

Factors contributing to mental depression: A study among university students

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Abstract Mental depression among students is a rising syndrome in Bangladesh. Recent research shows that the extent of depression, suicidal attempts, drug addictions, anxiety, and stress level have been on the rise significantly worldwide. It has become one of our critical social concerns. Unfortunately, these symptoms are more prevalent among tertiary-level students. These young people suffer from various disorders and various forms of depression. Since the young generation, like university students, are our prime strengths, their dejection and weak mental disposition are a significant loss and threat to our country. This problem is becoming more intense with time and causing vital social changes. This research investigated this issue using quantitative techniques, including a questionnaire survey. SPSS version 24 was used to determine the relationship between dependent and independent variables. The main goal is to determine the severity and variance underlying mental depression so that recommendations for improving cognitive abilities can be made. Further research can also be undertaken based on the findings of this research.

Keywords: mental health, financial problem, internet addiction, social media, students

1. Introduction

Numerous of us consider college a wondrous time of unusual encounters and extraordinary flexibility to explore modern thoughts and discover one's true self. However, depression and distress have been afflicting academic understudies increasingly at alarming rates in recent years. According to the most recent Center for Collegiate Mental Wellbeing Survey, anxiety and melancholy are the most common reasons college students seek counselling. The research shows that approximately 1 in 5 college students are influenced by depression; hence, these disarrangements are predominant among college students. There are a few factors that influence students' mental health. In Bangladesh, the predominance of mental depression is gradually increasing. According to one study in Dublin, Ireland, students are particularly vulnerable to depression, with rates of approximately 14%. The general population's foundation rate is estimated to be between 8% and 12%. (Gorter et al 2008). Depression was recorded in 18 percent of students entering the College of Massachusetts Restorative School; this rose to 39 percent in year two and diminished somewhat to 31 percent in year four. The increment over time was more prominent among females and those with more perceived stress. Medical, dental, law, and nursing students' instruction regularly increases misery. In 2007, approximately 16 percent of students at the University of Michigan were affected by a combination of unease, clutter, and discouragement, including two percent of children considering suicide and students who have financial problems who had a better chance (Neumayer 2013).

Depression influences individuals of all ages, from all walks of life, in all nations. Depression is the driving cause of sick wellbeing and inability around the world. In truth, it influences 322 million individuals worldwide and over 6 million individuals in Bangladesh. It causes mental anguish and impacts people's capacity to carry out only ordinary errands, sometimes obliterating results for connections with family and companions and the ability to win a living. At most noticeably awful, depression can lead to suicide, presently the moment driving cause of death among 15- to 29-year-olds. Information from the Worldwide School-Based Student Health Overview (2014) shows that of 13- to 17-year-old students in Bangladesh, 7% attempted suicide within the final 12 months, whereas 8% made a suicide arrangement, and 5% considered attempting suicide. The same report found that 5% of students from the same age group could not rest after being stressed out, 11% felt lonesome most of the time or continuously (12% boys, 9% young ladies) and 8% had no near friends.

In Bangladesh, the predominance is expanding daily. Mental wellbeing and depression since a few certain components make students do destitute academic records. Their lives ended up at stake. They ended up on edge, pushed out, and depressed



approximately everything. They ended up grouchy all the time. The most exceedingly bad thing that might happen is that it affects their individual lives and academic performance. Their scholastic execution diminishes. Sometimes they get dropped out of college and stay on probation. These issues are getting higher and affecting our youth, who are the spine of our country. On the off chance that if this issue stays as it is, it will lead us to a dangerous time when our nation will fall into a perilous circumstance. A clear increment in truly exasperating student counselling student wellbeing administrations within Bangladesh has driven concern that expanding monetary challenges and other exterior weights may influence student mental wellbeing and academic performance. This research explored whether depression develops in college. University section, where unfavorable things encounter any increments. Therefore, the objective of this research is 1) to determine the factors that influence university-level students' mental depression due to financial problems and internet addiction.

