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# **Factor Affecting Dropping out Students in Private University of Bangladesh**

Md. Moniruzzaman<sup>1</sup>, Giasuddin Ahmed<sup>2</sup>, Prabir Kumar Chakrabortty<sup>3</sup>, Shahanaz Akter Mim<sup>4</sup>

<sup>1</sup>Deputy Director (Finance & Accounts), Sonargaon University, Dhaka, Bangladesh.

<sup>2</sup>Deputy Controller of Examinations, Sonargaon University, Dhaka, Bangladesh.

<sup>3</sup>Assistant Professor, Department of Political Science, Narsingdi Government College, Bangladesh.

<sup>4</sup>Student, Department of Information Studies and Library Management, East West University Dhaka, Bangladesh.

Abstract: A instrument that is required for a country to gain its independence is education. It is an essential instrument that can reduce poverty. It plays a significant function and has a profound influence on every aspect of human life. Actually, a country's primary investment should be in education. The expansion of education in Bangladesh is being significantly aided by private universities. Many students are accepted into these universities each year. A damaging factor that has a significant impact on a country's development of human capital is university dropout. Many students, though, are unable to finish their graduation requirements. In a developing nation, the policymaker, administrator, and relevant authority do not adequately address university dropout. Additionally, they pay no attention to raising educational standards or reducing university dropout rates. A university dropout is someone who has stopped attending classes, and this situation is typically brought on by social, economic, political, and environmental causes. The major goal of this work was to undertake an in-depth investigation on the variables affecting undergraduate dropout rates in Bangladesh's private universities. A combination of quantitative and qualitative methodologies was utilized to accomplish the study's goals. To identify the elements that affect students' attrition from university programs, a dropout survey was created. 150 students who had dropped out were questioned about their motivations. They have been reached either directly or over the phone. The study's conclusions indicate that the personal income, financial difficulties, and job pressure came in second and third place, respectively, as the most significant reasons influencing student dropouts. This report also offers some suggestions for limiting this leakage based on the results of the investigation.

**Keywords:** Dropouts, Students, Private University.

#### 1. Introduction

Dropping out is typically defined as the withdrawal of students from school before completing their graduation degree and not pursuing any further education at a university level. Typically, dropping out occurs when students withdraw from school before completing their graduation degree and do not pursue any further

education at a university level. Student dropout encompasses the phenomenon of leaving school without fulfilling one's basic early and secondary education requirements. Undoubtedly, students' dropout poses a severe challenge for both developed and developing nations worldwide. In particular, developing countries face a disproportionately high dropout rate, even among children attending primary schools.

The indicator of an educational system's quality is dropout, which highlights significant failures in direction, transition, adaptation, and student promotion. The negative impact of dropouts is felt by individuals, universities, and socioeconomic status in Bangladesh. At the individual level, student dropout results in physical and psychological loss. Dropouts lead to depression due to inadequacy and self-doubt. Besides, students become aware of wasting their time, money, effort, and personal resources. At the university level, dropouts have significant economic and educational ramifications. Economically, more dropouts worsen the university's financial condition. From an academic perspective, dropout students indicate a red signal to the education system to provide convenient services for students. At the socioeconomic level, the effect of dropout students cannot be overlooked since university graduates provide notable influences with both returns to education and the real economic growth. Private universities face a significant challenge in preventing student attrition.

### 2. Literature Review

A comprehensive understanding of the multitude of variables that influence dropout rates in private universities is essential in reducing student attrition. The etiology of dropout rates in private universities is highly intricate and heavily influenced by a multitude of variables. Although numerous investigations have been conducted on the phenomenon of primary and secondary school dropout in Bangladesh, the issue at the undergraduate level remains an area that warrants further exploration. According to secondary sources, various programs and policies have been implemented in an attempt to combat this issue; however, the outcomes have not been favorable. Furthermore, the multifaceted factors that contribute to student dropout make it a particularly complex problem to address from primary to graduate levels. Consequently, directing attention to the dropout scenario at the university level in Bangladesh represents a novel perspective. Given the escalating number of public and private universities as well as the corresponding increase in student enrollment, it is imperative to concentrate on the issue of dropout at the graduation level and identify effective measures to prevent it.

