0.023	3.30
	10. I am worried that I cannot provide the necessary support for the future.	0.022	3.36
Teacher's condition	11. I am worried that the teacher is not good for his children.	0.021	2.13
	12. I am worried that the child is not a good teacher in the school.	0.019	1.83

Table	I Parents	Education	Anxiety	Questionnaire
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Control Variables

In this study, the child's gender, grade level, whether there is an only child, whether the school is focused, the parent's education level, the parents' occupation, the annual family income, the satisfaction of education, and the family parenting style as the control variables.

Variables such as child sex, whether they are only children, and whether they are key schools are binary variables, and the three-point variables at the grade level are valued "1 = primary school", "2 = junior high school" and "3 = high school". Father's and mother's education are divided into two categories: college degree or below, college degree and above. For the paternal profession and the maternal profession, this study combines them into two categories according to social capital and cultural capital: high socio-cultural capital, including: professional and technical personnel (such as doctors, engineers), heads of the party and government organs or enterprises and institutions, university teachers, primary and secondary school teachers, journalists or literary workers, and military personnel; the latter includes: civilian personnel, workers, commercial and service workers, individual workers, non-working, and others. The annual household income in the questionnaire is to ask parents "in the past year, your family's total income", the value is "1 = 50,000 or less, 2 = 50,000-100,000, 3 = 110,000-200,000, 4 = 210,000-500,000, 5 = more than 500,000". Educational satisfaction is taken by asking parents "how satisfied you are with your child's current education", which is taken as "1 = very dissatisfied, 2 = relatively dissatisfied, 3 = average, 4 = relatively satisfied, 5 = very satisfied". In this study, the Questionnaire for Parenting Styles,⁵⁶ revised by Jiang And others in 2010, uses the "Simplified Parenting Style Questionnaire (s-EMBU-C)" scale,⁵⁶ which consists of three dimensions: emotional rejection, emotional support and excessive protection, including a total of 21 questions, each of which is scored by 4 points.

Data Processing

In this study, the multiple linear hierarchical regression method in SPSS 26.0 was used to sequentially put the expectation gap, child sex, grade stage, whether there is an only child, whether the school is focused, the parent's education level, the parents' occupation, the annual family income, the educational satisfaction, and the family parenting style into the regression equation, focusing on the effect of the parental educational expectation gap on educational anxiety after controlling the interference of unrelated variables.

Analysis of Results

Descriptive Statistical Analysis of Parental Education Anxiety

From the average score of the 6 dimensions of parental education anxiety described in Figure 2, the highest degree of academic performance anxiety is the highest, followed by anxiety about the child's future prospects, anxiety about safety, physical condition anxiety and psychological condition anxiety, and the lowest level of anxiety is anxiety about the status of teachers. Overall, parents' educational anxiety average is higher, and the most anxious of them is their children's academic performance. Further, the analysis of parental education anxiety and student achievement showed a significant negative correlation (r= $-0.206^{***}p<0.001$), the lower the child's academic performance ranking, the higher the parental anxiety level, the higher the child's academic performance ranking, and the lower the parental anxiety level.

Comparing the students in primary school, junior high school and senior high school, we can see that the anxiety level of parents in junior high school is higher than that in primary school and senior high school. In high school, parents have the highest degree of concern for their children's physical condition.

Parents' Cognitive Analysis of Their Children's Achievements

According to statistics, the student report "What level of grade do you fall into in the class?" "What level of academic performance is the child's overall academic performance in the class?" reported the parents? "Data, measuring whether there is a bias in parents' perception of their children's achievements. The results of Table 2 showed that the parent's perception of the child's grade was highly consistent with the actual student's grade, and the two were significantly positively correlated, but the mean difference was not significant (R1=0.82***T1=1.524). This data conclusion shows

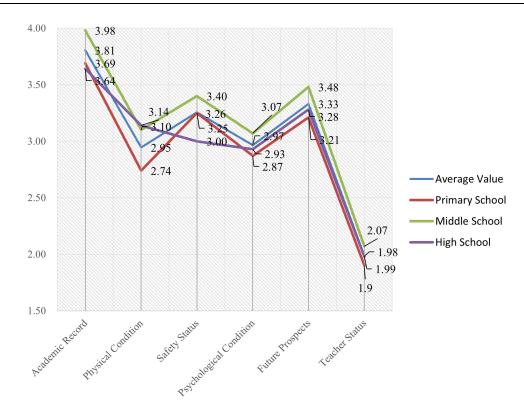


Figure 2 Descriptive analysis of parental educational anxiety.

that parents can objectively recognize the actual grades of their children and have a more realistic understanding of their own children's grades.

According to the statistics of the Parents Report, "How many points do you want your child to achieve on average this semester?"

Analyze the performance data reported by the students to measure whether there is a deviation between the parents' educational expectations and the child's actual grades.

