Depression among College and University Students of India and Lesotho According to Beck's Depression Inventory (BDI): An Empirical Study

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### **ABSTRACT**

This article presents the depression scores of college and university students according to Beck's Depression Inventory (BDI). As we know, that depression is a mood disorder that involves a persistent feeling of sadness and loss of interest. The study was conducted with college and university students of two countries i.e. India and Lesotho. The data was collected from 216 students through a structured questionnaire and Beck's Depression Inventory scale. The study found that the number of the normal cases is only 45.8 percent compared to the remaining 54.2 percent who are at risk and at different levels of depression. It was found that more females are suffering depression than males. It may be a reason that they are staying in the private hostels for their education. The students studying in Lesotho are suffering depression as compared to those studying in India. The postgraduate students suffering depression than the graduation students. The study suggested that more family interactions and interventions are required to reduce the depression levels among the students. The educational institutions should start the counselling intervention in all colleges and the universities.

**Key words:** Psychological problems, depression, students, youth, Beck's Depression Inventory

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## **INTRODUCTION**

Depression is a mood disorder that involves a persistent feeling of sadness and loss of interest. According to the World Health Organization (WHO), depression is a common illness worldwide, with an estimated 3.8 percent of the population affected, including 5.0 percent among adults and 5.7 percent among adults older than 60 years. Approximately 280 million people in the world have depression. The population-based study from India report on depression shows that the prevalence of depression was 15.1 percent. India is home to an estimated 57 million people (18 percent of the global estimate) affected by depression (Gandhi P A and, Kishore 2020).

## CAUSES AND CONSEQUENCES OF DEPRESSION

The causes of depression include complex interactions between social, psychological, and biological factors. Life events such as childhood adversity, loss, and unemployment contribute to and may catalyze the development of depression. Depression and associated mental disorders can have a profound effect on all aspects of life, including performance at school, productivity at work, relationships with family and friends, and the ability to participate in the community (WHO 2021).

## SYMPTOMS OF DEPRESSION

- a depressed mood
- reduced interest or pleasure in activities once enjoyed
- > a loss of sexual desire
- > changes in appetite
- unintentional weight loss or gain
- > sleeping too much or too little
- agitation, restlessness, and pacing up and down
- slowed movement and speech
- fatigue or loss of energy
- > feelings of worthlessness or guilt
- difficulty thinking, concentrating, or making decisions
- recurrent thoughts of death or suicide, or an attempt at suicide

Time at college can be stressful, and a person may be dealing with other lifestyles, cultures, and experiences for the first time. Some students have difficulty coping with these changes, and they may develop depression, anxiety, or both as a result. Symptoms of depression in college students may include: difficulty concentrating on schoolwork, insomnia, sleeping too much, a decrease or increase in appetite, and avoiding social situations and activities that they used to enjoy (Timothy, 2019).

#### **REVIEW OF LITERATURE**

**Deb, S et al. (2016)** conducted a study on 'Depression among Indian university students and its association with perceived university academic environment, living arrangements, and personal issues'. The objective of the study was to ascertain the level of depression among university students across academic and family related variables and also to examine the association between students' perceived university academic environment, living arrangements, personal issues, and depression. Seven hypotheses were formulated for verification. A total of 717 students were selected by following the multistage cluster sampling method, and data were collected by a specially designed structured questionnaire. Findings disclosed that 37.7%, 13.1%, and 2.4% of the students were suffering from moderate, severe, and extremely severe depression. Female students reported more depression than their counterparts. Positive perceptions about the family environment and good relationships with parents were found to be facilitating factors for good mental health.

Asif, S et al. (2020) conducted a study on 'Frequency of depression, anxiety, and stress among university students. The main objective of the present study was to explore the frequency of depression, anxiety and stress among university students in Sialkot, Pakistan. A survey research method was used to collect data from three universities in Sialkot by using a simple random sampling technique on 500 university students. A demographic sheet and DASS-21 (Depression, Anxiety Stress Scale) were used to measure the level of depression, anxiety, and stress. The study found that the prevalence of Depression within the range of normal (25%), mild (16%), moderate (35.8%), severe (14.6%) and extremely severe (8.6%).