In his 2012 research, Ruhul delves into the inquiry of the underlying causes behind students' withdrawal from the diploma engineering programs in the polytechnic institutes of Bangladesh. The research presents findings from a survey that was conducted to examine the root causes leading to student withdrawal at the said institutes. Additionally, the study highlights the reasons provided by both the teachers and the students who withdrew from the program, with the prominent factors being the frequent occurrence of student-led violence due to political involvement, and the perceived level of difficulty experienced by the students from the social and economic perspectives. Ultimately, the study concludes that the polytechnic environment appears to deter female students, who are not encouraged to pursue their academic ambitions in this setting.

Rashed, Rabiul, and Rabiul (2018) conducted a study aimed at investigating the factors that affect undergraduate dropouts in private universities in Bangladesh. The study utilized both quantitative and

qualitative methods to identify the factors that influence students' attrition from university programs. The study's results reveal that the primary factors that contribute to student dropouts include academic pressure, financial difficulties, and the decision to pursue overseas studies, which ranked second and third, respectively.

Islam and Pavel's (2011) study sought to ascertain the factors that lead to undergraduate student dropouts within the university. The study employed a combination of quantitative and qualitative techniques to carry out the research. The results revealed that the most significant contributing factor to student dropouts is academic pressure, followed by financial constraints and studying abroad.

Sarker and Hossin (2019) conducted an assessment of studies pertaining to pre-defined domains encompassing factors behind school dropouts, including but not limited to social, economic, political, and environmental determinants, initiatives undertaken by governmental entities, the academic study environment of schools, geographical variables, social norms and values, and expert opinions. The researchers meticulously selected only the most intricate articles for final analysis, and out of 151 research articles, a total of 57 were subjected to rigorous quality assessment.

Hijazi and Naqvi (2006) undertook a survey aimed at collecting data on the profiles of students. This included their attitude towards class attendance, time devoted to studies, the income level of parents, the age of the mother, and the mother's education. The research centered on private colleges and utilized multiple regression analysis to gauge the correlation between various factors affecting student performance. The study is a significant contribution to the literature as it illustrates the influence of these variables on student performance in a developing country such as Bangladesh.

The selection of variables in predicting dropout students is among the most crucial phases since the variable constitutes the primary construct in a study. The factors that impinge on dropout students vary from one country to another, as evidenced by prior research. Moreover, the variables that determine students' academic success or failure are multifarious. Consequently, the factors that influence dropout students are adapted to suit the country's prevailing conditions. Furthermore, in extant research, the factor that impacts dropout students does not emanate from direct feedback from the students who have dropped out, thereby necessitating the determination of the variables' accuracy. This study seeks to determine the factors that affect dropout students in Bangladesh, recognizing the importance of selecting variables in predicting these students. The primary source for determining the reasons for dropping out of university in this research is direct information from students who have dropped out, supplemented by validation from the public and stakeholders to fortify these reasons.

The third aspect is academic performance, which includes program study interest and grade point average (CGPA). Academic aptitude is one of the key elements in a student's ability to succeed in their studies. The CGPA is used to assess this academic capacity. Poor academic performance will lead to the student failing to complete the thesis or the class. Furthermore, it is implied that one of the factors that can predict student dropouts is CGPA. Other significant contributing factors to dropping out include an inability to adjust to the

program and a failure to choose a program that is in line with the student's interests. This leads one to the conclusion that one of the major factors affecting dropout students is interest in the study program.

The family's financial situation, including the parental income and marital status, comes in last. The number of dropouts in Indonesia is heavily influenced by economic considerations. If a student comes from a home where there is no financial support for them to continue their education, they will inevitably drop out of college because there are no fees or other ways to continue their education while working. Even though the student is looking while working, this will also have an affect on how concentrated he is during lectures and how difficult it is for him to manage his time.

This study's theoretical conclusion is that four factors, particularly those in Dhaka City, affect dropout rates at private universities in Bangladesh. These results can serve as a foundation for future studies aimed at forecasting dropout rates among students in Central Java, Indonesia. For policymakers to implement prepreventive measures, the first step is to identify the pupils who are expected to drop out or not.

The results of this study have various suggested educational implications, including:

- (1) University socialization is linked to factors that influence student dropout rates. In order to give the institution an initial justification and stop student dropouts, this socialization is essential.
- (2) They are enhancing the comfort level of the classroom setting to increase student interest in the courses they are taking. The rate may be influenced by the university's facilities, services, and learning environment.
- (3) We are enhancing the caliber of our human resources, particularly our academic supervisors and lecturers.
- (4) Give pupils plenty of incentive to pay attention in class and find creative ways to balance their time between work and school.
- (5) Offer assistance to students who have trouble learning or comprehending the subject matter.

