# Depression and Associated Factors among Undergraduate Students of Private Universities in Bangladesh: A Cross-sectional Study

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*Abstract--- Depression among the undergraduate students is a psychological well-being issue in the universities around the world. In Bangladesh, just one cross-sectional clear investigation was led by Sultana (2011) to address this issue which was constrained inside the medicine students. The objective of the present investigation is to recognize the elements responsible for depression among the undergraduate students in private universities in Bangladesh. For this purpose, a cross-sectional investigation based on 403 undergraduate students of International University of Business Agriculture and Technology (IUBAT) has been led from September 2019 to November 2019 employing stratified examining strategy, where every one of the class-areas has been considered as a stratum. The results of the study show that just over one-third of the students (33.7%) are depressed. Factors like skin complexion, chronic disease status, economic insolvency, ability to fulfill desire, relationship status with family members other than parents, unexpected Higher Secondary result, comfort ability within the university premise, satisfaction with the university program, ability to adjust with the continuously changing socio-cultural trends and survival status of parents have been found to have significant association with depression of the students. Besides, sociological factors like social status, social insecurity and social injustice have shown significant association with depression of the students. The findings of this study will lead future research works regarding the issue of depression among the students at various public as well as private universities in Bangladesh as there has hardly any relevant work been done so far.*

*Keywords--- Depression, chi-square test, stratified sampling, undergraduate students.*

## I. INTRODUCTION

Depression among the undergraduate students in the universities around the world has become an issue of major concern in recent years. A number of studies were conducted in different countries to find out the possible differentials and determinants of it. Alsubaie et al. (2019) through their study found that social support from friends and family had a significant impact on depression status of university students [1]. Various sources of social support were recognized to be the beneficial resources for universities in safeguarding the mental health of the students. Excessive internet addiction was found to be an important factor of depressive symptoms of university students as

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observed in a pilot study conducted by Mamun et al. (2019) [2]. In a separate study, it was identified by Pham et al. (2019) that the depression status of the university students had significant association with their observed financial solvency, physical inactivity, preeminence over the juniors, and apparent damaging effect of part time shifts [3]. It was also detected that non-self-determined motivation profile was a significant predictor of depression as well as suicidal ideation. Females were found to have significantly higher psychological distress than their male counterparts according to the findings of a cross-sectional study conducted by Hakami (2018) [4]. It was noticed through a separate cross-sectional study conducted by Islam et al. (2018) that socio-economic condition, life gratification, post-traumatic stress disorder, sleeping difficulty, study year, and area of residence of the students possessed significant association with depression [5]. A systematic review protocol was developed by January et al. (2018) to investigate the background, prevalence, consequences as well as treatments for depression and anxiety among the undergraduate university students in low- and middle-income countries [6].According to a cross-sectional study conducted by Ngin et al. (2018), overall health status, inadequate physical exercise, higher intake of unhealthful food, low academic performance, a negative self-assessment about body shape, and adverse childhood experiences including emotional exploitation, physical violence as well as lack of general and medical care from family in childhood were identified as factors having significant impact on depressive symptoms among university students [7]. Personal incompetence, teacher-student relationship, interpersonal difficulties, and insufficient learning facilities were found to be significant predictors of academic stress as per study performed by Reddy et al. (2018) [8]. It was highlighted in a systematic review study performed by Ribeiro et al. (2018) that academic stress of university students was negatively associated with their quality of life [9]. Residential status and gender of the students were found to have significant impact on depression according to Shant et al. (2018) [10]. It was also observed in their study that the level of depression decreased as the study year increased. It was revealed through study conducted by Jelastopulu et al. (2017) that anxiety and depression level of undergraduate students had significant association with several socio-demographic and institutional factors such as age, gender, year of study, family income, single parent family, having more than three siblings, and ignorance of support services available to students [11].Depression and smartphone addiction were found to have significant relationship according to a cross-sectional study conducted by Boumosleh and Jaalouk (2017) [12].It was discovered through the findings of a study carried out by Dawood et al. (2017) that the family history of depression or any mental disorder, physical sickness, academic result, and educational level of the parents were significant predictors of depression among the undergraduate university students [13].Gender, age, and socio-economic background of the students were recognized as significant predictors of depression according to a different study conducted by McLafferty et al. (2017) [14].The existence of a chronic disease, key events of life, being a student at the clinical level, and gender were found to be associated with depression on individual basis by Ngasa et al. (2017) through a cross-sectional study [15]. A different survey led by Munawar et al. (2017) among the university students found no significant relationship between depression and gender along with faculties [16]. Gender disparities, age-group differentials, family history of depression, socio-economic background, previous depression records, family problems, marital status, and addiction history were identified as the main causes of depression of the students by Zafar et al. (2017) through a multicenter study [17]. Gender and year of study were found to be associated with academic depression by

