

# ***The Influence of Family Environment on Secondary School Students' Academic Performance***

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**Abstract:** Secondary school students are in the developmental stage of adolescence. While the academic performance of secondary school students is very important to every student, the family environment is an important factor that affects academic performance. Therefore, the research topic of this paper is the influence of the family environment on secondary school students' academic performance. This paper is about the influence of family environment on secondary school students' academic performance. The research method of this paper is as follows: firstly, this paper use questionnaire survey to collect data, and secondly, this paper use the research method of quantitative analysis to study the data. This study is conducted on Chinese secondary school students and focuses on the influence of the family environment on the academic performance of secondary school students in various aspects. This study suggests several aspects to improve secondary school students' academic performance from both the perspective of the family environment and the student. The result of this study is that the family environment is influenced not only by family relationships, family income, and parent-student relationships, but also by the parenting style of the student. In the future, this paper will broaden the scope to find more factors that can influence students' performance and give a theoretical basis for the design of teaching methods. Parents should pay more attention to their students' learning, teach them according to their abilities, and adopt different discipline methods for students with different personalities.

**Keywords:** family environment, secondary school students, academic performance

## **1. Introduction**

### **1.1. Research Background**

In China, secondary school students face the pressure of the middle school examination in their junior year and the college entrance examination in their senior year. Therefore, the achievement of secondary school students is exceptionally important and it concerns the future fate of each student. However, achievement is affected by many factors, and the family of origin environment is an important factor that affects academic achievement. This study will find out in what ways the family

of origin environment affects students' grades, and will also investigate whether various aspects of the family of origin environment have a positive or negative effect on students' grades.

## **1.2. Significance of the Study and Purpose of the Study**

Through this study, this paper is able to know clearly in what ways the family of origin environment can affect students. This study will then provide suggestions to improve the academic performance of secondary school students and inspire other parents as much as possible to give their students a good learning environment.

## **2. Literature Review**

The family is the first place where people are educated after birth, parents can be considered as first teachers of young students. The family environment directly influences the healthy growth of a student. Parenting styles have received a great deal of attention from experts and scholars in psychology and education [1].

### **2.1. Family-related Factors Affecting Students' Academic Performance**

There are several main factors on the family side to influence students' academic performance: First, the relationship between parents and students. Second, the parents' education level. Third, parents' involvement in their students' learning. Fourth, parental education level. Fifth, the income level of the family. These five factors have great impacts on the students' academic performance.

### **2.2. Parent-student Relationship**

The relationship between parents and students can be broadly divided into two categories, the type of good relationship and the type of bad relationship. In families with good relationship, students will communicate with their parents in a timely manner when they encounter difficulties, which is not only helpful for parents to understand their students' difficulties, but also to help their students solve the difficulties they encounter [2]. In this environment of good communication, students' enthusiasm and motivation for learning will be significantly increased, which will affect students' academic performance [3].

In terms of category of family, there are original families, newborn families, and reconstituted families. The most influential family types for students (especially secondary school students) are original families and reconstituted families. Specifically, original family has more positive influence on secondary school students' academic performance comparing to the newborn and reorganized families.

In terms of the relationship between parents and students, the parent-student relationship in the original family is generally more beneficial for students and there is more communication between parents and students [4]. For secondary school students, it is the rebellious period in the psychological growth process, and students in original family have more love and care comparing to students in reconstituted families or single-parent families. Students from original family are more focused on learning and less susceptible to outside distractions, so their grades are generally better [5].

In terms of the parents' education level, generally the parents of non-divorced original family will have a higher education level than divorced families. Even if they are not highly educated, the educational philosophy of family will help and improve the students' performance especially in secondary school [6].

In terms of parental involvement in their students' learning, parents of the original family tend to invest a lot of energy and time in their students' learning. However, for families of other types, it is

difficult for parents to invest time and energy in their students' learning because the relationship between parents and students is more delicate [7]. In addition, for secondary school students' parental involvement, monetary investment for education (e.g., extracurricular tutoring classes) is also very important, which is much more important for secondary school students' learning by their original family than by non-original family [8].

Parents of the original family are mostly better educated than non-original family. Most original families invest emotional and energetic unconditional support in their students' education, which can be described as reasoning and a more authoritative parenting style, with very little roughness and scolding [9]. On the other hand, the education level of non-original families is more of a neglectful parenting style, which is characterized by ignorance, indifference, excessive severity, and excessive reprimand. Prior study suggested that these negative factors from non-original families can affect the academic performance of high school students. [10]. The income level of the original family is often better than that of the non-original family, and the investment in educational resources is also used more, which cannot be matched by the non-original family [11].