Sawhney, M. et al. (2020) conducted a study on the depressive symptoms and coping strategies among Indian university students. During this study, the students were divided into two groups and assigned either under high depressive symptoms or under low depressive symptoms based on the epidemiological score for Depression. The study found that the high depressive symptom group resorted to more avoidant coping strategies than low depressive symptom group. They also found that women were more likely to use avoidant

coping strategies than men.

Nasir Ahmad et al. (2018) conducted a study on 'Social Networking and Depression among University Students'. The study was undertaken at the University of Swat and University of Peshawar, Khyber Pakhtunkhwa, Pakistan. The study was conducted with 200 respondents through a questionnaire and the Beck Depression Inventory (BDI). The study found that most of the male social media users were more depressed than the female users. The students who spent more time on social media were found to be depressed. The students who spent more time on social media searching health information and playing games were more depressed than those who used social media to chat with friends and family.

#### THE SCOPE OF THE STUDY

Depression is a mood disorder that involves a persistent feeling of sadness and loss of interest. Approximately 280 million people in the world have depression. College students and university students are stressful because they engage in many activities in college, with friends and family. College and university students have a desire to deal with other lifestyles, cultures, and experiences for the first time which leads them to experience depression. Peer pressure and love are some of the factors that affect the lifestyles of college students. Depression disturbs the careers and lives of the young generation. The confidence levels of the students may be reduced, and their insecurity about their careers may be increased due to depression. The impact of depression is also high on their families. The researchers observed that there are not many studies conducted in India on depression among college and university students in India. In this connection, the present research study on depression among college and university students strives to understand and analyze the situation, causes, and prevention of depression in Lesotho and India.

#### **OBJECTIVES OF THE STUDY**

- 1. To study the socio-economic and demographic profile of the students pursuing their graduation and post-graduation.
- 2. To study the prevalence of depression among the students according to the Beck Depression Inventory.
- 3. To compare the prevalence of depression among students in India and Lesotho.
- 4. To understand the coping strategies of the students to protect them from depression.

#### **RESEARCH METHODOLOGY**

The researchers selected two cities, i.e. Visakhapatnam from India and Maseru from Lesotho to conduct the present study. These two cities are the educational hubs of their respective countries. This is a quantitative study that adopted a descriptive research design. The study adopted the convenience sampling method and collected data from 216 students from Visakhapatnam and Maseru to represent both India and Lesotho. This study adopted the Beck's Depression Inventory scale to understand depression among young students. The Beck Depression Inventory (BDI) is a 21-item self-report questionnaire for evaluating the severity of depression in normal and psychiatric populations. The information was gathered using a structured questionnaire on a Google Form. The data were analyzed through Statistical Package of Social Sciences (SPSS) and MS Excel 2010.

#### **RESULTS AND DISCUSSION**

The aim of the present study is to understand the prevalence of depression among college and university students of India and Lesotho. The researcher adopted the Beck Depression Inventory scale. The data were analyzed, and the results were presented. The table below presents the gender of the respondents:

Table No: 1
Distribution of the respondents by their Gender

Gender	Frequency	Percent
Male	98	45.4
Female	118	54.6
Total	216	100.0

The data in the table above shows that among 216 respondents, there are 98 males and 118 females. This means the gender is almost balanced in this study. The following table represents the ages of the respondents:

Table No: 2
Distribution of respondents by Age

Age	Frequency	Percent
19-23	122	56.5
24-28	67	31.0

29-33	21	9.7
34-38	6	2.8
Total	216	100.0

The data in the table above shows that the ages of the respondents' ranges from 19 to 38. Majority (56.5) of the respondents belong between the ages of 19-23 years. Respondents aged 24-28 making 31.0%, 29-33 with 9.7% and 34-38 with 2.8%. The following table represents the education level of the respondents.

