ABSTRACT

Determinants of students' performance have been the subject of ongoing debate among educators, academics, and policy makers. The objective of our study is determination of factors responsible for the unsatisfactory academic performance of the students of the University of Dhaka. The students of this university are the assets of the country and they are expected to be the leaders and manpower for the country who will lead the country's economic, social, and political development. Every year our government allocates a huge amount of budget to the university. So, as a developing nation our expectation from these students are huge. The students of the University of Dhaka have been doing well in the national and international arena. But many students cannot give output according to their merit and potential. It is expected that each and every students will do well in their academic performance and make a proper use of fund to which they are allocated.

In recent years, it has been seen that many students are getting poor CGPA, many of them are getting readmission in the same year and some cannot even get a graduation degree and are being dropped out from the university. This is a double loss for a developing country like ours. One is their merit and potential is not utilized for the country and the other is funding to them is resulted in a loss for the country.

Data were collected by a structured questionnaire. Questionnaire contained questions on socio-economic and demographic characteristics of the students, their residential status, college status, results, and political affiliation and about various factors interested in our study.

Data were collected from 200 students from the departments of the faculty mentioned before. We have used convenience sampling procedure leaving other sampling methods which would be more advantageous but required more time and fund. The questionnaire was filled by the respondents in the presence of the interviewers.

We have found that class attendance has a significant effect on the CGPA of the students. So, missing too many classes is one of the reasons for unsatisfactory academic performance. The students who do not intend to go to higher studies in their current discipline do not perform well. Students taking readmission in the current year cannot obtain good CGPA. Students come from rural area do better than the students lived in Dhaka. Students involved in share market obtain less CGPA than the students who are not involved in share market. Students‘ monthly income is negatively related with their CGPA. Time spent on internet has negative effect on the students' CGPA.

1.1 Introduction

The University of Dhaka is one of the leading institutions of higher education in Asia. This highly deemed institution is also known as Oxford of the East. The main purpose of the University is to create new areas of knowledge and disseminate this knowledge to the society through its students. Since its inception the University has a distinct character of having distinguished scholars as faculties who have enriched the global pool of knowledge by making notable contributions in the fields of teaching and research. While serving as the highest echelon of academic excellence, the University also functions as a central premise for free thought and democratic practices that would lead the nation to its march towards progress. The University of Dhaka is increasingly striving to combine the pursuit of knowledge and truth with the values and needs of an evolving society. At present the University consists of 13 Faculties, 66 Departments, 8 Institutes, 17 dormitories, 3 hostels and more than 35 Research Centers. The number of students and teachers is about 33,112 and 1,805 respectively. Presently the University enrolls more than 5,800 students, on merit basis, in the first year Honors Program in different Departments of the Faculties and the Institutes. Prospective students face a very competitive and tough exam to get a chance to get admitted in the University of Dhaka. Thus, every year only extra ordinary meritorious students get a chance to study here.

Students are main assets of universities. The students' performance (academic achievement) plays an important role in producing the best quality graduates who will become great leader and manpower for the country thus responsible for the country's economic and social development. The performance of students in universities should be a concern not only to the administrators and educators, but also to corporations in the labor market. Academic achievement is one of the main factors considered by the employer in recruiting workers especially the fresh

graduates. Thus, students have to place the greatest effort in their study to obtain a good grade in order to fulfill the employer's demand. Students' academic achievement is measured by the Cumulative Grade Point Average (CGPA). CGPA shows the overall students' academic performance where it considers the average of all examinations' grade for all semesters/years during the tenure in university.

The students of this university are the assets of the country and they are expected to be the leaders and manpower for the country who will lead the country's economic, social, and political development. Every year our government allocates a huge amount of budget to the university. So, as a developing nation our expectation from these students are huge. The students of the University of Dhaka have been doing well in the national and international arena. But many students cannot give output according to their merit and potential. It is expected that each and every students will do well in their academic performance and make a proper use of fund to which they are allocated.

In recent years, it has been seen that many students are getting poor CGPA, many of them are getting readmission in the same year and some cannot even get a graduation degree and are being dropped out from the university. This is a double loss for a developing country like ours. One is their merit and potential is not utilized for the country and the other is funding to them is resulted in a loss for the country.

There might be various reasons responsible for the bad academic performance of some students of the University of Dhaka. Since the admission of this university is very competitive, many students could not get admitted into their desired disciplines. After getting admitted here many students try somewhere else to get their desired disciplines of study. This may affect their academic performance. Some students are bound to study in a discipline which they do not like and have no

interest to go for higher studies. Beside this, sometimes career objective of many students does not require good knowledge of the subject may have negative impact on their academic performance. Apart from this, they are reading. This also may have negative influence on their result. Beside this, students are taking part in part time income activities. Some students provide tuition to school and college students. They are involved in share market. Students living in the dormitories have found many problems there. Also many students are involved in student politics, in which they have to spend time. Residential problems, student politics, family income of the students, tuition, involving in share market may have negative impact on their study.

Now-a-days students are getting addicted in social-networking and spend much time on internet. Many students are engaged in relationship and very often complicacy is raised in their relationship. These may have negative effect on their results. Another fact is that, in SSC & HSC students got Bangla as medium of education and in university they have to study in English. So, poor knowledge in English might create problem in university. Students from all over the country come to study in the university and they may face various problems to live Dhaka city as new comer.

So, many factors may be responsible for the unsatisfactory academic performance of the students of the University of Dhaka. And it is very important to detect the responsible factors. After detecting the factors, authority of the university can take steps to overcome the problem. It is expected that the implementation of the recommendation from the study will decrease the number of drop out students from the university and the number of students taking readmission in the same year and will help the students to increase their CGPA and also make the right use of government fund allocated to the university. Overall this research will help the

university to bring its previous glory back and build an intellectual society and efficient workforce for the country which will ease its way towards development.

1.2 Research Objective

The general objective of the study is to determine the factors which have negative impact on academic performance of the students of the University of Dhaka in order to improve the academic performance of all students by recommending appropriate interventions to the University authority.

1.3 Specific Objective

- Explore the socio-economic and demographic background of the students.
- To assess the students' interest towards their subject of study.
- To determine and assess the psychological factors which may have influence on the academic performance of the students.
- To assess the nature and impact of the part time income activities of the students on their academic performance.
- To compare the academic performance of the residential and non-residential students.
- To assess the influence of the student politics on the academic performance of the students.
- To recommend necessary actions to remove the negative influence of the responsible factors on the students' performance.

1.4 Research Hypothesis

- Students who want to go higher studies in their subject of study obtain higher CGPA than the students who do not want.
- Students who provide tuitions obtain lower CGPA than the students who do not.
- Students involving share market obtain less CGPA than those who are not involved in share market.
- Student politics have negative influence on the academic performance of the students.
- Disappointments after being failed to get admitted into the desired discipline have an impact on the students' performance.
- Family income has an effect of the performance of the students.
- The CGPA of the residential students and non-residential students may differ significantly.
- College status of the students has an effect on their CGPA.
- Efficiency in English of the students has an effect on their CGPA.

1.5 Literature Review

A similar type of study which was carried in United Arab Emirates University by Harb, Nasri and El-Shaarawi, Ahmed in July 2006. The heading of the study is **Factors Affecting Students' Performance.**

The aim of this study is to investigate the socio-economic characteristics of students of the College of Business and Economics-UAEU in relation to these students' performance and taking into account variables pertaining to the UAE Society. Besides the conventional factors, this study will investigate the effect of gender on students' performance especially that UAEU has different campuses for male and female students. Another factor to be investigated is whether living on campus has any role in determining students' performance. This factor interacts with gender since there exist strict rules on the female campus especially with regard to their movement in and out of the campus. Another factor that may affect students' performance is family size which differs significantly among different ethnic and economic sub-groups. On the other hand, since the language of instruction at the CBE is English, students' competence in English is included in their list of variables affecting students' performance.

They used regression analysis where the dependent variable was GPA of the students and the independent variables used in the regression were Number of students with private schooling, Number of students with science major in HS, Grade in English in HS, Grade in English in UGRU, Passed Challenge Exam, Employed Students, Students living with their family, Students living on campus, Father's education, Mother's education, Students with UAEU positive attitude, Attitude towards professors, Participation in class discussion, Number of missed lectures/course, Crowding of House Hold, Married students, Studying hrs/weekday,

Students with driving License, Hours for family Responsibilities, Number of maids, Students go to movies with friends. OLS estimator was used in this study.

This paper examined the factors that affect students' performance at the College of Business and Economics-UAE University. The results showed that the most important factor with positive effect on students' performance is student's competence in English and class participation. The results also show that the most important factors that have negative effect on students' performance are missing too many classes and credit hours achieved (progression of the students in his/her study plan). Finally, their analysis showed that non-national students outperform national students and female students outperform male students.

Another paper was titled: **Factors Affecting Students' Performance: a Case of Private Colleges** by **Syed Tahir Hijazi & S.M.M. Raza Naqvi.**

The most favorable thing about this paper is, this research was conducted in Pakistan, a developing country like Bangladesh, whereas, most of the other researches are done in developed countries. In their study they used multiple regression to find any relation between Student's performance and their expected affecting factors, which were: attendance in class, study hours, family income, mother's age, mother's education.

After studying the relation between student's performance and the proposed factors, they come in decision that, **educated mother can help their** children to improve and can keep proper check on their activities. Mothers' age also appeared to be important factor as young mothers can easily handle their children as compared to aged mothers. Attitude towards attendance is positive because regularity shows the effort and seriousness of student about his or her studies.

In case of family income, the given result showed that students belonging to more prosperous/affluent family do not give proper weight to studies although t- value shows inverse relation but this is very small that means it reflects the insignificance of affluence i.e. affluence cannot make a student serious about his studies or if a student wants to study then affluence is not a prerequisite. But still it requires more research to explain this phenomenon. Student s' attitude towards time allocation for study per day show there is a negative relation. It means more study hours are not significant as far as student performance is concerned. It may depend on intelligence level, intellect, memory or method of learning of the student although this value is very small yet it reflects the effect of personal characteristics of student. Further research is required to explore this relation.

Similar research was conducted by **Antonia Lozano Diaz** and was titled as: **Personal, family and academic factors affecting low achievement in secondary school.**

The general objective of this study is to find evidence of the influence of a set of diverse variables on school failure. They proposed the following: 1) see to what extent the different variables are interrelated and influence and explain scholastic failures; 2) try to establish the differential influence that each variable may present on scholastic failure.

Hypotheses were: 1) personal variables (age), academic variables (grade level), and family variables (parent's level of education) together with affective –motivational variables, taken jointly, must be able to predict school failure to a greater extent than they can individually.

2) Personal variables (age), academic variables (grade level), and family variables (parent's level of education) must be able to predict the affective –motivational level of the student.

3) Personal variables (age), academic variables (grade level), and family variables (parent's level of education) must affect the student's academic performance as well as his affective –motivational level.

4) The affective –motivational variables should affect the level of student performance.

In order to perform data collection two measuring instruments were used: an adaptation of the TAMAI questionnaire and a measure of scholastic failure. The "Self-assessing Multi-factorial Test of Childhood Adaptation "TAMAI, was used to evaluate the student's level of personal, social, academic, and family adaptation. In case of measuring academic failure, the number of school years repeated was used as a criterion, classified thus: 0 school years repeated, 1school years repeated, 2 school years repeated.

In this study the researchers used two types of variables: selection and questionnaire, even though both allude to: personal variables (age, gender, academic – self concept, locus of control, classroom behavior, perceived acceptance, affective assessment), family variables (parent's education level, relationships with parents and adults, family interest), and academic variables (number of school years repeated, grade level, secondary school, group social relationships in class, friendship relations, future expectations, relationships with teachers, academic assessment)

In order to demonstrate 1st two hypotheses, a multiple regression was carried out, while for the remaining hypotheses ANOVA and MANOVA were carried out.

Result shows that, 34% of the variation in the performance is due to personal variables such as, age, academic self-concept, and the locus of control,; academic

variables such as, grade level, social relationships in class, and friendship relations; and family variables such as, father's level of studies, and relationships with parents and adults.

The ANOVA with the factor age showed the expected effect that the older students showed the highest failure index. The MANOVA on affective-motivational aspects verifies the explicative ability of age in the variation of scores for Academic environment, academic motivation and social support. With the relation to gender, the fact is clear that women perform better than men, although this factor does not differentially influence the variance of affective motivational factors.

ANOVA carried out with the level of father's education and mother's education sharpens the results obtained from the regression analysis. Again the level of father's studies is able to explain the variation in performance and in academic motivation, while the level of mother's studies is only able to explain the variation in academic motivation.

ANOVA on the factors Secondary school and group and cycle, show different levels of interaction with performance and the affective motivational aspects. The last ANOVA carried out for the last hypothesis showed that the variable with the most explicative ability of the performance variance is Academic motivation, whose level decreases as performance decreases.

Thus the future lines of this research should explore more deeply and more specifically the way in which variables like the type of goals pursued by the students, his or her personality characteristics, class organization, peer group pressure, teacher personality and style, etc. influence the evaluation and the type of affective motivational characteristics that the students are acquiring throughout

their journey through the educational system and the repercussions of all that in the student's final performance and therefore in his or her potential academic failure.

Laura P. Womble of the University of North Carolina at Charlotte conducted a research which provides some light of interest in our research. Her research title was: **IMPACT OF STRESS FACTORS ON COLLEGE STUDENTS ACADEMIC PERFORMANCE.** College students have many obstacles to overcome in order to achieve their optimal academic performance. It takes a lot more than just studying to achieve a successful college career. Different factors such as time management, financial problems, sleep deprivation, social activities, and for some students even having children, can all pose their own threat to a student's academic performance.

Twenty-five undergraduate students at the University of North Carolina at Charlotte were asked to complete a survey. The purpose of this study was to detect if there is a correlation between the stress that students perceive that they are under, and their GPA's. Given that students may not be under the same amount of stress every single semester, the survey is designed to be answered as it pertained to them the previous semester of school. If the hypothesis is correct, there will be a negative correlation between the amount of stress perceived by the student and that student's GPA that same semester at school. To add another factor to the stress that a student perceives, the researcher wanted to find out what the three main reasons they perceive themselves to be under either a lot of stress, or little at all.

In order to evaluate the amount of stress that students perceive to be under, he used the Perceived Stress Scale. Students were asked to report data about themselves to control for extraneous variables. Questions were asked such as their genders, ages, and races. Students were also asked to answer questions about their course load, and class standing which is the demographic data sheet. Finally the

students were asked to read a list of possible stress factors, for example not getting enough sleep, and rank them in order of importance.

A correlation was run on the scores from the Perceived Stress Scale and the student's GPA. The results showed that the stress the surveyed students were under was not significantly correlated with the student's GPA, $r = -.030$, $p = .885$. The qualitative data was "eyeballed" to see in what order the students ranked their stress factors. Not getting enough sleep ranked number 1 with 12 students, followed by having problems with roommates, and social activities tied for number 2 with 8 responses. Lastly, working a part-time job came in at number 3 with 7 responses, close to the number 2 spot.

The purpose of this study was to examine the correlation between students' amounts of perceived stress in a given semester and their GPA's. The present study was unable to show a significant correlation between the two factors. There could be many reasons for these findings. The small amount of surveys that were collected may not have been a great enough number to examine the correlation closely. The student's themselves could have in some way served as an extraneous variable, with a great deal of them having problems remembering the courses that they during in the last semester. The grades that they reported may not have been completely accurate. The fact that the students had a hard time referring to their thoughts and feelings that previous semester may have also affected their stress scale score. Another limitation of this study was the fact that a majority of students were clueless about the grades that they received the prior semester, much less they knew about the classes they even took.

This study was unable to show a correlation between a student's amount of perceived stress, and that student's academic performance, measured by GPA,

though prior research showed there was a connection between the two. Some data suggested that those factors reviewed in the literature, like sleep and work, do somewhat contribute to a student's academic performance.

Another research was conducted by Norhidayah Ali et.al. They conducted a study to identify factors that affects students' performance at Diploma level in UITM Kedah. Their study was titled as: **The Factors Influencing Students' Performance at Universiti Teknologi MARA Kedah, Malaysia**. The purpose of the study was to explore and to identify the factors affecting students' performance. The researchers found that there are five factors influencing students' performance. They are demographic, student attendance, active learning, involvement in extracurricular activities, and course assessment. Students' CGPA was used as measurement scale of students' performance.

The data is analyzed using descriptive analysis, factor analysis and reliability testing. The data analysis is divided into two sections. In section 1, analysis of profiles and demographic variables are done. And in section 2, analysis of relationship of students' performance and active learning, involvement in extracurricular activities, peer influence and course assessment is conducted. They used Pearson's correlation coefficient to examine the relationships between the factors and students' performance. After the analysis they found demographic, student attendance, active learning and involvement in extracurricular activities are positively related with students' CGPA. And course assessment has shown negative relationship with students' CGPA.

Dr. Craig Applegate & Dr. Anne Daly conducted a research, which is titled as: **The Impact of Paid Work on the Academic Performance of Students: A Case Study from the University Of Canberra.** The main aim of their research was to examine

whether there is any affect of paid work on students' performance. Here they used secondary data collected from a survey of students at the University of Canberra.