## 3. Research Questions

The research questions are stated below:

- (a) What are the causes of student's dropouts in private university of Bangladesh especially Dhaka City?
- (b) What strategies may be used to combat student dropouts?

## 4. Research Hypothesis

This study defines the nature of drop out as dependent variables and the factors affecting the drop out as independent variables. The list of hypotheses is given below:

**Table – 1: Research Hypothesis** 

S. No.	Lists of the hypothesis						
1	H <sub>1</sub> : There is a positive relationship between the nature of dropout and						
	lack of management policy.						
2	H <sub>2</sub> : There is a positive relationship between the nature of dropout and						

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	delivery of instruction.
3	H <sub>3</sub> : There is a positive relationship between the nature of dropout and
	competition.
4	H <sub>4</sub> : There is a positive relationship between the nature of dropout and
	infrastructure scarcity.
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5	H <sub>5</sub> : There is a positive relationship between the nature of dropout and
	internal policy.
6	H <sub>6</sub> : There is a positive relationship between the nature of dropout and
	job mentality/job satisfaction.
7	H <sub>7</sub> : There is a positive relationship between the nature of dropout and
	lack of leadership.
8	H <sub>8</sub> : There is a positive relationship between the nature of dropout and
	students fee collection policy.
9	H <sub>9</sub> : There is a positive relationship between the nature of dropout and
10	quality assurance.
10	$H_{10}$ : There is a positive relationship between the nature of dropout and
	facilities.
11	H <sub>11</sub> : There is a positive relationship between the nature of dropout and
	hidden fee.
12	H <sub>12</sub> : There is a positive relationship between the nature of dropout and
	cultural program.
13	H <sub>13</sub> : There is a positive relationship between the nature of dropout and
	lack of extracurricular activities.
14	$H_{14}$ : There is a positive relationship between the nature of dropout and
	family disorder.
15	H <sub>15</sub> : There is a positive relationship between the nature of dropout and
13	inability to adapt oneself to the educational curriculum.
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16	$H_{16}$ : There is a positive relationship between the nature of dropout and
	lack of parental responsibility.
17	$H_{17}$ : There is a positive relationship between the nature of dropout and
	marital reasons.
18	H <sub>18</sub> : There is a positive relationship between the nature of dropout and
	personal depression.
19	H <sub>19</sub> : There is a positive relationship between the nature of dropout and
	not being able to adapt myself to the English version.
20	H <sub>20</sub> : There is a positive relationship between the nature of dropout and
	lack of proper counselling.
21	
21	H <sub>21</sub> : There is a positive relationship between the nature of dropout and

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	admission to university without preconceived notions of subject matter	
	and career.	
22	H <sub>22</sub> : There is a positive relationship between the nature of dropout and	
	not getting quality classes from teachers.	

### 5. Research Objectives

The goal of the study was to determine the main causes of undergraduate student abandonment. The research's precise goals are as follows:

- 1. To determine the main reasons why students fail to graduate due to academic, social, family, financial, employment-related, and personal reasons.
- 2. To determine the social impact of dropouts.
- 3. To offer suggestions for lowering the likelihood of high dropout rates.

The results of this study will be useful to policymakers in their efforts to reduce dropout rates in educational institutions. Additionally, this research would be useful for developing policies to improve the standard of education in our nation and advance economic development. The goal that any nation should strive towards is high-quality education. Where a sizable amount of the budget is devoted to education, it is thought that the nation will advance.

## 6. Research Methodology

The study was conducted with in five private university of Bangladesh, which situated in Dhaka city, these are Royal University of Dhaka, Fareast International University, Dhaka International University, Northern University of Bangladesh and Southeast University. In this study, 150 students were collected as a sample using simple random sampling method. The samples were collected purposefully in order to achieve the study's goals. Data were gathered using a standardized questionnaire from the samples. The university's faculty members play a significant role for reaching out the samples. Microsoft Excel and the Statistical Package for the Social Sciences (SPSS) were used to tabulate and analyze the data.

#### 7. Results and Discussion

The purpose of this study was to ascertain the factors that affect dropout students in private universities in Bangladesh, particularly those in Dhaka City. Research already done demonstrates that different countries experience different dropout rates due to different variables. Personal economics, which includes individual income and work position, is the first component. Significant factors in student dropouts include being too busy at work and not having enough time to finish college, especially if there is no firm commitment to finish their studies.

