



ADVANCE SOCIAL SCIENCE ARCHIVE JOURNAL

Available Online: <https://assajournal.com>

Vol. 05 No. 01. Jan-March 2026. Page#.6319-6331

Print ISSN: [3006-2497](#) Online ISSN: [3006-2500](#)Platform & Workflow by: [Open Journal Systems](#)**Analyzing the Impact of Socioeconomic Status on the Academic Performance of University Students****Maryam Shaheen**

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ABSTRACT

This paper aims to analyze how socioeconomic status (SES) influences the educational outcomes of university students in Pakistan. As a complex concept, socioeconomic status can be understood through family income, parents' education level, their occupations, availability of academic resources, and household possessions. Two theories, Human Capital and Social Reproduction, provide the context for this study. They characterize family background and available resources regarding educational outcomes. The main aims were to analyze the status of education and the overall outcomes of students and to determine which of the socioeconomic factors, if any, are the most influential in determining academic success. The study uses a quantitative methodology, including a structured questionnaire administered to a population of 383 university students who were selected via random sampling. The study measured academic performance through students' CGPAs and SES through family income, parents' educational attainment and occupations, academic resources, and household assets. The study uses a combination of descriptive statistics and multiple regression methods to analyze the survey data. The study results indicated a direct correlation between academic outcome and SES, positively and significantly. Family income, parents' education, and parents' occupations, along with the availability of academic resources and household assets, were found to be the major predictors of students' academic success. The regression equation revealed that related factors of SES explained 42.4% of the indicator of students' academic performance ($R^2 = 0.424$). The availability of academic resources emerged as the most significant indicator of students' educational success and emphasized the availability of academic materials, the Internet, and a positive learning environment. The data indicate that students with higher socioeconomic status tend to perform better academically because they have better access to educational resources. The study argues that SES (socioeconomic status) should influence how we view an individual student's academic capabilities. This means that educators and policymakers should

attempt to address inequities in education by improving available academic resources and student supports, as well as offering financial supports to assist students from low SES.

Keywords:

Socio-economic status, Academic Performance, CGPA, Family Income Level, Parents' Occupation, Parents' Education, Access to Academic Resources, Household Assets

1. INTRODUCTION

Properly educating people is one of the best ways for society to gain potential and develop. It provides people with the knowledge and skills to give back to their community. Education helps people learn to think for themselves and gain control over their own lives. In the last couple of decades, education researchers have almost exclusively attributed differential educational success to socioeconomic status (SES).

This has become a critical issue in Pakistan, as well as in other developing nations. The disparity of income is easily recognized. Schools are poorly funded, and there are almost no resources to help struggling people, especially at the higher levels of education. In the last twenty years, the higher education system in Pakistan has greatly improved and expanded, with numbers of students going from under 500,000 in 2002 to over 1.7 million in 2020. However, this increase has not helped improve the educational inequities related to SES. Malik and Courtney (2011) studied low SES university students in Pakistan, and noted that limited access to textbooks, learning resources, and tutoring have all negatively been impacting their education.

According to Suleiman et al (2024), socioeconomic status encapsulates a family's overall income; parental level of education; the family's occupation; and the family's access to educational resources. Improved socioeconomic status means that a family has access to better schools, an improved supportive environment, and supportive family members. All of which lead to better academic performance. For better academic performance, better family resources and more learning resources, and more parental support means that the family is more affluent, and the parents are more involved (Chen et al. 2024; Fan, 2025).

The relevance between SES and academic outcome has shown its effects across the globe and all educational systems, including tertiary education. According to Pelima et al. (2024), a student's socioeconomic background, behavior, and previous performance all define that student's experience in a university. Continuous use of tools such as machine learning and educational data mining has enabled researchers to identify background pressures that are caused by socioeconomic problems, and that they are associated with the student's potential to perform below average and even to drop out from the university.