In Table 3, we found that there was a significant difference between the expected grade of the parents and the actual grade of the child (T2=66.189***p<0.001), and the two still showed a significant positive correlation of R2=0.417, but

Their Children's Actual Grades

 MI ±S.D.
 RI
 T,

Table 2 Comparison of Parents' Perceptions of Their Children's Grades with

	MI ±S.D.	RI	Т
Parental cognitive grade Students' actual grades	3.35±1.044 3.35±1.084	0.82***	1.524
	5.55±1.001		

Note: The two-tailed significance probability p, ****p<0.001.

Table 3 Comparison of Parents'	Expected	Cognition	with	Their
Children's Actual Grades				

	M2±S.D.	R2	T ₂
Actual student grades Parents expect grades	3.36±1.044 4.51±0.736	0.417***	66.189***

Note: Double-tailed significance probability p, ***p<0.001.

compared with the R1=0.82 in Table 1, the correlation decreased rapidly. Thus, combined with the mean analysis, the difference between the actual grade of the student and the expected score of the parents is nearly 1.15 grades, which shows that the grade expected by the parents is far ahead of the actual grade of the student, which also shows that the parents have higher expectations for the child's education and exceed the actual grade level of the child.

Analysis of Influencing Factors of Parental Educational Anxiety

According to the operational definition of the model and variables, Table 4 shows the multivariate linear regression analysis of the influencing factors of parental education anxiety. When performing a multicollinearity test on the whole model, the VIF values of all variables are 1.000 to 2.695, which is less than 10, indicating that there is no multi-collinearity between the explanatory variables. In model 1, the variables only have the parental expectation gap, and as the basic model, the effect of the expectation gap on educational anxiety is examined, and the conclusion of hypothesis 1 is tested. Model 2 adds variables to the basic model 1 to examine the influence of various factors in the individual situation of the students on the anxiety of parents' education and test the conclusions of hypothesis 2. Model 3 adds family background factor variables based on model 2 to examine the effect of family economic status on parental educational anxiety to test hypothesis 3. Model 4 adds factors such as family parenting style and educational satisfaction to model 3 to examine the influence of family education concepts on educational anxiety and test hypothesis 4.

Model 1 shows that the parental expectation gap has a significant positive effect on their educational anxiety without controlling any variable factors (p<0.001), and the parental expectation gap still has a significant impact on educational anxiety in model 2 when the individual situation of the student is controlled, the parents' socio-economic status is controlled in model 3, and the parental parenting style and educational satisfaction are controlled in model 4 (p<0.001),

Self-variable regression model	Model I	Model 2	Model 3	Model 4
Expectation gap	0.175 ***	0.185 ***	0.178 ***	0.140 ***
Child gender		-0.009	-0.009	0.018
Whether or not you are an only child		0.002	-0.014	-0.023
Grade level		0.122 ***	0.112***	0.102 ***
Actual student grades		-0.167***	-0.15***	-0.064*
Parental gender		0.009	0.003	0.004
Parent age		-0.024	-0.026	-0.029
Whether the school is focused		0.135 ***	0.115***	0.089 ***
Father's education			-0.030	-0.03 I
Mother's education level			-0.039	-0.036
Father's profession			0.006	-0.003
Mother's profession			0.013	0.015
Annual household income			-0.063***	-0.055 **
Educational satisfaction				-0.187 ***
Father emotional support				-0.016
The father emotionally refused				0.076**
The father was overprotective				0.048**
Emotional support for mothers				-0.034
The mother emotionally refuses				0.029
Mothers are overprotective				0.059 **
R ²	0.031	0.054	0.063	0.134
Adjusted R ²	0.03	0.053	0.060	0.129

 Table 4 Multiple Linear Regression Analysis of Parental Educational Anxiety

Notes: I. In the model, β coefficient values are normalized coefficients; *p<0.05, **p<0.01, ***p<0.001; Cox and Snell R2 were calculated based on comparing the estimated model with the log-likelihood of the benchmark model, and Nagelkerke R2 was adjusted based on Cox-Snell's R2.

which is manifested as the greater the gap in parental expectations, the higher the level of educational anxiety. Hypothesis 1 is fully confirmed.

After the adjustment of model 2, under the conditions of other levels of consistency, (1) the child's grade section has a significant positive effect on parental education anxiety (p<0.001), which is specifically manifested as the higher the child's grade stage, the higher the level of parental education anxiety, that is, the level of parental education anxiety of the child going to high school is higher than that of the parents of the child who goes to junior high school, and the level of educational anxiety of the parents of the child's school focus has a significant positive effect on the parental anxiety level (p<0.001), which is specifically manifested in the fact that the child's school is not the focus of the parents' education anxiety level is higher than that of the child's school-focused parents. (3) The sex of the child and whether the only child has no significant impact on the parents' educational anxiety, that is, whether it is a multi-child family or a one-child family, regardless of the gender of the child, these will not affect the parents' educational anxiety. Model 2 was significant overall (F=37.896***p<0.001), with the variables jointly explaining the 5.3% variance variation. Hypothesis 2 is supported.

