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FACTOR AFFECTING THE ACADEMIC PERFORMANCE OF UNIVERSITY STUDENTS: EVIDENCE FROM SYLHET

Abstract. This study tried to identify the factors that have effects on the academic performances of university students in the Sylhet Region. Student's perceptions were taken to determine the factors affecting academic performance. Independent t-test was used to find out the mean difference of academic results between two groups of students. Results showed that there is a significant difference between male and female students in the case of academic study time and CGPA; as the female students have higher CGPA than male students by utilizing most of the academic study time. To find out the effective factors, the result showed that students who attend class regularly, feel comparatively less academic stress, submit assignments in due time and spend more time for the academic study were found to have higher academic marks compared to others who do not. By assessing other factors, results showed the students coming from the nuclear family got good marks rather than the extended family. Besides, the students having sufficient access to healthy food, satisfied with the current accommodation level had good academic marks, and students who spent more time in unproductive activities got poor marks in academics. Improving these factors would also influence much of the academic success of students.

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Introduction

In this era of globalization, education is a primary need. Education gives us insight and also grooms the personality inside the students. Since the best quality graduates will become a leader in the future thus accountable for the country's economic and social development. So, for all sort development, we know that education is necessary and among them, formal institutional education is most important as the students are the main concern of the educational institutions and without them, these institutions will have no value at all (Saxton, 2000). Consequently, it is seen that the educational institutions contribute a lot to make out a good result from students by developing their system, teaching quality, and learning environment for the overall social and economic development of the country (Ali *et al.*, 2009). But the present scenario is a little different because it has become a great deal to give quality education to the students. As quality education depends upon many factors and complex circumstances and one of the first complex phenomena is that educational services are often intangible and hard to measure. Generally, education is in the form of knowledge, life skills, and behavior modifications of learners, and many studies identified socio-economic, psychological, and environmental factors as causative factors of academic performance (Tsinidou *et al.*, 2010; Hijazi *et al.*, 2006). Earlier in the mid-1980s, researchers primarily focused on finding out the variables which separated students on the academic performance and the factors for which student's academic performances became poor (McGavin, 1998). In some recent studies, findings showed that factors like class attendance, family income, parents' education level, teacher-student ratio, presence of the experienced teacher, gender of student, the distance of the school, Learning facilities, communication skills, and proper guidance from parents affect the performance of the students (Raychaudhuri *et al.*, 2010; Singh *et al.*, 2016). Some other studies held the view that student's performances are connected with regular access to library computer facilities, social structure, parent's contribution in their child's education (Furstenberg & Hughes, 1995; Young, 1999; Karemera, 2003). Frazier (2019) reported students who claimed that stress affects their performance had a lower GPA and had more stress and lower self-efficiency, tolerance, and social support. Gender was also found as a significant factor for the academic performance of the students as well as stress (Ghazvi *et al.*, 2011). Besides this health was also associated with the academic study. It was found that students with the most vulnerable health revealed a high possibility of failure and dropout (Shaw *et al.*, 2015). Although there is adequate literature, globally those identified the factors which significantly affect students' academic performance and the possible solution, but in Bangladesh, little research was found to address this issue. Besides this, there exist very few published documents that addressed the factors affecting the academic performance of university students. So, this study tries to determine the factors that affect university student's academic performances, especially in the Sylhet region.

Literature of Review

There are a series of factors that actually affect the quality of performance of students (Waters & Marzano, 2006). A series of variables are to be well-thought-out when identifying the affecting factors towards the eminence of academic success. Categorizing and identifying the most effective variables in the quality of academic performance is a very composite and challenging work. Theory of Educational Productivity by Walberg (1981) categorized three groups of nine factors created on affective, cognitive, and behavioral skills for optimization of learning that correlate to the quality of academic performance: Aptitude (ability, development, and motivation); instruction (amount and quality); environment (home, classroom, peers, and television) (Roberts, 2007).

Out of much affecting variable stress was identified mostly consequential factors and Sax (1997) specified that in general, the stress among the students of colleges is expressively higher than the stress measurable to non-enrolled individuals. Some researchers gave a specific point about stress. Like, extra pressure from assignment and study which is not realistic to their expectation plays an important role in stress. Moreover, uncertain job opportunities and ongoing educational life are mainly responsible for the stress of university students in Bangladesh (Antor *et al.*, 2020). The major stress variable has been identified as financial stress by (McGavin, 1998; Ross *et al.*, 1999; Woosley, 2003).

In the meantime, when researchers are trying to find the factors which affect the students' academic results, Chambers & Schreiber (2004) reported that there is a difference between the results of male and female with facing the same factors in educational institutions and as a matter of fact. The study conducted by Clark & Ramsay (1990) showed a significant negative relationship between age and academic achievement while other studies like McInnis *et al.*, (1995) have found that mature students, having a clearer career orientation and lower integration needs, are more likely to achieve higher academic results.