This study establishes the links between family economic and social status and university attendance. As tertiary institutions across the world increase their enrolment quotas for students from different backgrounds, students from different social economic classes study together. However, they often do not show the same behavioral patterns or learning outcomes. Studies have shown that online help-seeking behaviors, internet self-efficacy, and school engagement are strongly influenced by the family SES (Fan, 2025). During the COVID-19 related school closures, parental engagement and family income also had a strong influence on academic performance (Chen et al., 2024).

The consequences of socioeconomic status (SES) on education are increasingly prevalent within literature. Disparities within SES are identifiable through inaccessibility to educational resources for exceptional teaching and supportive class leanings, and subsequent difference in educational attainment. Students of elevated SES receive improved class opportunities, educational resources, and parental support, which all lead to better outcomes (Chen et al., 2025). Van Ewijk and Sleegers (2010) completed a meta-analysis which found that students who were in classes with higher SES students experienced improved educational attainment because of improved educational class cultures and motivated peers.

Ding et al. (2024) completed a meta-analytic structural equation model (MASEM) for 158,818 students and found that SES had a major effect on educational attainment and that executive function had a partial mediating effect in the relationship. This consistent finding was true across diverse social and country contexts, such as China, the USA, and countries in Europe. During the COVID-19 pandemic, these growing gaps led to worse educational outcomes in lower SES students in public schools in Chile when compared to private schools, showing higher rates of withdrawal and a lower rate of passing courses (Acuña et al., 2025).

Domestic studies tend to show a similar trend in Pakistan. Using educational data mining, Asif et al. (2017) found that the outcome of university scholar's can be predicted from their earliest academic performances. More affluent students tend to be better performers. This could be attributed to their access to better academic resources (e.g., private schools, educational technology, tutors, and home learning support). Mental health is also important; for many students, stress and anxiety, coupled with a lack of motivation, can present real challenges to success at university in Pakistan (Zhang et al., 2024).

2. PROBLEM STATEMENT

In higher education, the financial and social environments of students complement the individual regulatory factors when evaluating academic achievement. Students with financially constrained families often face problems that detrimentally impact their academic performance. In South Asian countries, the income of the family, the education of the parents, and the social context have impacts on the performance of students. The effects of these factors in varied local university settings remain largely unexplored. It is this unexplored area that justifies the need for a structured study on the effects of the various socioeconomic factors, especially the income of the family, the occupation of the parents, and the availability of support, on the academic outcome of students.

2.1 Research Questions

- What is the relationship between socioeconomic status and the academic success of university students?
- Which of the socioeconomic factors is most strongly correlated with academic success?
- Are the challenges faced by low SES students greater than those faced by high SES students?
- What is the combined effect of non-SES factors with SES on the academic performance of students?

2.2 Research Objectives

1. To investigate the association of SES with the academic performance of university students.
2. To identify the most important socioeconomic variables that influence the performance of students.
3. To analyze the impact of SES on resource and opportunity inequities as well as motivation and inequities in learning.

4. To design interventions that address the socioeconomic-related inequities in education.

3. LITERATURE REVIEW

Masnan et al. (2025) explored the effects of self-esteem, attendance, time management, sleep, purpose, and other psychological variables on the academic performance of Malaysian university students. Findings showed that self-concept and purpose, which are influenced by the socioeconomic standing of one's family, have the strongest effects on grades. Using Self-Determination Theory (SDT) and the Theory of Planned Behavior (TPB), the study explained how family support and the conditions and resources of and provided by schools can motivate students and affect their academic performance.

According to Palmqvist et al. (2025), improved socioeconomic status among families of Swedish students with intellectual disabilities, particularly those where the fathers were well-educated and employed, led to better reading skills and an increase in reading materials; improved spatial skills were related to the well-educated, employed fathers. Poon (2020) investigated 349 primary school students in Hong Kong and discovered that students from middle-income families gain the highest scores in Chinese and English because of their parents' increased expectations and greater involvement in the students' education.

