

CRITICAL ANALYSIS OF DEPRESSION AMONG HIGHER EDUCATION STUDENTS OF KOLKATA

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Abstract

Students of all ages are susceptible to depression, which is a common mental health disorder that impacts millions of people worldwide. The major aim of the study was to investigate the rate of prevalence of depression among higher education students in Kolkata in relation with different demographic factors viz. gender, type of family and minority status. In order to fulfill the aim of this investigation, a cross-sectional survey design was used. The study's sample included undergraduate and postgraduate students located in Kolkata, West Bengal. A total of 250 participants, including both undergraduate and postgraduate students, were recruited using a random sampling method from various higher education institutions, namely colleges and universities, located in the Kolkata area of West Bengal. This research aimed to examine the association between depression and many independent factors, including higher educational levels, gender, type of family, and minority status. Depression was used as the dependent variable in this analysis. To access the depression levels of higher education students, researchers used Beck Depression Inventory (BDI) including a demographic data sheet. Major findings yielded that firstly, majority of the undergraduate and postgraduate students appeared with mild level of depression and educational levels had no significant dependency on levels of depression (p > 0.05). Secondly, most of the male students showed moderate level of depression and the majority of female students showed mild level of depression and gender had a significant dependency on levels of depression (p < 0.05). Thirdly, majority of students from both categories of family type appeared with mild level of depression but types of family had no significant dependency on levels of depression (p>0.05) and lastly, minority status wise majority of non-minor students showed mild level of depression and majority of minor students emerged with moderate level of depression and a significant relationship found between levels of depression and minority status of students (p < 0.05). Keywords: Depression, Mental health, Well-being, Academic Achievement, Higher education students.

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Introduction

Depression or Depressive disorder, is a mood disorder characterized by persistent feelings of sadness, hopelessness, and a lack of motivation (Beck et al., 1987). It may cause changes in how individuals feel, think, and act, which can make normal living difficult. It's important for anybody suffering from depression, no matter how mild, to reach out for aid and understanding. The presence of a genetic component in depression suggests a potential familial transmission of the disorder. Research indicates that those who have a familial background of depression are more susceptible to the onset of this disorder (Sullivan et al., 2000; Kendler et al., 2006). There exists a correlation between adverse childhood events, such as neglect or mistreatment, and increased susceptibility to depression throughout adulthood (McLaughlin et al., 2010). The presence of a chronic medical condition might increase the likelihood of experiencing depression. The psychological well-being of individuals may be profoundly affected by the stress and constraints that come with the management of chronic conditions (Moussavi et al., 2007; Atlantis & Sullivan, 2012). The comorbidity of substance abuse, including alcohol and drug usage, has been seen to coincide with depression and exacerbate its level of severity (Grant et al., 2010; Hasin et al., 2018).

Students of all ages are susceptible to depression, which is a common mental health disorder that impacts millions of people worldwide. Concerns regarding the incidence of depression and its effects on educational achievement, general well-being, and chances for the future have grown in recent years. A serious global public health issue, depression is estimated to impact 350 million individuals worldwide. According to this survey, there is an increasing demand for treatments to manage this illness and other mental health issues on a global scale (World Health Organization, 2012). In today's world, student depression has become a major problem. According to a 2019 World Health Organisation (WHO) study, depression symptoms are reported by 10-20% of teenagers and young people worldwide (World Health Organization, 2019). By 2020, depression is predicted to overtake heart disease as the second most common cause of disease burden, according to reports from the World Health Organisation. Numerous biological, psychological, and social elements interact in intricate ways to contribute to the causes of depression in students. Stress and anxiety are key depression triggers and are frequently brought on by academic pressure, competition, and the fear of failure. In addition, social isolation, familial problems, trauma, and genetic susceptibility can contribute to the emergence of depression in students (Avenevoli et al., 2015). The effects of depressive disorders on students can go well beyond the personal and affect society as a whole. Depression commonly impairs academic performance, resulting in lower grades, absences from work, and dropout rates. Additionally, depressed students may find it difficult to establish and sustain relationships, which reduces their ability to socialize and their sense of belonging in general (Hunt & Eisenberg, 2010). Depression, anxiety, and stress are interconnected psychological disorders. Frequently, sadness and anxiety tend to co-occur, leading people to potentially manifest symptoms of both conditions concurrently (McEwen, 2004). Chronic stress has the potential to initiate and sustain these diseases. Both conditions exhibit similar symptoms and patterns of negative thinking. Furthermore, these factors might potentially have adverse impacts on an individual's physical well-being. The comprehensive management of depression and anxiety necessitates a concurrent approach, whereby both illnesses are addressed simultaneously. It is essential to emphasize the importance of receiving assistance from

qualified professionals to ensure precise evaluation and tailored interventions (Segerstrom & Miller, 2004).