2. Literature Review

2.1 Mental Depression

Depression may be a common but genuine mental sickness ordinarily stamped by pitiful or anxious sentiments. Most college students sometimes feel pitiful or anxious, but these feelings ordinarily pass quickly within some days. Untreated depression keeps going for a long time, meddling with day-to-day exercises and is much more than just being "a little down" or "feeling blue." (National organization of mental wellbeing). Mental health problems are youth's most frequent psychological problems (Kashani and Orvaschel 1988). However, depression is less frequent during childhood, although it becomes more common as adolescence approaches (Van Beest and Baerveldt 1999). Eighty-six percent of university/college psychological services administrators reported an increase in severe mental disorders among students in a 2005 nationwide survey (Gallagher 2012). Poor financial position is a well-known risk factor for mental illness among the general public (Yu and Williams 1999). Declining financial status may be a known hazard calculated within the common populace for mental wellbeing issues (Yu and Williams 1999). In the collegiate context, however, far less is known about students from lower socioeconomic backgrounds. According to a UK study, students under more financial stress and working longer hours had higher levels of depression (Roberts et al 1999).

Colleges are well situated to advance mental wellbeing among youthful individuals since they envelop a few imperative viewpoints of students' lives: academics, health administrations, homes, social systems, and extracurricular exercises (Mowbray et al 2006). In Hong Kong, a web-based stretch survey with first tertiary instruction understudies discovered that 27% of respondents were experiencing tension with direct seriousness (Wong et al 2006). In India, a study examined the prevalence of current depression, anxiety, and stress-related side effects among young adults, ranging from mild to severe, 18.5 percent, 24.4 percent, and 20 percent, respectively (Sahoo and Khess 2010).

Emotional fatigue, which alludes to the sentiments of being drained of one's passionate resources, is respected as the essential person stretch component of the disorder. Depersonalization, alluding to negative, critical, or unreasonably segregated reactions to other individuals at work, speaks to the interpersonal component of burnout. Finally, decreased individual achievement refers to sentiments of a decrease in one's competence and efficiency and to one's brought down sense of adequacy, speaking to the self-evaluation component of burnout (Maslach 1998).

Mental wellbeing issues may influence human capital accumulation, specifically, the sum and efficiency of schooling, which may have long-lasting results for work, pay, and other results. Understanding the interface between mental health and scholarly victory is vital to surveying the returns to avoiding, identifying, and treating mental wellbeing issues among youthful individuals.

Past studies have considered several extended factors—such as financial help (Dynarski 2003) and scholastic and social inclusion (Tinto 1998)—that influence remaining in and completing college. Another critical calculation may be mental health. Mental clutters as often as possible, have to begin with onset at no time, sometimes recently, or amid the normal college age run (18-24) (Kessler et al 2005); however, they are only moderately small at the interface between mental health and scholastic success in college. Understanding this association might be profitable due to the numerous ways in which college settings can reach youthful individuals; college speaks to them as it was time in numerous people's lives when a single set includes their primary activities, social systems, and an extent of steady services and organizations.

Even after controlling for signs of anxiousness and compulsive overeating, prior academic achievement, and other factors, depression could be a significant predictor of poorer GPA and a higher probability of dropping out. Depression is also linked to nervousness; the link involving depression and academic performance is particularly strong among individuals who have also tested positive for panic clutter. Anhedonia is the most well-established negative indicator of academic achievement among these adverse symptoms of depression. Aggressive behavior (feeling frustrated or depressed) is independently associated with a lower GPA (Eisenberg et al 2009).

A study among 200 students appeared that female students are more on edge than guys, and males are more depressed than females. This finding indicates that achievement and anxiousness have a positive association, but depression has a negative association (Al Qaisy and Thawabieh 2017). After adjusting for professionals, depressive symptom ratings increased as statistically significant assertive markers of cellphone addiction. Regarding delayed mobile phone usage, 35.9% felt weary

during the day, 38.1% reported poor sleep, and 35.8% slept less than 4 hours on many occasions (Matar Boumosleh and Jaalouk 2017).