Tesfaye and Berhanu (2020) reported that educational attainment and occupations of students' parents affected students' academic motivation and performance. Students from families where parents are professionally employed experience greater academic performance due to psychological and financial security. Wube et al. (2024) demonstrated among female university students in Ethiopia that low family income, poor parental education, and inadequate parental support have a negative effect on academic performance, and that girls from low-income families experience greater academic stress and greater neglect from the academic community.

In Pakistan, Anees et al. (2011) surveyed multiple universities in Punjab and evaluated the effects of several socioeconomic factors on undergraduates' academic performance. This research found that the level of parental education, particularly at the university level, was the most critical factor, followed by family income and the availability of academic resources. Malik and Courtney (2011) also documented that students from poor families in Pakistan are more likely to encounter financial difficulties and have a limited supply of basic academic resources.

Ding et al. (2024) performed a meta-analytic structural equation modeling and found that executive function mediates the relationship between socioeconomic status and academic outcomes, and this mediation is more prominent later in life. In research within universities in China, Fan (2025) identified that family socioeconomic status, which was operationalized as family income and the education level of parents, has a significant influence on a student's online academic help-seeking behaviors, such that students from highest socioeconomic status families are more likely to possess online self-efficacy and online learning competencies.

In another longitudinal study, Chen et al. (2024) documented that family socioeconomic status, measured as family income and parent education levels, impacts children's academic performance through parent involvement and student effort. Bradley and Corwyn (2002) argued that gaps in income and social status have major negative impacts on student performance. Lastly, Coleman et al. (1966) asserted that family socioeconomic status has a larger effect on academic achievement than the quality of a student's school.

Davis-Kean (2005) accounts for income in his analysis and provides evidence that parental education levels affect child outcomes, suggesting parental education is a form of relevant cultural capital as described by Bourdieu. According to Haveman and Wolfe (1995), children of parents employed in better-skilled jobs perform better in schools, and this is likely a result of the education of skilled workers and the socialization of workers through the structures of time and academic orientation. A meta-analysis conducted by Sirin (2005) concluded that SES is among the top reliable determinants of academic success, at all levels, and in all cultures.

Noor-ul-Huda et al. (2025) explored the impact of financial constraints in Pakistan. Their findings suggest financial constraints result in heightened emotional distress, anxiety, and a decline in motivation to study among university students, all of which adversely affect academic performance. In Spain, Berlanga and Corti (2025) show that financial interventions, in the form of scholarships, promote educational achievement and offer a means of achieving greater equity in education by noticeably increasing the number of students who graduate from university and the overall educational performance of university students.

4. THEORETICAL FRAMEWORK

4.1 Human Capital Theory

Becker's (1964) Human Capital Theory argues that future productivity can be measured and improved through the development of vocational skills and educational attainment. The framework applies to the current study because the accrued benefits of a family's financial and social capital can be measured through the investments in a child's education. Families with privileged financial and social capital are able to spend more resources on private tutoring, educational technologies, and on extracurricular activities that yield positive results in children's education.

4.2 Social Reproduction Theory

Proposed by Pierre Bourdieu (1973), Social Reproduction Theory focuses on the perpetuation and inheritance of economic and social inequities across generations. This theory explains the barriers low-income students face in the educational system. In Bourdieu's view, low household capital, limited access to educational resources, and the absence of role models and cultural capital create barriers that are highly difficult to overcome, regardless of a student's innate ability. According to his theory, the educational gap across social classes is also a response to the stress level of a low-income family. He argued that the emotional barriers that result from the socioeconomic difficulties of a family have a serious negative impact on a student's academic performance.

4.3 Conceptual Framework

This study examines how the socioeconomic status (SES) of a university student's family personally and relationally impacts their academic performance (measured as CGPA). We operationalize SES as family income, parental education, and parental occupations, also access to academic resources, and household assets. We also consider psychological stress as a mediator in the SES and academic performance relationship. We consider motivation as a moderator of stress-performance that can decrease or increase the impact of stress on performance. The framework combines Human Capital Theory and Social Reproduction Theory.

