Comparison of Socioeconomic Status and Academic Achievement between Mainstream and Special Needs College Students

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ARTICLE INFO	ABSTRACT
	The current study examined the influence of socioeconomic status on the academic achievement of mainstream and special needs college students. The major aims of this study were to determine the SES of both student groups and to analyze the relationship between SES and academic achievement in each group. It was descriptive survey research in which students' latest academic results were used to evaluate their academic achievement, and a 22-item questionnaire was used to assess their SES. A total of 120 students, including both mainstream and special needs students, were selected through random sampling. Data collected was analyzed using SPSS. Findings of the study revealed that students belong to different levels of SES and were grouped into three categories: high class, middle class, and poor class. Furthermore, results displayed a significant relationship between SES and academic achievement for both groups; however, the strength of this relationship varied. While high-class and middle-class students in both groups showed a positive relationship with academic performance, poor-class students exhibited a negative relationship. Additionally, the impact of SES on academic achievement was found to be more pronounced among special needs students. Therefore, it is recommended that families, institutions, and policymakers work collaboratively to improve the SES of students, particularly those with special needs, to enhance their academic success.

Introduction

Academic achievement and basically education of the students has an utmost importance in social and economic development of a country. Prosperity of any country is precisely related to the achievement of its students (Maganga, 2016). Development and growth of any country largely depends upon its human capital. The working human capital is the backbone of its country (Javed et al., 2008). Education performs a vital role in developing and shaping human capital. Therefore, providing a foundation for social and economic development of any country by elevating the creativity, competencies and productivity of individuals, making them skilled and talented assuring viable economic prosperity (Memon, 2007).

Socioeconomic welfare cannot be gained without any investment in the education sector. Human capital as said above is an important element in any country's development and to produce an effective and productive human capital, education is vital (Sakmurzaeva, 2018). Recent studies have suggested that there is an important relationship among education and social and economic development (Levent and Gokkaya, 2014). Education is generally perceived means to reduce poverty, social and economic advancement, empowerment of people and generating a friendly and challenging atmosphere making way for prospering and stable country (Afzal et al., 2010).

Students' performance results in schools, colleges or universities are known as academic achievement. It refers to the overall performance of students' use of their intellectual abilities. As a sign of an educated individual, academic achievement is a very fundamental element for self and societal growth (Spinath, 2012). Educational achievement is treated as the most crucial consequence of all the educational experiences experienced by a

student (Moore, 2019). Due to its utmost importance, it has been a significant issue among educational researchers (Spinath, 2012).

Studies showed that academic achievement is affected by several factors. It is affected by gender, age, type of schooling, family's socioeconomic status (SES), area of residence and some other factors (Shoukat et al., 2013). Another study by Sbrocco (2009) said that it is also affected by behavior of teachers towards students, overall environment of school and race/ethnicity. The current study is designed to determine the effect of socioeconomic status on academic achievement of college students, with a specific focus on comparing mainstream and special needs college students. SES has an immense impact on student's academic performance (Gretz, 1995).

Students' academic achievement and success is dependent upon many factors. SES is a one big factor which impacts academic achievement of students (Salunke & M., 2015). SES is usually defined as a measure of family income, education of parents, and occupational level of parents (Chung, 2015). SES means the level of one or more individuals in society based on social class and financial standings. The SES of parents is defined as the combination of family income, parental educational level, family environment, and living standard of parents which largely impacts the academic achievement of their children. Academic achievement is the fundamental element through which a students' abilities, learning and competencies are measured (Salunke & M., 2015). Academic achievement is defined by Good (1973) as knowledge and information acquired or skills learned in educational institutions which are commonly measured by test scores or marks given by teachers.

In recent years, the need to address diverse educational needs has led to increased attention towards special education. Special needs students studying in special colleges often face unique challenges that may impact their academic achievement differently from mainstream students. Factors such as access to specialized resources, tailored instructional strategies, and supportive learning environments can interact with SES in complex ways. This study, therefore, focuses on comparing the effect of SES levels on the academic performance of both mainstream and special needs college students.