Their results show that those who do well at school also do well at university and that additional study time also contributes to higher grades. Doing some paid employment actually helps grades, perhaps by encouraging good time management skills. But paid employment for long hours per week has a small but negative effect on average marks for a full-time student. The research also showed that other commitments have some negative impact on the ability of students to access the library and academic staff members. Students may now gain less from their university experience than students in the past and the stress involved in time management may reduce the general levels of satisfaction with their lives. Their results are consistent with other studies of the relationship between paid employment and university grades and suggest that a negative effect is not evident unless students are working more than 20 hours per week during term time.

Dr. Gazi Mahbubul Alam and Dr. Mirza Mohammad Shahjamal conducted a research about the effects of student politics at 2008. Their research title was: **Student Politics in Bangladesh: An Impact on Quality Assurance in Education and National Development.**

Then they discussed the historical background and the present situation of Bangladeshi student politics. From this discussion they concluded that at present Bangladeshi student politics is an activity guided by and guided for the national political parties' competition, interests and outlook. Therefore, to examine these issues, further investigation is conducted in order to find answers of the following research question: i. Why are students involved in politics? ii. **What are the disadvantages for students involved in politics?** iii. What are the advantages for

students involved in politics? iv. How can students be encouraged not to join in "nefarious party politics"?

In this research, qualitative methods of data collection were used. The researchers chose semi-structured telephone interviews and email questionnaires. They also reviewed some documents to collect some data. In their research, the observation was conducted through checklist and non-checklist method. In some extent, the observation was very challenging and risky thus they had to stay with the so called 'cadres'.

In this study, students studying at Dhaka College, Dhaka University and some other institutes which are currently experiencing a high volume of student politics were chosen as respondents. They also had some respondents who are from private Higher Education institutes where no student politics exists. And also a lecturer and a principal, who had teaching experience at both types of institutes. For confidentiality they labeled the respondents as R1 to R12.

From their interviews of the respondents they found the following sad truth. Each hall is controlled and occupied by one political party. Therefore, student leaders often offer newcomers accommodation on condition they will join their political party. Newcomers often had to join politics just because their family background does not allow them to afford private accommodation.

It is quite implausible for higher education institutes to perform their regular activities in political unrest. Student organizations often fight each other to establish their parties' authority within the campus and surroundings. It is now common for higher education institutes to be closed for the strikes caused by student politics.

So, from this research it is evident that student politics is being harmful for our nation day by day as well as for the students who are being bound to join 'party politics'. It is also very clear that students are not being able to perform in the educational sector for the ongoing unrest in other sectors of their lives, which is without any doubt is mainly caused by 'nefarious student politics'. As such, Bangladesh urgently needs a united strong political commitment; otherwise there is no hope of achieving an appropriate higher education atmosphere.

2 Methodology

The research is conducted on the students of the University of Dhaka. The University of Dhaka has 13 faculties, 66 departments, 8 institutes, 17 dormitories, 3 hostels. We collected data from the departments of some of the faculties and institutes. The faculties are the Faculty of Science, Faculty of Biological Sciences, Faculty of Engineering and Technology, Faculty of Pharmacy, Faculty of Earth and Environmental sciences and the Institute of Statistical Research and Training Centre. The rationale behind collecting data from the departments of these faculties is that in the departments we get both residential and non-residential students as well as both male and female students whom we cannot get from the dormitories altogether. And the reason behind collecting data from some of the selected Faculties and institutes is that the departments in the mentioned faculties have similar examination system. Final examination is taken each year and students have to complete 4-years for their graduation. On the other hand, departments in the faculties and institutes not mentioned above have six-month semester where final examination is taken in every six-month and students have to complete 8-semisters for their graduation. We suspected that the effect of different examination system may be confounded with the effect of interested factors on the CGPA of the students. Since the time is very limited for the study so for simplicity of analysis we took the departments having similar examination system in our sample.

Data were collected by a structured questionnaire. Questionnaire contained questions on socio-economic and demographic characteristics of the students, their residential status, college status, results, political affiliation and about various factors interested in our study.

Data were collected from 200 students from the departments of the faculty mentioned before. We have used convenience sampling procedure leaving other sampling methods which would be more advantageous but required more time and fund. The questionnaire was filled by the respondents in the presence of the interviewers.

Our selected departments for data are located in Curzon Hall, Qazi Motahar Hossain Bhaban and Mokarram Bhaban. We made 5 teams each consists of 3 members for the data collection. 3 teams covered the departments in the Curzon Hall and 2 teams covered the departments in the Qazi Motahar Hossain Bhaban and Mokarram Bhaban.

After the data collection, data are edited and coded. The list of variables with coding is provided with the appendix.

The statistical analysis has been conducted in accordance with the objective of the survey. The sample overview is presented by using simple descriptive statistics, cross tables, simple bar charts and component bar charts.

To measure the influence of our interested factors on the CGPA of the students, we have used multiple linear regressions where the dependent variable is CGPA of the students and explanatory variables are the various factors interested in the study. Qualitative explanatory variables are treated by using dummy variable technique. We have used ordinary least square estimate of the regression parameters and appropriate statistical test to measure the significance of the parameters. Results and findings have been interpreted in accordance with the objective of the survey.

3 Sample Overview & Data Analysis

3.1 Univariate Analysis

From the collected data we performed univariate analysis of some important variables. Here we have used some pie charts and some bar diagrams to present the collected data.

3.1.1 Family Income

Table 3.1.1: Frequency distribution of respondents' family income category

Family Income Categories	No. of Respondents in Each Category	Percentage of Respondents in Each Category	Cumulative % of Respondents in Each Category
Less than 10000	56	28	28
10001 to 20000	56	28	56
20001 to 30000	50	25	81
30001 to 40000	18	9	90
40001 to 50000	9	4.5	94.5
More than 50000	11	5.5	100

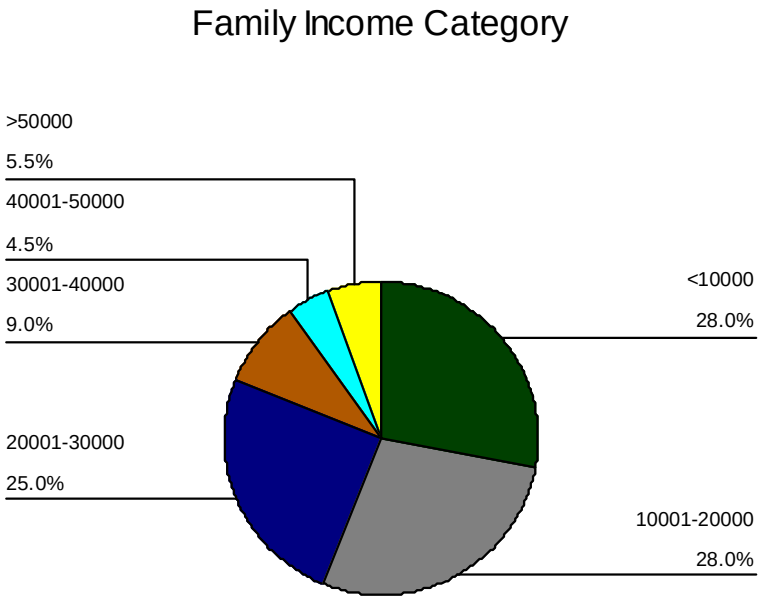

Fig 3.1.1: Pie chart of family income.

From the table and the pie chart we can see that, 56% respondents come from families with monthly income less than 20000. These respondents may be categorized as from lower middle class economic background. 25% respondents are from families with monthly income 20001 to 30000. 9% respondents from 30001 to 40000 and the remaining 10% come from families having monthly income more than 40000.

3.1.2 Academic result

Table 3.1.2: Frequency distribution of respondents' academic result

Letter Grade	No. of Respondents in Each Grade	% of Respondents in Each Grade	Cumulative % of Respondents in Each Grade
A	24	12	12
A-	52	26	38
B+	51	25.5	63.5
B	43	21.5	85
B-	17	8.5	93.5
C+	9	4.5	98
C	4	2	100
Total	200	100	

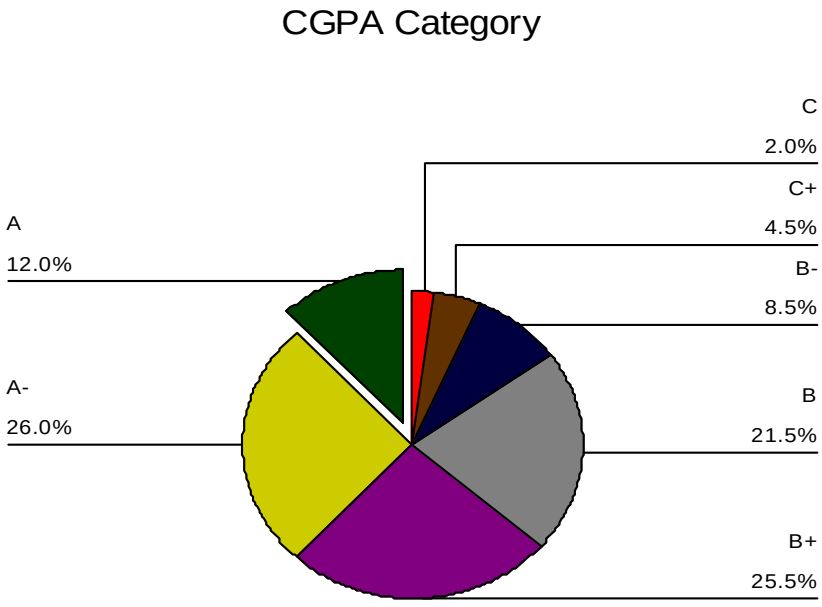

Fig 3.1.2: Pie chart of respondents' CGPA.

From the Pie chart we can see that, almost 73% respondents achieved grades B to A-. Only 12% achieved A, and there are no A+. It should be noted that, a large number of respondents achieved letter grade below B+, which is more average than good.

3.1.3 Class Attendance

Table 3.1.3: Frequency distribution of respondents' class attendance

Class Attendance Categories	No. of Respondents in Each Category	% of Respondents in Each Category	Cumulative % of Respondents in Each Category
More than 95%	51	25.5	25.5
90% to 94%	57	28.5	54
85% to 89%	59	29.5	83.5
80% to 84%	20	10	93.5
75% to 79%	8	4	97.5
70% to 74%	3	1.5	99
Less than 70%	2	1	100
Total	200	100	

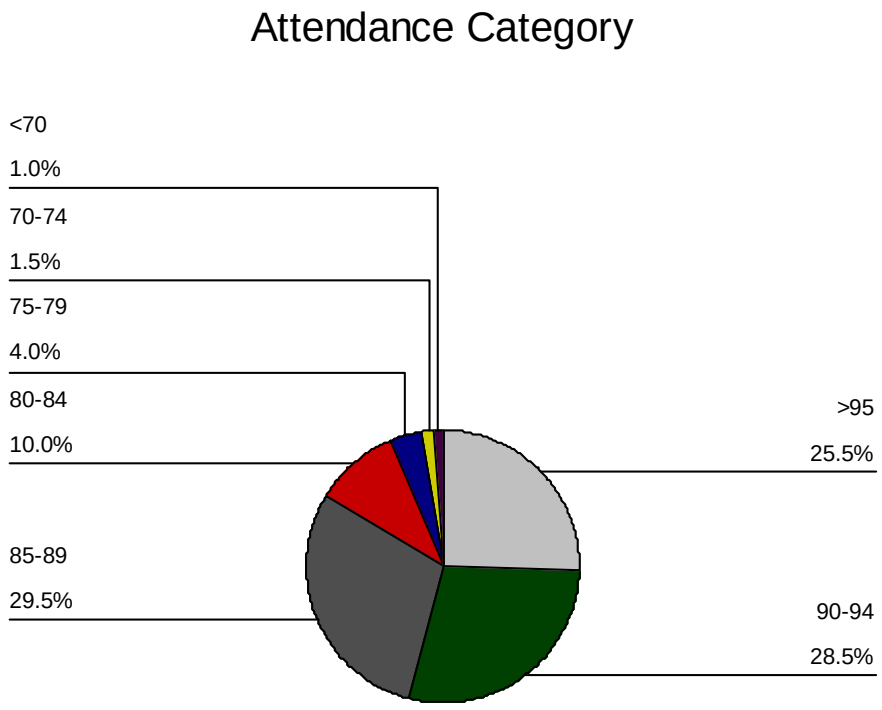

Fig 3.1.3: Pie chart of respondents' class attendance.

Most of the respondents (83.5%) have class attendance above 85 %. Among them 25.5% respondents have above 95% attendance. Only 2.5% respondents have less than 75% attendance.

3.1.4 Respondents Study Hour

Table 3.1.4: Frequency Distribution of respondents' study hour

Respondents Study Hour	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Less than 10 hrs	81	40.5	40.5
10 hrs to 20 hrs	54	27	67.5
20 hrs to 30 hrs	27	13.5	81
30 hrs to 40 hrs	12	6	87
More than 40 hrs	26	13	100
Total	200	100	

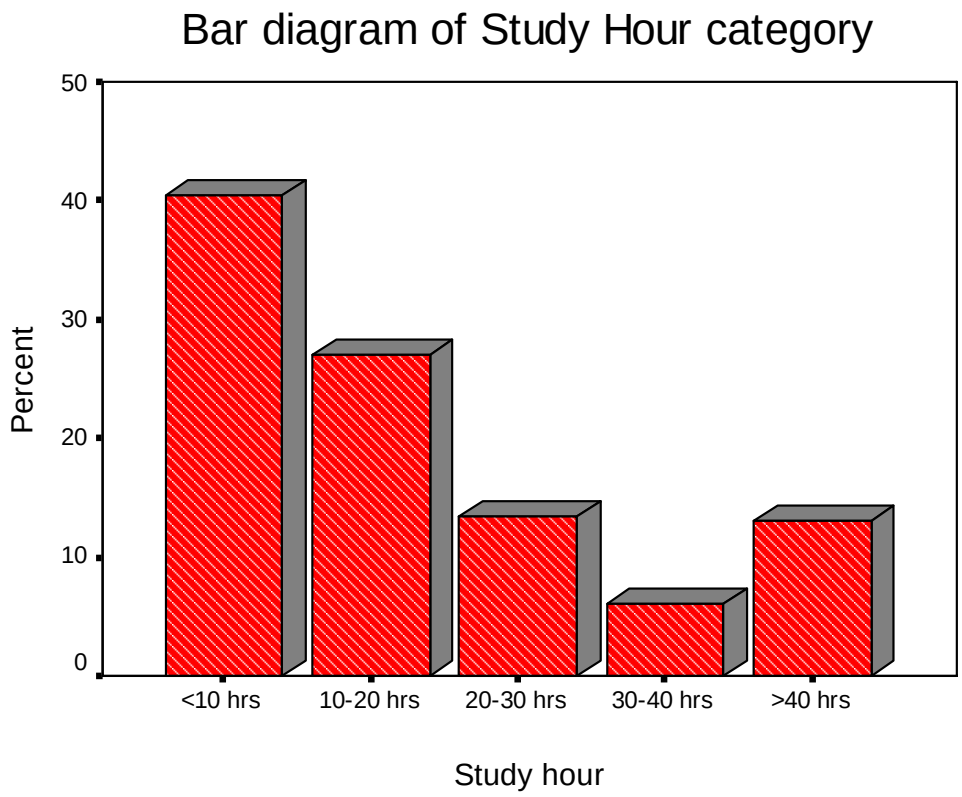

Fig 3.1.4: Bar diagram of respondents' study hours.

40% respondents study less than 10 hours per week. This might be a major cause of bad performance in examinations. 32.5% respondents study more than 20 hours per week. Among them, only 13% respondents study more than 40 hours a week.

3.1.5 Respondents Re-admission Status

Table 3.1.5: Frequency distribution of respondents' admission status

Re-admission	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Yes	40	20	20
No	160	80	100
Total	200	100	

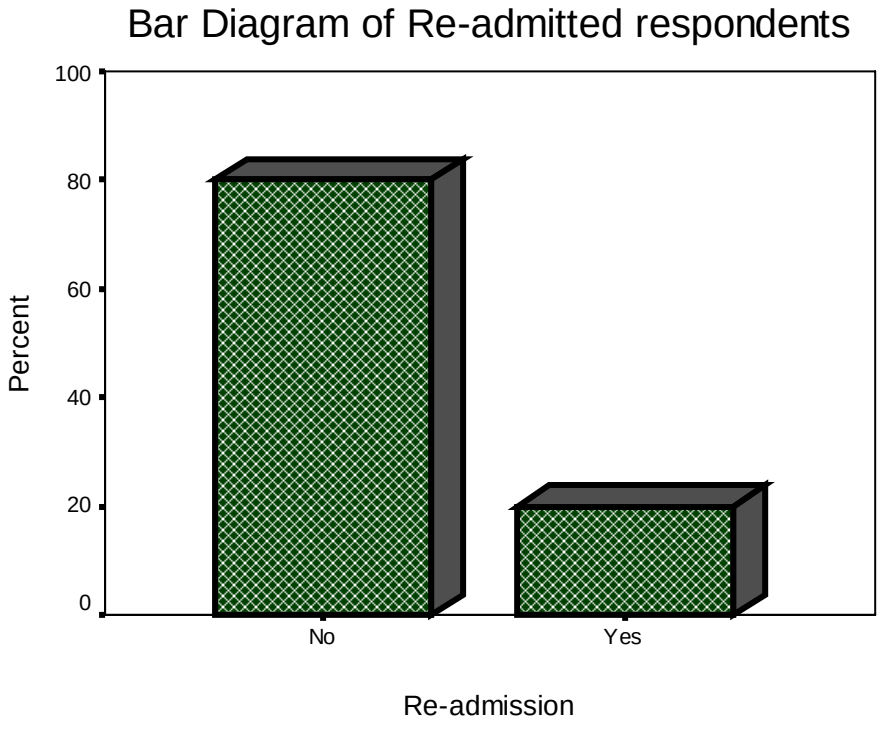

Fig 3.1.5: Bar diagram of respondents' admission status.

