



Research article

## Effect of Class Attendance on Academic Performance in the Higher Studies: A Case Study on the Department of Economics at Dhaka International University (DIU)

Rifat Mia<sup>1</sup>, Shahiduzzaman Selim<sup>2</sup>, Mostafa Monir<sup>3</sup>, Md. Anowar Hossain<sup>3</sup>, Babor Ahmad<sup>3\*</sup> and Md. Rakibul Hasan<sup>4</sup>

<sup>1</sup>College of Business, Chengdu University of Technology, Chengdu, China

<sup>2</sup>School of Economics and Finance, Xi'an Jiaotong University, Xian, China

<sup>3</sup>Economics Discipline, Dhaka International University, Dhaka-1212, Bangladesh

<sup>4</sup>OIC Ministerial Standing Committee on Scientific and Technological Cooperation (COMSTECH) Islamabad, Pakistan

### ABSTRACT

This study examines the impact of class attendance on academic performance among undergraduate students in the Department of Economics at Dhaka International University (DIU). Regular class attendance is crucial for academic success, fostering skills, knowledge, and engagement. Despite the importance of attendance, many students face challenges such as transportation issues, socio-economic constraints, and job commitments that hinder regular class participation. A sample of 181 undergraduate students from the DIU's Economics Department was surveyed between October 1 and October 20, 2024, to explore the relationship between attendance and academic performance, measured by Semester Cumulative Grade Point Average (SCGPA). Data were analyzed through ordinary least squares (OLS) regression, revealing that both class attendance and engagement in extracurricular activities significantly contribute to higher SCGPA. Findings reveal a positive, significant correlation between class attendance and academic performance. Extracurricular engagement also positively affects SCGPA, while other factors like job status and study habits outside of class show no significant relationship. These results highlight the need for policies promoting attendance and support for students' involvement in extracurricular activities.

### ARTICLE INFO

#### Article timeline:

Date of Submission: 08 January, 2025

Date of Acceptance: 27 August, 2025

Article available online: 08 September, 2025

Article available online: 08 September, 2025

#### Keywords:

Class attendance

Academic performance

Economics students

Extracurricular activities

SCGPA

### Introduction

Class attendance is often regarded as a key to academic success, particularly in higher education (Büchle, 2021) where students' engagement in the learning process significantly influences their performance (Kim et al., 2020). Regular attendance not only ensures that students have access to critical course material but also fosters active participation, engagement with instructors and classmates, and the development of essential skills. Participating in class is very important for students because constantly attending class helps students to achieve academic success (Cavinato et al., 2021; Muir et al., 2022). It's impossible to create strong bonding between students and teachers without maintaining regularity (Ahmad & Haque, 2020). In addition, consistently attending class helps students to build effective skills and knowledge. Students who are not attending classes on a regular basis are facing trouble

with the law and causing problems in their communities due to their poor efficiency (Burden, 2025). Currently all the higher educational institutions are so concerned about ensuring class attendance to increase the output of efficient graduates (Ahmad & Haque, 2020; Yeasmin et al., 2025). Students face challenges in attending classes regularly such as, transportation problems, environmental issues, job engagements, accommodation and other factors. Additionally, socio economic factors are also responsible for lower Attendance. These challenges are often exacerbated by issues such as inadequate infrastructure or the lack of affordable accommodation (Ahmed & Hasan, 2019; Aroun & Ahmed, 2025). Socio-economic factors including financial lacking, the need for part-time jobs, and family duties can create barriers to participating classes (Hossain et al., 2017; Chieng et al., 2024). Students from lower income backgrounds, generally face the pressure to support themselves or their

\*Corresponding author: <[baboraswapon@gmail.com](mailto:baboraswapon@gmail.com)>

families through part-time work. It results in irregular attendance, as they prioritize work over academic commitments (Amin et al., 2021). Likewise, insufficient transportation options, long travel distances, or health related issues can also contribute to attendance challenges. Socio-economic disparities also play a crucial role in shaping attendance patterns, because students from lower-income backgrounds are more likely to miss classes due to financial pressures or family responsibilities (Hossain et al., 2017). In contrast, Irregular attendance often leads to gaps knowledge, missed scope for clarification and lack of engagement with course material. It can negatively affect on students' result (Al-Omari and Al-Momani 2013).

SCGPA (Semester Cumulative Grade Point Average) is used in this study as the measure of academic performance. It offers a standardized assessment of a student's academic achievement over an entire semester and reflects performance across multiple courses and assessments. Final exam grades capture only a single point in time, and, CGPA accumulates over several semesters but they may dilute the impact of recent behaviors like class attendance, SCGPA allows for a more accurate analysis of the immediate relationship between attendance and academic outcomes. It is also more objective and quantifiable compared to subjective assessments. Also, it makes it a reliable metric for statistical analysis.

Previous studies consistently show a positive relationship between class attendance and academic performance across different educational contexts. Sarker (2020) made an observational study among BBA professional students in Bangladesh where he found that students with higher attendance generally achieve better academic results. It emphasizes the importance of classroom engagement in business education. Similarly, Ahmad et al. (2017) explored this relationship among medical students at Faridpur Medical College and reported that students with more than 75% attendance scored significantly higher in examinations. It reinforces the role of consistent class participation in demanding academic disciplines like medicine. Asadullah (2016) examined the effect of attending Islamic secondary schools on academic performance in a broader institutional context, and found that students from these institutions generally underperformed in secular subjects compared to their counterparts in general secondary schools. It attributes the gap to differences in curriculum and teaching quality. Together, these studies highlight an important role of class attendance and educational context in shaping students' result which provides an important foundation for further research on academic performance determinants. By considering above issues, this study aims to identify the impact of class attendance on academic achievement and, to provide some suggestions that can inform university policies and practices aimed at improving student attendance and academic results. Additionally, the study highly focuses to offer recommendations to overcome barriers to regular class participation, thereby assisting institutions in better supporting students in their educational journey.