Significance of the study

Depression is acknowledged as a major and expanding mental health concern worldwide. According to the World Health Organization (WHO), depression affected over 264 million persons of all ages in 2020. Between 2017 and 2018, the Centers for Disease Control and Prevention (CDC) reported that 8.1% of adults aged 20 and older in the United States had depression during a given two-week period. According to the National Institute of Mental Health (NIMH), 19.4 million American adults had at least one severe depressive episode in 2019. In 2018, the Mental Health Foundation in the United Kingdom reported that 19.7% of individuals aged 16 and older displayed symptoms of depression or anxiety. These statistics demonstrate the critical nature of addressing melancholy as a public health issue. Depression can have a significant impact on a student's academic performance and increase the likelihood that they will drop out of school (Eisenberg et al., 2013). Depression can cause extreme emotional distress, negatively affecting a student's mental health and well-being as a whole (Kessler et al., 2005; Hysenbegasi et al., 2005). Among students, depression is strongly associated with suicidal ideation and attempts (Wilcox et al., 2010; Harris & Barraclough 1997). Student depression can impede social relationships and heighten feelings of social isolation (Lewinsohn et al., 2003; Qualter et al., 2015). Depression can cause physical health issues, such as sleep disturbances, fatigue, and appetite changes (Hammen, 2005; Patten et al., 2009). Depression in college that is not treated can hurt a person's mental health and future well-being in the long run (Rohde et al., 2013; Fergusson & Lynskey, 1995). By addressing depression on college campuses, a more supportive and empathetic environment can be created, encouraging students to seek assistance (Eisenberg & Resnick 2006; Hunt & Eisenberg, 2010). Depression can impede a student's participation in extracurricular activities, internships, and networking opportunities, negatively affecting their future career prospects (Blanco et al., 2013; Reavley & Jorm, 2010). Prioritizing depression among students aids in eradicating the stigma associated with mental health, thereby encouraging frank dialogue and assistance-seeking (Corrigan, 2004; Eisenberg et al., 2009). Review of some related studies suggested the researchers the significance of mental health issues and problems associated with depressive disorder. It has massive impact on students' mental health. Here are a few insights that researchers gained at the time of the review process of depression in relation with student's overall well-being as depression among students is a major concern with significant consequences for their health and academic success. Depression must be addressed because it can have detrimental effects on mental health, academic performance, and social relationships. Depression increases the risk of dropping out of school, suicidal ideation, and long-term consequences for students. Creating a supportive campus environment and eradicating the stigma associated with mental health are crucial steps in promoting the well-being and future prospects of students. Therefore, the researchers made an attempt to observe the prevalence of depression among higher education students of Kolkata.

Delimitations of the study

The researchers limited the scope of the study and restricted the present study on some grounds that the researchers willingly described as shortfalls to undertake all the aspects of the problem. The followings are the delimitations of the study-

i) Higher education students from Kolkata district in West Bengal were surveyed only.

ii) Only 250 higher education students were considered as a sample.

iii) Only undergraduate and postgraduate students in the Kolkata district were taken.

iv) The study was delimited to only five background or demographic variables like-, Educational level, Gender, type of family, and minority status.

v) The study was delimited to measuring depression levels using the Beck depression inventory among higher education students.

vi) Only descriptive and non-parametric test (Chi-square) were used to present the actual nature of the data and analysis procedure.

Objectives

i) To investigate the rate of prevalence of depression among higher education students in Kolkata.

ii) To study the existing levels of depression among students across higher educational levels in West Bengal.

iii) To examine the levels of depression with respect to gender of students.

iv) To examine the levels of depression with respect to minority status of students.

v) To examine the levels of depression with respect to family type of students.

Hypothesis

 H_01 – The existing levels of depression of students do not show any dependency across various higher educational levels in West Bengal.

 H_02 – The existing levels of depression of students do not show any dependency across gender in West Bengal.

 H_03 – The existing levels of depression of students do not show any dependency across family type in West Bengal.

 H_04 – The existing levels of depression of students do not show any dependency across minority status in West Bengal.

Methods

To achieve the objective of this study, a cross-sectional survey design was employed. The population of the study consisted of undergraduate and postgraduate students in Kolkata, West Bengal. Only 250 samples of undergraduate and postgraduate students were randomly selected from higher education institutions i.e., colleges and universities in the Kolkata district of West Bengal. In this study, depression was considered as a dependent variable that was hypothesized to have a relationship with various higher educational levels, gender, type of family and minority status as independent variables.