5. MATERIALS AND METHODS

5.1 Research Design

This study used a cross-sectional quantitative framework to analyze the impact of different socioeconomic rankings on the studies of college students. This study was conducted to check correlations of different socioeconomic factors at one specific point to students' cumulative grade point average (CGPA).

5.2 Population and Sampling

The population focused on was undergraduate students from higher education institutions in Pakistan. To gain representation from all departments, years, and genders, a stratified random sampling method was used to decrease sampling bias and provide a more representative distribution of the students' population. To calculate the sample size, the following Cochran formula was employed.

$$N_0 = (Z^2 \cdot p \cdot (1 - p)) / e^2$$

With a 95% confidence interval, 5% margin of error, and a representative sample of $p = 0.5$, a sample size of 383 was required. This number was fully collected, and no data was missing.

5.3 Data Collection

Data were collected using a self-administered, multi-section, structured questionnaire containing three sections: demographic data, socioeconomic data, and academic performance measured by CGPA. A pilot study with thirty students was conducted to test the instrument and refine the phrasing of the questions. The final version of the questionnaire for the main study asked all independent and mediating/moderating variables with a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

5.4 Measures

Academic performance was assessed by students self-reporting their CGPA using a categorical scale. Socioeconomic status was measured by composite scales of Family Income, Parents' Education, Parents' Occupation, Access to Academic Resources, and Household Assets, all using 5 scale items each. Psychological stress was analyzed with a 5-item scale and served as the mediator, while motivation was analyzed using a 5-item scale and served as the moderator. The complete model is represented as:

$$AP = \beta_0 + \beta_1 FI + \beta_2 PO + \beta_3 PE + \beta_4 HA + \beta_5 AR + \epsilon$$

5.5 Estimation Method

Data were analyzed using IBM SPSS Version 25. Analyzing this study had several components: descriptive statistics (means, standard deviations, frequencies), reliability analysis (Cronbach's Alpha), Pearson correlation analysis, multicollinearity diagnostics (VIF and Tolerance), and multiple linear regression analysis. Two regression models were estimated: a full model with psychological stress and motivation, and a restricted model with the five SES predictors only.

6. RESULTS

6.1 Descriptive Statistics — Demographics

383 students participated in the research study. 60.6% of them were males and 39.4% were females. Most of the study's participants were of middle age (43.3%), followed by the young age group (33.9%). Every study participant was in a Bachelor's degree program. The biggest number of study participants were in the Social Sciences department (48.0), followed by the Computer Sciences/IT department (19.6%), Business Administration (14.4%), and Engineering (12.0%).

Table 1: Gender Distribution

Category	Frequency	Percent	Cumulative Percent
Female	151	39.4%	39.4%
Male	232	60.6%	100.0%
Total	383	100.0%	

Table 2: CGPA Distribution

CGPA Range	Frequency	Percent
Below 2.0	38	9.9%
2.0 – 2.49	71	18.5%
2.5 – 2.99	90	23.5%
3.0 – 3.49	113	29.5%
3.5 – 4.0	71	18.5%
Total	383	100.0%

The distribution indicates that the majority of students (48%) fall within the 2.5–3.49 CGPA range, representing moderate academic performance. Only 9.9% had a CGPA below 2.0, while 18.5% achieved a CGPA of 3.5 or above.

6.2 Descriptive Statistics — Independent Variables

All scale items utilized a five-point Likert scale. The means for the SES constructs indicated perceptions that were moderate to positive, with an average score ranging from 2.94 to 3.57. Motivation items were highest ($M = 3.40$ – 3.57), and some students seemed to have difficulty accessing sufficient resources as indicated in one of the academic resources items (AR2: $M = 2.94$).