The primary objective of this research is to examine how class attendance affects students' academic performance, with the aim of improving both attendance and academic outcomes. By considering this issues, the study aims to provide some suggestions that can inform university policies and practices aimed at improving student attendance and academic results. Additionally, the study highly focusses to offer recommendations to overcome barriers to regular class participation, thereby assisting institutions in better supporting students in their educational journey.

### Literature Review

Previous studies highlighted the significant relationship between class attendance and academic performance in different educational contexts.

Ancheta et al. (2021) found that class attendance significantly affects students' academic performance. In their study of 155 randomly selected Omani undergraduate students, they discovered that 71% had attendance below 70%, as per the college policy. Students with good attendance scored an average of 49 marks, while those with acceptable attendance scored 48. In contrast, students with poor attendance had an average score of 37, considered a failing mark. The study shows a positive relationship between class attendance and academic results.

Sarker (2020) conducted a study utilizing the effect of class attendance on the BBA student's academic achievement. The research was collected data during the period of December 2016 to March 2020 at Habibullah Bahar University College. The research findings indicated that students who attended class more than 80% of their attendance scored high compared to those with attendance below 80%.

Asadullah (2016) researched the performance of rural Bangladeshi students in madrasahs compared to students in secular (non-madrasah) schools. The study an outcome highlighted madrasah students are weakness in both math and English and student's selections taken into the gap in English narrows and the math difference disappears. Moreover, over all the summary shows poor academic performance.

Shahjahan et al., (2021) looked into cross-sectional study using a simple random sampling method to analyze the lower academic scores in urban university students in Bangladesh. The study was collected from 661 undergraduate students. The research result showed that most participants were male 88.4%, with 77.9% choosing their programs independently. Some factors which were significantly related to poor academic performance include irregular attendance, low paternal education and occupational levels, lack of family support, social media use, and excessive gossiping.

Bücheler, (2021) found a weak correlation between class attendance and academic performance due to the influence of technology in learning. They used regression analysis and collected responses from 730 students through questionnaires, with 492 samples analyzed for final performance. Data from the Economics Department of a mid-sized German university was examined across various semesters and courses. Mediation analysis in SPSS revealed that technology and digital systems enable

students to access study materials, reducing the impact of poor attendance on their academic performance.

Esma et al. (2024) analyzed academic performance on cross sectional study of a public in Bangladesh. Using 100 data set via face to face to interview from Noakhali Science and Technology University. The research revealed that personal, social, psychological, and institutional factors as key influences on students' academic outcomes. Academic achievement was an outcome of the personal motivation of the student, the environment they operated in, and the resources and support provided by their institution. However, problems with mental stability, anxiety and depression got in the way of academic success, with all results being statistically significant.

Lukkarinen et al. (2016) investigated the correlation between class attendance and academic performance among university students. Using data from a non-mandatory university course, they sampled 86 students in autumn 2014 and applied cluster and regression analysis. The study found that regular attendance positively impacted academic performance, while irregular and independent students experienced negative effects. The research suggests that to ensure quality education, class attendance should be mandatory, and teachers should implement outcome-based education to encourage students' participation.

Kasarani & Lassen et al. (2017) researched the relationship between class attendance and academic performance using data from 1,000 undergraduate students at the University of Denmark. They applied Spearman's correlation coefficient, Kruskal-Wallis H-test, and Theil-Sen estimator. The study found a strong correlation between early and consistent class attendance and academic performance. Most students had good attendance, but a few with lower attendance, often influenced by their social peers, showed poorer academic results.

Above the numerous studies found both positive and negative correlations between class attendance and student results across various higher educational institutions. Still, no other research focuses specifically dose class attendance on the academic performance in Semester Cumulative Grade Point Average (SCGPA) of Bangladeshi economics students at the private university level. And there is no prior research has been conducted on this topic. This study addresses that gap by focusing on a case study of Dhaka International University (DIU) Economics Department.

**Materials and Methods**

**Study area**

Dhaka International University (DIU), established on April 7, 1995, is a prominent private institution in Bangladesh, founded by the renowned academician, Late Alhaj Professor Dr. A. B. M. Mafizul Islam Patwari. It operates as a non-profit university, emphasizing academic discipline and the dissemination of knowledge. DIU's mission, encapsulated in the motto "Knowledge is Power," aims to empower individuals through high-quality teaching, research, and training. DIU has several faculties such as Science and Engineering, Business Studies, Law, and Arts and Social Sciences. The

Department of Economics, within the Faculty of Arts and Social Sciences, has about 500 undergraduate and post graduate students. In total the university has above 300 academic staff and more than 8,000 students. The university offers a modern, well-structured curriculum to foster intellectual growth. DIU is committed to producing knowledgeable graduates who contribute to societal development.

Because of its intermediate size in terms of number of students and its centralized organization of academic and administrative organization, DIU was chosen as the site of this case study, ensuring the possibility for data collection and comparison between students. Moreover, the authors have explicit academic access to the Department of Economics that enables the ease in access to data and authenticity. In contrast to many other institutions, detailed records of students' attendance and examination scores were available at DIU that enabled us to test the connection between class attendance and academic achievement. This expedient access and security of data was a factor in the decision to work with DIU instead of an alternative university.

**Determination of Sample Size**

This study shows a quantitative research design to find out the effect of class attendance on the academic performance of the Economics department students at DIU. A simple random sampling method is using to collect data from that selected sample (Ahmad et al., 2024). Determining the appropriate sample size is crucial for the success of any study (Mallick & Mishra, 2019). Yamane's (1967) formula, as shown in equation (1), is commonly used to calculate the optimal sample size for a given population in research.

$$n = \frac{N}{1+N(e^2)} \dots\dots\dots (1)$$

Where,

- n = Sample size,
- N = population size
- E =Level of precision

In our study, N = 328 students, according to the list of students those are currently studying in the Department of Economics at Dhaka International University (7th to 17th batch), e = 0.05

By putting these values in the equations (1) we have

$$n = \frac{(328)}{1+(328)(0.05)^2} = 181$$

So, the sample size is 181 respondents for this study.