In some recent years, studies showed that there are both external and internal factors affecting students' academic performances such as student's competence in English, class test results, learning facilities, the environment of the class, the complexity of the course material, teacher's role in the class, the technology used in the class, extracurricular activities (Mushtaq & Khan, 2012). Work by Shah (2009) revealed that teacher's cooperation towards their students directly affects their academic success and Romer (1993) found that class attendance is also significantly affecting the students' academic grade.

Materials and Methods

This study was mainly conducted with the aspect of university students in the Sylhet region of Bangladesh. A multistage cluster sampling technique was used to collect data to fulfill the objectives of the study. Most of the questionnaires were filled up with face to face interviews in the university area and some of the others were collected through email and social media approaches. A total of 60 responses were taken and it was summarized in Microsoft Excel for analysis. For further analysis purposes, SPSS version 23 was used. The Independent Samples t-Test was employed to compare the means of two independent groups namely “Male” and “Female” in order to determine whether there is statistical evidence that the associated population means are significantly different. Lastly, the mean of student’s average mark percentages was compared with different factors and determined the factors affecting the academic performances of the students.

Results & Discussion

Independent t-test

In this segment, analysis is done to find out that if there was any significant difference between male and female students by using Independent t-test. The comparable facts are CGPA (Cumulative Grade Point Average), time spending for academic study, and the time spending in unproductive activities like using too much smartphone for unproductive purposes, too many hangouts, spending too much time on the internet and social media, etc. per day in an hour.

Table 1

Results of independent t-test

Variables	Gender	N	Mean	Std. Deviation	t-value
CGPA	Male	28	3.137	0.230	-3.134*
	Female	32	3.318	0.214	
Academic Study Time (Daily Hours)	Male	28	1.89	1.066	3.099*
	Female	32	3.09	1.873	
Time in Unproductive Activities (Daily Hours)	Male	28	5.46	3.383	-1.681
	Female	32	4.19	2.442	

Source: Author's Estimation, 2019

Table 1 shows that there were significant differences between the males and females CGPA and the time they spend in “Academic study” purpose in hours in a day. Significant difference was not observed between male and female students in terms of spending their time in unproductive activities. The findings of the study represented that the students average CGPA was 3.23 in Universities in the Sylhet region (Table 1). Similar findings were observed by Alam *et al.*, (2014) in Chittagong where they have

found that the average CGPA was 3.25 and gender had a significant relation with academic performance.

Determining the Factors

Educational Factors

The following Table 2 characterizes the educational factors which are somehow responsible for the changes in their academic performance in university. Students achieve marks as well as GPA (Grade point average) in each semester and after several semesters these GPAs' are converted finally into CGPA. For the simplification of the study, students' average marks from all semesters were taken for the analysis. In the beginning, Table 2 shows that class attendance is important for achieving good results because universities give marks on the basis per semester attendance. In Table 2, the result showed about 81.7% of students who attended the class regularly had an average of (63.47%) marks and on the other side who were irregular in the class got (59.55%) marks in the semesters. Feeling stressed for the academic study was an important factor because 93.3% of students claimed that they felt stressed for academic study and their marks were lower than the counterpart.

Table 2

Educational factor analysis

Factors	Opinions	Frequency	Percentages	Average Marks (in %)
Attending Class Regularly	Yes	49	81.7	63.47
	No	11	18.3	59.55
Feeling Stressed for Academic Study	Yes	56	93.3	62.59
	No	4	6.7	65.00
Submitting Practical, Assignments, Reports, Homework Regularly	Yes	56	93.3	63.04
	No	4	6.7	58.75
Spending Time for Academic Study Daily (Hour)	1-3(Hours)	45	75.4	61.11
	>4(Hours)	15	24.6	63.67

Source: Author's Estimation, 2019

The students who regularly submitted their practical, assignments, reports were getting higher marks (63.04%) than the students who did not submit regularly. Lastly, the students who utilized 1-3 hours for the academic study has a lower mark compared to students who studied more than 4 hours per day.

Other Factors

Besides, the educational factors, there are also some other factors that affect the academic results of the students. In Table 3, the first factor is access to healthy food and

the results showed that about 30% of students had good access to healthy food and their academic performance was higher than those who did not have.

Table 3

Different types of non-educational factor analysis

Factors	Opinions	Frequency	Percentages	Average Marks (in %)
Access to Healthy Food	Yes	18	30	64.44
	No	42	70	62.02
Accommodation Types	University hostel	47	78.3	62.23
	Home	11	18.3	64.09
	Others	2	3.3	67.50
Satisfaction with Current Accommodation	Yes	38	63.3	63.29
	No	22	36.7	61.82
Parents Are Educated Enough	Yes	45	75	64.00
	No	15	25	62.33
Family Types	Nuclear	46	76.7	63.48
	Extended	14	23.3	60.36
Facing Financial Crisis	Yes	26	43.3	63.24
	No	34	56.7	62.12
Daily Spending Times in Unproductive Activities (Hour)	1-4(Hours)	33	55.6	63.48
	5-9(Hours)	21	35.1	62.86
	>9(Hours)	6	9.3	58.33