Table 3: Descriptive Statistics Summary by Construct

Construct	Items	Mean Range	SD Range
Family Income (FI)	5	3.04 – 3.22	1.143 – 1.250
Parents' Education (PE)	5	3.20 – 3.36	1.139 – 1.249
Parents' Occupation (PO)	5	3.14 – 3.48	1.124 – 1.193
Access to Resources (AR)	5	2.94 – 3.38	1.168 – 1.256
Household Assets (HHA)	5	3.06 – 3.43	1.191 – 1.265
Motivation (MO)	5	3.40 – 3.57	1.138 – 1.261
Academic Performance (AP)	5	3.21 – 3.48	1.152 – 1.243

6.3 Reliability Analysis

Reliability analysis was completed with Cronbach's Alpha. All 383 cases were used in the analysis. Overall Cronbach's Alpha was 0.719. This is over the conventional threshold of 0.70. (Table 4). This shows that the measurement instrument has acceptable internal consistency for the seven constructs.

Table 4: Reliability Statistics

Cronbach's Alpha	N of Items
0.719	7

6.4 Correlation Analysis

The goal of this study was to measure the correlation between study variables and the strength and direction of those relationships. The results with the corresponding variables are represented in Table 5. Most variables represented notable positive correlations with academic performance. The highest correlation measure was from the motivation variable ($r = 0.603$, $p < 0.01$). Following motivation, the order from highest correlation to lowest with academic performance was household assets ($r = 0.402$), access to academic resources ($r = 0.393$), parents' occupation ($r = 0.365$), parents' education ($r = 0.315$), and family income ($r = 0.227$). Psychological stress had weak and negative correlations with most other variables. Of the other variables, psychological stress had a weak negative relationship with family income ($r = -0.131$, $p < 0.05$).

Table 5: Correlation Matrix

Variable	FI	PE	PO	AR	HHA	PS	MO	AP
FI	1	.294**	.444**	.257**	.334**	-.131*	.181**	.227*
PE	.294**	1	.518**	.344**	.354**	.032	.361**	.315*
PO	.444**	.518**	1	.332**	.441**	-.011	.451**	.365*
AR	.257**	.344**	.332**	1	.504**	.058	.345**	.393*
HHA	.334**	.354**	.441**	.504**	1	-.008	.343**	.402*
PS	-.131*	.032	-.011	.058	-.008	1	.204**	.109*
MO	.181**	.361**	.451**	.345**	.343**	.204**	1	.603*
AP	.227**	.315**	.365**	.393**	.402**	.109*	.603**	1

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

6.5 Multicollinearity Diagnostics

Multicollinearity was measured using the VIF and Tolerance metrics. The VIF scores ranged between 1.082 and 1.825, far below the 10 limit, and all Tolerance scores were greater than the 0.10 limit between 0.548 and 0.924. Evidence suggests serious multicollinearity among the predictor variables was not present.

6.6 Multiple Regression Analysis — Model 1 (Full Model)

The complete first model of multiple regressions contained all seven predictors: family income, parents' education, parents' occupation, access to academic resources, household assets, psychological stress, and motivation. This model was a strong fit, showing a positive correlation ($R = 0.651$), and explained 42.4% of the variation in academic outcomes ($R^2 = 0.424$; Adjusted $R^2 = 0.413$). Since the F-statistic was significant ($F = 39.407$, $p < 0.001$), the overall model fit was confirmed.

Table 6: Model 1 Summary

R	R ²	Adjusted R ²	Std. Error	F	Sig.
0.651	0.424	0.413	0.54332	39.407	.000

Table 7: Regression Coefficients — Model 1

Variable	B	Std. Error	Beta (β)	t	Sig.
(Constant)	0.574	0.227	—	2.533	.012
Family Income (FI)	0.509	0.100	0.349	5.096	.001
Parents' Education (PE)	0.169	0.047	0.128	3.595	.000
Parents' Occupation (PO)	0.169	0.061	0.160	2.771	.006
Academic Resources (AR)	0.141	0.052	0.129	2.738	.006
Household Assets (HHA)	0.132	0.045	0.142	2.901	.004
Psychological Stress (PS)	0.009	0.040	0.009	0.220	.826
Motivation (MO)	0.465	0.045	0.487	10.373	.000