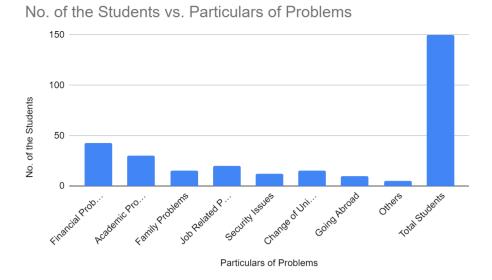
The use of questionnaires and indirect interviews are the two procedures done to get more in-depth data relating to the reasons why students drop out of university. There are two questions to be asked about the academic

program: the class schedule and the enrollment year. According to the survey's findings, regular classes account for the remaining 45% of dropouts and non-regular program classes for 55% of them. Then, when looking at the year of enrolment, 56% of students have a year of admission that is different from their year of university graduation, and the remaining students have a year of entry that matches their year of university graduation. Three issues related to social and economic considerations are covered. The first relates to the level of education of the parents, the second to their income, and the third to their kind of work. Among these three ideas, the respondents emphasize that parental support is crucial for pursuing higher education. When it comes to institutional issues, questions about study programs or fields of study are asked; 79% of dropout students are in the engineering sector, while a much smaller percentage are in the humanities, math, and natural sciences, as well as economics, social science, art, and education. The points for the academic performance element are based on CGPA. The CGPAs of dropout students range from 2.76 to 3.50 for 57%, 2.02 to 2.75 for 28%, and others for the remaining students.

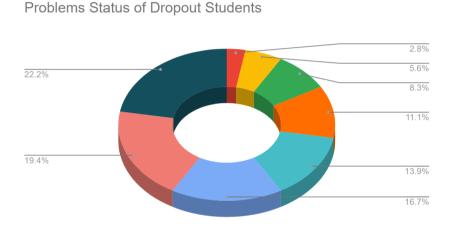
First on the list of personal factors is age: 49% of university dropouts were between the ages of 19 and 18; 40% were between the ages of 29 and 38; and others were older. The second element relates to gender; 82% of dropouts are men, and the remaining pupils are women. The third point is location; residence accounts for 50% of dropout students, followed by the city (16%), and other sources (14%).

The following aspects were noted: the caliber of the lecturers, the instructional environment, the evaluation process, and relationships with staff, lecturers, and academic supervisors. (1) The study of the questionnaire's results regarding the caliber of lecturers came to a conclusion of 75%, indicating that dropout students believe that lecturers who instruct during lectures are "competent";(2) learning facilities, with a conclusion of 70%, indicating that while attending lectures, students are satisfied with the learning facilities; (3) Learning climate: The analysis's finding is 71%, indicating that dropout students believe their academic environment "supports" learning; (4) evaluation system: 72% of respondents said that the assessment process used to determine students' grades was transparent; The analysis's final result, which is 75%, indicates that the responded has a good relationship with the staff, lecturers, and academic supervisors during the learning process.

Why the student dropped out was a key topic included in the questionnaire. The survey's findings reveal that: (1) 22% of students drop out due to financial problems, (2) 19.4% due to academic problems, (3) 16.7% due to family problems, (4) 13.9% due to job related problems, (5) 11.1% due to security issues, (6) 8.3% due to change of university, (7) 5.6% due to the going abroad, and (8) others; the remainder are ill or caring for both parents. Interviews with these dropout pupils will be the starting point for determining their specific causes.



**Figure - 1: Dropout Students (Author Constructed)** 



**Figure - 2: Problem Status (Author Constructed)** 

Students who work and study at the same time run a greater risk of failing. Individual full-time jobs that do not allow for study time, a lack of enthusiasm to finish courses, not having enough time to read the required readings, and study weariness all have an impact on the most important factor—readiness to learn. The findings of this investigation are also strengthened by the work of Pierrakeas et al. (2020). Pierrakeas identified a number of elements in relation to elements influencing dropout pupils. However, it is noted in Pierrakea's research that employment status is a crucial factor that influences students who drop out of school. Another finding was that students worked as a result of a lack of money, and that students with financial difficulties were impacted by individual income.

In addition to not sharing their time, researchers discovered that students were working because they had insufficient money; their individual income had an impact on those with financial difficulties. Individual kids' low incomes have an effect on their academic success as well. In terms of the student's finances, personal income is more significant than parental income. If the student is married, they talk about their income instead

of parental support. If they are single and unable to effectively handle their finances, this also has an impact on their academic performance.

Academic satisfaction, which includes student interactions with professors and supervisors and satisfaction with the caliber of lectures, is the second component. Lecturers need to be effective teachers in order to perform their tasks and responsibilities. The ability to teach is something that lecturers must possess. One aspect of designing an education program that must be taken into account is student satisfaction with academic services.