20% of the respondents have taken re-admission in one or more years. May be this is because of their poor results in those years.

3.1.6 Respondents' disappointment status

Table 3.1.6: Frequency distribution of respondents' mental disappointment

Disappointed	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Yes	79	39.5	39.5
No	121	60.5	100
Total	200	100	

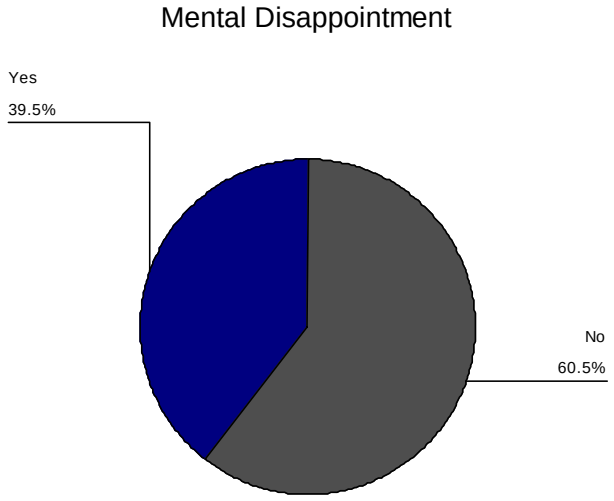

Fig 3.1.6: Respondents' mental disappointment status.

It is ironic that almost 40% respondents were not happy about their subject allocation. This could be another major cause of bad performance in examinations.

3.1.7 Respondents' who tried in other places

Table 3.1.7: Frequency Distribution of respondents' who tried in other places

Tried in other places	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Yes	53	26.5	26.5
No	147	73.5	100
Total	200	100	

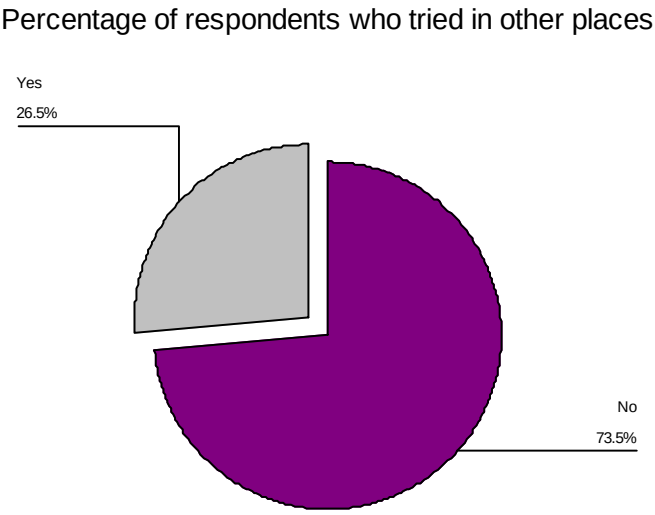

Fig 3.1.7: Pie chart of respondents' who tried in other places.

26.5% of the respondents tried in other institutions after getting admitted in their respective subjects. The rest of the respondents were either happy with their current subject, or lost enthusiasm to try somewhere else.

3.1.8 Respondents' who are interested in higher studies

Table 3.1.8: Frequency distribution of respondents' interested in higher studies

Higher Studies	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Yes	145	72.5	27.5
No	55	27.5	100
Total	200	100	

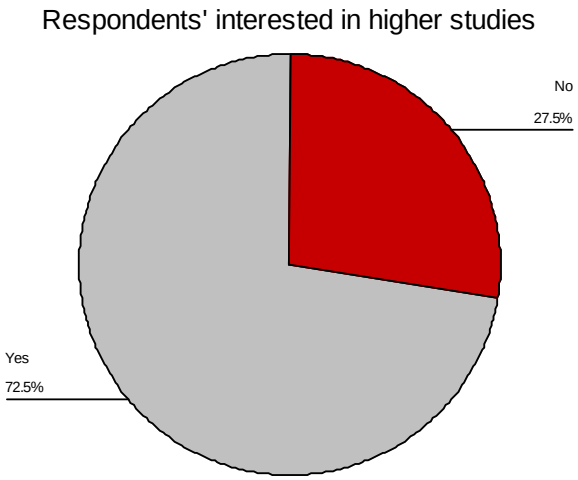

Fig 3.1.8: Pie chart of respondents' who are interested in higher studies.

72.5% of the respondents are interested in higher studies in their respective subjects.

3.1.9 Career Objective

Table 3.1.9: Frequency distribution of respondents' career objective

Career Objectives	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Yes	142	71	71
No	58	29	100
Total	200	100	

Fig 3.1.9: Pie chart of respondents' opinion about their career.

About 29% of the respondents think that a good knowledge of their subject is not required for their career objective. This opinion must have some effects on their seriousness about their study.

3.1.10 Respondents' college status

Table 3.1.10: Frequency distribution of respondents' college status

College status	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Inside Dhaka	103	51.5	51.5
Urban but Outside Dhaka	85	42.5	94
Rural	12	6	100
Total	200	100	

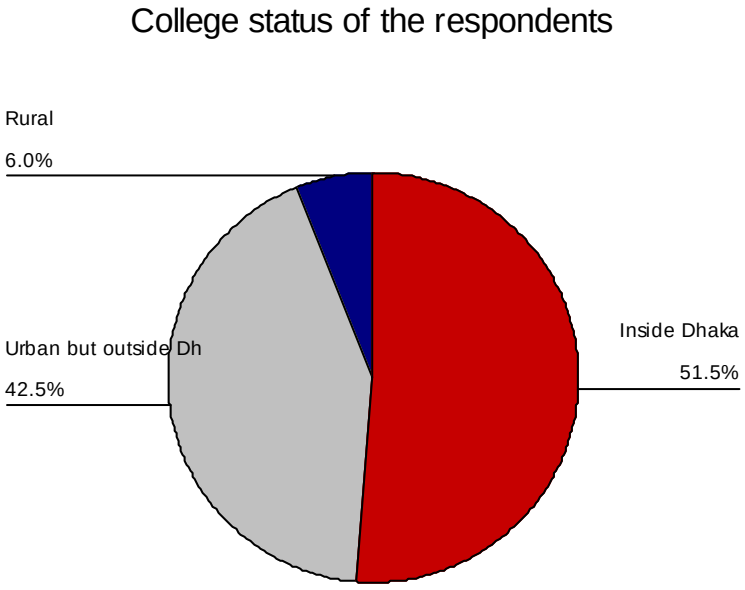

Fig 3.1.10: Pie chart of respondents' college status.

More than 50% of the respondents come from colleges inside Dhaka city. 42.5% respondents come from colleges in urban areas but outside Dhaka city. And 6% of the respondents are from rural areas.

3.1.11 Residential Status

Table 3.1.11: Frequency distribution of respondents' residential status

Respondents Residential Status	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
In Hall	112	56	56
With Family	78	39	95
With Relatives	3	1.5	96.5
In Mess	7	3.5	100
Total	200	100	

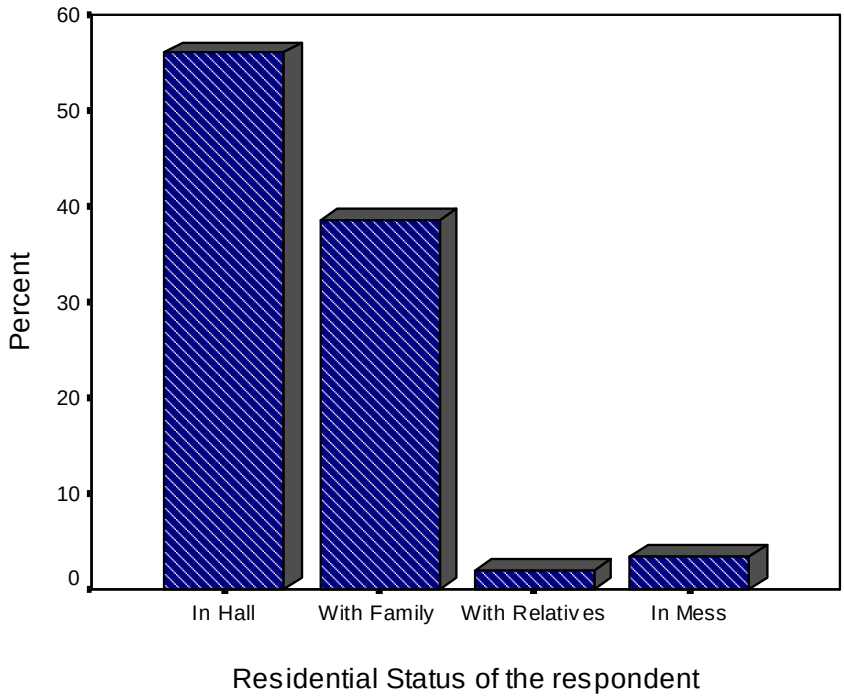

Fig 3.1.11: Bar chart of the variable "residential Status of the respondent."

Here 56%students stay in hall, 39%students live with their family, 1.5%lives with their relatives, in mess 3.5% and we can see that out of 200 students 112are in hall, 78are with their family and 3 are with their relatives and 7 are in mess and one person does not response in this question.

3.1.12 Tuition providing status

Table 3.1.12: Frequency distribution of respondents' tuition providing status

Provide Tuition	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Yes	128	64	64
No	72	36	100
Total	200	100	

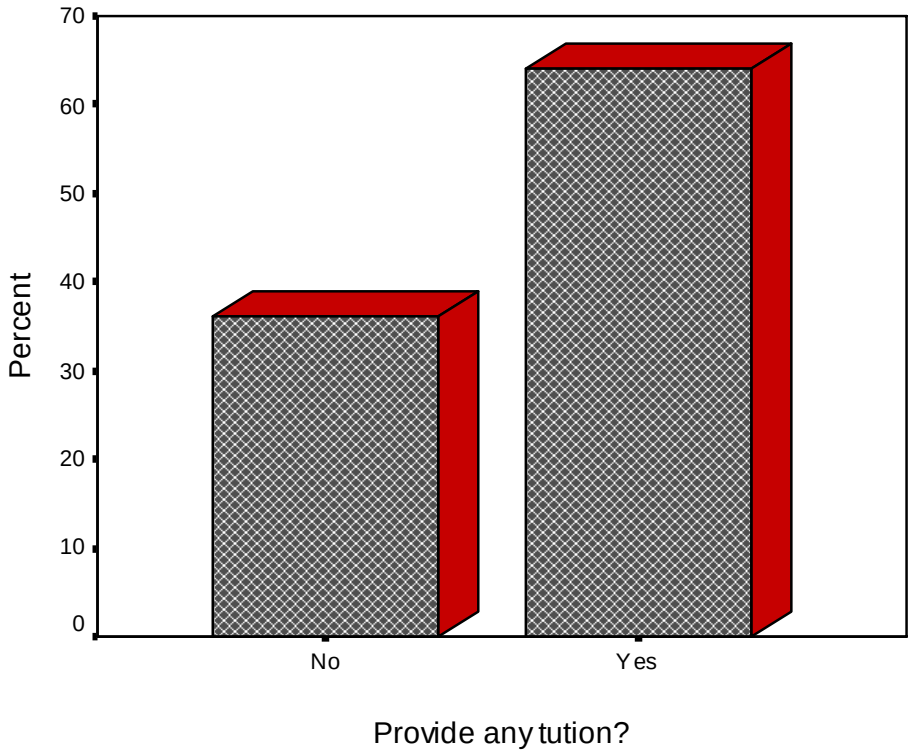

Fig 3.1.12: Bar chart of respondents' tuition providing status.

Here 36% students don't provide any tuition but 64%students provide tuition. From 200 students 72 students don't provide tuition but 128 students provide tuition.

3.1.13 Share investment status

Table 3.1.13: Frequency distribution of respondents' share investment status

Share Investment	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Yes	28	14	14
No	172	86	100
Total	200	100	

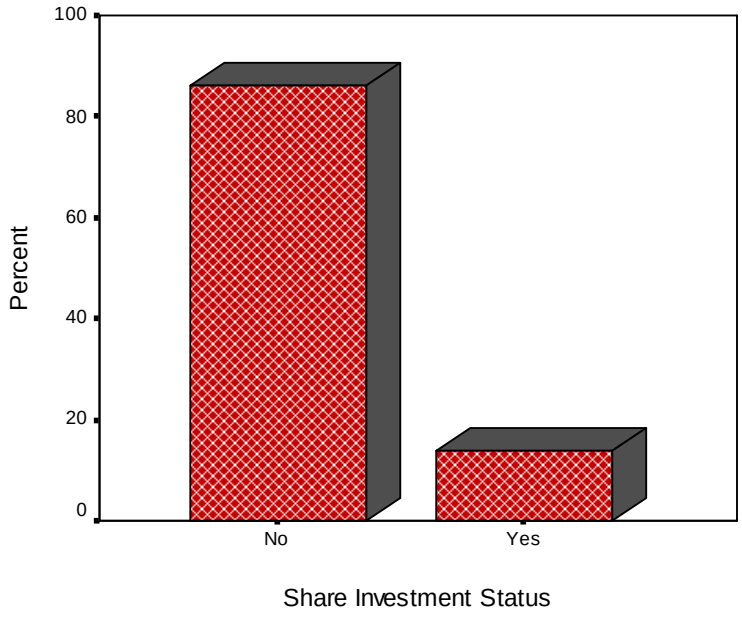

Fig 3.1.13: Bar chart of respondents' investment in share market status.

Here 86% students don't have any investment in share but only 14% students have investment in share market. Also we can see that Out of 200 students only 28 students invest in share market.

3.1.14 Relationship Status

Table 3.1.14: Frequency distribution of respondents' relationship status

Relationship Status	No. of Respondents in Each Group	% of Respondents in Each Group	Cumulative % of Respondents in Each Group
Yes	80	40	40
No	120	60	100
Total	200	100	

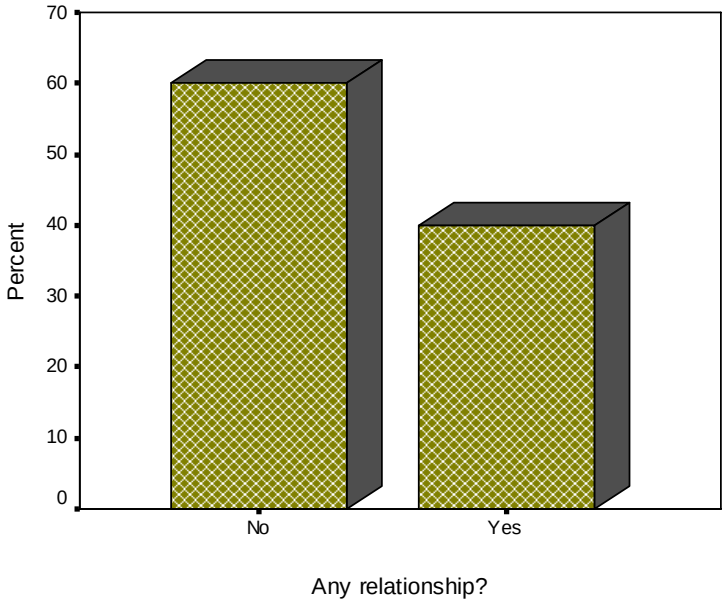

Fig 3.1.14: Bar diagram of respondents' relationship status.

From the bar diagram we see that 60% students have no relation and 40% students have relation.

Comparison of students being in a relation and facing complicated situations

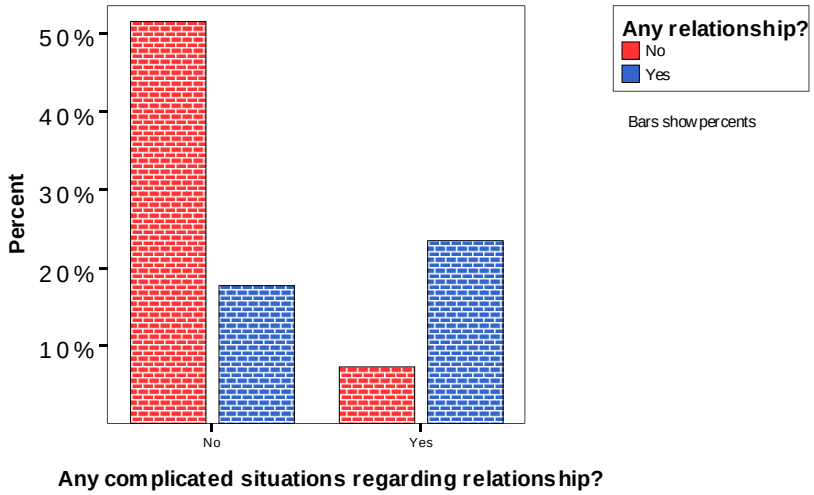

Fig 3.1.15: Multiple Bar diagram of respondents' relationship status and facing complicated situations.