Birhanu and Hassein(2016) in another study as well [18]. It was revealed by Cheung et al. (2016) through a cross-sectional study that economic barriers and lifestyle factors could increase the anxiety and depression level of the university students [19]. It was revealed by Hoque(2015) that class assignment, exam workload, and compulsion of acquiring good grade were the principal reasons of anxiety among the undergraduates [20]. Ethnicity of the students was found to be a significant predictor of their anxiety by Teh et al. (2015) in a separate cross-sectional study [21]. It was also observed in their study that relationship status, social life and monthly family income of the students were significantly associated with their level of depression. A background paper for the administrators, teachers and health workers was developed by Aldiabat et al. (2014) where emphasis was given in building collective and multidimensional protective psychological health plans to upgrade students' mental health [22].An association between depression levels of non-athletes and athletes at undergraduate level was revealed by Ghaedi and Mohd (2014) through comparative statistical analyses [23].In a different study, considerable difference was witnessed in the prevalence of depression among the undergraduate students across their ethnicity by Ghayas et al.(2014) [24].Facing difficulty at class work, feeling self-incompetent, and missing inspiration to learn were identified as the sources of stressors and emotional disturbances among the undergraduates by Radeef et al. (2014) through a cross-sectional study [25]. It was observed by Chen et al. (2013) that age, satisfaction with major, monthly family income, study year, mother's education, and parental relationship of the university students were significantly associated with depression [26]. A systematic review of earlier studies between 1990 and 2010 on depression among the university students was performed by Ibrahim et al. (2013), revealing that the prevalence of depression among the undergraduates was ranging between 10% to 85% with a 30.6%of weighted average prevalence [27]. Satisfaction with economic background and closeness with parents as well as with peers were found to be statistically significantly associated with depressive symptoms of the university students by Lee et al. (2013) [28]. The need of appropriate and timely counselling was spotted in a prevalence study carried out by Saleem et al. (2013) based on 1850 university students, of whom, nearly one-third (31%) was under severe level of depression [29]. Almost similar prevalence of depression (33%) was observed by Sarokhani et al. (2013) in a systematic review and meta-analysis of earlier studies between 1995 and 2012 on depression among the university students based on 9743 respondents [30]. Disturbed relationship, alcohol consumption, and low self-esteem were some of the contributors of stress among the university students as identified by Mazumdar et al. (2012) through a comparative study [31].Uniform prevalence rate of depression over time was observed by Quince et al. (2012) through a longitudinal study [32]. Gender, year of study, and political affiliation of the students were noticed to be associated with stress and depression by Sultana (2011) in a cross-sectional descriptive study [33].

The above-mentioned literature review gives an idea about the possible factors responsible for depression among the university students of several other countries. In Bangladesh, only one cross-sectional descriptive study was conducted by Sultana (2011) to address the issue which was limited within the medical students [33]. The objective of this study is to identify the factors responsible for depression among the undergraduate students in private universities in Bangladesh. The remaining sections of the paper are organized as: Section 2 describes the methodology of the study; in Section 3, the factors responsible for depression of the students are detected and

discussed; and in Section 4, the concluding remarks along with recommendations for the policy-makers as well as future researchers are given.

## II. METHODOLOGY

Primary data have been collected for the study from undergraduate students of Fall semester 2019 of International University of Business Agriculture and Technology (IUBAT). A pre-coded self-guided questionnaire was developed and deployed at the outset for data collection purpose. It was then confirmed after being pretested on a small sample of 40 students encompassing different programs. There are around 7000 students altogether under various colleges in IUBAT. An estimated sample of 403 students has been interrogated for the study considering 5% margin of error (4.78% to be exact) at 95% confidence level [34].

The issue of non-response rate has not been taken into account since the survey has been organized under straight direction of respective course teachers within the classrooms. Stratified sampling technique was employed where each of the class-sections under different colleges was considered as a stratum. Hence, the ultimate sample of 403 students cover all the departments under different colleges, namely, College of Business Administration, College of Engineering and Technology, College of Arts and Sciences, College of Agricultural Sciences, College of Tourism and Hospitality Management and College of Nursing.