## **Factors Affecting Drop out Students**

The study reveals several factors which directly and indirectly affecting the drop out students are listed below:

- 1. Lack of management policy.
- 2. Delivery of instruction
- 3. Competition
- 4. Infrastructure scarcity
- 5. Internal policy
- 6. Job mentality/job satisfaction
- 7. Lack of leadership
- 8. Students fee collection policy
- 9. Quality assurance
- 10. Facilities
- 11. Hidden fee
- 12. Cultural program
- 13. Lack of extracurricular activities
- 14. Family disorder
- 15. Inability to adapt oneself to the educational curriculum
- 16. Lack of parental responsibility
- 17. Marital reasons
- 18. Personal depression
- 19. Not being able to adapt myself to the English version
- 20. Lack of proper counselling
- 21. Admission to university without preconceived notions of subject matter and career
- 22. Not getting quality classes from teachers.

Lack of management policy							
	Frequency Percent Valid Percent Cumulative Percent						
Valid	Yes	138	90.2	92.0	92.0		
	No	12	8.0	8.0	100.0		



**Total** 150 100.0 100.0

The study found that out of 150 respondents 138 respondents give the opinions that lack of management policy is a factor which affect the drop out of students in private university.

Table 3: Opinions of drop out students regarding delivery of instruction

Delivery of instruction						
Frequency Percent Valid Percent Cumulati Percent						
	Yes	136	90.7	90.7	90.7	
Valid	No	14	9.3	9.3	100.0	
	Total	150	100.0	100.0		

The study found that out of 150 respondents 136 respondents give the opinions that delivery of instruction is a factor which affect the drop out of students in private university.

Table 4: Opinions of drop out students regarding competition

Competition						
Frequency Percent Valid Percent Cumulati						
	Yes	112	74.7	74.7	74.7	
Valid	No	38	25.3	25.3	100.0	
	Total	150	100.0	100.0		

The study found that out of 150 respondents 112 respondents give the opinions that competition is a factor which affect the drop out of students in private university.

Table - 5: Opinions of drop out students regarding infrastructure scarcity

Infrastructure scarcity						
	Cumulative					
		Frequency	Percent	Valid Percent	Percent	
	Yes	120	80.0	80.0	80.0	
Valid	No	30	20.0	20.0	100.0	
	Total	150	100.0	100.0		

The study found that out of 150 respondents 120 respondents give the opinions that infrastructure scarcity is a factor which affect the drop out of students in private university.

Table - 6: Opinions of drop out students regarding internal policy

Internal policy							
Frequency Percent Valid Percent Cumulative Percent							
	Yes	130	86.7	86.7	86.7		
Valid	No	20	13.3	13.3	100.0		
	Total	150	100.0	100.0			

The study found that out of 150 respondents 130 respondents give the opinions that internal policy is a factor which affect the drop out of students in private university.

Table - 7: Opinions of drop out students regarding job satisfaction

Job mentality/job satisfaction						
Frequency Percent Valid Percent Cumulative Percent						
	Yes	100	66.7	66.7	66.7	
Valid	No	50	33.3	33.3	100.0	
	Total	150	100.0	100.0		

The study found that out of 150 respondents 100 respondents give the opinions that job satisfaction is a factor which affect the drop out of students in private university.

Table - 8: Opinions of drop out students regarding lack of leadership

Lack of leadership						
		Frequency	Percent	Valid Percent	Cumulative Percent	
	Yes	130	86.7	86.7	86.7	
Valid	No	20	13.3	13.3	100.0	
	Total	150	100.0	100.0		

The study found that out of 150 respondents 130 respondents give the opinions that lack of leadership is a factor which affect the drop out of students in private university.

Besides these, 130 respondents give the opinions that student fee collection policy is a factor which affect the drop out of students in private university.102 respondents give the opinions that quality assurance is a factor which affect the drop out of students in private university. 107 respondents give the opinions that facilities of the student is a factor which affect the drop out of students in private university.122 respondents give the opinions that hidden fee is a factor which affect the drop out of students in private university.118 respondents give the opinions that cultural program is a factor which affect the drop out of students in private university.102 respondents give the opinions that lack of extracurricular activity is a factor which affect the drop out of students in private university. Some student face family problems. So, 120 respondents give the opinions that family disorder is a factor which affect the drop out of students in private university. Some students do not adapt themselves to the educational curriculum and English version curriculum, as a result which affect drop out.140 respondents give the opinions that lack of parental responsibilities, martial responsibilities, personal depression, lack of proper counselling and preconceived notion of subject matter and career are important factors which affect the drop out of students in private university.115 respondents give the opinions that they do

not get quality class from the teacher. So, quality class from the teacher is a factor which affect the drop out of students in private university.