Depression may be a prevalent indicator of a destitute GPA and a huge plausibility of dropping out, controlling for earlier scholastic performance and other variables and co-occurring misery and uneasiness related to lower GPA (Eisenberg et al 2009). Depression, anxiety, and stress have a gigantic hindering impact on a person and society, which can lead to negative results counting medical dropouts, expanded self-destructive tendency, relationship and conjugal issues, impeded capacity to work viably, burnout conjointly existing issues of health care arrangement (Teh et al 2015). Students who reported financial hardships had an increased risk of mental illness (Eisenberg et al 2009).

Web usage is one of the major variables influencing the scholarly performance and social life of college/university students. The number of hours spent on the web/social media/browsing will influence students' grades depending on whether the web is utilized for study reasons or social purposes. Numerous studies have been conducted to determine the type of information that end users seek and obtain on the Web and the circumstances under which they prefer electronic sources to paper sources (Tenopir and King 2008).

Technology and web usage, particularly among college students, have been linked to increased visitation and communication with companions and family members. According to various studies, the most common use of the Web for college students is interpersonal communication through mail, messaging, and chat programs (Kraut et al 2002). Many studies have claimed that individuals may use the Internet with an addiction that will cause hurtful impacts on people and academic issues, changing their social behavior, propensities, and capacities negatively (Young 1996; Kubey et al 2001; Kraut et al 2002; Nalwa and Anand 2003). College students positioned Web use within the "Health Hindrances to Learning". A total of 19.7% of college students noted that their web utilization negatively impacted their previous-year scholarly results (Acha-Ncha 2009). Subsequently, students experienced impediments in their studies, and others (Kubey et al 2001; Nalwa and Anand 2003) detailed that web addiction may be a fundamental issue that influences students' academic performance. Spending a part of the time watching pornographic sites can contrarily impact the academic performance of students (Lipsmoin 2007).

2.2. Hypothesis Development

2.2.1. Financial problems

Monetary issues have a gigantic effect on academic performance and depression. A few analysts also found the same thing prior. A clear increase in truly disturbed student counselling student wellbeing services within the UK has made us concerned that expanding financial challenges and other exterior weights may influence student mental wellbeing and academic performance. Financial challenges made a significant autonomous commitment to depression and relationship troubles freely anticipated anxiety.

Depression and budgetary troubles mid-course anticipated a decrease in examination performance from first- to second-year students (Andrews and Wilding 2004). Students and their families place a high value on staying in school and graduating on time. More significant financial burdens may cause students to reduce coursework or drop out of school to work. In the fall of 2004, a Web-based study (N = 503) was conducted at a large open college to examine the characteristics of students who experienced dropping out or reduced credit in subjects in college/university due to financial reasons. Exams were given to these students to compare them to those who did not drop out or reduce their coursework. The findings indicate a link between monetary stress and academic performance (Joo et al 2008). From this observational point of view, it is beautifully self-evident that academic results tend to drop when there is a burden of financial pressure. It can be seen that numerous students do part-time employment to win cash so that they try to reduce the loads of their parents. Maintaining jobs, earning money, supporting parents, giving fees, and studying may also impact their results and mental health.

H1: Financial problems contribute to students' mental health and cause depression.

2.2.2 Internet Addiction

Most of the time, it harms the students. They cannot cope with their studies and prioritize in an off-base way. Nonheavy web clients had much better connections with authoritative staff, academic grades, and learning fulfillment than overwhelming web clients. Astounding internet users were likelier to be depressed, physically ill, lonely, and introverted than nonheavy Web users (Chen and Peng 2008). Many other studies in brain research have discovered that spending more time on the Internet can harm a person's ability to communicate appropriately face-to-face with companions, peers, family members, and guardians (Anderson 2001).

H2: Internet addiction contributes to students' mental depression.

2.2.3 Research Framework

The research framework has been demonstrated in Figure 1.

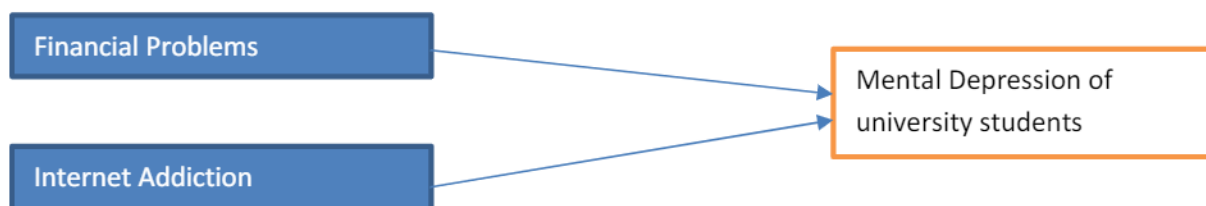


Figure 1 Research Framework.