**Data Collection**

To verify the relationship between attending class and academic performance, raw information was retrieved from undergraduate students in the Department of Economics at Dhaka International University (DIU). The programme of data collection ran between October 1 and October 20, 2024. Data was collected using the structured questionnaire as the main instrument of data collection. Questions were included in this questionnaire in order to collect data on demographic factors of the

students (such as age, sex, etc.), their academic performance (e.g., GPA, number of subjects studied), class attendance, and their involvement in extracurricular activities. The survey consisted of both closed-ended and Likert scales to facilitate quantitative analysis and standardisation of the results. A pilot survey was conducted on a small sample of the students to check the question's clarity and reliability prior to the final data collection. Additional wording and logic improvements were made in response to comments received from the pilot. The Data, were obtained by self-administration. The purpose of the study was explained to students; their involvement was voluntary. The questionnaire was administered to students in class and then collected upon completion to maximize participation rate and quality of data. Ethical reflections are rigorously adhered to at every stage. Confidentiality and anonymity of the participants were guaranteed and written consent was obtained prior to the participation. Results A total of 120 completed and valid data were used for final analysis. The questionnaire used for data collection consists of five sections. The first section captures Demographic Information, including name, age, gender, roll number, semester, and family size. The second section gathers Socio-economic Characteristics, such as the living place, parents' occupations, and household income. The third section focuses on the Lifestyle of Students, covering aspects like types of residence, transportation to the university, income and expenditure, and job status. The fourth section examines Educational Characteristics, including students' attendance ratios, academic performance, library engagement, and study hours outside regular classes. Finally, the fifth section explores the Reasons for Low Attendance, delving into students' opinions and environmental factors influencing attendance.

**Data analysis**

Data were synthesized using STATA 18.0 according to a predefined methodology. Thus, descriptive statistics (mean, median, and standard deviation) were calculated for evaluating class attendance rates and SCGPA; correlation analyses as inferential statistics were used for determining the relationship between class participation and academic performance. Further, it utilized regression analyses in evaluating the effect of attendance toward SCGPA while controlling other variables. There are caveats to the analysis, including possible biased estimates due to due reliance on personal data and that this is a cross-sectional study that does not refer causation for attendance and academic performance.

**Model Specification**

The Ordinary Least Squares (OLS) method is considered to be the most common technique in econometrics and statistics for the estimation of parameters of linear regression models (Khanom et al., 2024). It is preferred as it yields the Best Linear Unbiased Estimator (BLUE) which is consistent with the Gauss-Markov assumptions and is thus an efficient and reliable estimator (Wooldridge, 2016). The OLS minimizes the sum of squared residuals and thereby provides the best fit, so it produces a great explanatory power (Greene, 2018). This

is by allowing the model to be messaged with simplicity, flexibility and ease of interpretation: very widely used in many fields, including economics and social sciences, with (Stock & Watson, 2015). The model can be validated by testing its assumptions. For the purpose of this study, the dependent variable is SCGPA, while other variables are independent predictors as shown in equation (1).

$$\log(Y_i) = \beta_0 + \beta_1 \log(X_{1i}) + \beta_2 \log(X_{2i}) + \beta_3 \log(X_{3i}) + \beta_4 \log(X_{4i}) + \beta_5 \log(X_{5i}) + \beta_6 \log(X_{6i}) + \beta_7 \log(X_{7i}) + \beta_8 \log(X_{8i}) + \epsilon_i \dots\dots(1)$$

Where,

log represents Natural logarithm;

$Y_i$  = SCGPA (Semester Combined Grae Point Average);

$\beta$  = Unknown parameter to be estimated;

$X_{1i}$  = Extracurricular activity (Hours spent in extracurricular activities per month);

$X_{2i}$  = Job status (Whether the students have any paid job or not, measured in dummy as 1 for job holder and 0 for non-job holder);

$X_{3i}$  = Class attendance (Presence in the class by the students measured in numbers of days per semester);

$X_{4i}$  = Study outside of the class (Time spent on study outside of the class room such as hours spent in tuition, group study etc.);

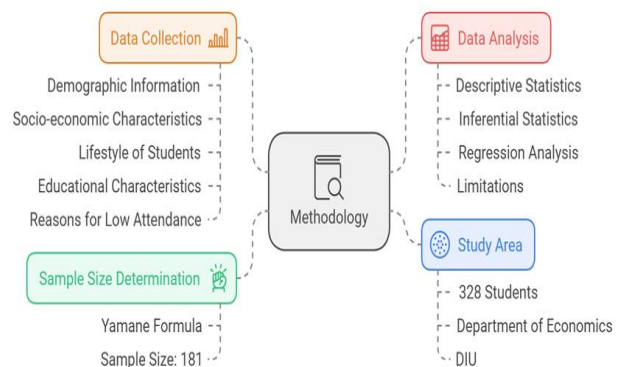
$X_{5i}$  = Library engagement (Students have a library card and spent time in library);

$X_{6i}$  = Residence (Residence distance of the students from the campus measured in kilometers);

$X_{7i}$  = Transportations (Students used transportation facilitated by the university, measured in dummy as 1 for yes and 0 for no);

$X_{8i}$  = Social media engagement (Students spent time in social media);

$\epsilon_i$  represents Error term;



**Figure 1: Methodology of the study**

**Result and Discussion**

This table (Table 1) summarizes the socio-demographic characteristics of the respondents where gender distribution, occupation, area of residence, extracurricular activities, employment status, and modes of transport are presented. Hence, from the total sample it was observed that 59.1% of the respondents were male while 40.9% female; indicating fair representation between the genders. As far as occupation is concerned, the majority are engaged in business (53.93%), the second priority comes to jobs (34%), followed by agriculture (8%) and day labor (4.97%), indicating a diverse economic background. Most of the respondents (65.7%) are rented, while 23.2% are owned houses. The remainder lives in university halls (5.5%) or other types of accommodation (5.5%).