## 8. Recommendations

The authority should implement corrective actions like the following in order to control the worsening condition of student dropouts from private universities:

- 1. More faculty members should offer counseling hours to encourage students. In this situation, the faculty members may be given some incentives.
- 2. English remedial classes need to get started. A student won't be admitted to the mainstream of programs if they don't pass the remedial courses.
- 3. The waiver policy can be changed to benefit both gifted and disadvantaged children.
- 4. Students who excel but are unable to pay their tuition may be given campus jobs.
- 5. Donations might be sought from the various donor organizations to help the financially strapped pupils.
- 6. Both banks and other NGOs are able to manage student loans.
- 7. Study loans may be made available to help with costs.
- 8. The authority may grant significant scholarships to deserving but low-income pupils.
- 9. External influences on private universities that have a negative impact on the educational system should be eliminated.

## 9. Conclusion and Limitations

This study looks into the reasons why students leave their university early. It is obvious that there are many factors involved; there is no single cause for students to leave private universities. University dropout rates are a major issue that must be resolved. According to the study's findings, dropout students are influenced by four different factors: personal economic factors (such as income and employment status), academic satisfaction factors (such as relationships with lecturers and supervisors and satisfaction with the quality of their lectures), academic performance factors (such as GPA and program interest), and economic family factors (such as parental income and marital status). The findings of this study are important because they will serve as the foundation for future research on predicting and preventing student dropout.

There are a number of issues with this study that need to be discussed and are suggested for future study. Both qualitative and quantitative research techniques are used in this study. In order to identify the factors influencing dropout rates, a qualitative technique is employed. A quantitative approach is then used to validate the variables discovered and categorize the components. This study phase is thought to be highly difficult and drawn out. The drawback of this research is that dropout student interviews are still conducted in an indirect manner.

#### 10. The Next Steps

Researchers advise conducting direct interviews as part of future study. The stakeholder validation procedure's use of a questionnaire alone is another drawback. At this point, we advise adding these stakeholders to the interview process so they may offer feedback based on the circumstances at each university. Further,

research will be conducted on large scales to identify the reasons of dropouts. In future research, causes of students' dropouts can be controlled in special educational institution, and at university level, comparative analysis of causes of students' dropouts in public and private universities can also be conducted.

## References

- C. Pierrakeas, G. Koutsonikos, A.-D. Lipitakis, S. Kotsiantis, M. Xenos, and G. A. Gravvanis, "The variability of the reasons for student dropout in distance learning and the prediction of dropout-prone students," in Machine Learning Paradigms, M. Virvou, E. Alepis, G. Tsihrintzis, and L. Jain, Eds., pp. 91–111, Springer, Cham, 2020.
- Hijazi, S. T., & Naqvi, S. M. M. (2006). FACTORS AFFECTING STUDENTS'PERFORMANCE. Bangladesh e-journal of Sociology, 3(1).
- Islam, M. N., & Pavel, T. (2011). Factors contributing towards dropouts at undergraduate level: An analysis. ASA University Review, 5(1), 97-113.
- 1. J. M. Ortiz-Lozano, A. Rua-Vieites, P. Bilbao-Calabuig, and M. Casadesús-Fa, "University student retention: best time and data to identify undergraduate students at risk of drop- out," Innovations in Education and Teaching International, vol. 57, no. 1, pp. 74–85, 2020.
- Milon, M. R. K., Hossain, M. R., & Alam, M. R. (2018). Factors influencing on dropouts at undergraduate level in private universities of Bangladesh: A case study. Australasian Journal of Business, Social Science and Information Technology, 4(4), 177-188.
- Ruhul, Amin. (2012). Investigating the causes of students' dropout from the diploma engineering programs in the polytechnic institutes of Bangladesh.
- Sarker, M. N. I., Wu, M., & Hossin, M. A. (2019). Economic effect of school dropout in Bangladesh. International journal of information and education technology, 9(2), 136-142.
- N. Saukani and N. A. Ismail, "Identifying the components of social capital by categorical principal component analysis (CATPCA)," Social Indicators Research, vol. 141, pp. 631–655, 2019.