2.2.3.1 Components of variables

Figure 2 shows a model of interrelationships among hypothesized variables.

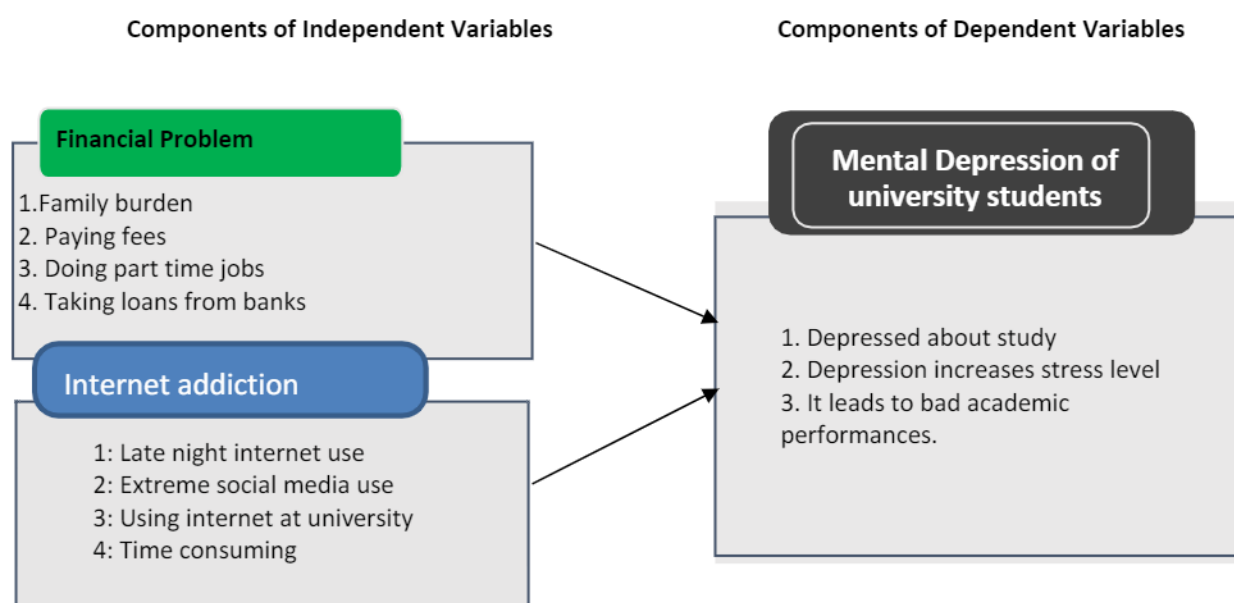


Figure 2 A Model of Interrelationships among Hypothesized Variables.

3. Methodology

The quantitative research approach was employed in this study to understand potential responses and to answer and identify the research objectives from undergraduate and postgraduate students of Bangladesh from both public and private universities. The term "gathering of information from a sample of persons through their responses to questions" refers to survey research. This kind of study permits using numerous techniques for participant recruitment, data collection, and instrumentation. Quantitative research techniques can be used in survey research, for example, the use of questionnaires along with numerical items (Check and Schutt 2011).

Primary data were gathered from a total of 206 undergraduate and postgraduate students who are currently enrolled in different public and private universities in Bangladesh in multiple divisions to shed light on the strategy for engagement, potency, perception, difficulties, and psychological processes as seen from the viewpoint of student happiness and experience.

The study's participants were chosen using a convenience sampling method. A convenience sample is drawn from a source that is conveniently accessible (Andrade 2020). A special nonprobability sampling technique called convenience sampling, also known as availability sampling, relies on data collection from population members who are easily available to participate in the study (Saunders et al 2009). The focus of the study was to understand the factors influencing mental depression among Bangladeshi undergraduate and postgraduate students from private and public institutions. The conclusions drawn from primary data were more accurate representations of all nationwide undergraduate and graduate students. Respondents are from public and private institutions, and they were chosen from Dhaka, Savar, Khulna, Chittagong, and Rajshahi to represent the entire country accurately.