Table No: 3
Distribution of respondents by level of Education

Education	Frequency	Percent
Graduation	140	64.8
Post Graduation	72	33.3
Ph. D	4	1.9
Total	216	100.0

The data in the table above indicates that most (64.8 percent) of the respondents are graduate students, while 33.3 percent of the respondents are post graduate students. PhD scholars consist of the lowest number of respondents i.e. 1.9 percent. The following table represents the country of study of respondents:

Table No: 4
Distribution of the respondents by their Country of study.

Country	Frequency	Percent
India	87	40.3
Lesotho	129	59.7
Total	216	100.0

The data in the table above revealed that majority (59.7%) of the respondents are studying in the colleges of Lesotho, while the remaining 40.3 percent of the respondents are studying in the colleges of India. The following table presents the present residence of the respondents:

Where do you stay while in college?	Frequency	Percent
Home	40	18.5
Private hostel	114	52.8
University hostel	62	28.7
Total	216	100.0

Table No: 5
Distribution of respondents by their present residence

The data in the table above show that majority (52.8%) of the respondents reside in privately rented hostels, while 28.7 percent of the respondents stay in the University hostels, And 18.5 percent of the respondents stay home with their family. The following table presents the number of family members of respondents:

Table No: 6
Distribution of respondents by number of family members

Number of family members	Frequency	Percent
1-4	21	9.7
5-8	189	87.5
9-12	2	.9
13 and above	4	1.9
Total	216	100.0

The data in the table above shows that the majority (87.5%) of the respondents are having 5-8 family members, followed by 1-4 family members with 9.7%. The least is 9-12 members with 0.9% and 13& above have 1.9%.

# **BECK'S DEPRESSION INVENTORY (BDI)**

The Beck Depression Inventory (BDI, BDI-II), created by Dr. Aaron T. Beck, is a 21-question multiple-choice self-report inventory, one of the most widely used instruments for measuring the severity of depression. Its development marked a shift among health care professionals, who had until then viewed depression from a psychodynamic perspective, instead of it being rooted in the patient's own thoughts (Beck, 1962). Beck had proposed the following score for depression.

Table No:7
Depression levels according to Beck

According to Beck Depression Score	Beck Depression scale	
1-10	These ups and downs are considered normal	
11-16	Mild mood disturbance	
17-20	Borderline clinical depression	
21-30	Moderate depression	
31-40	Severe depression	
Over 40	Extreme depression	

The data in the table above revealed the scores and depression level of the respondents. The researcher collected the data, analysed, and calculated. The depression scores of the respondents are presented in the following table as per the BDI.

Table No: 8

Distribution of respondents by their depression score according to BDI

According to Beck Depression Score	Beck Depression scale	Frequency	Percent
1-10	These ups and downs are considered normal	99	45.8
11-16	Mild mood disturbance	37	17.1
17-20	Borderline clinical depression	19	8.8
21-30	Moderate depression	50	23.1
31-40	Severe depression	8	3.7
Over 40	Extreme depression	3	1.4
	Total	216	100.0

The data in the table above revealed that 45.8 percent of the respondents scored from 0-10 which is considered normal. And 17.1 percent of the respondents scored 11-16 which is mild mood disturbance. And 8.8 percent are having borderline clinical depression. And 23.1 peer cent are having moderate depression while 3.7 percent are having sever depression and 1.4 percent having extreme depression. Thus depression is found to be high with different levels as the number of the normal cases is only found to be 45.8 percent

compared to the remaining 54.2 percent who are at risk of depression. The orphan children and students are more vulnerable to the depression and psychological problems than the other children (Abraham, M and Rao, ABSV, 2016). The following cross table represents the level of depression by gender:

Table No: 9
Distribution of respondents by their depression score and Gender

According to Beck	Beck Depression scale	Gender		Total
<b>Depression Score</b>		Male	Female	
1-10	These ups and downs are considered normal	49	50	99
11-16	Mild mood disturbance	19	18	37
17-20	Borderline clinical depression	6	13	19
21-30	Moderate depression	19	31	50
31-40	Severe depression	3	5	8
Over 40	Extreme depression	2	1	3
	Total	98	118	216