After the adjustment of model 3, under the condition of consistency of other levels, the annual household income has a significant negative effect on the parents' educational anxiety, which is manifested in the higher the annual family income, the lower the level of parental education anxiety, and the parents' occupation and cultural level factors do not have a significant impact on educational anxiety, that is, no matter what occupation the parents are, what level of education they are in, there is undifferentiated anxiety in the children's education. Model 3 was significant overall (F=22.122***p<0.001), with the variables jointly explaining a variance variation of 6.0%. Hypothesis 3 is supported.

After the adjustment of model 4, under the condition of other levels of consistency, (1) parental educational satisfaction had a significant negative effect on educational anxiety (p<0.001), which was manifested as the lower the parental educational satisfaction, the higher the educational anxiety level. (2) In the parenting style, the father's emotional rejection, the father's overprotective and the mother's overprotective have a significant positive effect on educational anxiety (p<0.001), that is, in the parenting style, the more the father's performance is rejected and the more overprotective, the higher the level of educational anxiety; the more overprotective the mother is, the higher the level of educational anxiety. (3) In other dimensions of parenting style, factors such as fatherly emotional warmth, maternal rejection, and maternal emotional warmth did not significantly impact educational anxiety. Model 4 was significant overall (F=29.732***p<0.001), with the variables combining to explain the variance variation of 12.9%. Hypothesis 4 is supported.

In summary, the gap between parental expectations, the student's school segment, actual academic performance, school focus, annual family income, educational satisfaction, father's emotional rejection, the father is over protectiveness, and maternal overprotective has a significant positive effect on educational anxiety. The gender of the student, whether the only child is born, the gender of the parent, the age of the parent, the occupation of the parents, the education level of the parents, etc., have no impact on educational anxiety. This shows that with the progress of society and the change of gender thinking, parents generally attach importance to education. The variables of parents' and students' individual characteristics no longer impact educational anxiety. The factors influencing educational anxiety are more reflected in the differences in parents' educational concepts and students' academic performance.

Discussion and Conclusions

Parental Education Anxiety Has an Objective Reality

The study found that the most anxious parents are their children's academic performance in the education anxiety survey. The child's academic performance and anxiety level are significantly negatively correlated. The lower the child's grade ranking, the higher the parental anxiety level. This result is consistent with the 2018 China Compulsory Education Quality Monitoring Report released by the Ministry of Education, which states that parents are most concerned about their children's learning, with nearly 80% of students pointing out that their parents are most concerned about their academic performance.⁵⁷ The "Survey Report on The Educational Anxiety Index of Chinese Parents" (2018) released by

Zhike Education also shows that the important position of test scores in many family education concepts is still irreplaceable.⁵⁸ With the implementation and comprehensive deepening of quality education, the talent training model has undergone great changes, and the education evaluation methods have shown diversification. At present, although to a certain extent, students' test scores are not the only criterion for measuring the quality of student development, under the established examination system, the evaluation method of assessing students' mastery and application of knowledge in the main way of examination is still the mainstream evaluation method, and the timeliness and sensitivity of academic achievements can more accurately reflect the students' stage learning effectiveness, so academic achievements have become an outlet for parents' educational anxiety.⁵⁹

Wu Ni, director of the Institute of Educational Development and Reform of the Chinese Academy of Educational Sciences, believes that "educational anxiety has become a kind of social anxiety, and it is a social and psychological problem that cannot be avoided during the period of social transformation. The pressures of social competition inevitably flow to education, directly or indirectly to parents and children.

On the one hand, the various educational anxieties of parents stem from the insufficient level of educational development and the uneven distribution of educational resources; on the other hand, they are also related to the social sentiments generated by the public due to the competition for high-quality educational resources.

The conclusion that parents in this study were significantly more anxious about their children going to non-key schools than parents whose children went to key schools supported this claim. Generally speaking, whether the key school itself is a manifestation of the uneven distribution of educational resources, the key school has more high-quality educational resources and educational conditions, and the quality and level of education are relatively high, thus providing a better guarantee for students' academic achievements. The party that fails in the scramble for limited and high-quality educational resources will inevitably fall into a panic about the backwardness of education. In the product of competition for scarce resources, "school district housing", "school choice", "tutoring class", etc. are all based on the family economic basis as a chip, so we can find in the study that the annual income of the family has a significant negative impact on the anxiety of parents' education, and the lower the annual income of the family, the higher the level of parental anxiety.