In summary, the family environment provides a positive influence on secondary school students' academic performance in several ways.

### **2.3. Parents' Education Level**

The more educated the parents are, the more helpful they will be to the students. Parents with higher education levels will adopt scientific education methods to guide their students step by step to learn independently and stimulate the desire of self-learning. Parents with higher education create a good family atmosphere to drive their students to learn [12]. Parents with lower education levels have difficulty in providing their students with effective advice because of their own inexperience. Therefore, students have to find the correct learning method through their own efforts. They also have to spend more time and experience compared to parents with higher education levels. Therefore, parents' education level may be positively correlated with their students' academic performance.

### **2.4. Parental Involvement in Students' Learning**

The higher the level of parental involvement in their student's learning, the higher the student's achievement will be [13]. Students tend to lack some self-control and the ability to resist external temptations, and parents can not only monitor their students' learning, but also help them solve problems and tutor their learning. Sometimes parents can also act as teachers, helping and guiding students through homework and correcting assignments. Parental involvement shows a positive relationship with students' academic performance [14].

### **2.5. Parenting Styles**

Parents' parenting styles are generally classified as authoritative, arbitrary, indulgent, and neglectful. Authoritative type is when parents often express positive affirmation to their students and adopt encouraging education; arbitrary type is when parents require their students to follow unconditionally; indulgent type is when parents are spoiled and overprotective of their students; and neglectful type is when parents are neglectful and cold to their students. Research shows that students who grow up in a gentle, encouraging educational environment have better social and cognitive skills, better self-control, and will be more optimistic and positive [15]. All those positive outcomes could have positive effects on students' academic performance. Violent education, on the contrary, will undermine students' self-confidence and create negative emotions such as anxiety and withdrawal, making students rebellious, which will lead to a decline in academic performance.

## 2.6. Family's Income Level

The income level of the family also has a greater impact on the students' academic performance. Families with high income levels can bring more and better educational resources for their students, as well as a more superior teaching environment. Families with low income, on the other hand, can only change their students' future destinies through their own efforts, so the students' own learning pressure will be greatly increased, which is not conducive to the improvement of their academic performance.

## 3. Research Methodology and Research Design

### 3.1. Research Methodology

This paper uses a quantitative research method because it employs statistical, mathematical or computational techniques for the systematic empirical examination of social phenomena, and the goal of such research is to apply mathematical models, theories or hypotheses related to social phenomena. Therefore, quantitative research method is more appropriate for this study.

### 3.2. Research Design

Quantitative studies generally have two types of variables, which are the independent and dependent variables. The independent variable is the cause of the research outcome and the dependent variable is the outcome obtained by the researcher. The two types of variables are causally related to each other. In this study, the independent variable is the family environment and the dependent variable is the academic achievement of secondary school students. This paper will study the effects of five factors (i.e., parent-student relationship, parents' education level, parents' involvement in students' learning, parents' education style, and family income level) on the academic achievement of secondary school students separately. About questions that used to measure variables, please see Table 1 for details.

Table 1: Description of study variables.

Independent variable		Nature	Description
Original Variable	Convert variables		
1.Parent-student intimacy		Continuous Variables	Very good, relatively good, relatively bad
2.Parents' education level	Highest Education	Continuous Variables	Under college, college, college or above
3.Parental involvement in students' learning	Frequency of parents tutoring their students' homework	Continuous Variables	Daily or often, occasionally, rarely or never
4.Parenting style		Continuous Variables	Authoritative, arbitrary, indulgent, neglectful
5.Household income	Total household income	Continuous Variables	Less than 8000 yuan, 8000-16000 yuan, more than 16000 yuan

The grouping criteria for each variable are as follows: Intimacy is divided into three groups: very good, relatively good, and relatively poor; education level is divided into four groups: below college,

high school, college, and college or above; parental involvement in students' learning is divided into three groups: daily or often, occasionally, rarely, or never; parenting style is divided into four types: authoritative, coddling, arbitrary, and neglectful; income level is divided into three groups: below 8,000 yuan, 8,000 yuan- 16000 yuan, and more than 16000 yuan.