As said above, due to students' academic achievement's high importance, it is a widely discussed topic amongst researchers. A study by Alam (2006) revealed that SES is greatly linked with academic achievement. Suleman et al. (2013) also said in their study that parental SES has immensely affected academic performance of students. Therefore, this study focuses on finding the impact of SES on academic performance of college students. The title of this study is "Comparison of Socioeconomic Status and Academic Achievement between Mainstream and Special Needs College Students". The study's objectives are:
1. To explore the socioeconomic status of mainstream and special needs college students
2. To analyze the relationship between socioeconomic status and academic achievement mainstream and special needs college students

Research Questions:
1. What is the socioeconomic status of mainstream and special needs college students?
2. What is the relationship between socioeconomic status and the academic achievement of mainstream and special needs college students?
3. How does the impact of socioeconomic status on academic achievement differ between mainstream and special needs college students?

Null Hypotheses:
1. There is no difference in socioeconomic status between mainstream and special needs college students.
2. There is no relationship between socioeconomic status and academic achievement of mainstream and special needs college students.
3. The impact of socioeconomic status on academic achievement does not differ between mainstream and special needs college students.

Significance of Study
This study investigates the correlation between socioeconomic status (SES) and academic achievement among mainstream and special needs college students. As highlighted in previous research, academic achievement is significantly influenced by a family's socioeconomic standing in society. However, limited studies have examined how this relationship varies between mainstream and special needs students.

This study will provide the valuable perspectives about the academic performance of students in South Punjab region based on their SES. It will help students assess their own socioeconomic standing and understand how it may influence their academic success. Additionally, the findings will be beneficial for parents, enabling them to recognize the role of their SES in shaping their child's academic performance and prospects. Additionally, the findings will be beneficial for parents, enabling them to recognize the role of their SES in shaping their child's academic performance and prospects. The study will also provide valuable insights for educators, policymakers, and institutions, highlighting the importance of considering socioeconomic factors in supporting students' academic success, particularly for special needs students.

Methodology of the Study

Research Design of the Study
It was a descriptive survey study in which the latest results of mainstream and special needs college students were used to evaluate their academic achievement, and a survey was used to measure the level of SES of students. Quantitative data was collected by the researcher personally and was analyzed using SPSS.

Research Tools of the Study
The latest results of students were used as a tool to measure academic achievement of students. A survey by Chhabra and Rajoura (2005) was used to evaluate the SES of the students. It consisted of 22 items. The maximum score of the survey was 100. According to the total final score, the SES is divided into six socio-economic categories ranging from upper high to very poor. The researcher merged the categories to make three socioeconomic categories namely high class, middle class and poor class.

Sample and Sampling
A sample of 120 students was chosen from 6 colleges in total (3 mainstream and 3 special colleges) from the south Punjab region using the random sampling technique. 20 random students were chosen from each college.

Data Collection Procedure
A list of mainstream and special public colleges in South Punjab was developed. Upon taking permission from college's administration survey was distributed among 22 students randomly in each college. 132 total responses were collected. 120 responses were then selected from among them. 2 responses from each college were discarded upon checking if they are incomplete or poorly filled. After that, with college administration's gracious permission, the latest academic results of those students (who completed the survey) were obtained. The quantitative data was then further used for analysis.

Data Analysis Procedure
SPSS was used to evaluate the data. Means and percentages were found out to determine different SES of students. Furthermore, Pearson correlation and two-way ANOVA tests were used to analyze the relationships between different levels of SES and academic achievement of special needs and mainstream college students.

Results and Interpretation

Table 1 Descriptive Statistics about SES of Mainstream and Special Needs College Students

SES Category	SES Score Range	Mainstream Students (n=60)		Special Needs Students (n=60)		Total		Mean	S.D
		f	%	f	%	f	%		
High Class	>60	20	33.3	15	25	35	29.2	70.233	1.765
Middle Class	31 – 60	22	36.7	25	41.7	47	39.2	44.655	1.856
Poor Class	<31	18	30	20	33.3	38	31.6	25.363	2.444
Total	-	60	100	60	100	120	100	46.750	6.065

Table 1 displays three categories of SES for mainstream and special needs college students. It shows that students belonged to different types of socioeconomic statuses. Hence, first hypothesis "there is no difference among socioeconomic status of college students" is nullified. Among mainstream students, 33.3% belonged to the high class, 36.7% to middle class, and 30% to poor class. Among special needs students, 25% belonged to the high class, 41.7% to middle class, and 33.3% to poor class. The results indicate that students from both groups were distributed among different socioeconomic levels.