Educational anxiety has become social anxiety. In this study, regardless of the occupation of the parents, executive white-collar workers or farmers, unemployed, regardless of the level of education of the parents, doctors or illiterates, there is no difference in educational anxiety, further whether in multi-child families or one-child families, whether in the education of boys or girls, there is no difference in educational anxiety, this negative emotion has a certain universal commonality in family education.

Parental Educational Expectations are Too Subjective and Emotional

This study found that parents' perception of their children's performance is highly consistent with their children's actual grades, and there is no significant difference, but the expected grades are significantly different from the children's actual grades. This conclusion shows that parents generally pay more attention to their children's education, will take the initiative to understand their children's learning situation on time through home-school communication or communication with children, and can make real judgments about their children's achievements intellectually, but they cannot accept it emotionally, and excessively enhance their educational expectations.

Many researchers have defined parental education expectations, from which it is not difficult to find that parental education expectations are too subjective and emotional. Parental expectations are parents who conceive, plan, and design their children's future based on their own experience, knowledge, and thinking. Parental expectations are attitudes parents have towards their children, which are psychologically directed to what kind of education parents want their children to receive and what results they will reap.⁶⁰ Educational expectations are the assumptions and expectations of their children's future consciously or unconsciously generated by parents in the family environment, mainly including expectations of educational attainment, ability, occupation.⁶¹ From the above definitions, it is not difficult to find the common denominator of parents' educational expectations: first, expectations carry the parents' value orientation and psychological stereotypes; second, parents set results and requirements for their children's education. Parents'

expectations for their children inevitably carry their own experience, knowledge and thinking and are marked by personal characteristics and class.

During the 2022 Winter Olympics, the "education anxiety" derived from "post-00s" athletes such as Gu Ailing and Su Yiming, Bai Yansong believes that "anxiety may come from the difficulty of 'copying' Gu Ailing", which comes from the great subjective emotional color of Chinese parents. Gu Ailing's mother lets her sleep ten hours a day, which seems loose, but her training is also very efficient. Even if Gu Ailing did not win so many championships, she was admitted to Stanford, and her quality of life was quite good. The real lessons for parents are finding out what children are suitable for, thinking about how to make children have things they love and helping children manage their time well and raise a better child.

Some parents will also extend their unfulfilled wishes to their children, hoping that their children can realize their ideas for them, such as "the dream of becoming an official" and "the dream of getting rich". Some parents love to compare their children with other people's children, some parents like to "show off the baby", these inappropriate behaviors, the essence reflects the deviation of parents' educational expectations, parents plan the future for their children and help their children grow and develop will bring corresponding psychological satisfaction to parents. Parents set the educational goals to be achieved by their children from their perspective, which is easy to deviate from the actual situation of the child and produce a large gap. Therefore, many things cannot be directly borrowed, let alone directly from the target.

Misplaced Expectations Make Parents Overly Anxious in Their Lives

The conclusions of this study show that there is a significant positive effect between the parental expectation gap and its educational anxiety, and the greater the parental expectation gap, the higher the level of educational anxiety.

Misplaced educational expectations leave families in financial difficulty and parents caught up in educational overanxiety. Due to the subjective emotional nature of educational expectations, parents will consciously or unconsciously increase the educational requirements for their children, and in order to let their children achieve the predetermined goals, parents will continue to increase their investment in education. Relevant research in the field of education economics has found that children's academic level during school has an important impact on their future education and the return on human capital after entering the labor market, and the better the school-age children, the more likely they are to receive a high-level academic education, which is conducive to the accumulation of human capital, improve their labor productivity, and obtain higher returns on education.⁵⁵ Parents are also convinced of this, mistakenly equating "high education" with "high income", especially in rural or low-income families, education has become the most important way to the elite. According to the 2017 China Education Finance Family Survey from the China Institute of Education Finance Science at Peking University, education expenditure accounts for 20.8% of the family's annual income, of which 30% of parents are willing to pay for tuition fees beyond spending power. According to the "Blue Book of Employment: 2018 Employment Report of Chinese College Students" of the Max Research Institute, the monthly income of college graduates in 2017 was 4317 Yuan, the employment rate of undergraduate students was 91.9% half a year after graduation, and the employment rate of higher vocational college graduates was 92.1% half a year later, and the employment rate of higher vocational colleges exceeded that of undergraduates for the first time. Compared with the income of highly educated graduates and the average monthly income of ordinary residents, the asymmetry of educational investment returns directly leads to parents' anxiety about their children's "over-education".