**Table 1:** Socio-demographic Characteristics of the respondents

Variables	Frequency	%
<b>Gender Status</b>		
Male	107	59.10
Female	74	40.9
<b>Occupational status</b>		
Business	94	53.93
Agriculture	16	8
Job	62	34
Day labor	9	4.97
<b>Residence status</b>		
Own House	42	23.2
Rented House	119	65.7
University hall	10	5.5

Others	10	5.5
<b>Extracurricular status</b>		
Yes	108	59.7
No	73	40.3
<b>Job status (Part time or full time)</b>		
Yes	67	37
No	114	63
<b>Transportation status</b>		
Public transport	103	56.9
Private transport	33	18.2
University bus	27	14.9
Others	18	9.9

*Source: Authors' own calculation from survey, 2024*

Extracurricular activities for students to engage in nonacademic activities show that participation is very high, at 59.7% involved, and 40.3% not involved, which implies different levels of engagement beyond academic or professional duties. Regarding job status, 37% are employed part-time or full-time, while 63% do not hold any work. This gives some information about the economic engagement of respondents on this subject. The transport choices reveal that the most used of all shows public transport usage (56.9%). Private transport follows with 18.2%, then university bus 14.9%, and lastly, other means take 9.9%, which informs about the accessibility and mobility patterns. All these socio-demographic profiles have served as a primary ground of understanding toward reflecting how the profiles can touch every aspect of academic, social, and economic experiences last key dimension of the study.

**Table 2:** Monthly household income

Variable	Observation	Mean	SD	Min	Max
Monthly Household Income	181	40860.22	77144.73	10000	700000

*Source: Authors' own calculation from survey, 2024*

Table 2 provides a summary of monthly household income based on 181 observations. The average (mean) monthly income is 40,860.22 BDT, with a standard deviation of 77,144.73 BDT, indicating substantial variability in income levels among households. The minimum recorded income is 10,000 BDT, while the

maximum reaches 700,000 BDT, reflecting a significant range of economic conditions within the sample. This wide range suggests significant economic disparities among the participants, which may influence their educational or socioeconomic experiences.

**Table 3:** Last semester SCGPA of the respondents Physical attributes

Variable	Observation	Mean	SD	Min	Max
SCGPA	181	3.12	0.55	1.5	4.00

*Source: Authors' own calculation from survey, 2024*

Table 3 presents the last semester's SCGPA (Semester Cumulative Grade Point Average) of 181 respondents. The mean SCGPA is 3.12, with a standard deviation of 0.55, reflecting moderate variability in academic performance among students. The minimum recorded SCGPA is 1.5, while the maximum is 4.0, indicating a

full range of performance levels from below average to excellent. These findings provide insights into the academic performance distribution among the respondents, reflecting varying levels of educational success.

**Table 4:** Class attendance status of the respondents

Variable	Observation	Mean	SD	Min	Max
Class attendances	181	0.708	0.195	0.10	1.00

Source: Authors' own calculation from survey, 2024

This table presents a statistical summary of class attendance data from 181 respondents in a higher education study. The mean attendance rate is 0.708 (or 70.8%), with a standard deviation of 0.195, indicating moderate variability in attendance patterns. The attendance rates range from a minimum of 0.10 (10%) to

a maximum of 1.00 (100%), suggesting that while some students attended nearly all classes, others had very low attendance, which is crucial for analyzing the relationship between class attendance and academic performance in higher education.

**Table 5:** Social media using ratio of the respondents (daily)

Variable	Observation	Mean	SD	Min	Max
Social media	181	5.10	2.45	1	12

Source: Authors' own calculation from survey, 2024

Table 5 provides insights into the daily social media usage of the respondents, based on data collected from 181 observations. The average daily usage is 5.10 hours, with a standard deviation of 2.45 hours, indicating moderate variability in social media habits among respondents. The minimum reported usage is 1 hour, while the maximum extends to 12 hours, highlighting a wide range of engagement levels. This data suggests that social media consumption is a significant activity for the respondents, with some individuals dedicating a considerable portion of their day to it.

performance, measured by SCGPA. Among the predictors, extracurricular activities and class attendance emerge as significant determinants of academic performance. Extracurricular activities exhibit a positive coefficient of 0.093 with a t-value of 3.65 and a p-value below 0.01, indicating that participation in extracurricular is associated with higher SCGPA. Similarly, class attendance has a strong positive impact, with a coefficient of 0.227, a t-value of 7.03, and a p-value below 0.01. These findings underscore the importance of active participation in both curricular and extracurricular engagements for academic success.

The table 6 presents the estimated regression results assessing the effects of various factors on academic

**Table 6:** Estimated result of the effect of SCGPA on academic performance

SCGPA	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Extracurricular activity	.093	.025	3.65	0	.043	.143	***
Job status	.018	.026	0.70	.486	-.034	.07	
Class attendance	.227	.03	7.60	0	.168	.286	***
Study outside of the class	-.001	.013	-0.10	.917	-.027	.025	
Library engagement	.008	.018	0.46	.646	-.028	.045	
Residence	.029	.034	0.84	.403	-.039	.097	
Transportations	-.045	.033	-1.37	.174	-.111	.02	
Social media engagement	.014	.025	0.55	.58	-.036	.064	
Constant	4.72	.139	33.90	0	4.446	4.995	***
Mean dependent var		5.745	SD dependent var		0.197		
R-squared		0.342	Number of observations		181		
F-test		10.783	Prob > F		0.000		
Akaike crit. (AIC)		-127.537	Bayesian crit. (BIC)		-99.054		

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

Source: Authors' own calculation from survey, 2024

Other variables, including job status, study outside of class, library engagement, residence, transportation, and social media engagement, are not statistically significant. Their p-values exceed the conventional thresholds (0.01, 0.05, or 0.1), and their coefficients are either close to zero or not impactful. For instance, study outside of class shows a negligible coefficient of -0.001 with a p-value of 0.917, suggesting no meaningful influence on SCGPA. Similarly, transportation has a negative coefficient of -0.045 but lacks statistical significance, indicating limited relevance. The constant term is highly significant ( $p < 0.01$ ) with a coefficient of 4.72, suggesting a baseline SCGPA independent of the included factors. The model's R-squared value is 0.342, meaning 34.2% of the variation in SCGPA is explained by the predictors. This indicates a moderate fit of the model to the data. The F-test value of 10.783 with a p-value of 0.000 confirms the overall significance of the model. Furthermore, the Akaike Information Criterion (AIC) value of -127.537 and Bayesian Information Criterion (BIC) value of -99.054 indicate good model performance and parsimony.