From the above figure we can see that, the ratio of students facing complicated situations is very high among those who are in a relationship. Yet there are students who are not in a relationship but faced complicated situations.

3.1.15 Political affiliation status

Table 3.1.15: Frequency distribution of respondents' political affiliation status

Political Affiliation	No. of Respondents in Each Group	Percentage of Respondents in Each Group	Cumulative % of Respondents in Each Group
Strongly Affiliated	7	3.5	3.5
Moderately Affiliated	26	13	16.5
Weakly Affiliated	13	6.5	23
Not Affiliated	154	77	100
Total	200	100	

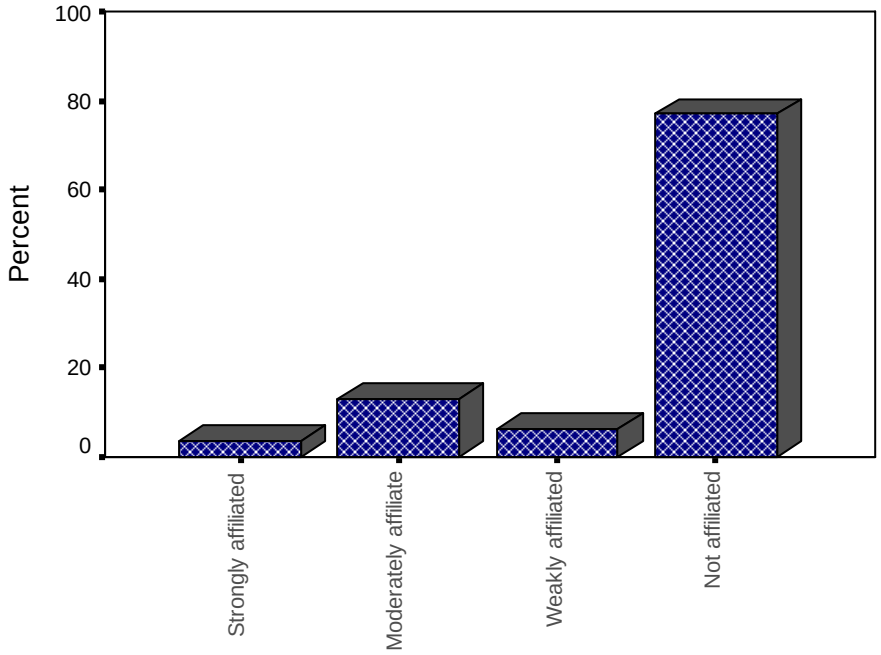

Fig 3.1.16: Bar Diagram of respondents' political affiliation.

From the bar diagram we see that 3.5% students are strongly affiliated in politics, 13% students are moderately affiliated in politics, 6.5% students are weakly affiliated in politics and 77% students are not affiliated in politics at all.

3.2 Bivariate Analysis

From the collected data we performed bivariate analysis of some important variables with respondents' CGPA. Here we have used some cross tables and some multiple bar diagrams to present the collected data.

3.2.1 Family Income:

Table 3.2.1: Cross tabulation of respondent's family income & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Family income	Less than 20000	14 15.6%	45 50.0%	31 34.4%	0.149 (.928)
	greater or equal 20000	16 14.5%	58 52.7%	36 32.7%	

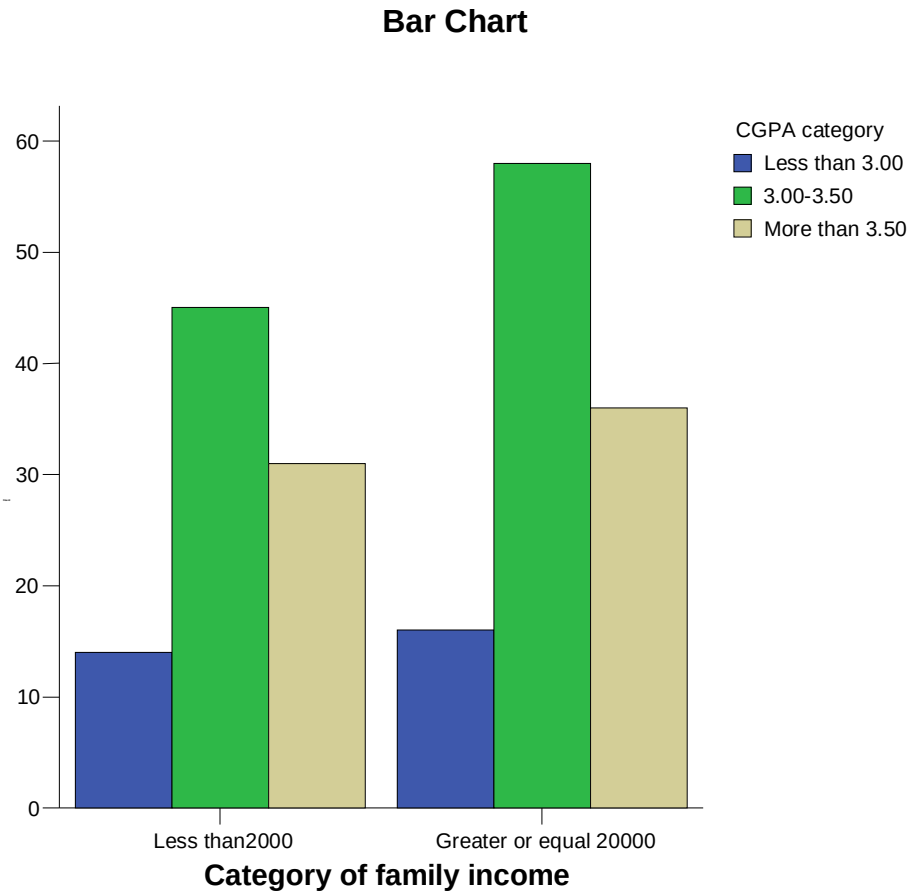

Fig 3.2.1: Multiple bar diagram of respondents' family income & CGPA.

We can see that respondent's family income and CGPA is not significantly associated. From the table and the component bar chart, for the both categories of family income, CGPA category 3.00-3.50 has a greater percentage than the other two categories. The percentage of the CGPA below 3.00 among the students with a family income under 20000 and greater or equals to 20000 are 15.6% & 14.5% respectively. The corresponding percentages in the CGPA 3.00-3.50 category are 50% & 52.7% respectively. The corresponding percentages in the CGPA above 3.50 are 34.4% & 32.7% respectively.

3.2.2 1st year GPA

Table 3.2.2: Cross tabulation of respondent's 1st year GPA & CGPA

		CGPA			Chi-square value (P-value)
		less than 3.00	3.00-3.50	more than 3.50	
1st year GPA	less than 3.00	25 52.1%	21 43.8%	2 4.2%	140.735 (.000)
	3.00-3.50	5 4.5%	79 71.2%	27 24.3%	
	Greater than 3.50	0 0%	3 7.3%	38 92.7%	

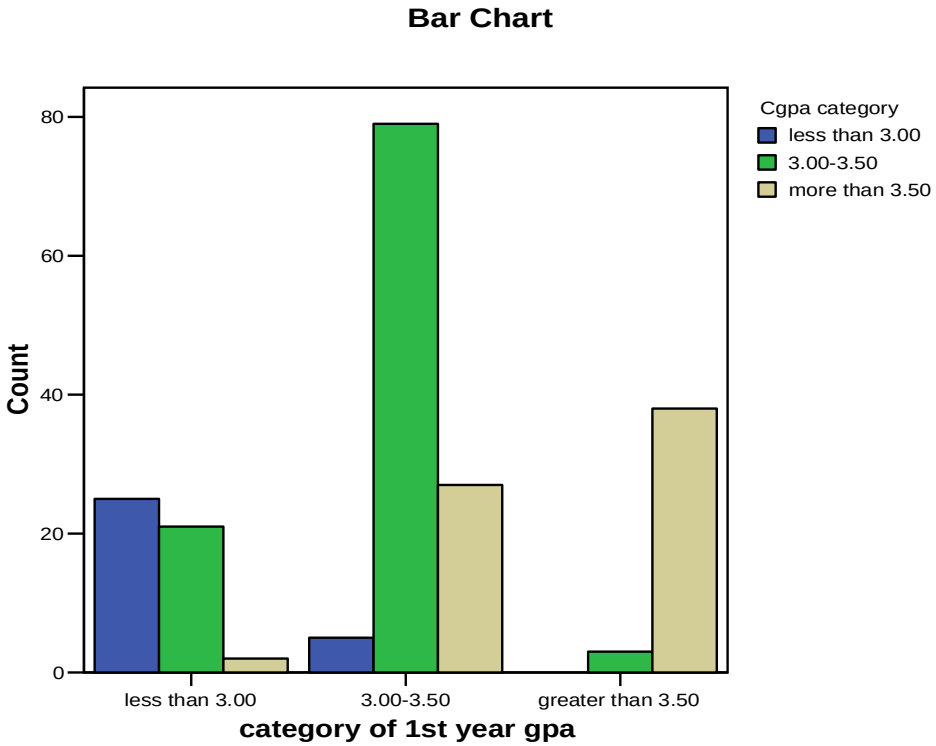

Fig 3.2.2: Multiple bar diagram of 1st year GPA & CGPA.

Here, respondent's 1st year GPA and CGPA is significantly associated. From the table and component bar chart it is clear that, those who got GPA 3.00 in the 1st year, their CGPA remain almost same in the final CGPA. That is, 52.1% student's 1st year GPA and CGPA stays in the category below 3.00. Whereas, only 4.2% students who are in the category above 3.50 in CGPA, they got a GPA below 3.00 in the 1st year. Again, 71.2% students 1st year GPA and CGPA are in the same category 3.00-3.50. And, 92.7% students 1st year GPA and CGPA are in the same category above 3.50.

3.2.3 4th year GPA

Table 3.2.3: Cross tabulation of respondent's 4th year GPA & CGPA

		CGPA			Chi-square value (P-value)
		less than 3.00	3.00-3.50	More than 3.50	
4th year GPA	less than 3.00	0 0%	0 0%	0 0%	23.594 (.000)
	3.00-3.50	0 0%	10 100%	0 0%	
	Greater than 3.50	0 0%	0 0%	7 100%	

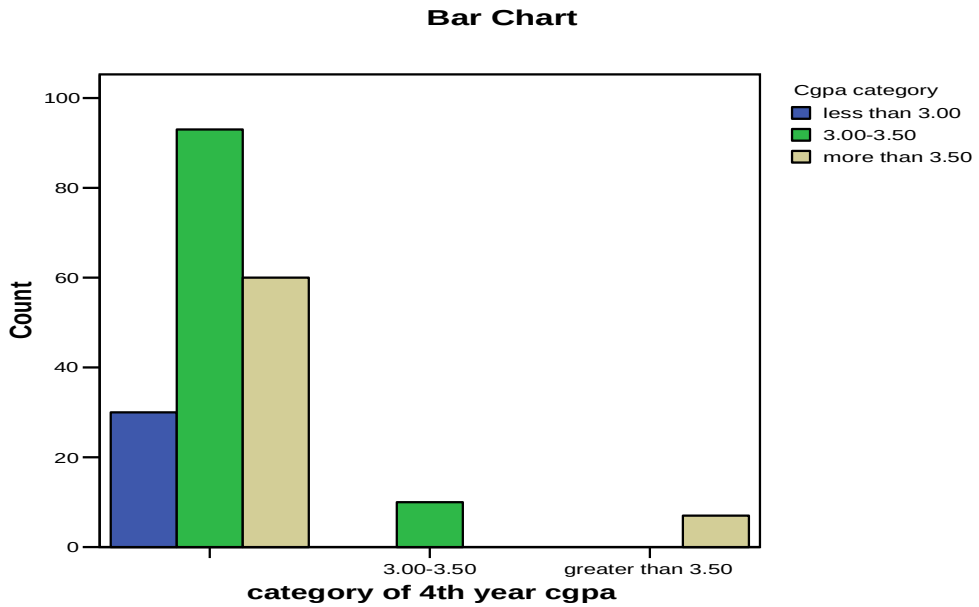

Fig 3.2.3: Multiple bar diagram of respondents' 4th year GPA & CGPA

We have found that respondent's 4th year GPA and CGPA is significantly associated. From the graph and the table we get that, 100% students 4th year GPA and CGPA are in same category 3.00-3.50. And, 100% students 4th year GPA and CGPA are in same category above 3.50.

3.2.4 Average Attendance

Table 3.2.4: Cross tabulation of respondent's average attendance & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Average attendance	Less than or equals to 85%	15 38.6%	18 46.2%	6 15.4%	22.793 (.000)
	Greater than 85%	15 9.3%	85 52.8%	61 37.9%	

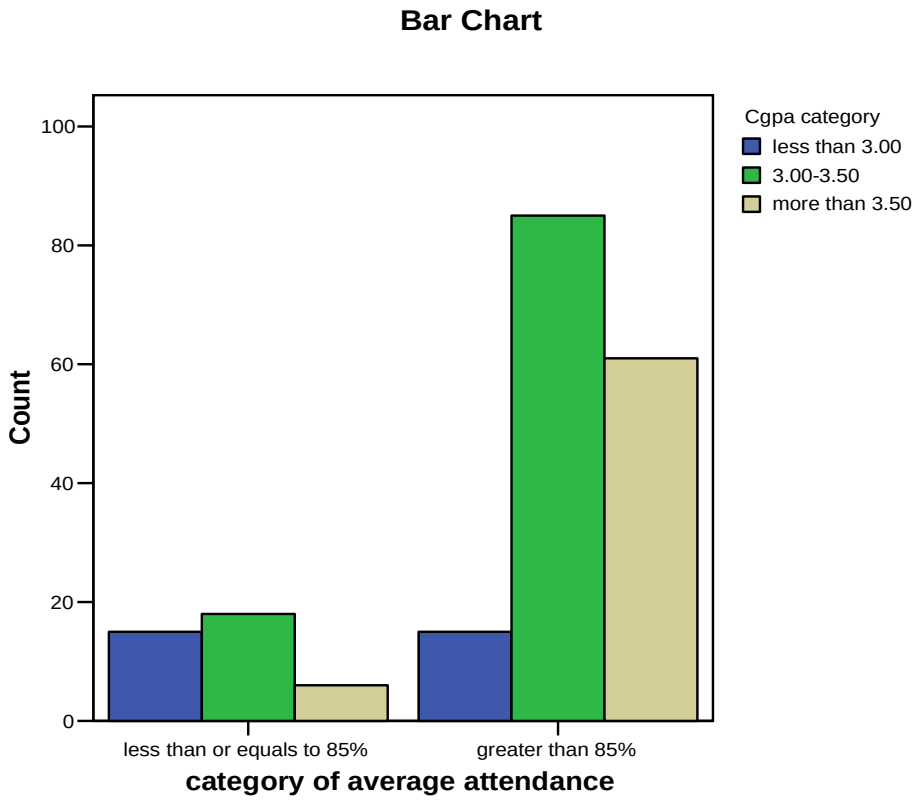

Fig 3.2.4: Multiple bar diagram of respondents' average attendance & CGPA.

Average attendance of the respondents shows significant association with respondents' CGPA. From the above bar chart and cross table, we can see that those who attended more than 85% classes got a CGPA above 3.50 (37.9%) and for the corresponding CGPA category, 15.4% students attended below 85% classes. Also, in the CGPA categories 3.00-3.50 and below 3.00, 46.2% & 38.5% students attended below 85% classes respectively and 52.8% & 9.3% students attended more than 85% classes.

3.2.5 Study Hours:

Table 3.2.5: Cross tabulation of respondent's study hours & CGPA

		CGPA			Chi-square value(P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Study hours	More than 20 hours	8 12.3%	33 50.8%	24 36.9%	.812 (.666)
	Less or equals to 20 hours	22 16.3%	70 51.9%	43 31.9%	

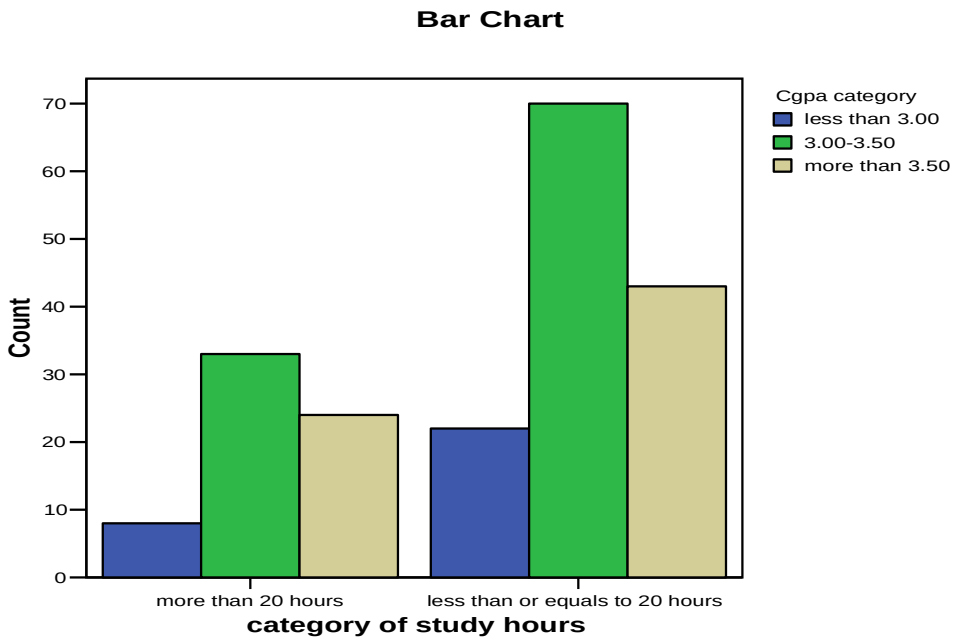

Fig 3.2.5: Multiple bar diagram of respondents' study hours & CGPA.