Students were contacted via social media platforms (Facebook, WhatsApp, and email). For one and a half months, the questionnaire was given to pupils from various universities in Dhaka, Savar, Khulna, Chittagong, and Rajshahi. To finish the investigation, primary data were collected. Primary data were collected using online Google Doc surveys during the pandemic. The study aimed to comprehend the potential solution and quantify attitudes, engagement, effectiveness, problems, and

psychological status from the perspective of students' experiences and satisfaction. A Google Form was used to create a questionnaire with 17 items on a five-point Likert scale, which were then organized into six sections following the study's goals. Later, SPSS was used as an analysis tool to obtain the final output.

4. Analysis and Results

4.1 Descriptive Analysis

The research was conducted among 206 respondents as demonstrated in Figure 3. Of the 206 respondents, 102 were male, and 103 were female. It was observed that 49.5% of the respondents were male, while 50.2% were female. This difference could be attributed to the fact that males exhibit a greater level of interest compared to females.

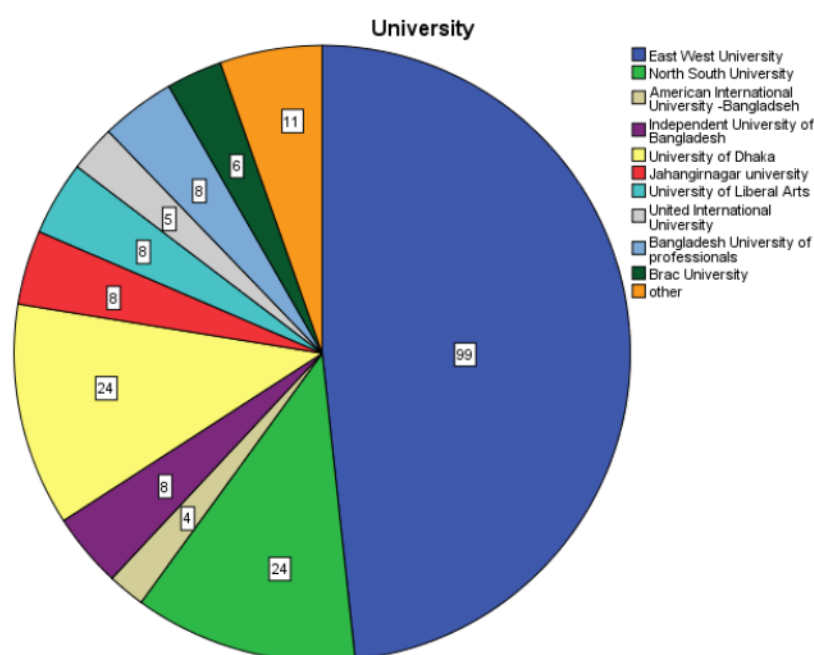


Figure 3 Respondents.

The Figure 3 shows a few of the questionnaire items that seem significant to delineate the respondent's overview of this topic. The scale was from strongly disagree to agree strongly.

From Figure 4, the item was whether financial problems affect students' mental health and create depression, and 51.2% of students strongly agreed with the statement. They highly feel that any financial issues of their life and family impact their mental health and lead to depression.

