

The Relationship Between Socioeconomic Status and Academic Achievement

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ABSTRACT

Generally, parents have a strong influence on student's academic achievement. However, the relationship between family and student academic achievement remains unclear. On this basis, in this paper, the role of socioeconomic status and parenting style is investigated in accounting for the student's academic achievement by reviewing articles from different time periods and regions. Specifically, this article compares the study between different periods and regions, points out the differences and finds the connection between family socioeconomic status and academic achievement. These results shed light on the direction of educational reform.

Keywords: Socioeconomic status, academic achievement, family.

1. INTRODUCTION

Academic achievement is the direct reflection of students' academic learning and mastery of knowledge [1], which is related to their graduation and future employment, and it can also reflect the quality of education. In educational psychology, academic achievement shows a level of proficiency in scholastic work in general or in a specific skill, e.g., mathematic or reading. Evidence of nowadays academic achievement is normally based on the results of standardized ability tests and assessment of performance by a teacher or other supervisor. Various previous studies have shown the relationship of academic performance on students' careers and Socioeconomic status. For example, Mueller and Essifile (2020) found that student's academic performance in higher education was positively related to their future earnings [2]. Walker (2012) found a positive relationship between the students' achievement in the academic and personal happiness [3]. Therefore, not only does academic performance have a positive relationship with graduation, but it is also linked to a student's future earnings, the standard of living, and mental health. In educational psychology, academic performance is associated with a wide variety of indicators of psychosocial functioning including psychopathology, social, and romantic relationship functioning.

Socioeconomic status (SES) was defined by Mueller and Parcel in 1981 as "the relative position of a family or individual on a hierarchical social structure, based on

their access to or control over wealth, prestige and power [4]. More recently, SES has been defined as a mixture concept that refers to individual, family, social class, and capabilities to create and consume goods that are valued in our society [5]. Examinations of the SES usually reveal inequities in access to resources, plus issues related to privilege, power, and control. For many educators, Coleman (1996) wrote a report which shows the various former researchers have come to the same conclusion: there exists a strong connection between socioeconomic status and academic achievement [6]. The higher the SES of a student's family, the greater the student's academic performance. This connection has been documented in many studies and seems to hold no matter what measure of SES is used [7]. As a result, the positive relationship between school completion, family socioeconomic status, and measured ability (e. g, mathematic) has been widely acknowledged [8].

However, comparing recent results to previous studies, a lot of differences exist. Recent literature from Japan found academic achievements of students are relatively the same irrespective of whether their parents are in the high, medium, or low-income levels [9]. In China, scholars also found that family income has no connection with student's academic achievement [10]. It is unexpected that the studies in Pakistan showed a negative relationship between family income and student performance [11]. This result is opposed to former studies that reveal a positive relationship between socioeconomic status and academic performance. The

different results can be explained by different cultures and country development. More and more studies demonstrate the most effective factor is parents' parenting style, which is a combination of parents' parenting concept, parenting behavior, and their feelings toward their children [12]. This kind of difference partly results from the development of technology and economy, and the level of the normal family background has improved. The cost to cultivate a highly achieved student requires less cost than in the past. Furthermore, the variables used in different research are different. Former studies hadn't involved factors such as the size of family, educational aspirations, ethnicity, mobility, presence of reading materials in the home, and amount of travel, as well as school-level variables e.g., teachers' salary, public teacher ratio, per capita expense, and staff turnover.

This research is trying to review studies from different period to illustrate the relationship between academic performance and SES. In the body, the different papers and results from classic studies are reviewed to describe the relationship between academic achievement and SES. Besides, the research between previous and present research are also compared to investigate the above relationship.