Every SES variable showed a strong association with performance outcomes ($p < 0.05$), including family income along with education and occupation of parents, available academic resources, and household assets. Out of these items, motivation was indicated to be the item that showed the strongest predictive effect. Motivation was ($\beta = 0.487$, $p < 0.001$), family income was ($\beta = 0.349$). Psychological stress was an insignificant predictor ($\beta = 0.009$, $p = 0.826$).

6.7 Multiple Regression Analysis — Model 2 (Restricted SES Model)

The five SES indicators formed the second regression model. The indicator shows a moderate positive relationship ($R = 0.498$) and accounted for 24.8% of the changes in academic outcomes ($R^2 = 0.248$; Adjusted $R^2 = 0.238$; $F = 24.918$, $p < 0.001$). In such a scenario, academic resources ($\beta = 0.211$, $p < 0.001$) and household assets ($\beta = 0.190$, $p = 0.001$) were the most significant predictors and validated that the available resources determine the academic performance of the students.

Table 8: Regression Coefficients — Model 2

Variable	B	Beta (β)	t	Sig.
(Constant)	1.168	—	5.533	.000
Family Income (FI)	0.647	0.012	3.235	.002

Parents' Education (PE)	0.399	0.089	2.660	.005
Parents' Occupation (PO)	0.169	0.160	2.771	.006
Academic Resources (AR)	0.231	0.211	3.974	.000
Household Assets (HHA)	0.176	0.190	3.413	.001

7. DISCUSSION

Overall, the results of this study coordinates with both the international and local literature on SES and performance. The positive relationship between family income and CGPA corresponds with Masud et al. (2016) in Bangladesh and Malik and Courtney (2011) in Pakistan. Family income and family wealth impact students' access to resources, including technology and tutorials. Literature supports the positive relationship between parents' education and student academic performance by Davis-Kean (2005) and Anees et al. (2011). These studies suggest that the education level of parents influences children's academic performance by determining the learning environment and by establishing educational norms and expectations.

The positive relationship that parents' occupation and academic performance also supports Haveman and Wolfe (1995), where the occupational status of parents shapes children's performance in school through the economic and social/cultural spheres. Identifying access to academic resources as one of the dominant SES-related indicators of educational performance is substantiated by Gibbons and Telhaj (2016). They demonstrated that school-level resources can partially compensate for disadvantaged family backgrounds. Naz et al. (2014) showed that in Pakistan, students who belonged to families that lived in low-income communities had poor access to textbooks and library resources, and this impacted their academic performance negatively.

The importance of motivation in predicting academic performance is of great interest. Suárez-Álvarez, Fernández-Alonso, and Muñiz (2014) noted that motivational factors accounted for 72% of the changes in students' academic performance in mathematics. This was considerably higher than the contribution of socioeconomic status. Hence, it is likely that efforts to improve the motivation of students, including those from disadvantaged groups, will lead to favorable changes in academic performance.

The lack of the strongest effect of psychological stress on academic achievement, as seen in the regression models, is likely to result from a coping mechanism in which the stress effect on grades is minimized. This is in line with the Social Reproduction Theory, which holds that students from disadvantaged socioeconomic backgrounds develop a mechanism of resilience that helps to reduce the impacts of social stress. Although Zhang et al. (2024) argue that stress, depression, and anxiety are significant negative predictors of academic performance among Chinese students, the effect of stress likely varies across different academic and cultural settings.

The total explanatory power of the complete model ($R^2 = 0.424$) is comparable to the work of Sirin (2005) and Tan (2024), who argue that in a number of educational systems, SES is a moderate- to strong-predictor of academic achievement. The SES restricted model ($R^2 = 0.248$) further illustrates that, within a variety of different systems and frameworks, socioeconomic factors, alone, explain a substantial,

although not exhaustive, segment of the variance in academic performance. This resonates with studies that focus on the complexity of academic achievement.