In conclusion, the results emphasize that class attendance and extracurricular activities are critical contributors to academic success. Their significant positive effects suggest that institutions should encourage regular class attendance and active participation in extracurricular programs to enhance student performance.

**Table 7:** Test of Multicollinearity

Variables	VIF	1/VIF
Class attendance	1.073	.932
Transportations	1.063	.941
Job status	1.049	.953
Social media engagement	1.041	.961
Library engagement	1.035	.966
Residence	1.026	.974
Extracurricular activity	1.019	.982
Study outside of the class	1.017	.983
<b>Mean VIF</b>	<b>1.04</b>	

*Source:* Authors' own calculation from survey, 2024

The table shows the outcomes of a multicollinearity diagnostic test using the Variance Inflation Factor (VIF) for the independent variables in a regression model. All independent variables are well below the VIF threshold of 10, and the largest is 1.073 for class attendance, whereas the smallest is 1.017 for study beyond class. The mean VIF is also very low at 1.04, thereby confirming that tumultuous parameterization is not a factor in the model. 1/VIF values, which are inverses of VIF, also recorded high tolerance levels, which further lent evidence of no collinearity defined by the test. These results show that the independent variables are not strongly correlated, thus securing the construction of stable and reliable regression estimates.

**Discussion**

This study explores the effect of class attendance on academic performance. This study found that the majority respondent were males and female respondents were quite lower than male respondents. This result is similar to Revathy et al. (2022) Ogbuewu et al. (2016) who

highlighted that a significant number of respondents were males in their study. This study also identified that almost the majority of respondents live in urban areas. only a minority percentage of respondents living in the rural areas. This finding is quite similar with Rahman et al. (2024); Hasan et al. (2025); Stanca, (2006). Most of the respondents of their study also belong to urban identity. The findings from the survey data on parental occupational status provide important insights into the socio-economic dynamics of the study population. This section discusses these findings in the context of existing literature on family roles, labor market participation, and gendered patterns in occupational status. The fact that many fathers are involved in business suggests that children in these households may have access to more resources, educational opportunities, and networks that could facilitate upward mobility (Cascio & Schanzenbach, 2021). Our study also found that most of the respondent parents engage with business related activities. This research reveals that a majority of respondents reside in rented houses, while 23.2% own their homes. A smaller proportion live in university halls or other accommodations (5.5%). This indicates a reliance on rented housing, suggesting possible economic factors or housing availability affecting residence choices. Gupta, & Sharma, (2020) also found similar findings in their research. Based on the data this study emphasizes that the majority of respondents rely on public transportation to commute to the university, suggesting its accessibility and affordability. Litman, (2017); Smith, & Jones, (2023) also showed similar result in their study Private transport is used by 18.2%, while 14.9% use the university bus, and 9.9% opt for other forms of transportation. This indicates a diverse range of commuting preferences among students, with public transport being the most popular choice. Factors such as cost, convenience, and availability may influence these transportation patterns. This study shows a variety of household income in different respondents, (Chakraborty, 2019) shows similar finding in their study. The standard deviation suggests that income inequality might be a concern within the sample population, as the range between the minimum and maximum values is quite broad. This paper shows a negative correlation between job status and academic result. Those are engaged in job their academic result is quite poor than regular students. Also engaging in part- or full-time jobs is the main reason behind their absence. Tetrick et al. (2003) and Eberhardt, (1984) shows similar finding in their study. Presented data of this study shows that most of the respondents are used to spending a long time on social media. Mean values of the respondents is 5.2. Even some of the respondents spend twelve hours on social media. That also causes one of the reasons for their poor academic result, because they don't utilize their time on academic sector. Amin et al. (2016) also find similar impact in their paper. Here SCGPA considered as a dependent variable and I have found a positive impact of class participation and extracurricular activity on the SCGPA of the respondents. From this above result we can see the minimum SCGPA of the respondent is 1.5 (fail) and maximum SCGPA is 4.00(A+). Average SCGPA of the respondent is 3.12 that considered as a satisfied score,

Joan (2001) also showed similar finding in their study. Studies show that class attendance is positively correlated with academic performance, suggesting that higher attendance is generally associated with better academic outcomes. Credé et al. (2010); Ahmad et al. (2024) and Carroll (2017) also show such a result in their research. However, the variability in attendance observed here may indicate that attendance alone is not the sole predictor of success, and other factors such as participation in active learning, study habits, and time management could play a crucial role in determining overall performance. This above study emphasizes the significant effect of student engagement in both academic and extracurricular activities, arguing that active participation leads to better developmental outcomes that also boost their academic outcome. Extracurricular activities such as workshops, seminars, sports, debate competitions, study tours etc. positively affect students' academic performance. The result of my research also reflects that. Astin et al. (1999) and Sharma et al. (2020) also show the significance of extracurricular activities in their research. This part of the study obtained the factors that influence semester Cumulative Grade Point Average (SCGPA) of university students, specifically within the Department of Economics at Dhaka International University (DIU). The analysis shows various student behaviors, academic involvement, and demographic characteristics to understand their relationship with academic results. The results from the OLS regression analysis suggest that extracurricular activity and class attendance are significant predictors of SCGPA among students at DIU. Specifically, students who participate in extracurricular activities and attend classes more regularly are likely to achieve higher SCGPA. In addition, factors such as job status, study outside of the class, library engagement, residence, transportation, and social media engagement do not show significant relationships with SCGPA in this analysis. Above findings highlight the necessity of student engagement, both inside and outside the classroom, to achieve academic success. The study underscores the value of class attendance as a key factor in enhancing academic performance and suggests that extracurricular involvement can further boost students' academic outcomes. Based on these studies, academic policies and student support services at DIU may consider fostering greater student participation in extracurricular activities and promoting the benefits of regular class attendance as part of efforts to improve academic achievement.