Source: Author's Estimation, 2019

Students with different accommodations were found to have different mark percentages in the universities. Like the students, as result showed, who were living in the university hostels were getting (62.33%) marks in the exams and those who were living at home were getting higher (64.09%) marks in the exams. Other accommodations like private hostels, rented houses, and less messy and more organized living place's students were getting the highest mark percentages (67.50%) in the exam compared to others. Amongst the factors presented in Table 3 shows that 75% of those students did better in the exam whose parents were educated enough. Students from different types of families were getting different academic results as data showed about 76.7% of students from nuclear families got higher marks than the extended family students. Due to more members in the extended family, the study environment is not suitable as the nuclear family's students. Facing financial problems in university life is a common phenomenon and many students face this problem as a result they worked hard and studied more to get out of that situation fast and make a better future life. So, their financial crisis worked as a motivation. In Table 3, results showed that about 43.3% of student's marks were even better in those who had some extent of the financial crisis and that the average marks obtained by them were (63.24%). Instead in

some cases, the students having sufficient money and also more than sufficient money, they seemed not much serious about life sometimes in comparison to others and that's why the results came down. Lastly, the time spending in unproductive activities like hangouts, spending more time on the internet, overuse of social media, using too much smartphone for unnecessary purposes, playing games for a long time, and some other activities like these had a great impact on the student's academic performances. The result showed that 55.6% of students were spending 1-4 hours in these unproductive activities and their mark was (63.48%). At the same time, 35.1% of the students who spend up to 5-9 hours daily in doing unproductive activities have gained (62.86%) marks in the exams. The marks gradually decreased in the 3rd category and it was found that 9.3% of the students who were spending more than 9 hours' time in unproductive activities have gotten (58.33%) marks in the exams. So, it was observed that as the spending times in unproductive activities increase the results of the student decrease.

Conclusion

Nowadays modern techniques are introduced to educational systems but still now achieving the good academic performance of students would be a great challenge. Since there are some factors that play a vital role in academic performance and this study has tried to identify some of them. This study identified the significant differences between male and female students in the case of CGPA and average study time. The major findings of the study indicated that the students who attended class regularly got on average 4 marks higher than irregular students. About 93.3% of the students felt stress for their academic study which had a negative impact on their academic results. Besides this, the study also considered some other factors such as access to healthy food, accommodation type, family type, financial crisis, and spending time on unproductive activities. By analyzing those factors, this study got findings that the students who faced financial crises had on average 1 mark higher than others. On the other hand, satisfaction with accommodation and access to food and who came from the nuclear family had a positive relationship with academic performance. So, this study specified some social factors such as family type, educational factors like class attendance, and financial factors like financial crisis play a vital role in academic performance. So, proper emphasis should therefore be imposed on the social and educational factors in order to improve academic performance, which can form a well-educated nation.

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ФАКТОРИ, ЯКІ ВПЛИВАЮТЬ НА АКАДЕМІЧНУ ЕФЕКТИВНІСТЬ СТУДЕНТІВ УНІВЕРСИТЕТУ: ДОКАЗИ СІЛЬГЕТСЬКИЙ АГРАРНИЙ УНІВЕРСИТЕТ

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Анотація. У епоху глобалізації освіта є головною потребою. Освіта дає нам розуміння, а також вдосконалює особистість студентів. Оскільки випускники в майбутньому стануть лідерами, що відповідатимуть за економічний та соціальний розвиток країни, то для них необхідний високий рівень освітніх послуг: формальна інституційна освіта є найбільш важливою, оскільки студенти є головною проблемою навчальних закладів, а без них ці заклади не матимуть ніякої цінності. Отже, видно, що навчальні заклади багато роблять для того, щоб отримати хорошиий результат від студентів шляхом розвитку їх системи, якості викладання та навчального середовища для загального соціального та економічного розвитку країни.

Це дослідження намагалося виявити фактори, які впливають на успішність студентів університетів у регіоні Сілхет. Сприйняття студентів було взято для визначення факторів, що впливають на успішність. Незалежний t-тест був використаний для з'ясування середньої різниці академічних результатів між двома групами студентів. Результати показали, що існує значна різниця між студентами та студентками у випадку академічного часу навчання та CGPA; оскільки студентки мають вищий CGPA, ніж студенти, використовуючи більшу частину академічного навчального часу. Щоб з'ясувати ефективні фактори, результат показав, що студенти, які регулярно відвідують заняття, відчувають порівняно менше академічного стресу, своєчасно подають завдання та проводять більше часу для академічного навчання, мають вищі академічні оцінки порівняно з іншими, які цього не роблять. . Оцінивши інші фактори, результати показали, що студенти, які походять з нуклеарної сім'ї, отримали хороші оцінки, а не розширену сім'ю. Крім того, студенти, які мали достатній доступ до здорової їжі, задоволені нинішнім рівнем проживання, мали хороші академічні оцінки, а студенти, які проводили більше часу в непродуктивній діяльності, отримували погані оцінки в академічних закладах. Поліпшення цих факторів також вплине на значну частину академічного успіху студентів.

Ключові слова: академічний виступ; студент університету; регіон Сілхет; фактори, що впливають.