The data in the table above illustrates that there are 49 male and 50 females who are on normal level. Mild mood disturbance can be seen among 19 males and 18 females making total of 37. Borderline clinical depression is found in 6 males and 13 females. There are 50 respondents suffering from moderate depression with 19 males and 31 females. Severe depression has been found in 3 males and 5 females. Only 3 respondents found to be suffering extreme depression with 1 male and 2 females. These data show that among 216 respondents, majority of them are at risk of depression with 117 found to be suffering from mild mood disturbance, borderline clinical depression, moderate depression, severe depression and extreme depression. This data also shows that more females are suffering from depression than males. living in the private hostels away from their families can be considered to be one of the reasons behind this. The source of sharing of personal information is lacking for female children. The table below presents the depression level by their age:

Table No: 10
Distribution of respondents by depression score with Age

According to	<b>Beck Depression scale</b>		Age			Total
Beck Depression Score		19-23	24-28	29-33	34-38	
1-10	These ups and downs are considered normal	54	35	8	2	99
11-16	Mild mood disturbance	15	15	5	2	37
17-20	Borderline clinical depression	15	2	2	0	19
21-30	Moderate depression	32	13	4	1	50
31-40	Severe depression	5	2	0	1	8
Over 40	Over 40 extreme depression	1	0	2	0	3
	Total	122	67	21	6	216

The data in the table above shows that the highest age frequency range is 19-23 and the lowest is 34-38. The ups and downs considered normal are 54, 35, 8, and 2 respectively with age ranges 12-23, 24-28, 29-33 and 34-38. Mild mood disturbances is 15 for age 19-23 and 24-28, 5 and 2 for ages 29-33 and 34-38 respectively. Borderline clinical depression has 15, 2,2 and 0 with respective age ranges. Moderate depression seems to be having second highest with 32 aged 19-23, 13 aged 24-28, 4 aged 29-33 and 1 aged 34-38. Severe depression has total of 8 respondents, 5 aged 19-23, 2 aged 24-28 and 1 aged between 34-38. Only suffering extreme depression with 1 from age 19-23 and 2 from age 29-33. The following table presents the depression level by level of study:

Table No: 11
Distribution of respondents by depression score with level of study

According	Beck Depression scale	level of study			Total
to Beck Depression Score		Graduation Post Graduation Ph. D			
1-10	These ups and downs are considered normal	70	29	0	99
11-16	Mild mood disturbance	20	16	1	37

17-20	Borderline clinical depression	16	3	0	19
21-30	Moderate depression	32	16	2	50
31-40	Severe depression	2	5	1	8
Over 40	Extreme depression	0	3	0	3
	Total	140	72	4	216

The data on the table above indicates that 70 graduates and 29 postgraduates are in a normal state. And 20 graduates, 16 post graduate students, and 1 PhD scholar have mild mood disturbances. Borderline clinical depression consists of 16 graduation and 3 postgraduate students, 32, 16, and 2 respectively have moderate depression, severe depression has 2 graduate, 5 post-graduates and 1 PhD scholar and 3 students have extreme depression only post-graduates. The following table represents the level of depression by country of study:

Table No: 12
Distribution of respondents by depression score and country of study

According to Beck	Beck Depression scale	Country		Total
<b>Depression Score</b>		India	Lesotho	
1-10	These ups and downs are considered normal	46	53	99
11-16	11-16 Mild mood disturbance	17	20	37
17-20	Borderline clinical depression	4	15	19
21-30	Moderate depression	15	35	50
31-40	Severe depression	4	4	8
Over 40	Extreme depression	1	2	3
		87	129	216