Dhaka International University's authorities could focus on minimizing barriers to attendance, such as transportation and job-related constraints, hall facilities and classroom environment related problems. Also, authorities should increase their budget to engage more students in extracurricular activities, for example research, sports, debate, seminar etc.

The results of this study are extremely consistent with contending theories from such disciplines as education, sociology, and behavioral science. Support for the positive relationship between attendance in class and academic performance was consistent with student involvement theory (Astin, 2014; Tinto, 1997) that posits that students who are more engaged in academic

activities—in this case, attending class—have a greater likelihood of higher academic performance. In line with this paradigm were the results that regular attending students in DIU showed better SCGPA scores, which is an implication of better understanding and retention of the course contents due to active participation.

Moreover, the importance of extracurricular involvement in academic achievement supports the student involvement-developmental theory (Astin, 2014), which focuses on other educational efforts outside of the class as development of personal and academic well-being. Seminars, debates, and study tours promote cognitive and non-cognitive development, and consequently, better academic achievement.

Socio-economic status (SES), measured by parents' occupation and housing status could be reflected by the Human Capital Theory (Becker, 1975) stating that those from richer family background have more access to more educational support, time and opportunities. Further, social reproduction theory (Bourdieu et al., 1977) demonstrates the impact of family background and access to economic, social and cultural capital on academic pathways. Individuals from business-oriented families or city locations who participated as respondents may be somehow privileged by structural forces, leading to positive educational effects.

Third, the inverse effect of job engagement on academic performance is consistent with role conflict theory (Greenhaus & Beutell, 1985), while student workers may face conflicting role demands of working and studying, leading to lower studying and academic performance. Likewise, the relationship that social media has on the academic achievement resembles such a pattern of time displacement theory, where too much time spent behind non-academic screen activities could limit effective learning.

Taken together, these theories give a strong basis for understanding the complex factors affecting student achievement at DIU.

Moreover, this research is crucial to better inform policy and practice to improve student success as the study on attendance and performance of class of Dhaka International University (DIU). DIU needs to make it easier to attend classes and take them when most convenient so that they can enroll folks with daytime jobs, folks that can only take classes on weekends, can fit in classes during the kids' school day, etc. In order to highlight the academic importance of attendance, the university might incorporate little means of encouraging attendance such as award programs, or interrelate attendance into academic assessment. Further, extracurricular activities have been found to have positive impact on academic performance, and hence DIU should provide more resources to improve the extra-curricular opportunities (workshops, sports, debates and study tours) so that every student may be benefited. The university can make funds, or scholarships, accessible for students with lower socio-economic backgrounds or develop a similar program in partnership with firms, leading to reduction in financial inequality in education. Job-related impediments to academic achievement also could be addressed by providing classes at flexible hours, on-campus employment, or part-time jobs geared to

academic responsibilities. Considering the harmful impact of overspending time on social media to academic performance, DIU should implement digital wellness programs to teach students to practice healthy “screen time” habits. Funded campaigns could be organized to help students maintain a healthier balance between social media and their studies, or there could be classes in time management to help students keep the main thing the main thing. In addition, transportation is an important great equalizer; DIU could partner with local government to provide more affordable, reliable public transportation to enable students to get where they need to go

throughout the course of their program—including possibly paying to subsidize travel or provide shuttles. Finally, the college could enhance the interactive and dynamic classroom environment by supporting all their faculty in employing active learning techniques—like flipped classrooms, collaborative projects—that improve students' engagement, and academic performance. These policy adjustments in combination would help to create and nurture a more inclusive environment, which would support the success of students of all cultures throughout the campus.

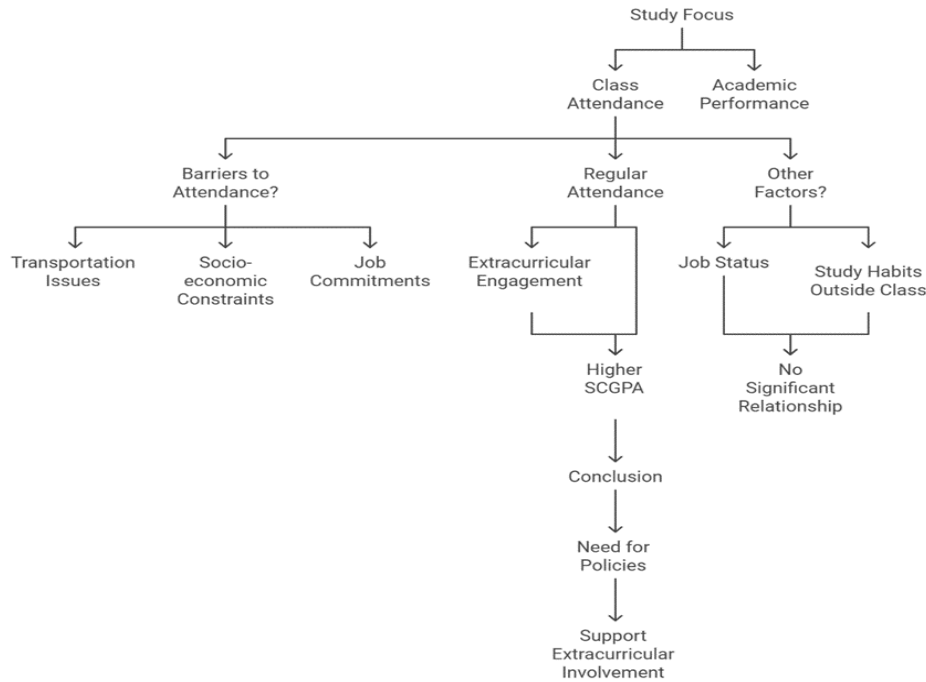


Figure 2: Schematic diagram for understanding the policy support.