The dependent variable for the study is depression of the students which is dichotomous. The selection of independent variables related to depression has been made for Bangladesh perspective on the basis of literature review. The association between the dependent variable and each of the independent variables are checked by applying chi-square test, where p-value $\leq 0.05$ indicates significant association. The chi-square test of association is briefly summarized below:

$H_0$ : There is no association between A and B

$H_1$: There is association between A and B

Let there are n units in a sample. The sample observations are categorized as:

| A | B | Not B | $Total\ (R_i)$ |
|---|---|---|---|
| A | $O_{11} = a$ | $O_{12} = b$ | $R_1 = a + b$ |
| Not A | $O_{21} = c$ | $O_{22} = d$ | $R_2 = c + d$ |
| Total $(C_j)$ | $C_1 = a + c$ | $C_2 = b + d$ | $n = R_1 + R_2 + C_1 + C_2$ |

Here, $a, b, c, d$ are observed frequencies in different cells. $n = \sum\sum O_{ij}$

$O_{ij}$ = observation of $i^{th}$ row and $j^{th}$ column recorded from the experiment.

$E_{ij} = \frac{R_i C_j}{n}$ = expected frequency corresponding to $i^{th}$ row and $j^{th}$ column under $H_0$

Test statistic: $\chi^2 = \sum\sum \frac{O_{ij}^2}{E_{ij}} - n \sim \chi^2_{(r-1)(c-1)}$, $r$ =number of rows and $c$ =number of columns.

For r = 2 and c = 2, $\chi^2 = \frac{n(ad-bc)^2}{(a+b)(a+c)(b+d)(c+d)} \sim \chi_1^2$

## III. RESULTS AND DISCUSSION

The background characteristics of the 403 respondents of this study are displayed in Table 1.

**Table 1:** Distribution of respondents by background characteristics

| Variables under study | | Frequency | Percentage |
|---|---|---|---|
| Age (in years) | 18 - 20 | 58 | 14.4 |
| | 21 - 23 | 280 | 69.5 |
| | Above 23 | 65 | 16.1 |
| Weight (in kg) | Below 50 | 31 | 7.7 |
| | 50 - 70 | 86 | 21.3 |
| | Above 70 | 286 | 71.0 |
| Gender | Male | 211 | 52.4 |
| | Female | 192 | 47.6 |
| Religion | Muslim | 373 | 92.6 |
| | Non-Muslim | 30 | 7.4 |
| Complexion | Fair | 97 | 24.1 |
| | Medium | 270 | 67.0 |
| | Dark | 36 | 8.9 |
| Severe Disease | Yes | 63 | 15.6 |
| | No | 340 | 84.4 |
| Constant Illness | Yes | 68 | 16.9 |
| | No | 335 | 83.1 |
| Chronic Disease | Yes | 21 | 5.2 |
| | No | 382 | 94.8 |
| Monthly family Income (in BDT) | Below 50000 | 181 | 44.9 |
| | 50000 -100000 | 177 | 43.9 |
| | Above 100000 | 45 | 11.2 |
| Economic Solvency | Yes | 300 | 74.4 |
| | No | 103 | 25.6 |
| Unfulfilled Desire | Yes | 128 | 31.8 |
| | No | 275 | 68.2 |
| Academic Race | Yes | 295 | 73.2 |
| | No | 108 | 26.8 |
| Father's Education | Primary | 28 | 6.9 |
| | Secondary | 132 | 32.8 |
| | Above Secondary | 243 | 60.3 |
| Mother's Education | Primary | 98 | 24.3 |
| | Secondary | 194 | 48.1 |
| | Above Secondary | 111 | 27.5 |
| Unexpected SSC Result | Yes | 135 | 33.5 |
| | No | 268 | 66.5 |
| Unexpected HSC Result | Yes | 143 | 35.5 |
| | No | 260 | 64.5 |

