How Family Environment Affects Students' Academic Performance

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Abstract: Often within a school, students' academic performance always appears different. Some students do well on the exam and get high scores, but some students struggle. It has been proved that the academic performance of students is not only related to how they work at school, but also strongly relevant to factors outside school, and this can be related to many factors, for example, the IQ of students, the hard work of students at home and the environments of their family, etc. This article mainly discusses how the family environment of students impacts their academic performance. In this paper family environment has been divided into four parts: parental educational level, family income, family structure of students, and parental involvement. The paper is trying to discover do these four parts of family are related to students' study achievement. This paper searches many previous researches to support the idea. After reading and analyzing the resources, the conclusion can be that: the four parts of family environment have a certain relationship with students' academic achievement and influence from different aspects.

Keywords: Academic performance, Parental Educational Level, Family Income, Family Structure, Parental Involvement

1. Introduction

Students' grades are an important indicator to measure students' academic achievements, and schools usually aim to allow students to achieve higher test scores. Many educational researchers are looking for methods and influencing factors that can improve students' test scores. Family is the main part of a student's growth, and the family environment can become an important factor that affects a student's test scores. Some special family environments can cause students to show different performances in studies and examinations. Therefore, this article explores how those factors in the home environment affect students' scores and academic performance.

A student's academic performance can be affected by different factors in how a student performs in school, including what they study in school and other social factors. Although these two main factors may affect students' performance, family environment is another important factor and a major part of students' growth and education. Learning is one of several areas where family environment has an impact. It is well acknowledged that families are crucial to children's academic success and growth [1]. Research has found that students' family environment can directly affect students' academic achievements, and indirectly affect students' academic achievements through factors such as schools. Due to the lack of a supportive academic environment and limited resources at home,

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some special families, such as those from low SES and black communities, sometimes have comparatively low performance [2].

1.1. Student Academic achievement

Academic achievement is generally difficult to define. The academic achievements achieved by students from different directions in different fields are different. For example, students studying other fields often perform worse than students studying mathematics in science and mathematics subjects, which is also a factor that affects students' academic achievement. It may also be affected by family factors. For better analysis, this article uses students' test scores as an indicator of students' academic performance. Therefore, students studying certain specialized fields will not be considered in the analysis of this article, and we will only consider students in subjects whose academic proficiency can be measured by test scores, such as mathematics and science.

1.2. Family Environment Factors

Academic performance in students is significantly influenced by family environment. Kurniawan's research [3] indicates that a student's home environment has a substantial impact on their motivation to learn. The family environment is made up of many different elements. There are various components that make up the family environment. This article primarily focuses on the four topics that are most closely related to parental behavior, family income, family structure, and children's education. By examining various experiments and viewpoints in the prior literature, you can support how these four family characteristics affect students' academic progress.

2. Home environment Factors

2.1. Parental education Level

Parents are students 'first teachers. There may be a certain relationship between parents 'education level and students 'test scores. For example, the more educated parents are, the more they think their children should be smart, so sending their children to better schools can give them a better education. According to research, parent education strongly and profoundly impacts student achievement [4]. Numerous studies also demonstrate the strong correlation between parents' educational attainment and their children's school achievement, as well as the critical role that parents' education levels play in their involvement in their children's education [5]. Generally speaking, parents with higher education will be more interested and concerned about their children's academic performance, which will definitely lead to better student performance. Higher educated parents encourage their children to do better in school by being more worried about their future occupations and lifestyles [6]. A survey-based study showed that children of educated women perform better academically and have higher test scores. Children of mothers with lower levels of education, however, did poorer on tests than children of mothers with higher levels of education. According to statistics, 87% of children of educated mothers succeed academically, while only 13% of students struggle academically [7]. According to research, parents with more education are more likely to provide their kids with a positive learning environment and tools [8]. There is also the belief that, although while all parents are involved in their children's education, the effect of parents' educational attainment on their children's education is larger than the effect of parents' financial circumstances [9].

2.2. Family Income

Similar to parental education, family income, as a major factor in family environment, will also have a certain impact on students' performance. For example, families with high incomes can give students

more possibilities to choose extracurricular activities, which will also have certain benefits for improving academic performance. According to one survey, household income in the United States climbed by 20% between 1993 and 1997. According to our initial estimations, each extra \$1,000 in income is linked to a 6% standard deviation improvement in combined math and reading exam scores [10]. The findings from support this view to some extent. Their results indicated that students from economically affluent families achieved higher academic scores in the examination (Mean \pm SD = 2.97 ± 0.88 , X2 = 11.991, P = 0.007) [11]. A comparable poll was also carried out by Suleman [12], they looked at 60 public high schools in Pakistan and came to the conclusion that middle school students' academic performance will be influenced by their parents' socioeconomic status and degree of money. According to Considine's research [13], a family's "social" and "economic" status has an effect on the educational outcomes of its children. According to a Taiwanese study, pupils' cultural capital and their parents' economic standing and power are closely correlated, however the correlation is a little lower there than in Western nations because of regional and cultural differences [14]. family's level of wealth Although it is a crucial component in determining school achievement, college performance is not much impacted by this factor [15].