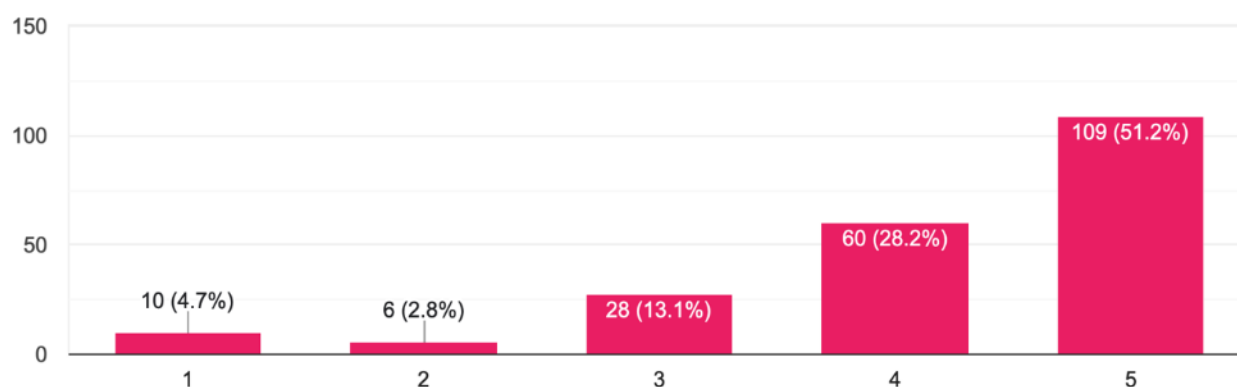


Figure 4 Financial problems affect students' mental health and create depression.

Figure 5 shows that extreme internet and social media use hampers students' mental health and leads to poor academic performance. Most of the participants (40.8%) responded that they agreed with this statement. They believe that excessive internet usage without any purpose takes them to nothing and leads to poor academic records and mental depression.

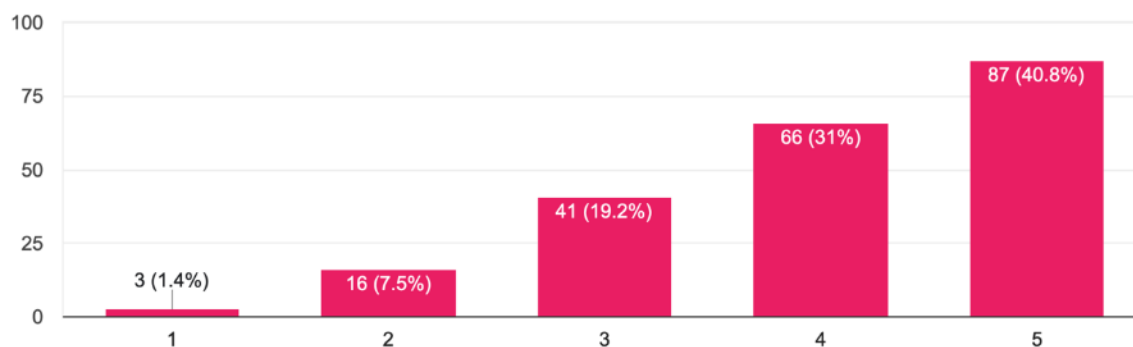


Figure 5 Extreme internet and social media usage hampers students' mental health and leads to poor academic records.

From Figure 6, the item was whether mental depression enhances suicidal attempts, anxiety, and other drug addictions of university-level students, and 48.4% of students strongly agreed with this statement. They highly think that if a student is mentally unhappy and depressed, he or she might get into bad activities such as different types of addictions and be always anxious; moreover, it may sometimes lead to suicidal attempts.

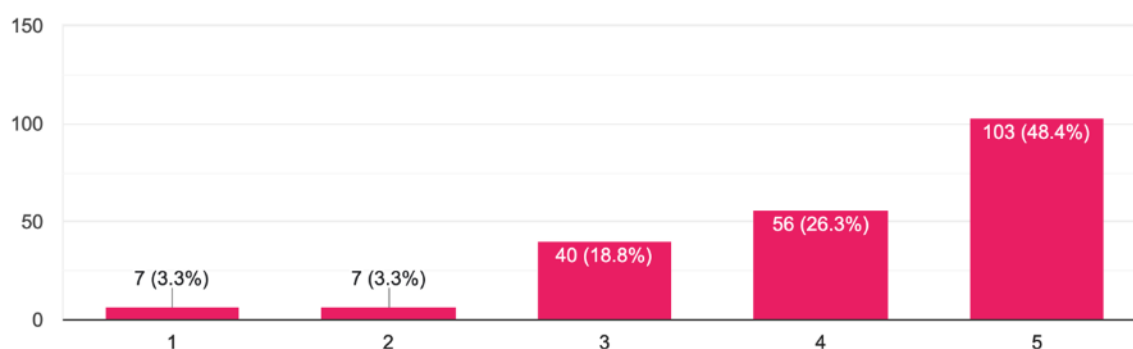


Figure 6 Depression enhances suicidal attempt and other drug addictions and anxiety.