Here we have found insignificant association between respondents study hours and CGPA. Here in the CGPA categories less than 3.00, 3.00-3.50 & above 3.50, there are 12.3%, 50.8% and 36.9% students respectively who studied more than 20 hours in a week. Again, in the CGPA categories less than 3.00, 3.00-3.50 & above 3.50 there

are 16.3%, 51.9% and 31.9% students respectively who studied less than 20 hours in a week.

3.2.6 No. of Improvement:

Table 3.2.6: Cross tabulation of respondent's No. of improvement & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
No. of improvement	less than or equals to 1	16 9.3%	90 52.8%	66 38.4%	42.902 (.000)
	more than 1	14 53.8%	12 46.2%	0 0%	

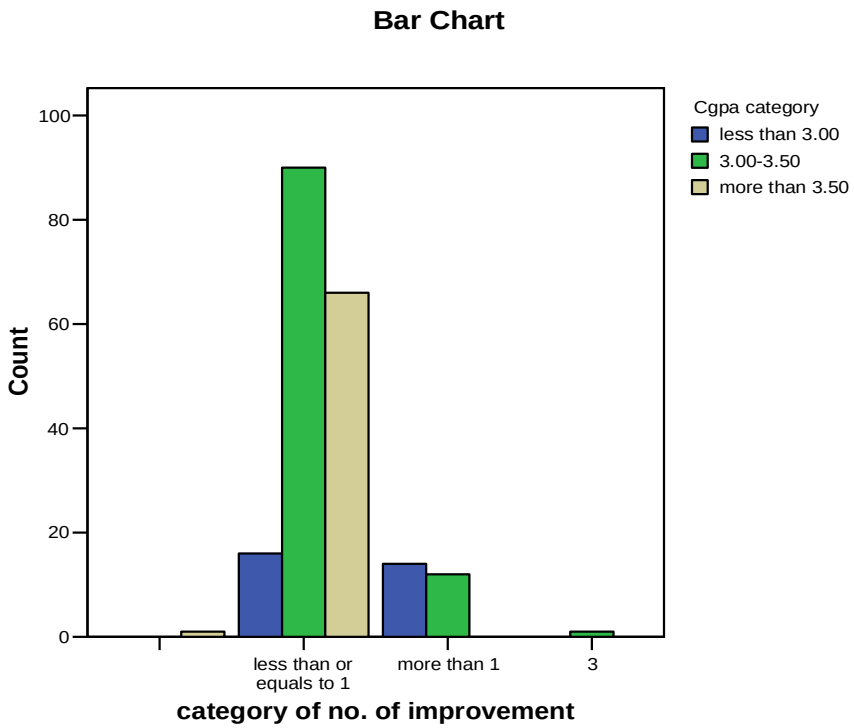

Fig 3.2.6: Multiple bar diagram of respondents' no. of improvements & CGPA.

We can see that respondent's No. of improvement and CGPA is significantly associated. From the table it is visible that, 38.4% students took less or equals to 1 improvement per year and got a CGPA above 3.50, and for the corresponding category of improvement 9.3% students got a CGPA below 3.00 and 52.3% students got a CGPA between 3.00-3.50. Again, 53.8% students took more than 1 improvement per year and got a CGPA below 3.00 and for the corresponding category, 46.2% students got a CGPA between 3.00-3.50. That is, those who took more than 1 improvement per year cannot get a good CGPA.

3.2.7 Readmission

Table 3.2.7: Cross tabulation of whether respondent take any readmission & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
whether any re-admission taken by the respondent	No	20 12.5%	87 54.4%	53 33.1%	.098 (.115)
	Yes	10 25.0%	16 40.0%	14 35.0%	

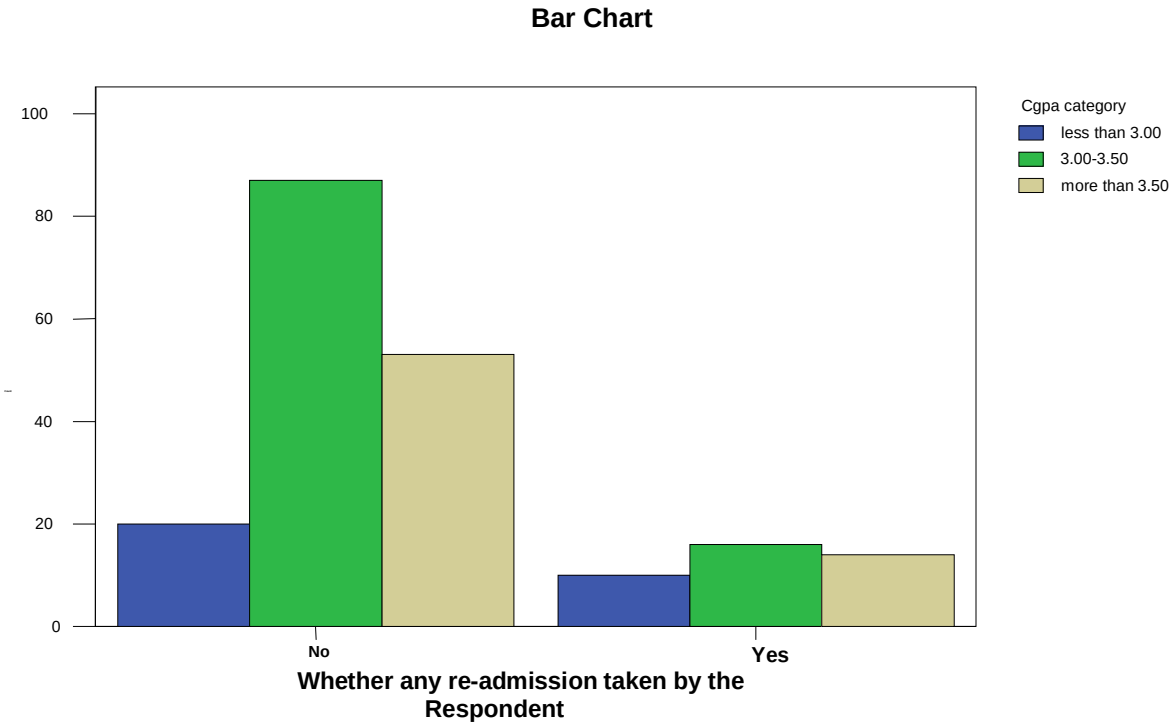

Fig 3.2.7: Multiple bar diagram of respondents' admission status & CGPA.

Here we observe that whether respondents take any readmission and CGPA is insignificantly associated. Here, in case of the CGPA category above 3.50, those who took readmission (35.0%) did well than who did not take readmission (33.1%). Again, in case of CGPA category 3.00-3.50, those who did not take readmission (54.4%) did well than who took readmission (40.0%).

3.2.8 Merit Position

Table 3.2.8: Cross tabulation of respondent's Merit position & CGPA

		CGPA			Chi-square value (P-value)
		less than 3.00	3.00-3.50	more than 3.50	
Merit position	less than 1000	9 14.8%	35 57.4%	17 27.9%	6.209 (.400)
	1000-2000	14 16.3%	45 52.3%	27 31.4%	
	Greater than 2000	6 11.8%	23 45.1%	22 43.1%	

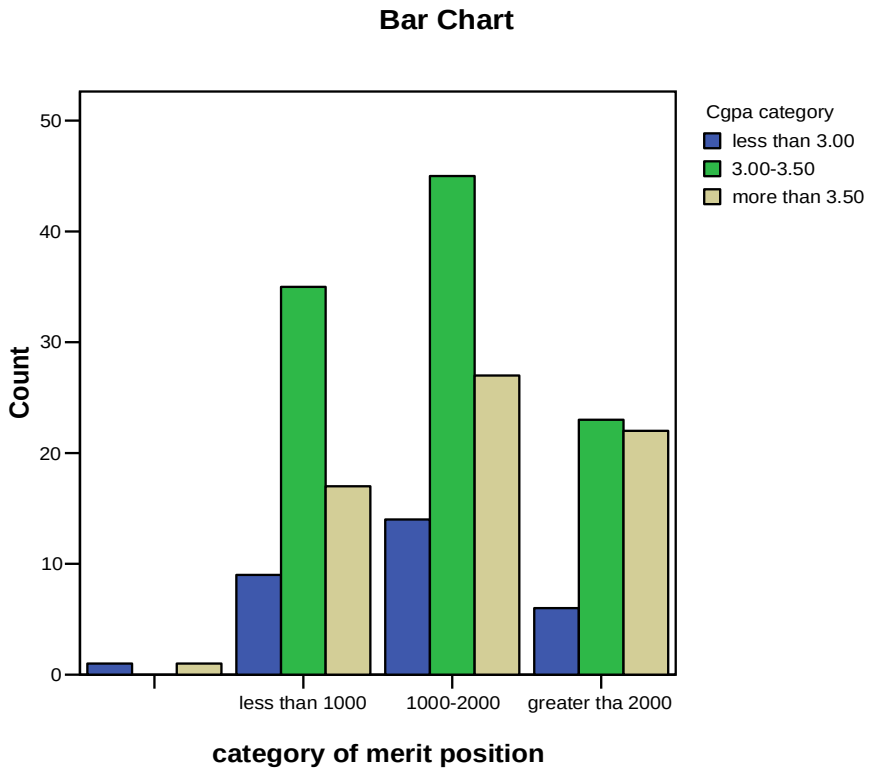

Fig 3.2.8: Multiple bar diagram of respondents' merit position & CGPA.

There is no significant association between respondent's merit position and CGPA. Here, in case of the merit position's categories, less than 1000, 1000-2000, above 2000, we got that 27.9%, 31.4%, 43.1% students got a CGPA of above 3.50 respectively. For the corresponding category, 57.4%, 52.3%, 45.1% students got a CGPA between 3.00-3.50 respectively. And, 14.8%, 16.3%, 11.8% students got a CGPA of less than 3.00 respectively.

3.2.9 Mental Disappointment

Table 3.2.9: Cross tabulation of respondent's Mental Disappointment & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Mental Disappointment	No	17 14.0%	64 52.9%	40 23.1%	.318 (.853)
	Yes	13 16.5%	39 49.4%	27 34.2%	

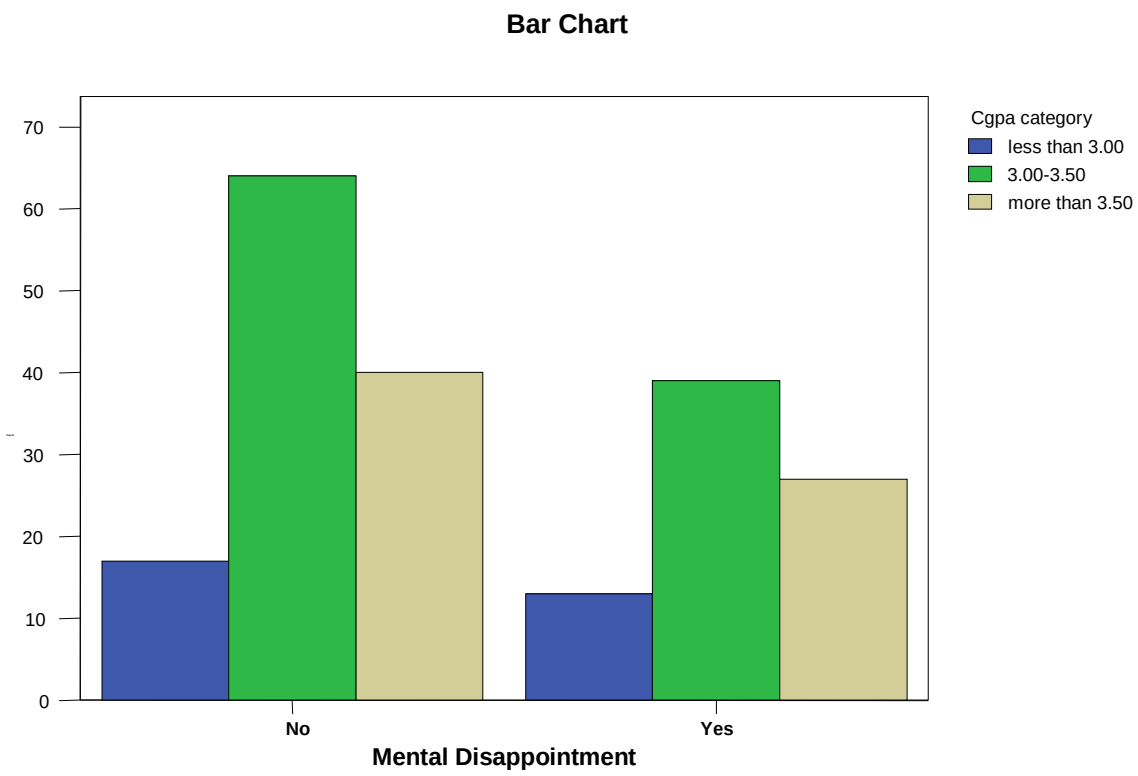

Fig 3.2.9: Multiple bar diagram of respondents' mental disappointment status & CGPA.

From the above table, it is clear that respondent's mental disappointment and CGPA is insignificantly associated. We can see that students who were mentally disappointed with his or her subject, 16.5%, 49.4%, and 34.2% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively. And, those were not disappointed, 14%, 52.9%, and 33.1% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively.

3.2.10 Tried somewhere else

Table 3.2.10: Cross tabulation of whether respondents try somewhere else & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Whether tried anywhere else or not	No	24 16.3%	76 51.7%	47 32.0%	1.041 (.594)
	Yes	6 11.3%	27 50.9%	20 37.7%	

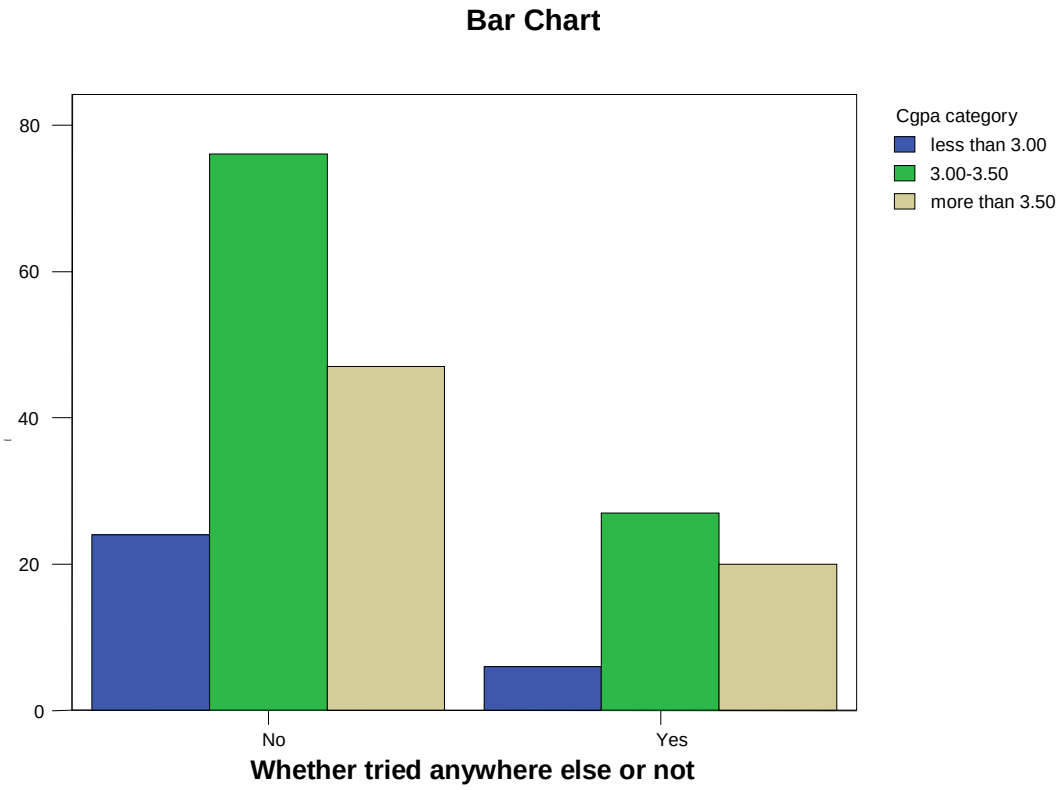

Fig 3.2.10: Multiple bar diagram of respondents' trying somewhere else & CGPA.