Tools Used

To access the depression levels of higher education students, researchers used Beck Depression Inventory (BDI) including a demographic data sheet. Beck Depression Inventory (BDI) is a standard self-report questionnaire for gauging depressive symptoms. It was first created by American psychiatrist Dr. Aaron T. Beck in 1961 and has subsequently undergone multiple updates. The BDI-II, released in 1996, is the most popular variant. The BDI-II is a 21-item multiple-choice questionnaire designed to measure a person's level of depression on the day of the evaluation and during the previous two weeks. Each question contains four answer choices that range in seriousness. Each answer is given a score between 0 and 3, where 0 indicates the complete absence of that symptom and 3 represents the most extreme manifestation. The BDI-II assesses 21 different symptoms of depression, including those related to thinking, feeling, wanting to do things, and even physical health. Examples include descriptions of depression, hopelessness, guilt, worthlessness, apathy, altered eating and sleeping habits, and suicidal ideation.

The total score on the BDI-II is obtained by summing the scores of all 21 items. The overall score reflects the severity of depressive symptoms, with higher scores indicating more

Variable	Levels	N (frequency)	Ainimal	Mild	Aoderate	Severe
Educational level	Jndergraduate	130	23	50	41	16
			(17.7%)	(38.5%)	(31.5%)	[12.3%)
	Postgraduate	120	24	51	35	10
			(20.0%)	(42.5%)	(29.2%)	(8.3%)
Gender	Male	175	26	64	65	20
			(14.9%)	(36.6%)	(37.1%)	(11.4%)
			21	37	11	6
	Female	75	(28.0%)	(49.3%)	(14.7%)	6 (8.0%)
vpe of family	Nuclear	143	27	62	41	13
			(18.9%)	(43.4%)	(28.7%)	(9.1%)
	Joint	107	20	39	35	13
			(18.7%)	(36.4%)	(32.7%)	[12.1%)
Minority Status	Non-Minority	146	32	66	38	10
			(21.9%)	(45.2%)	(26.0%)	(6.8%)
	Minority	104	15 (14.4%)	35 (33.7%)	38 (36.5%)	16 [15.4%)

significant levels of depression. The scoring ranges for the BDI-II are as follows: 0-13: Minimal depression; 14-19: Mild depression; 20-28: Moderate depression; 29-63: Severe depression.

Results and Interpretations

Table 1: Descriptive statistics based on categories of independent variables with levels of depression.





Minimal Mild = Moderate Severe Minimal Mild = Moderate Severe Minimal Mild = Moderate Severe Minimal Mild = Moderate Severe

Interpretation: It can be observed from Table 1 that 1) within undergraduate students (N=130) 17.7% showed minimal level of depression, 38.5% showed mild level of depression, 31.5% showed moderate level of depression and 12.3% showed severe level of depression. This means most of the undergraduate students appeared with mild level of depression. 2) within postgraduate students (N=120) 20% showed minimal level of depression, 42.5% showed mild level of depression, 29.2% showed moderate level of depression and 8.3% showed severe level of depression. This means most of the postgraduate students appeared with mild level of depression. 3) within male students (N=175) 14.9% showed minimal level of depression, 36.6% showed mild level of depression, 37.1% showed moderate level of depression and 11.4% showed severe level of depression. This means most of the male students appeared with moderate level of depression. 4) within female students (N=75) 28% showed minimal level of depression, 49.3% showed mild level of depression, 14.7% showed moderate level of depression and 8% showed severe level of depression. This means most of the female students appeared with mild level of depression. 5) within nuclear family-based students (N=143) 18.9% showed minimal level of depression, 43.4% showed mild level of depression, 28.7% showed moderate level of depression and 9.1% showed severe level of depression. This means most of the nuclear family-based students appeared with mild level of depression. 6) within joint family-based students (N=107) 18.7% showed minimal level of depression, 36.4% showed mild level of depression, 32.7% showed moderate level of depression and 12.1% showed severe level of depression. This means most of the joint family-based students

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appeared with mild level of depression. 7) within non-minority students (N=146) 21.9% showed minimal level of depression, 45.2% showed mild level of depression, 26% showed moderate level of depression and 6.8% showed severe level of depression. This means most of the non-minority students appeared with mild level of depression. 8) within minority students (N=104) 14.4% showed minimal level of depression, 33.7% showed mild level of depression, 36.5% showed moderate level of depression and 15.4% showed severe level of depression. This means most of the minority students appeared with moderate level of depression.

Independent Variables	Dependent Variable	Chi-square value	df	Assmp. Sig. (2-sided)	Testing
Educational levels		1.492	3	0.684	Failed to reject
Gender		16.258	3	0.001*	Rejected
Type of family	Levels of Depression	1.600	3	0.659	Failed to reject
Minority status		10.283	3	0.016*	Rejected

Table 2: Pearson's Chi-square test of independence

*Significant

Interpretation: It can be observed from Table 2 that-

1) Pearson's chi-square test of independence was calculated to determine whether there is a significant relationship between levels of depression and levels of higher education. A not significant interaction was found { $\chi 2(3) = 1.492$, p> 0.05}. Thus, there is no significant relationship between levels of depression and levels of higher education.