Misplaced educational expectations make parents struggle between "test-taking education" and "quality education". Quality education has been implemented for nearly 20 years, and its educational concept has deeply affected a generation, especially the new generation of parents after the 80s and 90s who grew up under this concept. They are the first batch of only children in the context of China's family planning, generally have a high level of education, open-mindedness, are more likely to accept new things, are willing to be friends with children, respect children's personality differences, and pay attention to the cultivation of children's personality. In some studies, post-80s parents generally expect their children to grow up independent, confident, sunny, and happy, and they also realize that the existing education system pays too much attention to academic performance. They are also aware that the current social competition is fierce, education is still the main way to achieve class leaps and self-worth, so in the process of children's

education, they constantly compromise with reality, basically after primary school began to gradually reduce interest classes, to junior high school basically to take the exam as the primary goal. Some parents try to make up for the lack of school education through summer camps and social practice activities, but the large educational environment makes these parents overwhelmed and physically and mentally exhausted. Some parents abandon public education, choose private international schools, or send their children abroad to study. The conflict of parental contradictions reflects the compromise and inner contradictions in test-taking education, resulting in deep educational anxiety among parents. In this study, parental educational satisfaction has a significant negative effect on educational anxiety and the lower the educational satisfaction, the higher the anxiety level.

Misplaced educational expectations face the harsh reality, and parents are repeatedly frustrated, physically and mentally traumatized. In the fairer competition between the middle school entrance examination and the college entrance examination, according to the statistics of the 2018 college entrance examination, the admission rate of ordinary high schools in various provinces and cities across the country is about 50%, while the admission rate of key high schools is as low as 8%, and on this basis, the admission rate of a university is about 30%, such as Beijing, Tianjin and other places, while the low such as Yunnan, Jiangxi and other places is only 7%-8%, not to mention "211" and "985" and other key universities. In the competitive field of early childhood and early ascension, the "enrollment qualifications" of key schools that rely on the accumulation of parents' economic capital and social capital have made some children "lose on the starting line". The reality of cruel education competition has made most parents expect the blueprint fragmented, in addition to the above large exams, in the usual learning stage of the large and small exams always test the "strong" heart of parents, some parents will adjust their educational expectations promptly, and some parents fall into high expectations cannot extricate themselves, obsessively continue to give children learning to increase the weight, children in high-pressure education will lead to further decline in performance, parents in education repeatedly frustrated, but still self-anesthesia in high expectations, Trap your children and yourself in the cage of education.

Recommendations

To reduce the educational anxiety value of parents, we must first establish reasonable expectations and goals. However, what kind of expectations and goals are appropriately set? The Soviet educator, Vygotsky's theory of recent development zones, has answered.⁶² The desired goal should be based on understanding the child's current level, constantly focusing on the child's possible development level, which some describe as "an apple that can be picked by jumping up". Secondly, parents should be careful about the boundaries of love, and education is the fusion of love and wisdom. Parents have expectations because of love, and love is a gentle light that soothes the anxiety of education, and it is also a heart lock that imprisons the wisdom of education. For a child to fulfill the "Pygmalion" prophecy, he or she needs to radiate love in his parents' rationality in order to exert the positive effect of expectations. Finally, do not forget the original intention of education and establish long-term educational goals. The purpose of education is the starting point and the basic basis of all educational work and it is also the ultimate goal and true destination of all educational work. Parents' expectations for their children's education should not stay in the current "first place", "key primary and secondary schools" and "key universities", but should focus on the child's long-term development goals, what kind of person they want him (her) to become and help them eventually become themselves. Given the above recommendations, the following measures alleviate parental educational anxiety.

(1) Governments at all levels: conscientiously implement the task of "reducing burdens" and rationally allocate highquality educational resources.

After the "double reduction" policy is fully implemented, primary and secondary school students no longer have to run on the road to tutoring classes and have more time to participate in quality development. However, with the reduction of homework and exams, many parents feel empty in their hearts and involuntarily fall into educational anxiety. One objective reason parents' educational anxiety has persisted is the insufficient supply of high-quality resources for basic education in China.⁸ Strengthen the expansion model of high-quality resources for compulsory education so that high-quality educational resources can be exported, transplanted, integrated, and regenerated from high-quality schools to weak schools. The rational allocation of high-quality teacher resources will be strengthened, and the flow of backbone

teachers and principals to remote areas and weak schools will be promoted⁶³ to strengthen the protection of students in rural schools.⁶⁴ In addition, the government should also clarify the role orientation and training scope of discipline-based off-campus training institutions, promote their reasonable and smooth transformation, and become a necessary way to resolve parents' educational anxiety.

(2) Parents and teachers: Starting from the needs of children, establish a scientific concept of education and the concept of becoming a talent.

As a parent, first of all, we must deeply understand the spirit of the "double reduction" policy, analyze the deep-seated reasons, constantly adapt, update the concept of family education, help children solve learning problems, and let children grow up healthy and happy. Secondly, the child's growth has both a regular and unique trajectory. Parents can only continue improving themselves, cultivating children's good habits, and giving children the power to set an example. Finally, parents should learn to accompany growth, pay more attention to their children's physical and mental health and all-around development in the parent-child time they spend together, and rationally plan their children's future.