8. CONCLUSIONS

This study establishes that in Pakistan, the academic achievement of university students is positively influenced by the family's socioeconomic status (SES). Variables such as family income, educational and occupational levels of parents, availability of academic resources, and household assets were included in the study. Availability of academic resources revealed the largest impact on academic performance and indicates the significance equitable resource allocation in higher education.

Motivation was found to be the most powerful predictor of academic performance. This indicates that the gap from SES to academic performance is largely narrowed by students' motivation to succeed. In this instance, psychological stress was theorized to be a potential mediator. However, it was found to have no significant effect on academic performance in the regression analysis conducted.

This study prompts education policymakers and university administrators to take action. Facilities to enable the availability of academic resources such as virtual learning, libraries, and internet access should be stressed. Greater efforts should be made to provide financial aid, academic counseling, motivational services, and scholarships to ameliorate SES-based inequities and support greater academic success.

8.1 Recommendations

1. The inclusion of academic counseling, mentoring, and career services would develop student motivation and engagement.
2. Students should have additional support for academic purposes via expanded library services, improved digital learning platforms, and better internet availability.
3. National and institutional educational policy should seek to narrow the divide between low- and high-income student groups by means of scholarship, grant, and resource provision policies.
4. Universities should have counseling and mental health services available to offer support for stress related to the challenges of study.
5. Parents should be assisted in creating supportive learning environments in the home with access to learning resources and designated study space.

8.2 Limitations and Future Directions

There are some limitations with this study. The research was limited to only one selected population of university students, so results may not be applicable to other universities and areas of Pakistan. Data that is self-reported is often not the most accurate. Moreover, the research only included a few possible predictors. Factors such as learning style and teaching quality, peer influence, self-efficacy, and institutional support may affect academic performance in the absence of consideration.

Regarding the future, research should look to include participants that are students that attend universities that are not located in the same area. Studies that take place in the future may look at the relationships that connect SES to academic-related outcomes in the long run. Researchers may also introduce support and self-efficacy as the other predictors that impact academic performance.

REFERENCES

- Acuña, M., Álvarez, R., & Avarca, C. (2025). The heterogeneous impact of COVID-19 on university students' academic performance. *International Review of Economics Education*, 49, 100318.
- Anees, M., Qasim, M., & Bhatti, M. A. (2011). Impact of socio-economic and demographic variables on the academic achievement of university students. *Journal of Social Sciences & Humanities*, 19(2), 97–114.
- Asif, R., Mercer, A., Ali, S. A., & Haider, N. G. (2017). Analyzing undergraduate students' performance using educational data mining. *Computers & Education*, 113, 177–194.
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Berlanga, V., & Corti, L. (2025). The impact of scholarships on grades of university students in Spain. *Journal of Higher Education Policy*.
- Bourdieu, P., & Passeron, J.-C. (1977). *Reproduction in education, society and culture*. Sage.
- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53(1), 371–399.
- Burns, J., Li, A. R., Rohr, K. E., Thomas, M. L., McCarthy, M. J., & Meruelo, A. D. (2025). The influence of chronotype, socioeconomic status, latitude, longitude, and seasonality on cognitive performance and academic outcomes in adolescents. *Sleep Medicine*, 128, 95–102.
- Chen, M., Liu, S., Wijaya, T. T., & Cao, Y. (2025). Influence of family socioeconomic status on academic buoyancy and adaptability. *Acta Psychologica*, 253, 104753.
- Chen, X., Chen, Y., Yu, X., Wei, J., & Yang, X. (2024). The impact of family socioeconomic status on parental involvement and student engagement during COVID-19. *Journal of Experimental Child Psychology*, 246, 105992.
- Coleman, J. S., et al. (1966). *Equality of educational opportunity*. U.S. Government Printing Office.
- Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement. *Journal of Family Psychology*, 19(2), 294–304.
- Ding, X., Li, S., Zhang, X., & Shi, J. (2024). The mediating role of executive function between socioeconomic status and academic achievement. *Learning and Individual Differences*, 110, 102418.
- Fan, Y. (2025). Investigating the relationship between family socioeconomic status and online academic help-seeking behaviours. *International Journal of Educational Research*, 130, 102530.
- Gibbons, S., & Telhaj, S. (2016). Peer effects: Evidence from secondary school transition in England. *Oxford Bulletin of Economics and Statistics*, 78(4), 548–575.
- Haveman, R., & Wolfe, B. (1995). The determinants of children's attainments: A review of methods and findings. *Journal of Economic Literature*, 33(4), 1829–1878.
- Lareau, A. (2003). *Unequal childhoods: Class, race, and family life*. University of California Press.
- Liu, J., Peng, P., & Luo, L. (2020). The relation between family socioeconomic status and academic achievement in China: A meta-analysis. *Educational Psychology Review*, 32(1), 49–76.
- Malik, S., & Courtney, K. (2011). Higher education and women's empowerment in Pakistan. *Gender and Education*, 23(1), 29–45.
- Masnan, F., et al. (2025). Role of sense of purpose, time management, attendance, sleep and self-esteem in academic performance. *Social Sciences & Humanities Open*, 11, 101258.