Table 2 Relationship between SES and Academic Achievement of Mainstream and Special Needs Students

SES Category	Academic Achievement			
	Mainstream Students (n=60)		Special Needs Students (n=60)	
	r	p	r	p
High Class	.764***	.000	.710***	.000
Middle Class	.579***	.000	.525***	.000
Poor Class	-.589***	.000	-.613***	.000

r= Pearson Correlation, p= Sig. (2-tailed) 0.01 Level of Significance

Table 2 presents the following relationships:
1. Students falling under the high SES category in both groups show a strong positive correlation with academic achievement, though slightly stronger in mainstream students (r = .764) as compared to special needs students (r = .710).

2. Middle-class college students have a moderate positive correlation with academic achievement among both groups but slightly higher in mainstream students.
3. Students belonging to poor-class category display a significant negative correlation with academic achievement, with special needs students ($r = -0.612$) having a slightly stronger negative correlation than mainstream students ($r = -0.588$).

This suggests that higher SES is linked with better academic achievement, while lower SES negatively impacts performance in both groups. Therefore, the second hypothesis "there is no relationship between SES and academic achievement of college students" is rejected.

Table 3 Two-way ANOVA Result

Source	SS	df	MS	F	Sig. (p-value)
SES	425.23	2	212.62	15.74	.000***
Student Type	198.51	1	198.51	8.42	.005***
SES x Student Type (Interaction)	57.92	2	28.96	2.31	.103
Error	1586.72	114	13.92	-	-
Total	2268.38	119	-	-	-

(SS = Sum of Squares, df = Degrees of Freedom, MS = Mean Square, F = F-ratio, p-value =0.05 Significance Level where p < 0.05 indicates a significant effect)

Table 3 displays that SES significantly affects the academic achievement of college students from both groups. Students with higher SES perform better in academics as compared to students with lower SES. Further it shows that mainstream students perform significantly better than special needs students overall. However, SES impacts both groups in a similar way, meaning there is no significant difference in how SES influences academic achievement across the two groups. Thus, the third hypothesis "the impact of SES on academic achievement does not differ between mainstream and special needs college students" is accepted.

Discussion

Academic Achievement is a widely discussed topic amongst researchers due to its utmost importance. It refers to the overall performance of students in the educational setting (Spinath, 2012). While SES is the measure of total family income, level of parental education and level of parental occupation. Another study by Jeynes (2002) defines the SES of a child as the combination of educational, occupational and income level of his parents. The first objective of this research was to find out the socioeconomic status of mainstream and special needs college students. The results in Table 1 describe that college students from both groups belonged to different classes of SES. The current study grouped students into three different levels that is high class, middle class and poor class.

SES has been identified as an important factor which effect students' academic achievement. Students' academic progress can somewhat be judged even before he enters the school based on his family's SES (Chung, 2015). Filmer & Pritchett (1999) in their study declared that family SES is a major element in determining educational progress. A study performed in Bangalore's urban and rural areas also suggests that SES is one of the key elements that has major impact on students' educational performance (Salunke & M, 2015). In another research done on the effects of race and SES on academic achievement, it was determined that SES has three times more significant effect on educational performance of students than race (Battle & Lewis, 2008). In addition to this, another study performed on rural schools in Missouri determined that there is a significant correlation amongst academic performance of students and their SES (Blevins, 2009). Moreover, McCoy et al. (2012) revealed that the impact of SES on academic achievement is even more pronounced in students with disabilities as compared to mainstream students due to limited access to educational resources, specialized support, and inclusive learning opportunities.

Study suggests that families belonging to poor class SES generating low family income are associated with low educational standards and in turn their children's academic performance is at great risk (Chung, 2015). Current study also shows that SES has a very significant relationship with academic achievement. Results in Table 2 show that students from both groups belonging to high class and middle-class families have a positive relationship with academic achievement meaning that students who belong to these families show comparatively good academic results. On the other hand, students who belong to poor class families are negatively associated with academic achievement which means students from these families show poor academic results. A meta-analysis study by Sirin (2005) on a sample of 101, 157 students revealed that SES has a medium-strong relationship with academic achievement. Another study confirms that students belonging to high SES had better academic achievement scores than medium and low levels of SES (Salunke & M, 2015). One more study by Li, Xu & Xia (2020) analyzed that SES, and self-concept was highly correlated with students' academic achievement in mathematics and Chinese language. Another research by Battle & Lewis (2008) also had similar findings to the current study. It showed that students belonging to higher SES had higher academic

achievement results. A study by Lam & Gigi (2014) again displayed that a low academic result and high school dropout pattern is seen amongst students belonging to low SES. Similarly, Lindsay et al. (2016) confirmed that special needs students from low-income families tend to have lower academic outcomes due to financial constraints and lack of adaptive learning tools. Emerson & Hatton (2007) also found that children with disabilities from lower SES families experience more significant educational disadvantages compared to their mainstream peers from similar economic backgrounds.