As a teacher, we must first focus on improving the efficiency of classroom teaching; classroom teaching must consider the overall situation of students, achieve "zero starting point" teaching, pay attention to teaching according to aptitude, and meet the needs of students personalized learning. Secondly, to improve the quality of homework assignments, all teachers in the homework management left to "selection, refinement, fine criticism, and fine talk". Only by ensuring that teachers "teach well" in the classroom and students "learn well" will parents be more at ease, and educational anxiety will be reduced.

(3) Society: Build a benign education ecology and eliminate parents' anxiety about education.

At present, integrating educational technology innovation with new formats and models requires the intervention of social forces.^{7,65} Give full play to the advantages of off-campus enterprises and training institutions in technologyenabled education, and promote teaching efficiency, innovative learning methods and improved educational experience in schools. The "Education Informatization 2.0 Action Plan" proposes actively encouraging enterprises to invest funds, provide high-quality informatization products and services, achieve diversified investment, and promote synergy. Actively lay out smart education, create a new ecology of education in the new era, and pay more attention to innovation and leadership.⁶⁶ Society should actively cooperate with schools to provide a path for high-quality educational technologies to enter the campus, such as teacher homework correction system, learning situation analysis and diagnosis system, teaching quality evaluation system to promote schools, teachers and students to improve efficiency, enhance the educational experience, and eliminate parents' educational anxiety.

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References

- 1. Zhike. 中国家长教育焦虑报告发布:家长综合焦虑指数达67点 [China Parent Education Anxiety Report Released: comprehensive anxiety index for parents reaches 67 points]; 2018. Available at: http://edu.sina.com.cn/zxx/2018-09-16/doc-ifxeuwwr4952738.shtml. Chinese.
- MoE. Notice of the Ministry of Education and Other Departments on Effectively Reducing the Extracurricular Burden of Primary and Middle School Students and Carrying out Special Management Actions of Off-campus Training Institutions. *Commun Ministry Educ.* 2018;4:138–140.
- 3. Xue E, Li J. The General Office of the State Council on the Standardization of Development of Off-campus Training Institutions. *Commission PRC*. 2018;1:845.
- 4. MOE. Notice of the Ministry of Education and Other Departments on Issuing the Measures to Reduce the Burden of Primary and Middle School Students. *Communiqué MOE*. 2018;12:37–40.
- 5. CPC. The General Office of the CPC Central Committee and the State Council issued the Opinions on Further Reducing the Burden of Homework and Extracurricular Training for Students at the Stage of Compulsory Education. *Commun State Council China*. 2021;22:14–19.
- 6. Yea Z. Reconstruction of Educational Evaluation System. Shanxi Education Press; 2019.
- 7. Yu Y, Yao Z. Parents' Anxiety in the Context of "Double Subtraction". J Xinjiang Normal Univ. 2022;1:1-11.
- 8. Si X, Wang T. Under "Double Reduction": relief and Management of Educational Anxiety. School Manag. 2021;10:39-41.
- 9. Xu S. Double subtraction" What really needs to be reduced is parents' educational anxiety. Educ Horizon. 2021;34:4-7.