Respondents' try somewhere else does not seem to differ significantly with respect to respondents' CGPA. In this case, those who did not try anywhere else, 16.3%,

51.7%, and 32% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively. And, those tried somewhere else, 11.3%, 50.9%, and 37.7% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively.

3.2.11 GPA in H.S.C

Table 3.2.11: Cross tabulation of respondent's GPA in H.S.C & CGPA

		CGPA			Chi-square value (P-value)
		less than 3.00	3.00-3.50	more than 3.50	
GPA in H.S.C	less than 4.00	0 0%	1 50.0%	1 50.0%	6.468 (.167)
	4.00-4.50	12 26.1%	19 41.3%	15 32.6%	
	Greater than 4.50	18 11.8%	83 54.6%	51 33.6%	

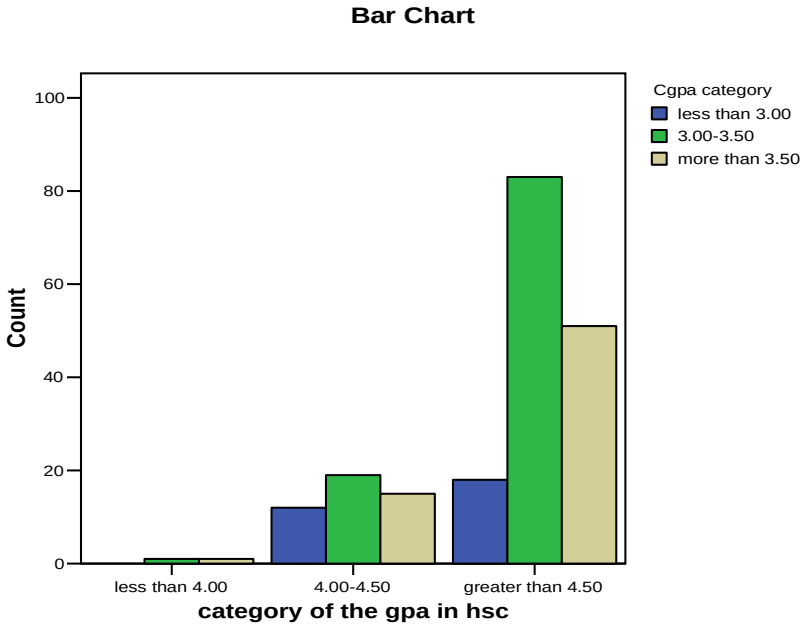

Fig 3.2.11: Multiple bar diagram of respondents' H.S.C. GPA & CGPA

Respondent's GPA in H.S.C seems to be insignificant with respect to respondents' CGPA. We can see that, those who got a GPA 4.00-4.50 in H.S.C, 26.1%, 41.3%, and 32.6% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively. And, those who got a GPA above 4.50 in H.S.C, 11.8%, 54.6%, and 33.6% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively.

3.2.12 GPA in English in H.S.C

Table 3.2.12: Cross tabulation of respondent's GPA in H.S.C in English & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
GPA in H.S.C in English	Less than or equals to 4.00	22 14.1%	83 53.2%	51 32.7%	.919 (.632)
	Greater than 4.00	8 18.2%	20 45.5%	16 36.4%	

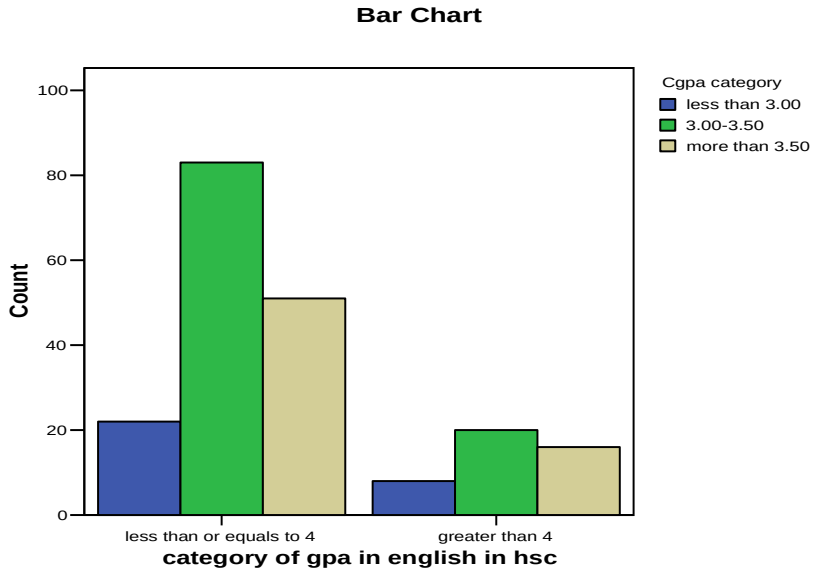

Fig 3.2.12: Multiple bar diagram of respondents' H.S.C. GPA in English & CGPA.

There is no significant association between respondents' GPA in H.S.C in English and CGPA. Here, those who got a GPA less than or equals to 4.00 in English in H.S.C, 14.1%, 53.2%, and 32.7% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively. And, those who got a GPA above 4.00 in English in H.S.C, 18.2%, 45.5%, and 36.4% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively.

3.2.13 College Status

Table 3.2.13: Cross tabulation of respondent's College status & CGPA

		CGPA			Chi-square value (P-value)
		less than 3.00	3.00-3.50	more than 3.50	
College status	Inside Dhaka	13 12.7%	48 47.1%	41 40.2%	10.923 (.027)
	Urban but outside Dhaka	17 20.0%	49 57.6%	19 22.4%	
	Rural	0 0%	6 46.2%	7 53.8%	

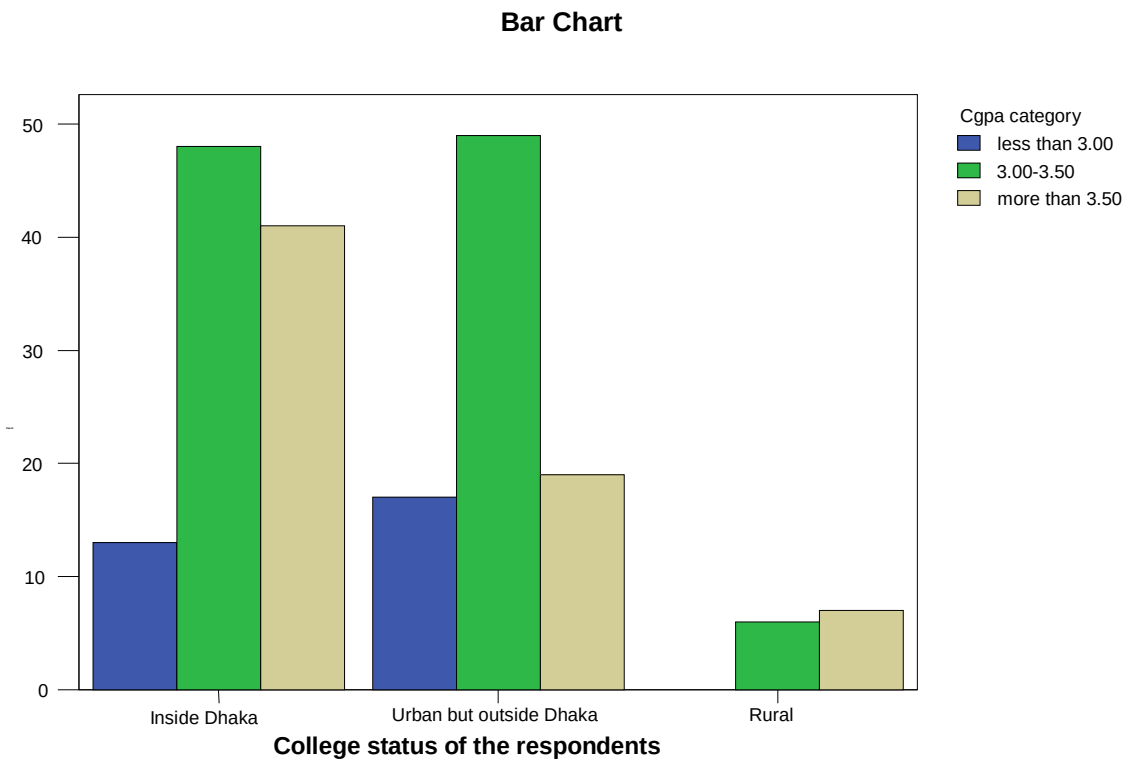

Fig 3.2.13: Multiple bar diagram of respondents' college status & CGPA.

Respondent's college status has also been found significant with respect to respondents' CGPA. From the table, we can see that the percentage of the category CGPA above 3.50 is higher among the students who are from rural areas (53.8%), compared to that of the students from urban but outside of Dhaka city (22.4%) and from inside Dhaka (40.2%). Also, for the category 3.00-3.50, the percentages are 47.1%, 57.6%, and 46.2% respectively.

3.2.14: Residential status

Table 3.2.14: Cross tabulation of respondent's Residential status & CGPA

		CGPA			Chi-square value (P-value)
		less than 3.00	3.00-3.50	more than 3.50	
Residential status	In hall	18 16.1%	60 53.6%	34 30.4%	4.638 (.591)
	With Family	9 11.7%	38 49.4%	30 39.0%	
	With Relatives	1 25.0%	1 25.0%	2 50.0%	
	In Mess	2 28.6%	4 57.1%	1 14.3%	

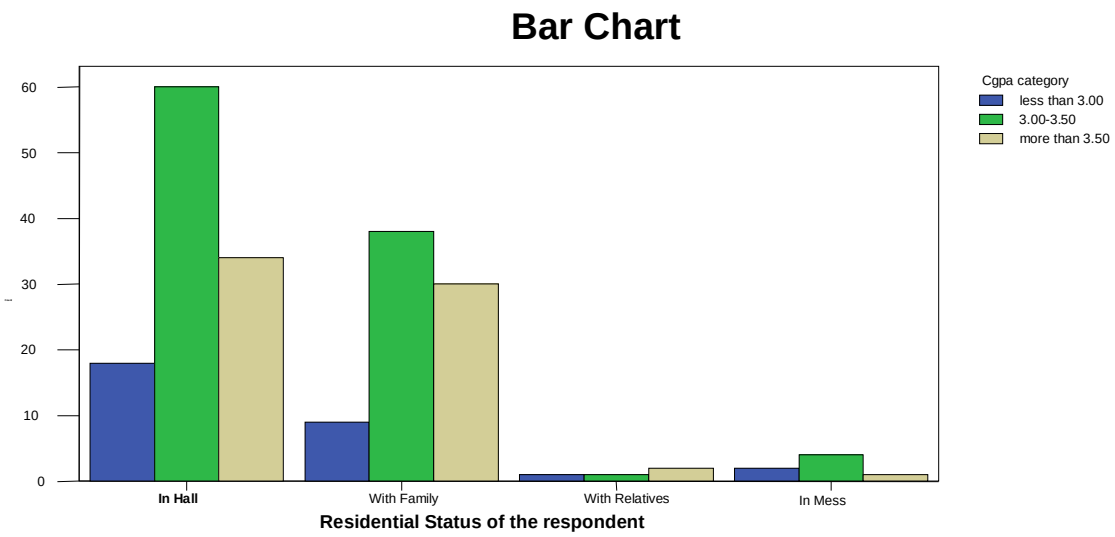

Fig 3.2.14: Multiple bar diagram of respondents' residential status & CGPA.

We can see that respondent's residential status and CGPA is insignificantly associated. From the table, the percentage of the category CGPA above 3.50 is higher among the students who lives with their relatives (50%), compared to that of the students who lives in hall (30.4%), with family (39%) and in mess (14.3%). Also, for the category 3.00-3.50, the percentages are 25%, 53.6%, and 49.4%, and 57.1% respectively. And, for the category less than 3.00, the percentages are 25%, 16.1%, and 11.7%, and 28.6% respectively.

3.2.15 Tuition

Table 3.2.15: Cross tabulation of respondent's Tuition & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Provide any tuition	No	8 11.1%	36 50.0%	28 38.9%	2.159 (.340)
	Yes	22 17.2%	67 52.3%	39 30.5%	

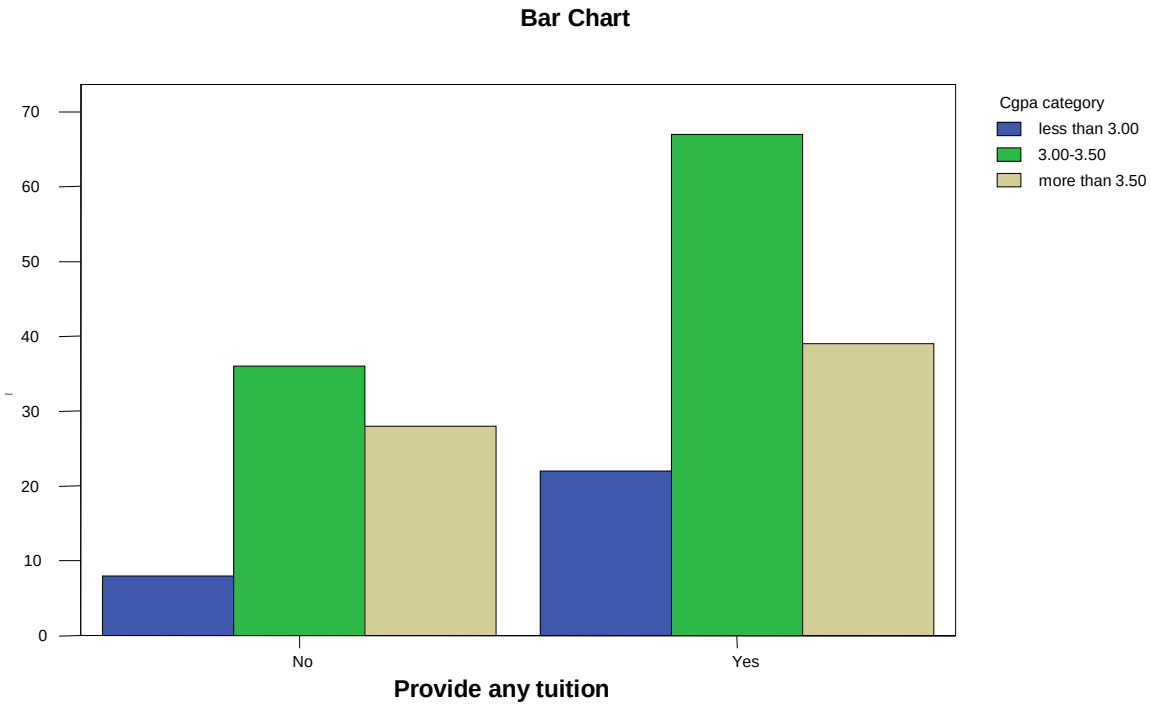

Fig 3.2.15: Multiple bar diagram of respondents' tuition providing status & CGPA.

We do not find any significant relationship between respondent's tuition and CGPA. Here, those who do not provide any tuition, 11.1%, 50.0%, and 38.9% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively. And, those who provide

tuition, 17.2%, 52.3%, and 30.5% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively.

3.2.16 Investment in Share

Table 3.2.16: Cross tabulation of respondent's Investment in share & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Investment in Share	No	25 14.5%	86 50.0%	61 35.5%	2.13 (.345)
	Yes	5 17.9%	17 60.7%	6 21.4%	

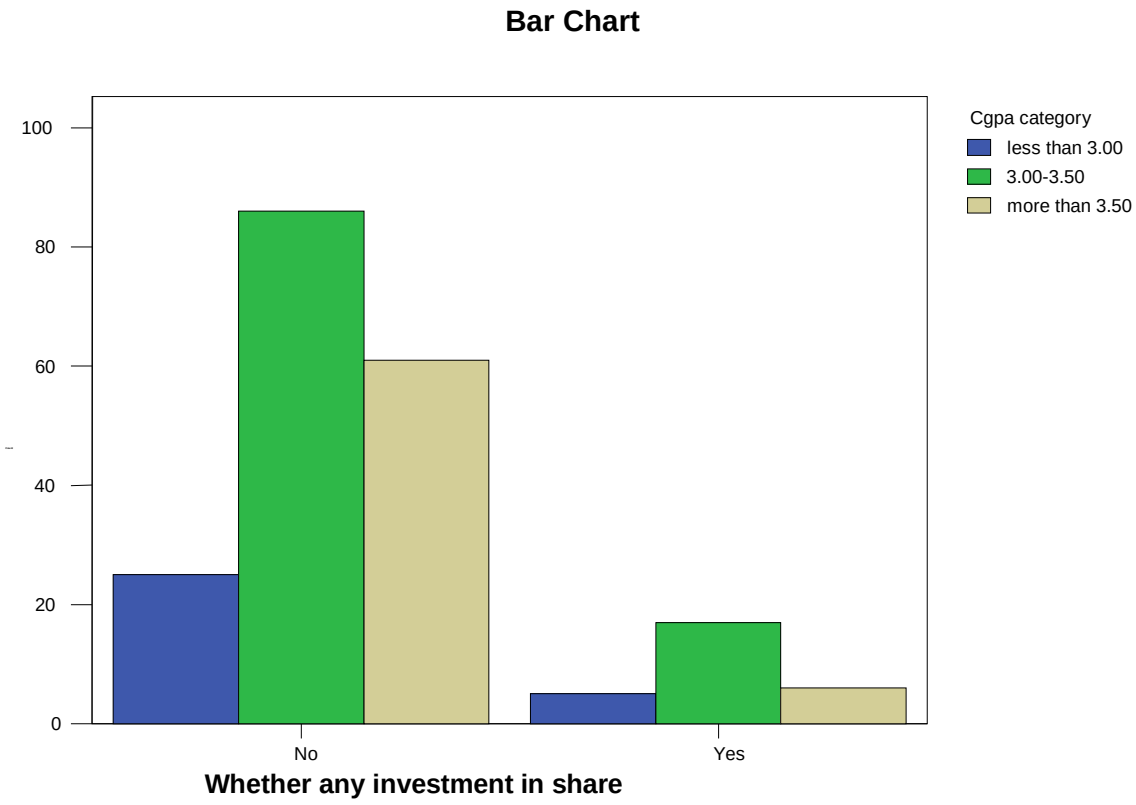

Fig 3.2.16: Multiple bar diagram of respondents' share investment status & CGPA.