**Conclusions**

In conclusion, the study underscores the significant influence of class attendance on the academic performance of students in higher education. The findings reveal that consistent attendance positively correlates with better academic outcomes, emphasizing the critical role of active classroom participation in fostering understanding and knowledge retention. Beyond grades, regular attendance cultivates discipline, engagement, and a stronger connection to the learning process, equipping students with skills that extend beyond academia. This study highlights the need for institutions to implement policies encouraging attendance and addressing barriers that hinder students from consistent participation. This study serves as a reminder for students to prioritize attendance, recognizing its substantial impact on academic success and personal growth. For educators and policymakers, these insights advocate for collaborative strategies to enhance attendance rates and optimize learning experiences. Ultimately, fostering a culture of commitment and active involvement in academic environments can significantly elevate educational outcomes. To improve academic performance, institutions should implement targeted policies that

promote regular class attendance and expand support for extracurricular engagement—such as offering transportation subsidies, flexible class schedules for working students, and increased funding for student-led academic and co-curricular initiatives. These measures would not only reduce structural barriers but also enhance student motivation, learning outcomes, and holistic development.

**Acknowledgement**

At the very outset, we would like to express our deep gratitude from our core of heart to almighty Allah for everything. In the trajectory of this research, we owe numerous personalities. We are grateful to our enumerator team and the students of Economics Discipline, Dhaka International University, Dhaka-1212. We also pay homage to 181 respondents for their invaluable information. Thanks to some undergrad students of Economics Discipline of Dhaka International University as they assisted us a lot in data collection.

**Conflict of Interest**

The authors declares no conflict of interest.

## References

- Ahmad, B., Rabbani, M. G., Siddiquee, M. S. H., Uddin, M. M., Khanom, S., Talukdar, S., & Habiba, U. (2024). Fishermen's willingness to accept compensation for conservation of Hilsha (*Tenuosia ilisha*) fish: Evidences from Bangladesh. *Urban Agriculture & Regional Food Systems*, 9(1), e20067. <https://doi.org/10.1002/uar2.20067>
- Ahmed, S. & Hasan, M. (2019). Factors affecting student attendance in higher education institutions of Bangladesh. *Journal of Higher Education Research*, 12(3), 45-58.
- Ahmad, B. & Haque, A.T.M.R. (2020). Socio-Economic Impact of Campus Violence on Education: A Case Study of HSTU. *International Journal of Research and Innovation in Social Science*, 4(6), 641-645. <https://EconPapers.repec.org/RePEc:bcp:journl:v:4:y:2020:i:6:p:641-645>
- Al-Omari, A. & Al-Momani, M. (2013). The impact of class attendance on students' academic performance in higher education. *Journal of Education and Practice*, 4(9), 98-104.
- Amin, Z., Mansoor, A., Hussain, S. R., & Hashmat, F. (2016). Impact of social media of student's academic performance. *International Journal of Business and Management Invention*, 5(4), 22-29.
- Ancheta, R. F., Daniel, D., & Ahmad, R. (2021). Effect of class attendance on academic performance. *European Journal of Education Studies*, 8(9).
- Aroun, L. B. M., & Ahmed, S. N. (2025). Effect of Parental Socioeconomic Status on Educational Outcome of Tertiary Level Students at Khulna University. *Khulna University Studies*, 120-126.
- Asadullah, M. N. (2016). The effect of Islamic secondary school attendance on academic achievement. *The Singapore Economic Review*, 61(04), 1550052.
- Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 518-529. <https://doi.org/10.1353/csd.1999.0043>
- Astin, A. W. (2014). Student involvement: A developmental theory for higher education. In *College student development and academic life* (pp. 251-262). Routledge.
- Becker, G. S. (1975). Investment in human capital: effects on earnings. In *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education, Second Edition* (pp. 13-44). NBER.
- Bourdieu, P., Passeron, J. C., & Nice, R. (1977). Education, society and culture. *Trans. Richard Nice. London: SAGE Publications*, 1(1), 15-29.
- Büchele, S. (2021). Evaluating the link between attendance and performance in higher education: The role of classroom engagement dimensions. *Assessment & Evaluation in Higher Education*, 46(1), 132-150.
- Büchele, S. (2021). Evaluating the link between attendance and performance in higher education: The role of classroom engagement dimensions. *Assessment & Evaluation in Higher Education*, 46(1), 132-150.
- Burden, P. R. (2025). Classroom management: Creating a successful K-12 learning community. John Wiley & Sons.
- Carroll, C. D. (2017). Class attendance and student performance in higher education: A review of empirical literature. *Journal of College Teaching*, 28(1), 35-48.
- Cascio, E., & Schanzenbach, D. (2021). The effects of parental employment on children's long-term outcomes. *Journal of Labor Economics*, 39(4), 763-800. <https://doi.org/10.1086/713742>
- Cavinato, A.G., Hunter, R.A., Ott, L.S. (2021). Promoting student interaction, engagement, and success in an online environment. *Anal Bioanal Chem* 413, 1513-1520. <https://doi.org/10.1007/s00216-021-03178-x>
- Chakraborty, S. (2019). Income Inequality in Developing Countries: Cause and Consequences. *Journal of Economic Development*, 45(2), 55-72. <https://doi.org/10.1234/jed.45.2.55>
- Chieng, F., Goi, C. L., Ho, J. M., & Yip, K. Y. (2024). Beyond the academic curriculum: embedding a career management program to improve the employability of business students. *Education+ Training*, 66(4), 379-394.
- Credé, M., Roch, S. G., & Kieszczyńska, U. M. (2010). Class attendance in college: A meta-analytic review of the relationship of class attendance with grades and student characteristics. *Review of Educational Research*, 80(2), 272-295.
- Eberhardt, B. J., & Shani, A. B. (1984). The effects of full-time versus part-time employment status on attitudes toward specific organizational characteristics and overall job satisfaction. *Academy of Management Journal*, 27(4), 893-900
- Esma, A., & Roknuzzaman, S. M. (2024). Factors Affecting the Students' Academic Performance: A Cross-Sectional Study of a Public University in Bangladesh. *Journal of Technology and Humanities*, 5(1), 13-23.
- Gakovic, A., & Tetrick, L. E. (2003). Perceived organizational support and work status: a comparison of the employment relationships of part-time and full-time employees attending university classes. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 24(5), 649-666.
- Glaeser, E., & Gyourko, J. (2018). The economic implications of housing supply. *Journal of economic perspectives*, 32(1), 3-30.
- Greene, W. (2024). Models for ordered choices. *Handbook of choice modelling*, 393-425.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of management review*, 10(1), 76-88.