- 10. Liu Y. Study on Parents' Anxiety About Education. Central China Normal University; 2021.
- 11. Hartley M. Anxiety in Education. J Educ Cambridge Univ Press. 2019;24:138-139.
- 12. Xu -X-X. Analysis of parents' educational anxiety in China. Educ Observation. 2021;10(35):115–117.
- 13. Krupić D, Ručević S, Vučković S. From parental personality over parental styles to children psychopathic tendencies. Curr Psychol. 2020. doi:10.1007/s12144-020-00676-6
- 14. Diao SLX. A Study on Anxiety in Basic Education. J Foshan Univ Sci Tech. 2016;34(06):57-61.
- 15. Takil NB, Sari BA. Trait anxiety vs career anxiety in relation to attentional control. Curr Psychol. 2021;40(5):2366–2370. doi:10.1007/s12144-019-0169-8
- 16. Oubibi M, Fute A, Xiao W, Sun B, Zhou YJS. Perceived organizational support and career satisfaction among Chinese teachers: the mediation effects of job crafting and work engagement during COVID-19. *Sustainability*. 2022;14(2):623.
- 17. Yu MK. How to Construct the Family Policy System in the Low Fertility Period? A Configuration Analysis Based on Typical National Family Policies. *Soc Construction*. 2021;8(6):3–14.
- 18. Ke QB. Supply and Service Innovation of Digital Education Resources in the Context of "Double Subtracting". *China Audio Visual Educ.* 2022;01:17-23.
- 19. Wang HC. The Logic and Path of "Breaking the Volume" of the "Double Reduction" Policy in the Perspective of Involution. *Educ Economy*. 2021;37(06):38–43.
- 20. Yu X. Parents' social background, educational values and expectations. J Nanjing Normal Univ. 2020;04:62-74.
- 21. Zhou X. Family Capital and Academic Anxiety: parents Anxiety Caused by "Double Reduction" Policy. J Guangxi Normal Univ. 2021;57 (6):96–106.
- 22. Boser U, Wilhelm M, Hanna R. The Power of the Pygmalion Effect: teachers' Expectations Strongly Predict College Completion. Center Am Progress. 2014;1:54.
- Jahan F, Mehrafzoon D. Effectiveness of Pygmalion Effect-based Education of Teachers on the Students' Self-efficacy and Academic Engagement. Memory. 2019;1(4):17–22.
- 24. Gündüzalp S, Özan M. The Power of Expectations in School Management: Pygmalion Effect. Future. 2019;1(15):47-62.
- 25. Ma Y, Siu A, Tse W. The role of high parental expectations in adolescents' academic performance and depression in Hong Kong. *Huan jing ke xue = Huanjing kexue*. 2018;39(9):2505–2522. doi:10.13227/j.hjkx.201711112
- Hascoët M, Giaconi V, Jamain L. Family socioeconomic status and parental expectations affect mathematics achievement in a national sample of Chilean students. Int J Behav Dev. 2021;45(2):122–132.
- Jeynes W. A Meta-Analysis: the Relationship Between the Parental Expectations Component of Parental Involvement with Students' Academic Achievement. Urban Educ. 2022;1:00420859211073892.
- Pinquart M, Ebeling M. Parental educational expectations and academic achievement in children and adolescents—a meta-analysis. *Educ Psychol Rev.* 2020;32(2):463–480.
- 29. Xu Y, Montgomery C. Understanding the complexity of Chinese rural parents' roles in their children's access to elite universities. *Br J Soc Educ*. 2021;42(4):555–570.
- Ma XW. An Analysis of the Circular Model of "Rosenthal Effect" in Parents' Educational Expectation: a Model Test Based on CEPS. *Xinjiang Soc Sci.* 2017;01:135–140.
- 31. Nikander J, Tolvanen A, Aunola K. The role of individual and parental expectations in student-athletes' career adaptability profiles. *Exercise*. 2022;59:102127.
- Khanam L, Akram H, Kamran M. Parental Expectations and Students' Academic Interests: a Case Study of the Islamia University of Bahawalpur, Pakistan. Pakistan J Soc Sci. 2022;42(1):61–70.
- 33. Sollars V. Children's achievements in ECEC: parents' expectations. Int J Early Years Educ. 2021;1:1–18.
- 34. Zhang HK. Study on the contrast between parents' expectation and students' behavior. Studies Weekly. 2016;21:5487.
- Deb S, Strodl E, H S. Academic stress, parental pressure, anxiety and mental health among Indian high school students. Int J Psychol Behav Sci. 2015;5(1):26–34.
- Sangma ZM, Shantibala K, Akoijam S, Maisnam A, Visi V. Perception of students on parental and teachers' pressure on their academic performance. IOSR J Dental Med Sci. 2018;17(1):67–75.
- 37. Li C, Tan X, Zhao Q, PJJoS R, Relationships P. Parental warmth may not always be beneficial: high parental warmth impairs victimized adolescents' academic achievement via elevated school burnout. J Soc Personal Relat. 2022;02654075211068189.
- Zhu Q, Cheong Y, Wang C, Tong JJCP. The impact of maternal and paternal parenting styles and parental involvement on Chinese adolescents' academic engagement and burnout. Curr Psychol. 2021;1–14.
- Benoit L, Thomas I, Martin AJC. Ecological awareness, anxiety, and actions among youth and their parents-a qualitative study of newspaper narratives. *Child and Adolescent Mental Health*. 2022;27(1):47–58. doi:10.1111/camh.12514
- 40. Peleg O, Deutch C, Dan OJL, Differences I. Test anxiety among female college students and its relation to perceived parental academic expectations and differentiation of self. *Learning Individual Differenc.* 2016;49:428–436.
- 41. Li Y, Peng J, Tao Y. Relationship between social support, coping strategy against COVID-19, and anxiety among home-quarantined Chinese university students: a path analysis modeling approach. *Curr Psychol.* 2021. doi:10.1007/s12144-021-02334-x
- 42. Weng LZ. The Difference of Parents' Conception of Children's School Readiness: an Empirical Comparison between China, America and Japan. *Educ Academic Monthly.* 2021;01:57–63.
- 43. W-hQ S. The Influence of Locus of Control and Related Factors on Anxiety of Parents of College Entrance Examination Students. *Chine J Health Psychol.* 2008;02(02):213–215.
- 44. Rodriguez-Hernandez CF, Cascallar E, Kyndt E. Socio-economic status and academic performance in higher education: a systematic review. *Educ Res Rev.* 2020;29:100305.
- 45. Liu J, Peng P, Luo LJEPR. The relation between family socioeconomic status and academic achievement in China: a meta-analysis. *Educ Psychol Rev.* 2020;32(1):49–76.
- 46. Zhao D, Liu S, Li Q. Effects of socioeconomic status and its components on academic achievement: evidence from Beijing-Shanghai-Jiangsu-Zhejiang (*China*). Asia Pacific J Educ. 2022;2;1–16.