The technical route of this study was to conduct a questionnaire survey, followed by data collection based on the five family aspects mentioned above (i.e., parent-student relationship, parents' education level, parents' involvement in students' learning, parents' parenting style, and family income level) that affect students' performance, and then to analyze and illustrate the data through a quantitative research method. The overall situation of the questionnaire was counted, and the number of participants who answered the questionnaire was 271.

### 3.3. Research Hypothesis

By combining and summarizing the related literature, it can be found that the relationship between parents and students, parents' education level, parents' involvement in students' learning, parents' education style, and families' income level all have effects on secondary school students' academic performance. Combining the data, the following hypotheses are made.

- The better the relationship between parents and students, the better the students' performance;
- The higher the parent's education level, the better the student's performance;
- The more parents are involved in their students' learning, the better their students' performance;
- The more reasonable the parent's educational style, the better the student's performance;
- The higher the income level of the family, the better the student's performance;

## 4. Results

### 4.1. Parent-student Relationship

Table 2: Parent-student relationship.

Options	Subtotal	Proportion	Average of grade points
A. Very good	136	50.18%	467
B. Better	84	31%	455
C. Poorer	51	18.82%	342
Total	271		

As shown in Table 2, the relationship between students and their parents is divided into three groups. In Group A, students' grades are generally around 467, while those in Group C are generally around 342. Based on the statistical results, it can be presumed that the better the relationship with parents, the better the academic performance of secondary school students. A harmonious relationship in the family not only allows the student to study without worries, but also allows the student to truly take to heart the lessons taught to him by his parents.

### 4.2. Parents' Education Level

As shown in Tables 3 and 4, in the independent variable of education, parents' education level is divided into three groups; parents' education level does not have a very direct relationship with students' achievement, and does not show a clear positive correlation, in the group of parents with less than college education, students' average achievement is about 450, in the group of college, students' average achievement is 460. highly educated people do not necessarily know how to

Learning and teaching are two very different things. Highly educated parents may neglect to discipline their students or teach them in the wrong way, resulting in their students' poor performance.

Table 3: Father's education level.

Options	Subtotal	Proportion	Average of grade points
A. Under college	133	49.08%	456
B. College	118	43.54%	466
C. College or above	20	7.38%	465
Total	271		

Table 4: Mothers' education level.

Options	Subtotal	Proportion	Average of grade points
A. Under college	138	50.92%	457
B. College	90	33.21%	463
C. College or above	43	15.87%	467
Total	271		

#### 4.3. Parental Involvement in Students' Learning

Table 5: Parents' supervision or tutoring of students' homework.

Options	Subtotal	Proportion	Average of grade points
A. Daily or often	157	57.93%	469
B. Occasionally	64	23.62%	449
C. Rarely or never	50	18.45%	451
Total	271		

As shown in Table 5, in the variable of involvement, parents' tutoring of students' homework is divided into three groups. In group A, students' grades are generally around 469, and students in group B also have an average grade of 449, while students in group C generally have a grade of around 451, which shows that the higher the degree of parents' involvement in students' learning, the higher the students' grades will be. Parents' involvement in their students' learning not only gives tutoring on homework, but also implicitly cultivates their students' learning attitude, shapes their three perspectives, and ultimately motivates their students to learn on their own, thus influencing their grades.

#### 4.4. Parenting Style

As shown in Table 6, in the variable of parenting style, this paper divided into four groups, where the authoritative type was absolutely dominant and the majority of families used this parenting style. This paper cannot visualize the relationship between parenting style and achievement from this variable. The majority of families use a parenting style that is not necessarily successful. The authoritative type of this style does not mean that the wishful thinking of the parents can make the student spontaneously develop a passion for learning, but also depends on the student's own approval for this type of education to be successful. Although the authoritarian parents do their best to discipline their students, the student's rebelliousness and the awakening of the student's sense of self will make this parenting style fail and eventually lead to the student's poor performance.



Table 6: Parenting style of the family.

Options	Subtotal	Proportion	Average of grade points
A. Authority	200	73.8%	466
B. Coddling	38	14.02%	448
C. Autocratic	15	5.54%	454
D. Neglectful	18	6.64%	434
Total	271		

#### 4.5. Income Level of the Household

Table 7: Monthly income of the household.