| | | | |
|---|---|---|---|
| Unexpected University Result | Yes | 143 | 35.5 |
| | No | 260 | 64.5 |
| Satisfied with Program | Yes | 332 | 82.4 |
| | No | 71 | 17.6 |
| Comfortable in Institute | Yes | 294 | 73.0 |
| | No | 109 | 27.0 |
| Both Parents Alive | Yes | 346 | 85.9 |
| | No | 57 | 14.1 |
| Healthy Parents | Yes | 352 | 87.3 |
| | No | 51 | 12.7 |
| Conservative Family | Yes | 213 | 52.9 |
| | No | 190 | 47.1 |
| Relationship with Parents | Good | 355 | 88.1 |
| | Not Good | 48 | 11.9 |
| Relationship with Others in Family | Good | 333 | 82.6 |
| | Not Good | 70 | 17.4 |
| Trend Adjustment | Good | 262 | 65.0 |
| | Not Good | 141 | 35.0 |
| Physical Appearance | Good | 331 | 82.1 |
| | Not Good | 72 | 17.9 |
| Disability | Yes | 26 | 6.5 |
| | No | 377 | 93.5 |
| Interaction with Opposite Sex | Good | 301 | 74.7 |
| | Not Good | 102 | 25.3 |
| Social Status | High | 48 | 11.9 |
| | Medium | 280 | 69.5 |
| | Low | 75 | 18.6 |
| Social Insecurity | Yes | 146 | 36.2 |
| | No | 257 | 63.8 |
| Social Injustice | Yes | 344 | 85.4 |
| | No | 59 | 14.6 |
| Using Social Media | Low | 132 | 32.8 |
| | Moderate | 199 | 49.4 |
| | High | 72 | 17.9 |
| Depression | Yes | 136 | 33.7 |
| | No | 267 | 66.3 |

Age of around seventy percent (69.5%) respondents is between 21 to 23 years whereas weight of seventy one percent students is above 70 kilograms. The ratio of female and male students is very close (1:1.1). A major proportion of the respondents is Muslim (92.6%) which is foreseeable since Bangladesh is a Muslim dominant country. The complexion of about two-third of the students is medium (67%), followed by fair (24.1%) and dark (8.9%). Nearly sixteen percent (15.6%) of them have severe disease whereas almost seventeen percent (16.9%) have continuous illness. Only five percent (5.2%) students have chronic disease. Monthly family income of forty five percent students (44.9%) is below BDT 50000. Almost similar percentage of students (43.9%) has monthly family

income between BDT 50000 to BDT 100000. Nearly one-fourth of the respondents is economically insolvent (25.6%) whereas about one-third (31.8%) is frustrated due to their inability to fulfill their desire. The pressure of academic race is being felt by about seventy three percent (73.2%) students.

Fathers of the students are found to be more advanced than the mothers regarding their level of education. Over sixty percent (60.3%) fathers have education level above secondary which is about twenty eight percent (27.5%) in case of the mothers. Almost one-third of the respondents (33.5%) experienced unexpected SSC (Secondary School Certificate) result while approximately thirty six percent (35.5%) of them experienced the same in HSC (Higher Secondary Certificate) result. Similar results have been found in case of university result as well. More than eighty two percent (82.4%) of the students are satisfied with their university program whereas seventy three percent of them are comfortable inside the university.

A large proportion of the respondents (85.9%) had both parents alive at the time of the interview. In terms of health status, most of the parents (87.3%) are healthy. Just over half of the students (52.9%) belong to conservative family. Most of the students have good relationship with their parents (88.1%) as well as with the remaining family members (82.6%). Nearly one-third of the students (35%) have not been able to adjust with the changing socio-cultural trends with time.

Around eighteen percent (17.9%) of them have responded that their physical appearance is not so good according to them. A small part of them (6.5%) are physically disable. About one-fourth (25.3%) of the students are not good at interacting with opposite sex. Social status of nearly seventy percent (69.5%) students is medium. Over thirty six percent (36.2%) students do not feel secured socially. A large proportion of them (85.4%) are upset due to social injustices happening around. Almost half of the respondents (49.4%) are moderate users of social media (2 - 3 hours per day on average).Moreover, nearly one-third of them (32.8%) spend less than 2 hours per day on average in using social media (low level users) while about eighteen percent (17.9%) use it highly (more than 2 hours per day on average).

Finally, it is observed from Table 1 that just over one-third of the students (33.7%) have responded as being depressed. A prevalence study conducted by Saleem et al. (2013) based on 1850 university students in Pakistan found that thirty one percent students were severely depressed [29]. Besides, a systematic review and meta-analysis study conducted by Sarokhaniet al. (2013) based on 35 studies conducted in Iran from 1995 to 2012 involving 9743 university students found one-third (33%) of the respondents to be depressed [30].