- Naz, A., Khan, W., Hussain, M., & Daraz, U. (2014). Students' family problems and their impact on academic performance. *American Journal of Applied Sciences*, 11(5), 860–866.
- Noor-ul-Huda, S., et al. (2025). Financial difficulties, mental health and academic achievement among college students in Pakistan.
- Palmqvist, L., Heimann, M., Samuelsson, J., et al. (2025). Role of fluid intelligence and socioeconomic status on reading development. *Acta Psychologica*, 258, 105246.
- Pelima, R., et al. (2024). Machine learning and EDM for predicting academic performance: A systematic literature review. Indonesian context.
- Poon, K. (2020). The impact of socioeconomic status on parental factors in promoting academic achievement in Chinese children. *International Journal of Educational Development*, 75, 102175.
- Rahman, S., et al. (2023). Socio-economic factors affecting academic performance of private university students. *SN Social Sciences*, 3(26).
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review. *Review of Educational Research*, 75(3), 417–453.
- Suárez-Álvarez, J., Fernández-Alonso, R., & Muñiz, J. (2014). Predictors of academic performance in mathematics. *Learning and Individual Differences*, 30, 118–123.
- Sulaiman, N. F. C., et al. (2020). Data on impact of socioeconomic status on academic achievement. *Data in Brief*, 31, 106018.
- Suleiman, A., et al. (2024). Predicting student academic performance using behavioral and socioeconomic factors. Nigerian educational context.
- Tan, C. Y. (2024). Socioeconomic status and student learning outcomes: An umbrella review. *Educational Research Review*.
- Tomaszewski, W., Xiang, N., & Kubler, M. (2025). Socio-economic inequalities in university participation and academic performance in Australia.
- Van Ewijk, R., & Sleegers, P. (2010). Peer socioeconomic status and student achievement: A meta-analysis. *Educational Research Review*, 5(2), 134–150.
- Wube, T. B., Asgedom, S. G., Jemal, Z. M., & Gebrekirstos, L. G. (2024). Academic performance and associated factors among female university students. *Global Epidemiology*, 8, 100175.
- Zhang, Y., Peng, L., & Chen, X. (2024). Mental health and academic performance of college students in the post-COVID period. *Acta Psychologica*, 248, 104351.
- Zhang, L., Zhai, R., He, J., Ma, X., & Yang, S. (2025). Time perspective and socioeconomic status effects on academic achievement. *Personality and Individual Differences*, 245, 113275.