Options	Subtotal	Proportion	Average of grade points
A. Less than 8,000 yuan	99	36.53%	457
B. 8,000-16,000 yuan	154	56.83%	464
C. More than 16,000 yuan	18	6.64%	452
Total	271		

As shown in Table 7, in the variable of family's income level, this paper divided into three groups, in which the monthly family income was concentrated in the range of \$8,000-16,000, but the academic performance of students in the three groups was similar.

## 5. Discussion

### 5.1. Relations Between Family Environment Factors and Students' Academic Performance

Of the five independent variables studied in this study, not all of them were directly related to students' good grades. Parent-student relationship and parental involvement in students' learning had a positive relationship with students' grades, while parental education, family parenting style and family income level did not have a direct positive relationship with students' grades. In a study by Hongwei Li on the influence of family environment on learning motivation and self-harmony, not all independent variables showed correlations with dependent variables [16]. For example, the higher the closeness, the higher the students' motivation to learn; the better the emotional expression; the higher the motivation to learn. It can be seen that students' academic performance is influenced by many aspects, the family occupies a very important position, but not the ruling position. Therefore, when studying the achievement of secondary school students, all aspects should be taken into account. The analysis and research should be conducted in an integrated manner and should not analysis the problem in a one-sided way. For education, it is important to take a holistic approach. A student is a complex individual, and they tend to develop his or her own enthusiasm for learning. External forces do not play a decisive role in their learnings. The family only subconsciously changes the students' minds. If a student always learns passively, his learning ability cannot be effectively improved. This study analyzed from the family's perspective, and the independent variables set are not very comprehensive, so the present study cannot summarize all aspects of family impact.

The number of people living with grandparent elders was low. Regarding achievement and family relationships, this paper investigated parent-student relationships, parenting styles, parents' education levels, family income levels, and parental involvement in their students' learning. The data results show that the more open and democratic the family environment is, the more parents adopt a parenting style that stimulates their students' intrinsic motivation to learn. the results also reveal the higher the family income, the better the students' achievement. Most students were more satisfied with the way

their families were raised. This paper notes that there are very few families that take extreme control over their students which also leads directly to poorer academic performance. It is evident that the family environment is not only influenced by factors such as family relationships, family income, and parent-student relationship, but also by the way parents raise their students has a great impact.

## 5.2. Suggestions for Academic Performance Improvement

In response to this paper's research study, in order to improve the academic performance of secondary school students, this paper can start by changing the family environment to create a good learning environment for students.

Firstly, the relationship between parents and students should be improved and the communication between parents and students should be enhanced. A good family relationship will bring a pleasant mood to the students and cultivate an optimistic and positive mindset. This will enable them to positively face the learning difficulties and persevere which could improve their academic performance effectively.

Secondly, it is important to increase parents' involvement in students' learning. Parental involvement in students' learning does not mean that parents should replace teachers in tutoring students, but more so that they should be more present. Generally speaking, parents will spend more time with their students during their childhood. However, as students grow up, especially in secondary school, many parents slowly reduce their time and they encourage students to study on their own. However, teenage students actually need parents to spend more time with themselves and be involved in their studies.

Thirdly, it is important to change the parenting style of the family. Parents should try to give students a harmonious family atmosphere and a positive learning environment by adopting a gentle and encouraging parenting style. Parents should also foster students' interest in learning and self-confidence, and they should help students develop the ability to think independently.

Finally, parents should lead by example and motivate their students to improve their abilities together.

## 6. Conclusion

Family factors are important aspects of individuals' academic achievement. By reviewing the literature on family environment, student achievement and parent-student relationships, this study found that most of the current studies on factors influencing academic achievement consider only a single or two variables, with few combining multiple variables. In contrast, there are more than a single or two factors in the family environment that influence secondary school students' academic performance. Therefore, studies on factors influencing secondary school students' academic performance should consider a combination of parent-student relationship, parents' education level, parents' involvement in their students' learning, parents' education style, and family income level. Therefore, this study selected some of the important dimensions of family factors and examined their relationship with academic achievement. The results show that the three dimensions of parent-student relationship, parental involvement in the student's learning and parenting style have an impact on students' achievement, while the two dimensions of parental education and family income level have less impact on students' achievement. The findings suggest that family factors have a significant impact on academic achievement levels. This reveals the important role of family factors in individual development on the one hand, but also highlights the need to refine the different components of family factors. Future educational practice needs to place family education in a more important position and set up family education programs.



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