The distribution of the respondents by their depression status and other remaining variables along with respective chi-square tests of association are shown in Table 2.

**Table 2**: Distribution of respondents by depression and remaining variables

| Variables under study | | Depression | | Significance |
|---|---|---|---|---|
| | | Yes | No | |
| Age (in years) | 18 - 20 | 22 | 36 | $\chi^2 = 3.11$ |
| | 21 - 23 | 87 | 193 | $p-value = 0.21$ |
| | Above 23 | 27 | 38 | |
| Weight (in kg) | Below 50 | 12 | 19 | $\chi^2 = 0.85$ |
| | 50 - 70 | 26 | 60 | $p-value = 0.65$ |
| | Above 70 | 98 | 188 | |
| Gender | Male | 70 | 141 | $\chi^2 = 0.06$ |
| | Female | 66 | 126 | $p-value = 0.79$ |
| Religion | Muslim | 127 | 246 | $\chi^2 = 0.20$ |
| | Non-Muslim | 9 | 21 | $p-value = 0.65$ |
| Complexion | Fair | 45 | 52 | $\chi^2 = 9.87$ |
| | Medium | 78 | 192 | $p-value = 0.00$ |
| | Dark | 13 | 23 | |
| Severe Disease | Yes | 17 | 46 | $\chi^2 = 1.52$ |
| | No | 119 | 221 | $p-value = 0.21$ |
| Constant Illness | Yes | 20 | 48 | $\chi^2 = 0.68$ |
| | No | 116 | 219 | $p-value = 0.41$ |
| Chronic Disease | Yes | 13 | 8 | $\chi^2 = 7.85$ |
| | No | 123 | 259 | $p-value = 0.00$ |
| Monthly family Income (in BDT) | Below 50000 | 68 | 113 | $\chi^2 = 4.36$ |
| | 50000 - 100000 | 50 | 127 | $p-value = 0.11$ |
| | Above 100000 | 18 | 27 | |
| Economic Solvency | Yes | 90 | 210 | $\chi^2 = 7.37$ |
| | No | 46 | 57 | $p-value = 0.00$ |
| Unfulfilled Desire | Yes | 55 | 73 | $\chi^2 = 7.14$ |
| | No | 81 | 194 | $p-value = 0.00$ |
| Academic Race | Yes | 106 | 189 | $\chi^2 = 2.35$ |
| | No | 30 | 78 | $p-value = 0.13$ |
| Father's Education | Primary | 10 | 18 | $\chi^2 = 0.06$ |
| | Secondary | 44 | 88 | $p-value = 0.97$ |
| | Above Secondary | 82 | 161 | |
| Mother's Education | Primary | 41 | 57 | $\chi^2 = 3.95$ |
| | Secondary | 62 | 132 | $p-value = 0.14$ |
| | Above Secondary | 33 | 78 | |
| Unexpected SSC Result | Yes | 46 | 89 | $\chi^2 = 0.01$ |
| | No | 90 | 178 | $p-value = 0.92$ |
| Unexpected HSC Result | Yes | 39 | 104 | $\chi^2 = 4.16$ |
| | No | 97 | 163 | $p-value = 0.04$ |
| Unexpected University Result | Yes | 79 | 133 | $\chi^2 = 2.45$ |
| | No | 57 | 134 | $p-value = 0.11$ |
| Satisfied with Program | Yes | 105 | 227 | $\chi^2 = 3.79$ |
| | No | 31 | 40 | $p-value = 0.04$ |