2) Pearson's chi-square test of independence was calculated to determine whether there is a significant relationship between levels of depression and gender. A significant interaction was found $\{\chi 2(3) = 16.258, p < 0.05\}$. Thus, there is a significant relationship between levels of depression and gender.

3) Pearson's chi-square test of independence was calculated to determine whether there is a significant relationship between levels of depression and types of family. A not significant interaction was found { $\chi 2(3) = 1.600$, p> 0.05}. Thus, there is no significant relationship between levels of depression and types of family.

4) Pearson's chi-square test of independence was calculated to determine whether there is a significant relationship between levels of depression and minority status. A significant interaction was found { $\chi 2(3) = 10.283$, p< 0.05}. Thus, there is a significant relationship between levels of depression and minority status.

Major findings

The current study emerged with some important findings as-

i) Majority of the undergraduate and postgraduate students appeared with mild level of depression but there is no significant relationship between levels of depression and levels of education.

ii) Most of the male students showed moderate level of depression and the majority of female students showed mild level of depression and there is a significant relationship between levels of depression and gender.

iii) Majority of students from both categories of family type appeared with mild level of depression but there is no significant relationship between levels of depression and family type. iv) Minority status wise majority of non-minor students showed mild level of depression and majority of minor students emerged with moderate level of depression and there is a significant relationship between levels of depression and minority status of students.

Discussion

The main aim of the study was to measure depression among higher education level students and to explore the dependency of various demographic variables towards levels of depression. Albeit a simple random sample, the survey participants were representative of higher education level students of Kolkata in terms of gender, family type and minority status.

In the current study, the researchers attempted to observe how much prevalence was found within the level of depression in relation to the categories of independent variables. Most of the survey research works found on depression of students examined the current state of depression and checked whether there found any significance in the relationship between independent and dependent variables. Major findings yielded that within the educational levels, the majority of the undergraduate and postgraduate students appeared with mild levels of depression. Studies in a similar context found that university students were diagnosed with moderate to severe levels of depression (Adams et al., 2021). No handful study found with similar results. Another finding yielded that most of the male students showed moderate levels of depression and the majority of female students showed mild levels of depression and there found a significant relationship between levels of depression and gender. This finding was supported by other research that males found with higher levels of depression than females (Shi et al., 2021; Haq et al., 2018; Grant et al., 2002; Gao et al., 2019). Dissimilar results were also found in related studies that females possessed higher levels of depression than their other counterparts (Negi et al., 2019; Ghaedi & Kosnin, 2014). Again, the present study yielded that the majority of students from both categories of family type appeared with mild level of depression but there is no significant relationship between levels of depression and family type. Related studies demonstrated family types had a significant association with levels of depression (Guerrero-Muñoz et al., 2020; O'Connor et al., 1998). The current study showed different results might be due to different population area and sampling fluctuation. Finally, it was found that the majority of non-minor students showed mild levels of depression and the majority of minor students emerged with moderate levels of depression. It can be justified as minority populations often encounter elevated levels of depression in contrast to majority communities as a result of several social, economic, and cultural determinants. The presence of discrimination, socioeconomic inequities, cultural hurdles, and restricted access to healthcare might all contribute to the observed gap. Acculturation stress, a lack of sufficient social support, and the presence of previous trauma may also exert influence in this context.

No empirical research has been identified that specifically examines the relationship between minority status and levels of depression.

Recommendations and Conclusion

Education may assume a substantial role in the identification, management, and reduction of depression in student populations. Depression is a significant mental health concern that may have enduring impacts on a student's scholastic achievements, general state of being, and future opportunities. There are many mechanisms via which education might effectively mitigate the prevalence of depression in students as-

i) The integration of mental health education into the curriculum has the potential to enhance knowledge and understanding around depression, including its indicators, manifestations, and the significance of obtaining appropriate assistance.

ii) The provision of sufficient mental health support services inside educational institutions, including the presence of school counselors, psychologists, or social workers, is of utmost importance.

iii) The cultivation of a pleasant and inclusive institute atmosphere has the potential to engender a profound feeling of belonging among pupils. It is essential for educational institutions to proactively prohibit instances of bullying, discrimination, and harassment, since these behaviors have the potential to exacerbate feelings of social isolation and sadness.

iv) It is important for educational institutions to demonstrate a proactive approach in recognizing and mitigating academic pressures that have the potential to exacerbate depressive symptoms. This encompasses an abundance of pressure to excel intellectually, unattainable standards, and an exclusive emphasis on academics at the expense of comprehensive growth.

Finally, the researchers might conclude that depression is a worldwide health concern and mental health of students should prioritize in the first place. Present study was aiming at reveal the rate of prevalence of depression among higher education students in Kolkata in relation with different demographic indicators and according to the objectives, the found findings were adequate and satisfactory in all cases.

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