2. RESEARCH ANALYSIS

2.1. The relationship between SES and academic performance

The educators have shown us the importance of students' education, and SES is the most important factors which effect students' academic achievement. As it known to all, parents play a crucial role in children's educational development. Their effort would determine the children's future life [13]. Parents who are more active in participating in children's study process show a higher rate of success. Family activities, e.g., parties and museum tours, even summer vacation, can lead to a huge gap in academic performance. Researchers' found SES gap grows faster during summer than during the school year [14]. Furthermore, schools and teachers can also influence students' academic performance. Recent study indicates that schools are treating students differently according to their parents' social class. In addition, the treatment gap between students keeps burgeoning [15]. It can lead to unbalanced assignment distribution to students. Disproportionate assignment for low SES students results in lower school tracks [16]. Studies also argue that high SES students are more likely in disproportionate numbers to enroll in advanced courses leading to college education and low SES students are more likely to enter vocational programs [17]. As a result, the students can take preparatory courses at a higher rate to get better academic performance [18]. However, these studies have shortcomings in their study and method. For

example, there are always teachers with Nobel personalities who prevent them from treating students differently. Comparing the studies from former and contemporarily researchers, there are lots of differences that appear.

2.2. Previous research about the Socioeconomic status

The studies in Japan [7] randomly chose 300 high school students in two different cities. Based on a self-design questionnaire for basic data, it evaluates parents' social status and income level and students' scores. The four-point Likert scale (SA, strongly agree; A, agree; D, disagree; and SD, strongly disagree) methodology and academic grade point of students in an examination are used to evaluate the students' academic achievement. They creatively collect the students' opinions about their parent's socioeconomic status. The results indicate that students from affluent families have a higher chance of getting good grades. However, most students disagree with the result that financial constraint poses a threat to the number of children that are allowed to go to school in low-income earned families. Moreover, the research indicates that the parental method is the key factor affecting students' academic performance.

Other researchers use four cycles of thousands of Canadian children as a sample tracking from their birth to 11 years old [19]. To be specific, they collect data once in two years including families, health, development, temperament, school activities, etc. The study drew on socioeconomic data and achievement data from children's mathematics examines from grade 2 and onwards. The results reveal that the mathematical scores gap between children from greater SES families and low SES families is expanding. With students advancing in school, the disparities associated with family background tend to increase.

A study by Pang (2013) included 5066 middle school students from 5 areas of mainland China as research sample to investigate the relationship between SES and academic achievement [20] based on PISA (Program for International Student Assessment). The results exhibit that SES has a close connection with academic achievement. To be specific, the student mother's education level and the auxiliary education tools used by the student has the most powerful influence on student's academic achievement. Moreover, Pang mentioned a new discovery, Chinese parents normally have a higher expectation, family SES has an interrelationship with parents' expectations.

2.3. Recent studies about the factor affect students' academic performance

Suna and Tanberkan (2020) investigated the effects of SES and school type on academic achievement based

on data from millions of students over 10 years through three national transition systems in Turkey [21]. They used covariance analysis to compare the mean scores of public schools and private schools after controlling the effect of students' socioeconomic levels. They found students studying in private schools, who were socioeconomically stronger, had significantly higher academic achievement levels in language, mathematics, and science tests, and was proved valid in all three systems. With future studying, they figured that the negative impact of a student's socioeconomic levels on his academic performance reached its maximum value when all students were placed into high schools utilizing a national exam.

A study evaluated the associations between the timing and duration of low socioeconomic status during childhood and academic achievement in secondary school [22], which used Cohort design to evaluate life-course models for associations between the low SES and Grade 7 reading ability and numeracy achievement. The results of 3734 children showed that low SES at all ages studied except 8 to 9 years has associations with poorer Grade 7 reading ability. Longer duration of low SES from 4 to 11 years is associated with poorer Grade 7 numeracy, with stronger associations for boys than girls. The conclusion recommended that Academic interventions should be targeted toward children with persistently low SES.