4.2. Factor Analysis: KMO and Bartlett's Test

The suitability of the sample responders being tested is crucial. The adequacy of the sample size can be determined by employing KMO's and Bartlett's tests. The acceptability of the sample respondents is demonstrated through the utilization of KMO's and Bartlett's tests. The investigation's overall sample size is determined by these tests. A benchmark value is assigned to each test, which should be compared to the actual value to ascertain the level of adequacy for the number of respondents.

Kaiser, Meyer, and Olkin (KMO) developed the KMO scale to assess sampling adequacy. It possesses a standard value of 0.70. The number of participants is adequate for the investigation if the value exceeds 0.70. KMO values ≥ 0.70 are desired, but values less than 0.50 are generally considered unacceptable (Kaiser 1974; Hair et al 2010) (see Supplementary Material). Another indicator of sufficient sample size is the significance level of the responders, as shown by Bartlett's test. Null hypotheses will be accepted in Bartlett's test if the significance value is larger than the benchmark value of 0.05. If it is less than 0.05, null hypotheses will be rejected (Jones 1994).

The number of respondents for this study is sufficient per the KMO criterion of sampling adequacy because the value is 0.876, higher than the benchmark value of 0.70. Bartlett's test results indicate that the significance level is 0.000, which is lower than the benchmark value of 0.05. The null hypothesis is thereby disproved, and the alternative hypothesis is accepted. The results of the tests indicated above indicate that the respondents' group is sufficient for further study.

4.3. Total variance explained (TVE) analysis

The independent factors successfully explain the dependent variable if the cumulative percentage is 60% or above (Hair et al 2010). The dependent variable's 62.597% variance is calculated from here (see Supplementary Material). This surpasses the benchmark in quality. Accordingly, the independent variables in this study undoubtedly adequately described the dependent variables.

4.4. Regression analysis

Regression analysis is a set of statistical methods used to estimate the impact of an independent variable on the dependent variables. To determine the research objective, which is to identify the impact of internet addiction and financial problems on mental depression, multiple regression analysis was used.

The model summary in Table 1 details how well a regression line can capture all variations in the dependent variable. It refers to whether the independent variables may evaluate the dependent variable. The R-square (R^2) from the regression analysis results explained whether to accept or reject the hypotheses stated in this study. The result of the R-square reveals that financial problems and internet addiction would be able to elucidate the R^2 value of 0.341 or 34.1% of the variation in mental depression, and the p-value 0.000 was less than 0.05, which reached the significance level. The t value was positive, indicating that students' mental depression was significantly and proportionally affected by financial problems and internet addiction. This also means that another 65.9% of the variance can be explained by other variables not included in this study. A value of 0.3 to 0.5 has a moderate/average effect on the dependent variables (Srinivasan 2020). Hence, 34.1% is good enough to explain the relationship for this study.

Table 1 Coefficient^a of internet addiction and financial problems.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	8.861	1.520		5.828	.000
Internet_Addiction	.363	.095	.268	3.834	.000
Financial Problem	.561	.101	.387	5.534	.000

^aDependent variable: mental depression.

The results of the hypothesis testing are shown in Table 2. Beta values for two variables presented a positive value. Thus, there is a positive relationship between internet addiction and financial problem variables with the dependent variable of the mental depression of university students.

Table 2 Summary of findings for hypothesis testing.

	Hypotheses	Supported/Not Supported
Hypothesis 1	Financial problems contribute to student's mental health and cause depression	Supported
Hypothesis 2	Internet addiction contributes to student's mental depression	Supported

5. Discussions and Conclusions

This study delineates one of the most significant topics worldwide and in Bangladesh. After thorough analysis and interpretation, it can be said that out of two independent variables, financial problems, and internet addiction have a great impact and contribute to students' mental depression and their mental health. All the methods and techniques showed the influence of independent factors on the dependent variable. Thus, this study surely will contribute to society, and we hope that the findings will support the university authority, parenting styles, and the students themselves to eliminate mental depression by addressing the abovementioned two factors (internet addiction and financial problems); only then will this contribution be an achievement for us.