2.3. Family Structure

Family structure determines whether a student's growth environment is complete. For example, family fragmentation caused by parents' divorce can take a toll on students psychologically. As a result, students are less motivated to learn and have lower academic performance. There are five main categories of family structure: 1. Nuclear family 2. Single parent family 3. Extended family 4. Step family 5. Grandparent family. Children educated by different family structures have different academic performances. Test results for all standardized indicators differed significantly by family structure. Children from intact families received the highest test scores in each case. According to Jeynes et al. [16], children from cohabiting households, widowed and remarried families, and singleparent families who never married often performed the worst. Another study showed that father involvement was related to student performance. According to data, school achievement is positively impacted by a father's level of involvement in the family [17]. According to a research investigation, children in two-parent households and step-parent families have made more progress in reading and mathematics than children in single-parent households and households with many children. [18]. In academic performance In terms of encouragement and help, single-parent families and step-parent families provide less help to children than nuclear families. The participation of biological parents will have a positive impact on children's academic performance [19]. Schools dominated by singleparent families and stepfamilies have a negative impact on student achievement, with lower achievement than children from nuclear families [20]. Concluded from the study of Thompson [21] that 1. Students from single-parent families are more likely to struggle academically than students from two-parent homes. 2. Children from two-parent households participate more frequently in social and cultural activities. 3. One of the reasons why the academic achievement of children in the two family structures varies is due to the varying economic resources of the two family structures. Less money is available to students from single-mother families to spend on books and extracurricular activities. The dynamics of the home can affect a student's academic performance. Students from intact families perform better academically than those from homes where the family structure has changed, such as those where the parents have remarried, according to research by BD Ham [22]. Additionally, this effect is stronger in women. Depending on whether the family remains intact, the presence of grandparents has a substantial impact on children's educational performance. Lack of resources and socialization techniques might be blamed for the harmful effects of incomplete households [23].

2.4. Parental Involvement

Parental involvement also affects children's academic performance. The way parents interact with their children at home will have an impact on students' test scores, both positively and negatively. The relationship between parents' participation in students' learning and student performance is particularly important. Results from one study suggest that parent involvement can have a positive impact on student achievement, especially when parents participate voluntarily. Although parents who do not voluntarily participate in students' learning will also have a positive impact on student performance, the effect is better if parents participate voluntarily [24]. There is also research showing that parents respond gently to their children but also establish an authoritative set of rules. Children in such families tend to have higher grades [25]. Another study found that parents 'involvement in their children's learning also affects student performance. If parents simply express their expectations for students' test scores without forcing them, students' scores will be higher. On the contrary, if parents directly help students with homework, students' grades will be worse [26]. Another study in the same field also reached a similar conclusion. Parents' expectations for children's academic performance are strongly related to student performance, while parents' direct supervision of children's learning is closely related to student performance. relationship is weak [27]. A metaanalysis conducted by Castro [28] showed that the parental model in which parents express their hopes for their children's academic performance while supervising their children's learning is most related to children's high achievement. Additionally, this effect is stronger in women. Depending on whether the family remains intact, the presence of grandparents has a substantial impact on children's educational performance. Lack of resources and socialization techniques might be blamed for the harmful effects of incomplete households [29]. Research has shown that parental involvement in academic activities is positively associated to student achievement because it influences students' performance through examples, encouragement, and direction [30].

3. Conclusion

There is a lot of literature that proves that family environment and students' academic performance are closely related and affect students' academic performance in different aspects. The four parts of the family environment mentioned in this article have a strong correlation with students' academic performance in school. Firstly, the education level of parents is positively related to student performance. Educated parents will encourage their children more, so that they can perform better in learning. Second, there is a positive correlation between family economic status and student academic performance. Children from families with good financial status will also perform better in academic performance than children from low-income families. This may be because the economic status of wealthy families gives children more opportunities. Educational resources and extracurricular activities. Equally important, the closer the family structure is to a nuclear family, the higher the academic performance of students. Family structure determines the growth environment of students and also affects their performance. This is a very important point. The research in this article found that, generally speaking, children in nuclear families perform better than children in other family structures such as single-parent families and step-parent families. Last, the degree of parents' participation in their children's education is also a factor that is closely related to students' academic performance, but this depends on the method and degree of parents' participation. The research in this article found that parents' participation in students' learning with a more gentle and encouraging attitude will have a positive impact on their performance. On the contrary, if parents' educational attitude is too strong or direct, students' performance will actually become worse. Therefore, the degree of parental involvement in education is negatively related to students' performance.