Some studies also investigated the relationship between academic achievement and other newfangled factors. There is a positive relationship between communication and student performance. Harb and EL-Shaarawi found that the most important factor with a positive effect on a student's academic achievement is the student's English-speaking ability [23]. It can greatly enhance communication between students. Thus, students may be willing to join in-class activities and get a better performance in grades. Second, Learning facilities are positively related to student performance. Moreover, Karemera found that a student's performance has a strong connection with the school environment and library facilities. The proper use of the library can considerably enhance students' academic achievement. Besides, it also connects with their parental education. The use of the library greatly helps students to get ahead [24]. Last, there exists a positive relationship between proper guidance and student performance. The students cannot individually cultivate their own study habits and attitude. Guidance is the key to helping students to gain a better score. The students who have better guidance from their parents and teachers are performing well in their tasks. Even the guidance from classmates can be helpful, these guidelines indirectly influence the grades of the students [25].

3. LIMITATIONS

From reviewing different research and various methods, lots of researchers using mathematics scores as an indicator to reveal students' academic achievement. It reveals a score that can directly show a student's academic performance. However, without considering other variables, other confounding variables may affect the accuracy of results. Moreover, the strong connection between SES and academic achievement has a higher chance of appearing in a lower developed country like Turkey. On the contrary, the relationship becomes weaker in a highly developed countries like Japan and America. In this case, one can conclude that a highly developed society had reached a more stable educational system, which greatly decreases the educational unbalance between students. On the other hand, socioeconomic status has considerable power in education in poorly developed countries.

4. DIRECTION OF CONTINUING RESEARCH

All the previous studies give us direction and enlightenment to future studies. It also shows the limitations we need to solve. First, future studies should aim at the parental method and parents' influence on children. The impact of family socioeconomic status on students' performance disappears with the improvement of life quality. Family parenting is the key to differences from child to child. Second, the research data is still too imitated. Lots of researchers focus only on the short time of students' education periods. The analysis and conclusion can be insufficient. There are lots of research about American students, but children from all over the world are suffering from different problems and situations. The results' serviceability is restricted in American, and it may be useful in America, but it cannot be appropriately applied in other countries. For example, studies in Japan show their parents do not have enough time to educate their kids because of the working pressure. The same problems are fewer in America because of a higher life standard. In addition, the challenge of following a student's research life is enormous. It can last for at least 12 years, which can also be affected by some factors like losing family members, dropping school. It's a difficulty waiting to be solved in the future.

5. CONCLUSION

In conclusion, student's family plays an essential role in education based on reviewing plenty of research with results from different countries. Higher family SES would considerably help students to get better academic achievement. Even though most of us were taught a common sense that hard work makes us different, and it showed in the result of research in Japan (some students claimed their view that academic achievement does not

affect grades). However, the impact of SES existed both in highly advanced countries and poorly developed countries. More and more researchers have shown the limitation of their research mainly because the time of education is too long to draw a conclusion. In this case, future research should either have a better plan or prepare long-time research. In addition, comparing abundant research, the parental style has been mentioned in much research. It should be considered as the crucial factor that affects academic achievement in future studies. These results offer a guideline for educational reform.