In addition to this, studies show that the impact of SES on academic achievement is significant for special needs students. These students often experience additional barriers, such as the lack of individualized learning resources, assistive technology, and trained educators, which can hinder their educational progress (Blackorby & Wagner, 2004). A study by Banks, Frawley, & McCoy (2015) further emphasized that special needs students from lower SES backgrounds experience lower literacy and numeracy scores than their higher SES counterparts. The findings of this research also align with the results of the current study, reinforcing that SES plays a crucial role in shaping the academic performance of both mainstream and special needs college students.

Conclusion and Recommendations

From the above literature, findings and discussions, it is concluded that mainstream and special needs college students under discussion belong to different categories of socioeconomic statuses. Students are categorized under three levels of SES that are high class, middle class and poor class. Prosperity of any country depends upon the advancement of its human capital and education has a key role in improving and shaping the human capital. The level of education of any student is determined by his academic achievement. From previous research, it is found that academic achievement and SES are highly linked to each other. SES is one of the big factors in analyzing academic achievement.

From results of this study, it is prominently displayed that students who belong to high class and middle-class families have higher academic achievement as compared to others. While students who belong to poor class show lower academic achievement results. Studies mentioned in the above discussion also declared that the higher the socioeconomic status of the student, the higher his academic achievement and lower the SES of student, the lower his academic achievement.

Therefore, it is recommended that to achieve better academic results, families should work collectively to enhance their socioeconomic status. Mature college and university students can consider taking up part-time jobs to contribute financially and support their families in improving their SES. Additionally, government bodies and NGOs should introduce and expand programs aimed at assisting families, particularly those belonging to middle and poor-class SES, by providing more financial aid, scholarships, and access to quality education resources. Special attention should be given to students with special needs from lower SES backgrounds to ensure they receive the necessary support for academic success. Future research can be conducted on a larger scale, incorporating a more diverse sample and covering a wider geographical area to strengthen the generalizability of findings.

References

1. Alam, M. M. (2006). Academic Achievement in Relation to Socio-Economic Status, Anxiety level and Achievement Motivation: A Comparative Study of Muslim and non-Muslim School Children of Uttar Pradesh. Indian Educational Abstracts. 6(2). 42-43.
2. Afzal, M., Farooq, M. S., Ahmad, H. K., Begum, I., & Quddus, M. A. (2010). Relationship between School Education and Economic Growth in Pakistan: ARDL Bounds Testing Approach to Co-integration. Pakistan Economic and Social Review. 48(1), 39-60.
3. Ali, S., Haider, Z., Munir, F., Khan, H., & Ahmed, A. (2013). Factors Contributing to the Students Academic Performance: A Case Study of Islamia University Sub-Campus. American Journal of Educational Research. 1(8), 283–289. Retrieved from: https://doi.org/10.12691/education-1-8-3
4. Banks, J., Frawley, D., & McCoy, S. (2015). Achieving inclusion? Effective resourcing of students with special educational needs. International Journal of Inclusive Education, 19(9), 926–943.
5. Banks, J., Shevlin, M., & McCoy, S. (2012). Disproportionality in special education: Identifying children with emotional behavioural difficulties in Irish primary schools. European Journal of Special Needs Education, 27(2), 219–235.
6. Battle, J., & Lewis, M. (2002). The Increasing Significance of Class: The Relative Effects of Race and Socioeconomic Status on Academic Achievement. Journal of Poverty. 6(2), 21–35. Retrieved from: https://doi.org/10.1300/J134v06n02_02
7. Blevins, B. M. (2009). Effects of Socioeconomic Status on Academic Performance in Missouri Public Schools. (Doctoral Dissertation, Lindenwood University, United States) Retrieved from: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.612.2322&rep=rep1&type=pdf

8. Chung, K. K. H. (2015). Socioeconomic status and academic achievement. International Encyclopedia of the Social & Behavioral Sciences. 924–930. Retrieved from: https://doi.org/10.1016/B978-0-08-097086-8.92141-X

9. Emerson, E., & Hatton, C. (2007). The mental health of children and adolescents with learning disabilities in Britain. Advances in Mental Health and Learning Disabilities, 1(3), 62–63.