| | | | | |
|---|---|---|---|---|
| Comfortable in Institute | Yes | 91 | 203 | $\chi^2 = 3.80$ |
| | No | 45 | 64 | $p-value = 0.04$ |
| Both Parents Alive | Yes | 107 | 239 | $\chi^2 = 8.71$ |
| | No | 29 | 28 | $p-value = 0.00$ |
| Healthy Parents | Yes | 111 | 241 | $\chi^2 = 6.09$ |
| | No | 25 | 26 | $p-value = 0.01$ |
| Conservative Family | Yes | 71 | 142 | $\chi^2 = 0.03$ |
| | No | 65 | 125 | $p-value = 0.85$ |
| Relationship with Parents | Good | 117 | 238 | $\chi^2 = 0.83$ |
| | Not Good | 19 | 29 | $p-value = 0.36$ |
| Relationship with Others in Family | Good | 104 | 229 | $\chi^2 = 5.43$ |
| | Not Good | 32 | 38 | $p-value = 0.02$ |
| Trend Adjustment | Good | 73 | 189 | $\chi^2 = 11.59$ |
| | Not Good | 63 | 78 | $p-value = 0.00$ |
| Physical Appearance | Good | 108 | 223 | $\chi^2 = 1.04$ |
| | Not Good | 28 | 44 | $p-value = 0.31$ |
| Disability | Yes | 9 | 17 | $\chi^2 = 0.01$ |
| | No | 127 | 250 | $p-value = 0.92$ |
| Interaction with Opposite Sex | Good | 102 | 199 | $\chi^2 = 0.01$ |
| | Not Good | 34 | 68 | $p-value = 0.92$ |
| Social Status | High | 9 | 39 | $\chi^2 = 6.59$ |
| | Medium | 104 | 176 | $p-value = 0.04$ |
| | Low | 23 | 52 | |
| Social Insecurity | Yes | 124 | 22 | $\chi^2 = 268.27$ |
| | No | 12 | 245 | $p-value = 0.00$ |
| Social Injustice | Yes | 126 | 218 | $\chi^2 = 8.72$ |
| | No | 10 | 49 | $p-value = 0.00$ |
| Using Social Media | Low | 46 | 86 | $\chi^2 = 3.24$ |
| | Moderate | 60 | 139 | $p-value = 0.19$ |
| | High | 30 | 42 | |

It can be observed from Table 2 that skin complexion of the students is significantly associated with their depression status. Skin complexion was observed to be a cause of depressive symptoms by Keith et al. (2010) in their study [35]. Chronic disease status of the students has been observed to have significant association with depression. This is justified by the findings of a cross-sectional study conducted by Ngasa et al. (2017) based on 618medical students in Cameroon [15]. Economic insolvency of the students as well as their inability to fulfill desire are observed to be significantly associated with their depression status. Similar results were found by Pham et al. (2019) [3], Islam et al. (2018) [5], McLafferty et al. (2017) [14], Zafar et al. (2017) [17] and Cheung et al. (2016) in their respective studies.

Unexpected academic results of the students were found to be significantly associated with their depressive symptoms in studies conducted by Ngin et al. (2018) [7] and Dawood et al. (2017) [13].In this study, unexpected HSC result of the students has been found to have significant association with depression. Satisfaction with the

university program they are studying is also significantly associated with the depression status of the students. This is justified by findings of studies done by Suleiman et al. (2017) [16] and Chen et al. (2013) [26]. Besides, students' comfortability within the university premise has also been observed to have significant association with their depression status, justified by the results of the study performed by Reddy et al. (2018) [8].

Survival status of parents has also been observed to have significant association with depression status of the students in this study. Demozeet al. (2018) observed similar findings in their cross-sectional study conducted among 453 orphan adolescents in Ethiopia [36]. Relationship status of the students with their family members other than parents has also been found to be significantly associated with depression. This outcome is well supported by results found by Lee et al. (2013) in their study based on 126international university students in the Philippines [28]. We can also observe from Table 2 that students' inability to adjust with the continuously changing socio-cultural trends has significant association with depression. A 10-year prospective study conducted by Barton et al. (2013) also supports this result [37].

Finally, sociological variables like social status, social insecurity and social injustice have been found to be significantly associated with depression status of the students in this study. The results are well supported by findings of the study conducted by Sheppard (2002) [39].

## IV. CONCLUSION

The findings of this investigation have exhibited us a clear picture about the components that are essentially connected with the downturn status of the undergraduate university students in Bangladesh. It has been demonstrated through this study that unexpected HSC result impacts student's depression status significantly. Hence, corresponding policy-makers should think about the issueand take necessary initiatives to fix it. The government of Bangladesh must confirmsocial security as well as justice to ensurea safe social atmosphere for the present and upcoming generation which would be beneficial for their mental health.The university authorities should have arrangements inside their campuses that would make the students feel comfortable. Besides, there is still scope for further research to identify variables like preeminence over the juniors, apparent damaging effect of night shifts, political affiliation of the students,non-self-determined motivation profile, life gratification, post-traumatic stress disorder, lack of general and medical care from family in childhood, addiction history  etc. that might have notable effects on depression but have not been included in this study due to their unavailability for several constraints .

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