REFERENCES

- [1] Gijsselaers, H., Meijs, C., Neroni, J., Kirschner, P. A., & Groot, R. D. (2017). Updating and not shifting predicts learning performance in young and middle-aged adults. *Mind Brain & Education*, 11(4), 190-200.
- [2] Mueller, R. E., & Essilfie, J. (2020). Grades and labor market earnings in Canada: new evidence from the 2018 national graduates survey. *SSRN Electronic Journal*.
- [3] Walker, C. O., Winn, T. D., & Lutjens, R. M. (2012). Examining relationships between academic and social achievement goals and routes to happiness. *Education Research International*, 2012, 1-7.
- [4] Mueller CW, Parcel TL. Measures of socioeconomic status: Alternatives and recommendations. *ChildDev.* 1981; 52: 13-30.
- [5] Miech RA, Hauser RM. Socioeconomic status (SES) and health at midlife; a comparison of educational attainment with occupation-based indicators. *Ann Epidemiol.* 2001; 11:75-84.
- [6] Coleman, H., Altini, M., Kieser, J., & Nissenbaum, M. (1996). Familial florid cemento-osseous dysplasia--a case report and review of the literature. *The Journal of the Dental Association of South Africa= Die Tydskrif van die Tandheekkundige Vereniging van Suid-Afrika*, 51(12), 766-770.
- [7] Boocock, S. S. An introduction to the sociology of learning- in. Boston: Houghton-Mifflin, 1972.
- [8] Welch, F. Relationships between income and schooling. In F. N. Kerlinger (Ed.), *Review of research in education*. Ithaca, N.Y.: Peacock, 1974.
- [9] Machebe, C. H., Ezegebe, 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.
- [10] ZHANG, C. (2011). Parental education, family income, and peer group on children's academic performance in China.
- [11] S. Bensalem, M. Bogza, A. Legay, T.H. Nguyen, J. Sifakis, R. Yan, Incremental component-based construction and verification using invariants, in: *Proceedings of the Conference on Formal Methods in Computer Aided Design (FMCAD)*, IEEE Press, Piscataway, NJ, 2010, pp. 257–256.
- [12] Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*. 113(3), 487-496
- [13] Campbell JR. Raising your child to be gifted: Successful parents speak Brookline Books/Lumen Editions; 1995 Jan. 25, 1995. 196 p.
- [14] Alexander, K. L., Entwisle, D. R., & Olson, L. S. (2001). Schools, achievement, and inequality: A seasonal perspective. *Educational Evaluation and Policy Analysis*, 23(2), 171–191.
- [15] Bourdieu, P. (1977). Cultural reproduction and social reproduction. In J. Karabel & A. H. Halsey (Eds.), *Power and ideology in education* (pp. 487–511). New York: Oxford University Press.
- [16] Kerckhoff, A. C. (1993). *Diverging pathways: Social structure and career deflections*. Cambridge, England; New York: Cambridge University Press.
- [17] Alexander, K. L., Entwisle, D. R., & Kabbani, N. S. (2001). The dropout process in life course perspective: Early risk factors at home and school. *Teachers College Record*, 103(5), 760-822.
- [18] Gamoran, A. (1992). The variable effects of high school track. *American Sociological Review*, 57(6), 812-828.
- [19] Caro, D. H., McDonald, J. T., & Willms, J. D. (2009). Socio-economic status and academic achievement trajectories from childhood to adolescence. *Canadian Journal of Education/Revue canadienne de l'éducation*, 32(3), 558-590.
- [20] Weiguo Pang, Xiaobo Xu, Lijia Lin & Youqun Ren. (2013). A study on the relationship between family socioeconomic status and Middle School students' academic achievement. *Global Education Outlook* (02), 12-21. doi: CNKI: SUN: WGJN.0.2013-02-005.
- [21] Suna, H. E., Tanberkan, H., Bekir, G. Ü. R., Matjaz, P. E. R. C., & Mahmut, Ö. Z. E. R. (2020). Socioeconomic status and school type as predictors of academic achievement. *Journal of Economy Culture and Society*, (61), 41-64.

- [22] Van Zwieten Anita, Teixeira-Pinto Armando, Lah Suncica, Nassar Natasha, Craig Jonathan C. & Wong Germaine. (2021). Socioeconomic Status During Childhood and Academic Achievement in Secondary School. *Academic Pediatrics* (5) Doi: 10.1016/J.ACAP.2020.10.013.
- [23] Harb, Nasri and El-Shaarwi, Ahmed. (July 2006). 'Factors Affecting Students' Performance'. MPRA Paper No. 1362.
- [24] Saenz, terry, Marcoulides, George A., Jum, Ellen & Young, Ray. (1999). The relationship between the college experience and academic performance among minority students. *The International Journal of Educational Management*, pp.199-207.
- [25] Hussain, Ch. Abid. (June 2006). Effect of Guidance Services on Study Attitudes, Study Habits and Academic Achievement of Secondary School Students. *Bulletin of Education and Research*, vol. 28, No. 1 (35-45)