10. Good. (1973). "Dictionary of Education" Pleasure Hill Doom Co. Inc. New York. Mc Graw Hill. New York. 493-510. 3.

11. Graetz, B. (1995). Perspectives on socioeconomic status" In Ainley, J., Graetz, B., Long, M. & Batten, M. Socioeconomic Status and School Education. Canberra: Australian Government Publishing Service, 5-22.

12. Javed, Z. H., Khilji, B. A., & Mujahid, M. (2008). Impact of Education on SocioEconomic Status of Villagers Life: A Case Study of Shrienwala Village of Faisalabad. Pakistan Economic and Social Review. 46(2), 133-146.

13. Jeynes, W. H. (2002). Examining the effects of Parental absence on the academic achievement of adolescents: the challenge of controlling for family income. Journal of Family and Economic Issues. 23(2).

14. Kayani, M. M., Akbar, R. A., Faisal, S., Kayani, A., & Ghuman, M. A. (n.d.). Analysis of Socio-Economic Benefits of Education in Developing Countries: An Example of Pakistan. Bulletin of Education and Research. 39(3). 75-92.

15. Lam, G. (2014). A Theoretical Framework of the Relation between Socioeconomic Status and Academic Achievement of Students. Education. 134(3), 326–331.

16. Levent, F., & Gökkaya, Z. (2014). Education Policies Underlying South Korea's Economic Success. Journal plus Education. 10(1). 275–291.

17. Li, S., Xu, Q., & Xia, R. (2020). Relationship between SES and Academic Achievement of Junior High School Students in China: The Mediating Effect of Self-Concept. Frontiers in Psychology. 10. Retrieved from: https://doi.org/10.3389/fpsyg.2019.02513

18. Lindsay, G. (2007). Educational psychology and the effectiveness of inclusive education/mainstreaming. British Journal of Educational Psychology, 77(1), 1–24.

19. Maganga, J. H. (2017). Factors affecting Student's Academic Performance: A Case Study of Public Secondary Schools in Ilala District, Dar-Es-Salaam, Tanzania. (Doctrol Dissertation, University of Tanzania, Tanzania) Retrieved from: http://repository.out.ac.tz/1732/1/JAMILLAH__MAGANGA-Dissertation_14-10-2016-Final.pdf

20. McCoy, S., Banks, J., & Shevlin, M. (2012). School matters: How context influences the identification of different types of special educational needs. Irish Educational Studies, 31(2), 119–138.

21. Memon, G. R. (2007). Education in Pakistan: The Key Issues, Problems and the New Challenges. Journal of Management and Social Sciences. 3(1), 47-55.

22. Moore, P. J. (2019). Academic achievement. Educational Psychology. 39(8). 981–983. Retrieved from: https://doi.org/10.1080/01443410.2019.1643971

23. Moore, P. J. (2019) Academic achievement. Educational Psychology. 39(8). 981-983.

24. Sakmurzaeva, N. (2018). The Role of Education in Economic Development: A Comparison of South Korea and Kyrgyzstan. 29–33. Retrieved from: https://doi.org/10.36880/C10.02040

25. Salunke, S. (2015). Influence of Socio-Economic Status on Academic Achievement of Secondary School Students of Bangalore Urban and Rural District. 3(9).

26. Sbrocco, R. (2009). Student Academic Engagement and the Academic Achievement Gap between Black and White Middle School Students: Does Engagement Increase Student Achievement? (Doctrol Dissertation, University of Minnesota, United States) Retrieved from: https://conservancy.umn.edu/bitstream/handle/11299/57326/1/Sbrocco_umn_0130E_10755.pdf

27. Sharma, S., Chhabra, P., & Rajoura, O. (2005). A New Instrument (Scale) for Measuring the Socioeconomic Status of a Family: Preliminary Study. Indian Journal of Community Medicine, 30(4). 111-114.

28. Sirin, S. R. (2005). Socioeconomic Status and Academic Achievement: A Meta-Analytic Review of Research. Review of Educational Research. 75(3), 417-453.

29. Spinath, B. (2012). Academic Achievement. In Encyclopedia of Human Behavior. 2. 1-8. Retrieved from: https://doi.org/10.1016/B978-0-12-375000-6.00001-X

30. Suleman, Q., Hussain, I., & Nisa, Z. (2012). Effects of parental socio-economic status on the academic achievement of secondary school students in district Karak (Pakistan). International Journal of Human Resource. 2(4). 14-31.