We have found that respondent's investment in share and CGPA is insignificantly associated. From the table, it is clear that those who do not have any investment in share, 14.5%, 50.0%, and 35.5% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively. And those who have investment in share, 17.9%, 60.7%, and 21.4% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively.

3.2.17 Internet use

Table 3.2.17: Cross tabulation of respondent's Internet use hours & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Net hours	More than 5 hours	17 18.1%	50 53.2%	27 28.7%	2.432 (.296)
	Less or equals to 5 hours	13 12.3%	53 50.0%	40 37.7%	

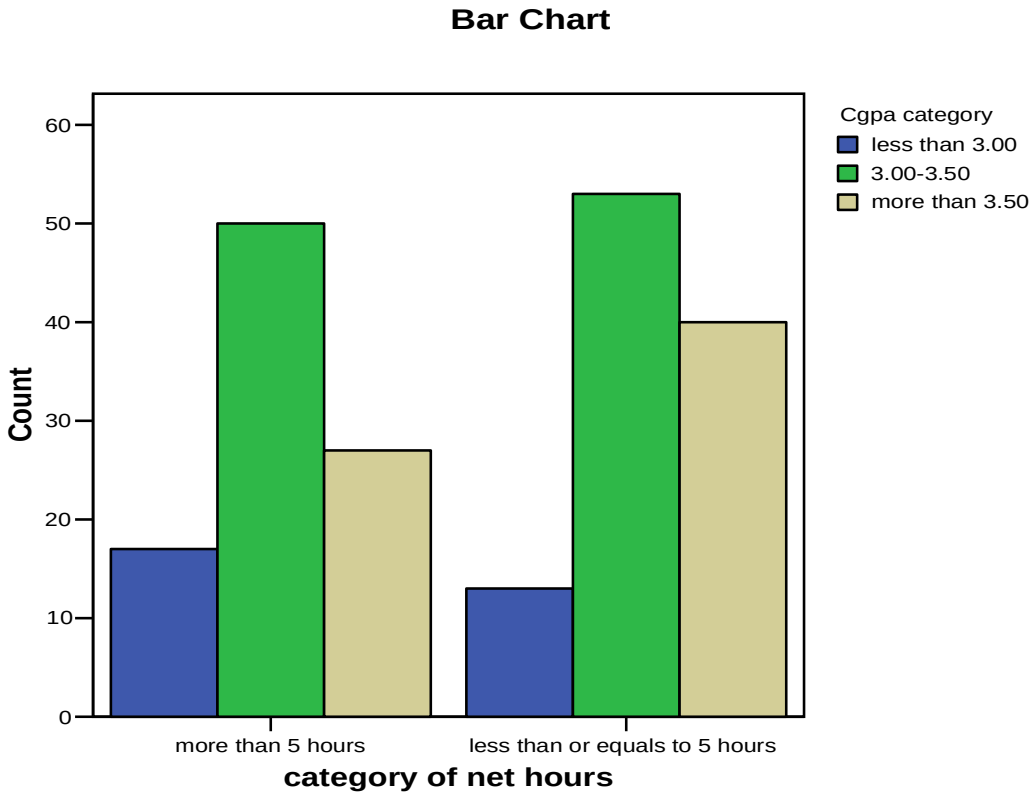

Fig 3.2.17: Multiple bar diagram of respondents' internet using hours & CGPA.

Respondent's internet use hours shows insignificant association with respondents' CGPA. We can see that, those who use internet more than 5 hours per week, 18.1%, 53.2%, and 28.7% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively. And those who use internet less than or equals to 5 hours per week, 12.3%, 50.0%, and 37.7% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively.

3.2.18 Time spends with friends

Table 3.2.18: Cross tabulation of respondent's amount of time spend with friends & CGPA

		CGPA			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Amount of time spend with friends	More than 3 hours	9 18.8%	20 41.7%	19 39.6%	2.476 (.290)
	Less or equals to 3 hours	21 13.8%	83 54.6%	48 31.6%	

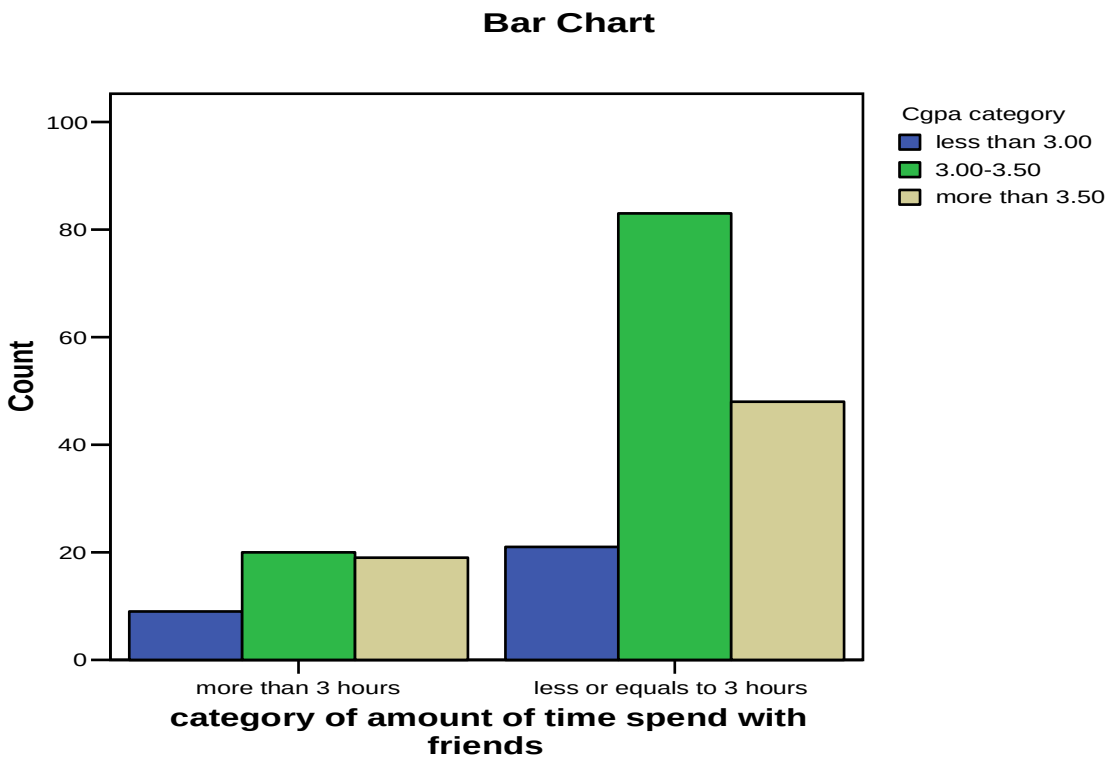

Fig 3.2.18: Multiple bar diagram of respondents' time spend with friends & CGPA.

We have found that respondent's amount of time spends with friends and CGPA is insignificantly associated. Here, those who spend more than 3 hours per week with friends, 18.8%, 41.7%, and 39.6% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively. And those who spend less than or equals to 3 hours per week with friends, 13.8%, 54.6%, and 31.6% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively.

3.2.19 Relationship

Table 3.2.19: Cross tabulation of Respondent's Relationship & CGPA

		CGPA category			Chi-square value (P-value)
		Less than 3.00	3.00 - 3.50	more than 3.50	
Relationship	No	16 13.3%	64 53.3%	40 33.3%	.754 (.686)
	Yes	14 17.5%	39 48.8%	27 33.8%	

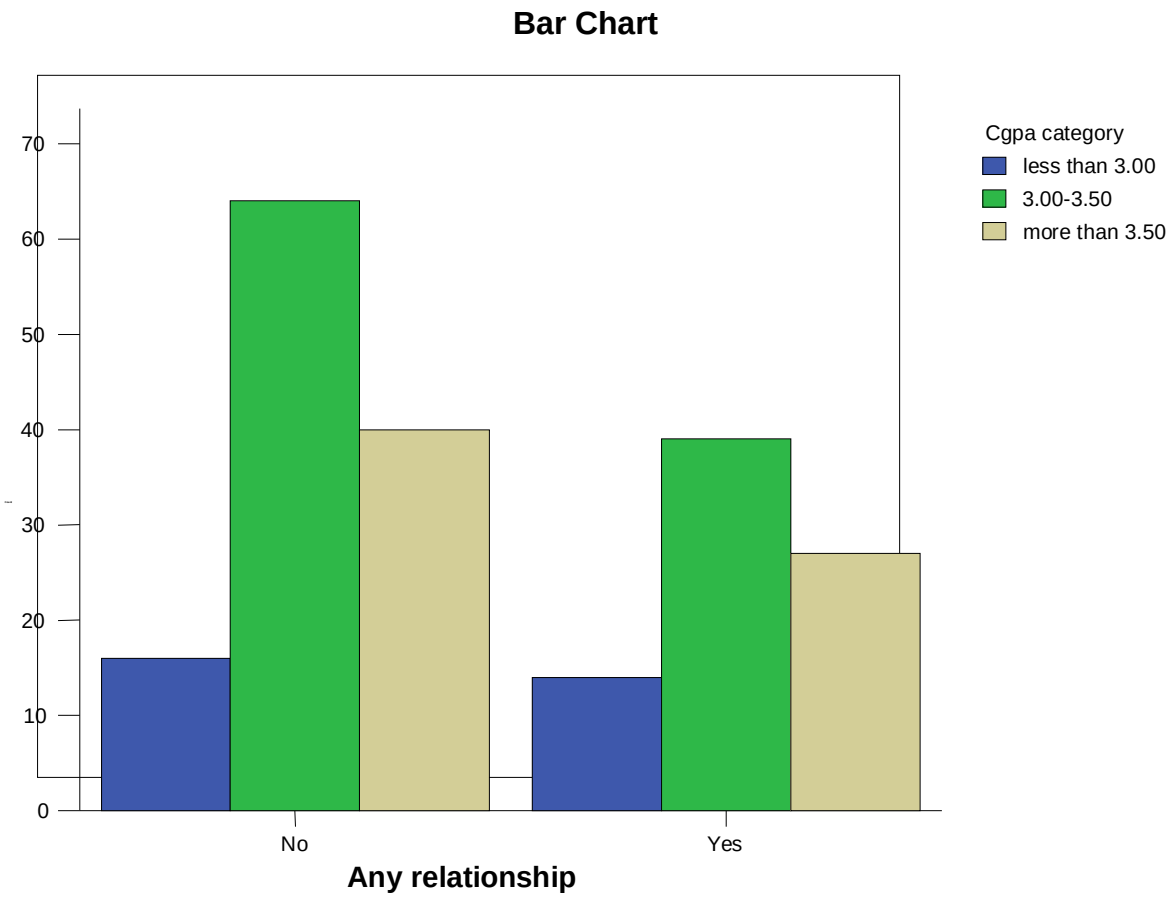

Fig 3.2.19: Multiple bar diagram of respondents' relationship status & CGPA.

There is no significant association between respondent's relationship and CGPA. From the above table we get that, those who are not in any relation, 13.3%, 53.3%, and 33.3% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively. And, those who are in a relation, 17.5%, 48.8%, and 33.8% of them got CGPA less than 3.00, 3.00-3.50, above 3.50 respectively.

3.2.20 Political Affiliation

Table 3.2.20: Cross tabulation of respondent's Political affiliation & CGPA

		CGPA			Chi-square value (P-value)
		less than 3.00	3.00-3.50	more than 3.50	
Political affiliation	Strongly affiliated	5 71.4%	1 14.3%	1 14.3%	28.225 (.000)
	Moderately affiliated	9 29.0%	16 51.6%	6 19.4%	
	Weakly affiliated	0 0%	7 53.8%	6 46.2%	
	Not affiliated	16 10.7%	79 53.6%	54% 36.2%	

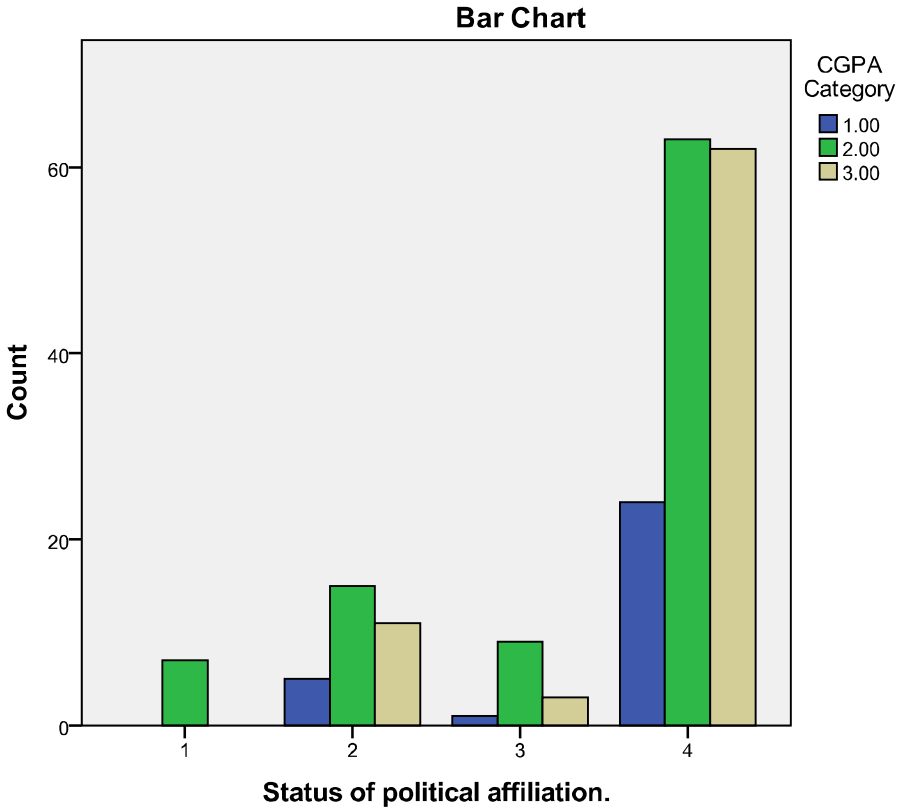

Fig 3.2.20: Multiple bar diagram of respondents' political affiliation & CGPA.

We have found that respondent's political affiliation and CGPA is significantly associated From the table, the percentage of the category CGPA above 3.50 is higher among the students who are weakly affiliated to politics (46.2%), compared to that of the students who are strongly affiliated (14.3%), moderately affiliated (19.4%) and not affiliated (36.2%). Also, for the category 3.00-3.50, the percentages are 53.8%, 14.3%, 51.6%, and 53% respectively. And, for the category less than 3.00, the percentages are 0%, 71.4%, and 29%, and 10.7% respectively.

3.3 Regression Analysis

To scrutinize the effect of different factors interested on the CGPA of the students of the University of Dhaka, we use multiple linear regression.

Model

$CGPA=\beta_0+\beta_1$ fam_inc+ $\beta_2$ave_at+β_3 std_hrs+β_4 re_adm+ β_5 dissap+β_6 tri_else+β_7 h_stud+β_8 g_eng+β_9 c_status2+ β_{10} c_status3+β_{11} r_status2+ β_{12} r_status3 + β_{13} r_status4 +β_{14} tuition+β_{15} share+β_{16} income+β_{17} net_hrs+β_{18} addafy+β_{19} reltn+β_{20} ex_act+β_{21} p_afltn2+β_{22} p_afltn3+β_{23} p_afltn4

The variables in the above model include most of the variables discussed in the previous section. Some variables were not included because they are expected to be strongly correlated with others. For instance, whether interested to go higher studies in their current discipline is expected to be positively associated with whether career objective of the respondents require a good knowledge of their current subject of study.