References

- [1] Marchant, G. J., Paulson, S. E., & Rothlisberg, B. A. (2001). Relations of middle school students' perceptions of family and school contexts with academic achievement. Psychology in the Schools, 38(6), 505-519.
- [2] Slaughter, D. T., & Epps, E. G. (1987). The home environment and academic achievement of Black American children and youth: An overview. The Journal of Negro Education, 56(1), 3-20.
- [3] Kurniawan, J., Effendi, Z. M., & Dwita, S. (2018, July). The Effect of school environment, family environment and learning motivation on students' learning performance.
- [4] Nicholas-Omoregbe, O. S. (2010). The effect of parental education attainment on school outcomes. IFE PsychologIA: An International Journal, 18(1), 176-182.
- [5] Sui-Chu, E. H., & Willms, J. D. (1996). Effects of parental involvement on eighth-grade achievement. Sociology of Education, 69 (2), 126-141.
- [6] Khan, R. M. A., Iqbal, N., & Tasneem, S. (2015). The Influence of Parents Educational Level on Secondary School Students Academic Achievements in District Rajanpur. Journal of Education and Practice, 6(16), 76-79.
- [7] Awan, A. G., & Kauser, D. (2015). Impact of educated mother on academic achievement of her children: A case study of District Lodhran-Pakistan. Journal of Literature, Languages and Linguistics, 12(2), 57-65.
- [8] Teachman, J. D. (1987). Family background, educational resources, and educational attainment. American sociological review, 548-557.
- [9] Al-Matalka, F. I. M. (2014). The influence of parental socioeconomic status on their involvement at home. International Journal of Humanities and Social Science, 4(5), 146-154.
- [10] Dahl, G. B., & Lochner, L. (2012). The impact of family income on child achievement: Evidence from the earned income tax credit. American Economic Review, 102(5), 1927-1956.
- [11] Machebe, C. H., Ezegbe, B. N., & Onuoha, J. (2017). The Impact of Parental Level of Income on Students' Academic Performance in High School in Japan. Universal Journal of Educational Research, 5(9), 1614-1620.
- [12] Suleman, Q., Aslam, H. D., Hussain, I., Shakir, M., Khan, F. U., & Nisa, Z. (2012). Effects of parental socioeconomic status on the academic achievement of secondary school students in karak district, pakistan. International Journal of Human Resource Studies, 2(4), 14-32.
- [13] Considine, G., & Zappalà, G. (2002). The influence of social and economic disadvantage in the academic performance of school students in Australia. Journal of sociology, 38(2), 129-148.
- [14] Cheng, S. T., & Kaplowitz, S. A. (2016). Family economic status, cultural capital, and academic achievement: The case of Taiwan. International Journal of Educational Development, 49, 271-278.
- [15] Neupane, D., & Gurung, S. K. (2021). Influence of Parental Socio-Economic Status on Students' Academic Performance: Experience from Pokhara University, Nepal. International Journal of Multidisciplinary Perspectives in Higher Education, 6(2), 50-67.
- [16] Jeynes, W. H. (2005). Effects of parental involvement and family structure on the academiic achievement of adolescents. Marriage & Family Review, 37(3), 99-116.
- [17] Jeynes, W. H. (2015). A meta-analysis: The relationship between father involvement and student academic achievement. Urban Education, 50(4), 387-423.
- [18] Sun, Y., & Li, Y. (2011). Effects of family structure type and stability on children's academic performance trajectories. Journal of marriage and Family, 73(3), 541-556.
- [19] Astone, N. M., & McLanahan, S. S. (1991). Family structure, parental practices and high school completion. American sociological review, 309-320.
- [20] Pong, S. L. (1997). Family structure, school context, and eighth-grade math and reading achievement. Journal of Marriage and the Family, 734-746.
- [21] Hampden-Thompson, G. (2009). Are two better than one? A comparative study of achievement gaps and family structure. Compare, 39(4), 517-534.
- [22] Ham, B. D. (2004). The effects of divorce and remarriage on the academic achievement of high school seniors. Journal of Divorce & Remarriage, 42(1-2), 159-178.
- [23] Kuan, P. Y., & Yang, M. L. (2004, May). Educational achievement and family structure: Evidence from two cohorts of adolescents in Taiwan. In meeting on Social Stratification, Mobility, and Exclusion, the Research Committee on Social Stratification and Mobility (RC28), International Sociological Association, Neuchatel, Switzerland.
- [24] Jeynes, W. H. (2007). The relationship between parental involvement and urban secondary school student academic achievement: A meta-analysis. Urban education, 42(1), 82-110.
- [25] Pinquart, M. (2016). Associations of parenting styles and dimensions with academic achievement in children and adolescents: A meta-analysis. Educational Psychology Review, 28, 475-493.
- [26] Wilder, S. (2014). Effects of parental involvement on academic achievement: a meta-syn-thesis. Educational Review, 66(3), 377-397.

- [27] Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. Educational psychology review, 13, 1-22.
- [28] Castro, M., Expósito-Casas, E., López-Martín, E., Lizasoain, L., Navarro-Asencio, E., & Gaviria, J. L. (2015). Parental involvement on student academic achievement: A meta-analysis. Educational research review, 14, 33-46.
- [29] Boonk, L., Gijselaers, H. J., Ritzen, H., & Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement. Educational Research Review, 24, 10-30.
- [30] Hoover-Dempsey, K. V., Battiato, A. C., Walker, J. M., Reed, R. P., DeJong, J. M., & Jones, K. P. (2001). Parental involvement in homework. Educational psychologist, 36(3), 195-209.