- Gupta, R., & Sharma, S. (2020). Impact of extracurricular activities on academic performance and student development: A longitudinal study. *Journal of Educational Research*, 54(3), 402-412. <https://doi.org/10.1016/j.edurev.2020.02.003>
- Hasan, M. R., Rabbani, M. G., Ahmad, B., Selim, S., Hossain, M. A., & Jonah, E. (2025). Migration and Influencing Factors of Auto Rice Mill Workers' Intentions to Stay in Villages: An Empirical Study in Selected Areas of Dinajpur District. *Journal of the Bangladesh Agricultural University*, 23(1), 71-84. Hossain, M., Rahman, M. & Karim, A. (2017). Socio-economic factors influencing student attendance in Bangladesh. *International Journal of Education and Development*, 10(2), 99-113.
- Khanom, F., Khanom, S., Selim, S., Rabbani, M. G., Uddin, M. M., & Ahmad, B. (2024). Assessment Of Income Diversification And Family Welfare: An Empirical Study Of Small-Scale Rice Farmers In Dinajpur District, Bangladesh. *Bangladesh Journal of Agricultural Economics*, 44(1&2),1-13.
- Kim, A. S., Shakory, S., Azad, A., Popovic, C., & Park, L. (2020). Understanding the impact of attendance and participation on academic achievement. *Scholarship of Teaching and Learning in Psychology*, 6(4), 272.
- Kirby, A. & McElroy, B. (2003). The effect of attendance on grade for first-year economics students in University College Cork. *The Economic and Social Review*, 34(3), 311–326.
- Lee, C. W., & Wong, S. F. (2022). GPA distribution and predictors of academic performance: A cross-sectional study of university students. *Educational Research Quarterly*, 46(1), 78-92. <https://doi.org/10.1080/01443410.2022.2069999>
- Litman, T. (2017). Transportation and land use impacts on urban mobility. *Victoria Transport Policy Institute*.
- Lukkarinen, A., Koivukangas, P., & Seppälä, T. (2016). Relationship between class attendance and student performance. *Procedia-Social and Behavioral Sciences*, 228, 341-347.
- Mallik, A. K. and Mishra, A. K. (2019). Interest rates forecasting and stress testing in India: a PCA-ARIMA approach. *Palgrave Communications*, 5(1), 1-17.
- Marburger, D. R. (2001). Absenteeism and undergraduate exam performance. *Journal of Economic Education*, 32(2), 99–109.
- Muir, T., Wang, I., Trimble, A., Mainsbridge, C., & Douglas, T. (2022). Using interactive online pedagogical approaches to promote student engagement. *Education Sciences*, 12(6), 415.
- Ogbuewu, I. P., Ukaegbu, F. C., Odoemelam, V. U., Ugwuoke, F. O., Echereobia, E. C., Okoli, I. C., & Iloeje, M. U. (2016). Studies on the diversity of medicinal plant species utilized for goat reproduction in Abia State Nigeria.
- Rahman, M., & Atikuzzaman, M. (2024). Social media-based copyright awareness and knowledge-sharing practices among university students in Bangladesh. *Information Services & Use*, (Preprint), 1-18.
- Revathy, K. S., & Praba, L. J. Familiarity, Knowledge, Attitude and Willingness towards Genetic Counselling among the South Indian Population.
- Rodgers, J. R. (2001). A panel-data study of the effect of student attendance on university performance. *Australian Journal of Education*, 45(3), 284-295.
- Sarker, B. K. (2020). The Impact of Class Attendance on Academic Performance of BBA Professional Students: An Observational Study. Available at SSRN 5255407.
- Shahjahan, M., Ahmed, K. R., Al Hadrami, A., Islam, M. R., Hossain, S., & Khan, M. S. (2021). Factors influencing poor academic performance among urban university students in Bangladesh. *International Journal of Evaluation and Research in Education*, 10(4), 1140-1148.
- Smith, J. A., & Jones, R. P. (2023). Determinants of academic success among college students. *Journal of Educational Psychology*, 115(3), 232-245. <https://doi.org/10.1037/edu0000530>
- Stanca, L. (2006). The effects of attendance on academic performance: Panel data evidence for introductory microeconomics. *Journal of Economic Education*, 37(3), 251–266.
- Stock, J. H., & Watson, M. W. (2015). Introduction to econometrics (3rd updated edition). Age (X3), 3(0.22).
- Tetrick, L. E., Da Silva, N., Slack, K. J., Etchegaray, J. M., Latting, J. K., Beck, M. H., & Jones, A. P. (2003). Is there a relationship between employee perceptions of organizational learning practices and employee performance?. *The Psychologist-Manager Journal*, 6(1), 104.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of higher education*, 68(6), 599-623.
- Wooldridge, J. M. (2016). Should instrumental variables be used as matching variables?. *Research in Economics*, 70(2), 232-237.
- Yamane T. (1967). *Statistics, An Introductory Analysis*. 2nd ed. New York: Harper and Row.
- Yeasmin, F., Kabir, M. S., & Hossain, M. S. (2025). Teaching Testing Nexus: Teachers' Perceptions and Practices at the Tertiary Level in Bangladesh. *Khulna University Studies*, 1-10.