Dependent variable

CGPA

Explanatory variables

Fam_inc
Ave_at
Std_hrs
Re-adm= 1, if Yes
0, otherwise
Dissap= 1, if Yes
0, otherwise

Tri_else= 1, if Yes
0, otherwise
H_stud= 1, if Yes
0, otherwise
G_eng

C_status1 = 1, if inside Dhaka
0, otherwise

C_status2 = 1, if urban but outside Dhaka
0, otherwise

C_status3 = 1, if rural
0, otherwise

R_status2 = 1, if live with family
0, otherwise

R_status3 = 1, if live with relatives
0, otherwise

R_status4 = 1, if live in mess
0, otherwise

Tuition = 1, if Yes
0, otherwise

Share = 1, if Yes
0, otherwise

Income

Net_hrs

ReItn = 1, if Yes
0, otherwise

P_afItn2 = 1, if moderately affiliated
0, otherwise

P_afItn3 = 1, if weakly affiliated
0, otherwise

P_afItn4 = 1, if not affiliated at all
0, otherwise

Ex_act = 1, if Yes
0, otherwise

The levels of the variables are given in the Appendix III.

3.3.1 Regression Results

Table 3.3.1: Table of regression results of factors affecting students' performance

Explanatory variables	Estimate	P-value
fam_inc	5.429e-07	0.640420
ave_at	2.050e-02	5.97e-08 (highly significant)
std_hrs	-7.263e-04	0.606175
re_adm	-1.062e-01	0.097463 (sig at 5%)
disapp	-4.140e-03	0.933758
tri_else	1.115e-01	0. 052512(sig at 5%)
h_study	1.119e-01	0.045895 (sig at 1%)
g_eng	6.482e-03	0.862677
c_status2	-5.318e-02	0.403636
c_status3	1.719e-01	0.096224(sig at 5%)
r_status1	-4.372e-02	0.491670
r_status2	1.866e-01	0.268970
r_status3	1.229e-02	0.924909
tuition	-5.549e-02	0.317803
share	-1.365e-01	0.051724(sig at 5%)
income	-9.780e-06	0.078951(sig at 5%)
net_hrs	-3.683e-03	0.020382 (sig at 1%)
addfy	5.784e-04	0. 916021
reltn	2.417e-02	0.617613
ex_act1	-5.921e-02	0.245155
p_afltn2	1.993e-01	0.149133
p_afltn3	2.184e-01	0.156980
p_afltn4	1.767e-01	0.165632

3.3.2 Discussion

It is believed that the relationship between dependent variable CGPA and student family income is positive because money can buy you all the comforts that you need to concentrate on your studies. Our study has also shown β_1 positive but insignificant. So there is no significant positive effect of the family income on the CGPA of the students. That is, affluence cannot make a student serious about his studies or if a student wants to study then affluence is not a prerequisite. But still it requires more research to explain this phenomenon.

β_2 is expected to be positive. Since students who attend more classes usually do well than the students who miss too many classes. We have got β_2 positive and highly significant. That is, class attendance has significantly positive effect on the students' CGPA. In other words, we can say that missing too many classes is a reason for bad academic performance of the students.

It is still believed strongly that the relationship between dependent variable and student attitude towards time allocation for study per day after college are positively related but the result could not prove this relation because the coefficient value is negative and insignificant. It means more study hours are not significant as far as student performance is concerned. It may depend on intelligence level, intellect, memory or method of learning of the student although this value is very small yet it reflects the effect of personal characteristics of student. Further research is required to explore this relation.

We suspected that readmission in the same year has negative effect on the CGPA and β_4 is expected to be negative. Our study has also found it negative and significant. Thus taking readmission in the same year has a significant negative effect on the CGPA.

Many students in the University of Dhaka cannot get themselves admitted into desired discipline. Some of them have disappointed after not getting chance in their desired discipline. This event may have negative impact on the CGPA and we expected β_5 negative. Our result has shown that the students who were disappointed obtain less CGPA than the students who were not disappointed but the result is not significant.

Some students tried for admitting themselves in their desired discipline while studying in the 1st year of the University. This event may have some negative impact on their CGPA. Thus we expect β_6 negative. But our result has shown that the students who tried somewhere else have significantly higher CGPA than the students who did not do so. This happens for the reason that the students who tried somewhere may be good students and could not be satisfied with their merit position in the admission test. Their trying may affect their initial result but they may overcome it eventually.

Some students do not want to go higher studies in their current discipline. Rather they wish to change their discipline after graduation and wish to do Masters in other discipline. Students of this intension sometimes lack their interest in studying. This may affect their CGPA seriously. Thus we expected β_7 positive, that is, the students who want to go higher studies obtain higher CGPA than the students who do not want so. Our result proves our conjecture. We have got β_7 positive and significant. Thus the students having intention to go higher studies in their current subject field obtain significantly higher CGPA than the students who do not have such intention.

Grade point in English in H.S.C is expected to be positively related with the dependent variable. Our result has also suggested that it is positively related but

insignificant. That is, Grade point in English in H.S.C is not significantly related with the CGPA in university.

Our study has shown that students from Dhaka obtain less CGPA than the students come from rural area. Further research is required to explore this relation.

It is expected that the CGPA obtained by the students vary with their residential status which are living in hall, living with family, living with relatives and living in mess. Usually we think that students who live with their family in Dhaka obtain good result because they get guidance and all kinds of supports from their family and the hall problems do not disturb their study. But we have got β_{11}, $\beta_{12,}$ and β_{13} all are insignificant. That is the students living with their family do not obtain significantly good result than the students living hall. And also the results of students living with relatives and living in mess do not differ significantly from the hall students. However further study require to scrutinize this matter in detail.

We have suspected that provide tuition has negative impact on the CGPA. But our result have shown that It is expected that the CGPA obtained by the students vary with their residential status which are live in hall, live with family ,live with relatives and live in mess. Usually we think that students who live with their family in Dhaka obtain good result because they get guidance and all kinds of supports from their family and the hall problem do not disturb their study. But we have got β_{11}, $\beta_{12,}$ and β_{13} all are insignificant. That is the students living with their family do not obtain significantly good result than the students living in hall. And also the results of the students living with relatives and living in mess do not differ significantly from the results of the hall students. However further study is required to scrutinize this matter in details.

We have suspected that providing tuition has negative impact on the CGPA. But our results have shown that β_{11} is negative but insignificant. That is the students who provide tuition to school and college students do not obtain significantly less CGPA than the students who provide tuition may have proper time management that is why provide tuition do not harm their study.

It is expected that students involved in share market obtain less CGPA than the students who are not involved in share market. Thus we expected β_{15} negative. The results also have shown that β_{12} is negative and insignificant. That is students involved in share market obtain significantly less CGPA than the students who are not involved. Students involved in share market may spend much time on it and think much about it which hampers their study.

It is expected that the students who income more obtain less CGPA. Our study also proves this, as we have got β_{16} negative and significant. Thus, when income of a student increases, his CGPA dicreasees. That is, more income lessens the students' interest in study.

It is suspected that time spent on internet by the time spent on internet by the students has negative effect on their study and we expected β_{14} negative. Our results also show that β_{17} negative and significant. That is, time spent on internet by the students has significant negative effect on their CGPA.

We expected β_{18} negative as time spent with friends for non academic purpose is expected to be negatively correlated with CGPA. But our study has not provided any evidence for it as we have got β_{18} insignificant.

Students who are involved in relationship are expected to perform poor in their academic performance since they spend much time on it. But our study has not provided any evidence for it as we have got β_{19} insignificant.

Our study has shown that extracurricular activity does not harm the academic performance as we have got β_{20} insignificant.

It is expected that student politics vitiate the academic atmosphere and have negative impact on the academic performance of students who are involved in politics. But our regression results have not shown any evidence for it as we have got β_{21}, β_{22}, β_{23} are insignificant. In contrast, in bivariate analysis we got significant negative association between the levels of political affiliation and CGPA categories. So it requires more research to scrutinize the association of politics and students performance as we strongly believe that they are associated.

4.1 Conclusion

The objective of our study is the determination of factors responsible for the unsatisfactory academic performance of the students of the University of Dhaka. We have found that class attendance has a significant effect on the CGPA of the students. So, missing too many classes is one of the reasons for unsatisfactory academic performance. The students who do not intend to go to higher studies in their current discipline do not perform well. Students taking readmission in the current year cannot obtain good CGPA. Students come from rural area do better than the students lived in Dhaka. Students involved in share market obtain less CGPA than the students who are not involved in share market. Students' monthly income is negatively related with their CGPA. Time spent on internet has negative effect on the students' CGPA.

4.2 Recommendation

- Teachers should try to make the discipline more interesting so that the students get interest in their study and intend to go to higher study in their own discipline.
- Proper counseling should be given to the students so that they do not give much attention and time in share market, other income activities and internet and they are to be made understood that their study is more important that something else.
- Awareness should be raised among the students about these factors which have significant negative impact on the students CGPA so that they can improve their academic performance.

Bibliography

- Antonia Lozano Diaz. "Personal, family and academic factors affecting low achievement in secondary school". *Electronic Journal of Research in Education Psychology & Psychopedagogy*. **Vol-1**, issue-1, page: 43-66. **[9]**
- Dr. Craig Applegate & Dr. Anne Daly. "The Impact of Paid Work on the Academic Performance of Students: A Case Study from the University Of Canberra", *Australian Journal of Education,* **Vol-50**, Issue-2, page: 155-167. **[14]**
- Dr. Gazi Mahbubul Alam and Dr. Mirza Mohammad Shahjamal (2008). "Student Politics in Bangladesh: An Impact on Quality Assurance in Education and National Development". Available at: *http://www.bdeduarticle.com/education-policy/37-uncategorised/28-student-politics-in-bangladesh-an-impact-on-quality-assurance-in-education-and-national-development.* **[15]**
- Harb, Nasri & El-Shaarawi, Ahmed (2006). "Factors Affecting Students' Performance". MPRA Paper No. 13621, posted 25. February 2009. **[7]**
- Laura P. Womble. University of North Carolina at Charlotte, "Impact of Stress Factors on College Students Academic Performance". Available at: www.psych.uncc.edu/womble.pdf. **[12]**
- Norhidayah Ali, Kamaruzaman Jusoff, Syukriah Ali, Najah Mokhtar, and Azni Syafena Andin Salamat (2009), "The Factors Influencing Students' Performance at Universiti Teknologi MARA Kedah, Malaysia" *Management Science and Engineering*. **Vol-3**, Issue-4, 2009 page: 81-90. **[14]**
- Syed Tahir Hijazi & S.M.M. Raza Naqvi, "Factors Affecting Students' Performance: A Case of Private Colleges", *Bangladesh e-Journal of Sociology.* **Volume 3**, Issue 1, January 2006. **[8]**

Appendix I

List of variables

Variables	Variable label	Categories	Codes
Fam_inc	Respondents Family income	-----	-----
Family income	Respondents Family income	Less than 20000 Greater or equals to 20000	1 2
CGPA	CGPA of the respondent	-----	-----
CGPA	CGPA of the respondent	Less than 3.00 3.00-3.50 More than 3.50	1 2 3
1st year GPA	Respondents 1st year GPA	Less than 3.00 3.00-3.50 More than 3.50	1 2 3
4th year GPA	Respondents 4th year GPA	Less than 3.00 3.00-3.50 More than 3.50	1 2 3
Average attendance	Respondents average attendance	Less than or equals to 85% Greater than 85%	1 2
Ave_at	Average class attendance of the respondent	----	----
Std_hrs	Study hours of the respondent per week	----	----
Study hours	Respondents study hours per week	More than 20 hours Less or equals to 20 hours	1 2
N_imprv	Number of improvements taken	----	----
No. of improvement	Respondents no. of improvement	Less than or equal to 1 More than 1	1 2

re_adm	Whether any re-admission taken by the respondent	Yes No	1 0
yr_re_ad	Re-admission year	1st year 2nd year 3rd year 4th year	1 2 3 4
mrt_pos	Merit position in admission test	----	----
Merit position	Respondents merit position	Less than 1000 1000-2000 More than 2000	1 2 3
disapp	Mental Disappointment	Yes No	1 0
tri_else	Whether tried anywhere else or not	Yes No	1 0
h_stud	Interested in higher studies?	Yes No	1 0
car_obj	Career objective requires good knowledge?	Yes No	1 0
g_ssc	SSC GPA of the respondents	----	----
g_hsc	HSC GPA of the respondents	----	----
GPA in H.S.c	Respondents GPA in H.S.C	Less than 4.00 4.00-4.50 More than 4.50	1 2 3
g_eng	HSC GPA in English	----	----
GPA in English	Respondents GPA in English	Less than 4.00 4.00-4.50 More than 4.50	1 2 3
c_status	College status of the respondents	Inside Dhaka Urban but outside Dhaka Rural	1 2 3
r_status	Residential Status of the respondent	In Hall With family With relatives In mess	1 2 3 4
tution	Provide any tuition	Yes No	1 0

tu_time	Time spend in tuition per week	----	----
share	Whether any investment in share	Yes No	1 0
pt_jobs	Any other part time jobs?	Yes No	1 0
tm_ptjob	Time spent in part time jobs per week.	----	----
income	Monthly earnings	----	----
mn_fmly	Money got from family per month	----	----
net_hrs	Amount of time spent in internet per week.	----	----
Net hours	Respondents internet use hours	More than 5 hours Less than or equals to 5 hours	1 2
addafy	Amount of time spent with friends	----	----
Amount of time spend with friends	Respondents Amount of time spent with friends	More than 3 hours Less or equals to 3 hours	1 2
reltn	Any relationship?	Yes No	1 0
brk_up	Any complicated situations regarding relationship?	----	----
ex_act	Extra-curricular activities?	Yes No	1 0
tm_x_act	Time spent in extra-curricular activities per week	----	----
p_afltn	Status of political affiliation.	Strongly affiliated Moderately affiliated Weakly affiliated Not affiliated	1 2 3 4
p_status	Position in students' wing of any political party?	----	----
tm_pltcs	Time spent in political activities per week.	----	----

Appendix II

List of Tables

Appendix III

Questionnaire

Dhaka University
Department of Statistics, Biostatistics & Informatics

Research Topic: Determination of factors behind unsatisfactory academic performance of the talented students: A study on the students of University of Dhaka.

(All information provided by the respondents will be kept strictly confidential)

ID: **…….**

Background Information:

1. **Name:** **…….**
2. **Sex:**
   - Θ Male
   - Θ Female
3. **Department:** **……**
4. **Session of Admission:**
   - Θ 2005-2006
   - Θ 2006-2007
   - Θ 2007-2008
   - Θ 2008-2009
   - Θ 2009-2010
5. **Current Level of Study:**
   - Θ 2nd year
   - Θ 3rd year
   - Θ 4th year
   - Θ M.S.
6. **Marital Status:**
   - Θ Single
   - Θ Married
7. **How much do your family earn approximately per month?**
   - Θ Ans: …….

Academic Information:

8. **What are the GPA's you obtained & what are the percentages of your class attendance at the following academic years?**

Year	1st	2nd	3rd	4th	Average
CGPA					
Class Attendance					

9. **How much time (in hours) do you spend for academic purposes per week?**
   - Θ Ans: ……
10. **How many improvement examinations have you appeared per year on an average?**
    - Θ Ans: ……
11. **Did you take readmission in any year?**
    - Θ Yes
    - Θ No (go to 13)
12. **Which year(s) did you take readmission?** (Tick all, in case of more than one)
    - Θ 1st year
    - Θ 2nd year
    - Θ 3rd year
    - Θ 4th year
13. **What was your merit position at the admission test?**
    - Θ Ans: ……
14. **Were you disappointed after getting admitted here?**
    - Θ Yes
    - Θ No
15. **Have you tried somewhere else after getting admitted here?**
    - Θ Yes
    - Θ No
16. **Do you want to go through higher studies in your subject?**
    - Θ Yes
    - Θ No
17. **Does a good knowledge of your subject require for your career objective?**
    - Θ Yes
    - Θ No

Information about Secondary & Higher Secondary examination:

18. What was your GPA in S.S.C?

- Ans: ……..

19. What was your GPA in H.S.C?

- Ans: ……..

20. What is your grade point in English in H.S.C?

- Ans: ……..

21. What is your college status?

- Inside Dhaka
- Urban but outside Dhaka
- Rural

Information about residence:

22. Residential status:

- In Hall
- With Family
- With Relatives
- In Mess

Information about non-academic activities:

23. Do you provide tuition?

- Yes
- No (go to 25)

24. How much time do you spend in providing tuition per week?

- Ans: ……..

25. Do you have investments in Share market?

- Yes
- No

26. Do you have any other part time jobs?

- Yes
- No (go to 28)

27. How much time (in hours) do you spend in that job per week?

- Ans: ……..

28. How much money do you earn per month (if any earnings)?

- Ans: ……..

29. How much money do you get per month from your family?

- Ans: ……..

30. How much time (in hours) do you spend on internet per week?

- Ans: ……..

31. How many hours each day do you stay with your friends (non-academic purposes)?

- Ans: ……..

32. Are you in a relation?

- Yes
- No

33. Have you suffered any complicated situations regarding your relationship?

- Yes
- No

34. Are you involved in any extracurricular activities except politics?

- Yes
- No (go to 36)

35. How much time (in hours) do you spend on it per week?

- Ans: ……..

36. What is the status of your political affiliation?

- Strongly affiliated
- Moderately affiliated
- Weakly affiliated
- Not affiliated at all

37. Do you have any position in students' wing of any political party?

- Yes
- No

38. How much time (in hours) do you spend on political activities per week (if affiliated)?

- Ans: ……..

Thank you & Good luck