- Waters NE, Ahmed SF, Tang S, Morrison FJ, Davis-Kean PEJECRQ. Pathways from socioeconomic status to early academic achievement: the role of specific executive functions. *Early Childhood Research Quarterly*. 2021;54:321–331. doi:10.1016/j.ecresq.2020.09.008
- 48. Davis-Kean PE, Tighe LA, Waters N. The role of parent educational attainment in parenting and children's development. *Curr Directions Psychol Sci.* 2021;30(2):186–192.
- 49. Li W, Xie YJCSR. The influence of family background on educational expectations: a comparative study. Chine Soc Rev. 2020;52(3):269-294.
- 50. Lim W. Impacts of Parental Involvement and Parents' Level of Education on Student's Academic Accomplishment. Educ J. 2021;10(1):35-39.
- 51. Davis-Kean PE. The influence of parent education and family income on child achievement: the indirect role of parental expectations and the home environment. *Journal of Family Psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43).* 2005;19(2):294. doi:10.1037/0893-3200.19.2.294
- 52. Liu Y, Yang Y. New "useless education theory": highly educated parents' expectations for their children's education—Evidence from the one-child policy. *China Economic Rev.* 2022;2:101764.
- 53. Giallo R, Wood CE, Jellett R, Porter RJA. Fatigue. Educ Observation. 2013;17(4):465-480.
- 54. Liu LQZY, Chen YN. The Relationship between Test Anxiety, Parental Anxiety and Awareness in Senior Three. *Modern Primary Secondary Educ*. 2013;6:63–66.
- 55. Forster AG, van de Werfhorst HG, Leopold T. Who benefits most from college? Dimensions of selection and heterogeneous returns to higher education in the United States and the Netherlands. *Res Soc Stratif Mobil*. 2021;73(10):06–07. doi:10.1016/j.rssm.2021.100607
- 56. Jiang ZLZ, Bijing J. Preliminary revision of the Chinese version of the simplified parenting style questionnaire. *Psychol Dev Educ*. 2010;26(1):94–99.
- 57. MoE. Basic Education Quality Monitoring Center, Ministry of Education. China Compulsory Education Quality Monitoring Report; 2018.
- 58. von Sengbusch S, Doerdelmann J, Lemke S, et al. Parental expectations before and after 12-month experience with video consultations combined with regular outpatient care for children with type 1 diabetes: a qualitative study. *Diabetic Medicine: a Journal of the British Diabetic Association*. 2021;38(6):e14410. doi:10.1111/dme.14410
- 59. Syed NK, Alqahtani SS, Meraya AM, et al. Psychological impact of COVID-19 restrictions among individuals at risk of exercise addiction and their socio-demographic correlates: a Saudi Arabian survey study. Curr Psychol. 2022. doi:10.1007/s12144-022-02892-8
- 60. Susperreguy MI, Douglas H, Xu C, Molina-Rojas N, LeFevre J. Expanding the Home Numeracy Model to Chilean children: relations among parental expectations, attitudes, activities, and children's mathematical outcomes. *Early Childhood Res Quarterly*. 2020;50:16–28.
- 61. Eiberg M, Olsen RFJC, Review YS. Too High Or Too Low? The Role Of Educational Expectations For Children In Out-Of-Home Care. *Children Youth Ser Rev.* 2022;106376.
- 62. Zhang C. The Theory and Practice of the Three Orientations of Educational Psychology. Hangzhou: Zhejiang Education Press; 1998.
- 63. John MJJ. An Analysis of the Expansion of Quality Resources in Compulsory Education. J Educ Sci. 2000;12:12-17.
- 64. An Y. Student Flow, Restructuring of Educational Resources and Unbalance of Urban and Rural Compulsory Education: a Case Study of N County, Gansu Province. J Beijing Univ Techn. 2021;21(5):39–47.
- 65. Oubibi M, Zhao W, Wang Y, et al. Advances in Research on Technological. *Pedagogical Didactical Soc Competencies Preservice TCFL Teachers*. 2022;14(4):2045.
- 66. Feng Yangcun RY. Education for Intellectual Support in the Age of Education Informatization 2.0: bridging the Three-tier Gap; Blocking the Transmission of Poverty: interpretation of Action Plan for Education Informatization 2.0. J Distance Educ. 2018;36(4):20–26.

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