Mental illness is a prevalent and significant medical condition that has a detrimental impact on how you feel, think, and act, such as eating disorders, suicide attempts, or loss of interest in hobbies. Sometimes this attitude of grief or discontent may last so long depending on the trigger factor. Adolescence, which is the transitional period from childhood to adulthood, is a stage of emotional instability that makes adolescents vulnerable to depression, and it was very high among preuniversity college students (Naushad et al 2014). Students are constantly under pressure from various sources throughout their academic careers, resulting in stress. The main objective of this study was to investigate the role of financial problems and internet addiction in mental depression.

Similar to previous studies (Mellal et al 2014; Reiss et al 2019; Razzak et al 2019), financial problems are positively related to mental depression. One possible explanation may be that without denying in today's world, money is almost everything. Education fees becoming increasingly expensive. Students cannot cope with financial pressure, especially from less privileged socioeconomic backgrounds. According to ThinkImpact (2021), 55% of students admit to leaving school due to financial struggles. Economic pressure in families during the COVID-19 pandemic also impacts depressive symptoms in adults (Stirling et al 2022) when children lack parental loving and careful guidance and suffer bodily and psychological harm (Francis et al 2015). Low-income families have more conflict, including domestic violence and discrimination (Wadsworth et al 2008). Students from

broken families lack confidence in every area of life and cannot handle emotional breakdowns (Sparks et al 2021). This finding is consistent with previous research highlighting that financial difficulties play a large role in determining mental depression.

Our results also indicated that mental depression among students was significantly affected by internet addiction behavior. Similar findings were reported by Sayyed et al (2023) and Gupta et al (2018), revealing the relationship between internet addiction and mental depression. Depression is associated with anhedonia, dysphoria, lack of interest and pleasure in daily activities, weight loss or gain, insomnia or excessive sleeping, and hopelessness (American Psychiatric Association 2015). Internet usage has permeated every aspect of daily life in these current times of digitization, especially among adolescents, and a dangerous illness known as internet addiction has emerged, and addiction is also described as an identified health problem (Lai et al 2015). Students not only use the internet for academic purposes but also increase their exposure time to social media, play online games, watch movies and spend much of their time using the internet.

People with internet addiction frequently experience emotional and social issues, which can cause them to withdraw from their peers, spend more time online, and ultimately experience greater adjustment stress and psychological and interpersonal connection issues (AlAzzam et al 2021). The general inference we can make is that addiction to the internet influences adolescents' less sociability and increases individualism, indirectly affecting mood. Thus, avoiding real-life social contact and social isolation in excessive Internet users leads to depression (Kuss et al 2014). As adolescents spend more of their time online, it is easier to engage in cyberbullying. Being a victim of cyberbullying may lead to more psychological and behavioral problems, and depression seems to be one of the most common (Kwan et al 2020).

6. Recommendations

In conclusion, mental depression is common among university students. Given the negative impact of financial problems and internet addiction on mental health outcomes, more attention should be given, and effective interventions should be undertaken. Socioeconomic disadvantage shapes long-term students' mental health, and considering how quickly the Internet is spreading over the entire nation, the effect of Internet addiction on physiological health is tremendous. The time has come to acknowledge internet addiction as a real issue and take action before it gets out of hand. By informing and educating parents, teachers, and legislators on the negative effects of Internet addiction, a comprehensive strategy is needed to restrict students' Internet use. Every university must have a counselling centre for students who need psychiatric counselling. Counsellors should plan educational and preventative group activities about caring for mental health and using the Internet properly. To support teacher relationships, the university could provide emotional and behavioral support for students. Students should get involved in numerous extracurricular activities to refresh their minds. Paying attention to students with high depression. Family tends to play an important role in influencing an individual's socialization. Parents should care more about internet addiction and educate them about digital safety and etiquette.

Ethical Considerations

The respondents have consented to the research.

Conflict of Interest

The authors declare no conflict of interest.

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