The table above illustrates that among 99 normal participants, 46 study in India and 53 in Lesotho. Mild mood disturbance is 17 from India and 20 from Lesotho, Borderline clinical depression 4 and 15, Moderate depression 15 and 35 from India and Lesotho respectively, Severe depression 4 from each country and Extreme depression 1 in India and 2 in Lesotho. This shows that more respondents studying in Lesotho are suffering from depression as compared to those studying in India. The reason for higher level of depression in Lesotho

might be financial issues of the students who depend on National Manpower stipend, which is delayed most of the time while the standard of living at university level is high. The study is in line with the study of Puseletso Martha Mahlomaholo et al, (2021) who reported that in Lesotho the prevalence of depression was above 50%, and the prevalence of suicidal behaviors was above 8%. The study is also in line with the study of Times of India (2020) who reported that ever since the pandemic hit India over five months back, followed by an unprecedented lockdown, stress levels have been on the rise with 43 percent Indians suffering from depression, according to a new study. The following table represents the level of depression in the living residence during studies:

Table No: 13
Distribution of respondents by depression score and residency while studying.

According to the Beck	<b>Beck Depression Scale</b>	Where do you stay while in school?			Total
Depression Score		home	private hostel	university hostel	
1-10	These ups and downs are considered normal	16	52	31	99
11-16	Mild mood disturbance	9	14	14	37
17-20	Borderline clinical depression	5	10	4	19
21-30	Moderate depression	8	33	9	50
31-40	Severe depression	1	4	3	8
Over 40	Extreme depression	1	1	1	3
Total		40	114	62	216

The data on the table above shows that the majority (114) of the students reside in private hostels while the least (40) stay at home. The students that showed ups and downs are 16, 52, and 31 staying at home, private hostel, and university hostels respectively, Mild mood disturbance 9, 14 and 14, Borderline clinical depression is 8, 33 and 9, Moderate depression is 8, 33 and 9, Severe depression is 1, 4 and 3 all respectively to residency and Extreme depression is 1 in each residency. The table below represents depression level in accordance with the number of family members:

Table No: 14
Distribution of respondents by depression score and number of family members

According	<b>Beck Depression scale</b>	Number of family members			Total	
to Beck Depression Score		1-4	5-8	9-12	13 and above	
1-10	These ups and downs are considered normal	8	89	0	2	99
11-16	Mild mood disturbance	3	33	1	0	37
17-20	Borderline clinical depression	1	18	0	0	19
21-30	Moderate depression	6	41	1	2	50
31-40	Severe depression	2	6	0	0	8
Over 40	Extreme depression	1	2	0	0	3
	Total	21	189	2	4	216

The table above illustrates that the respondents with ups and downs which is normal are 8 from [1-4] family members, 89 from [5-8], 0 from [9-12] and 2 from [13 & above family members. Mild mood disturbance is 3, 33, 1 and 0 with respective family members' range. Borderline clinical disorder is 1, 18, 0 and 0, Moderate depression is 6, 41, 1 and 2, Severe depression is 2, 6, 0 and 0, and extreme depression is 1, 2, 0 and 0 all in respective to the number of family members' ranging. It is found that the depression levels are less in the families where more family members are available. The following table represents the coping strategies of the students against depression:

Table No:15
Coping Strategies of the Respondents

S.No	Coping strategy	Frequency	Percentage (%)
1.	Religious coping	94	43.5
2.	Seeking emotional help	23	10.6
3.	Venting emotions	21	9.7
4.	Substance use	22	10.1
5.	Denial	21	9.7
6.	Humour	30	13.9
7.	Acceptance	88	40.7
8.	Self-blame	52	24.1

9.	Positive re-framing	47	21.8
10.	Guidance and counselling	11	5.1
11.	Participating in sports	28	13
12.	Support from peers	44	20.4
13.	Music	44	20.4
14.	Crying	4	1.9

The findings in the table above revealed that, religious coping was ranked the highest method of coping with 94 (43.5%), individual acceptance 88 (40.7%), self-blame 52 (24.1%), Positive re-framing 47 (21.8%), support from peers and music had 44 (20%) each. Others include: humor 30 (13.9%), participating in sports 28 (12.7%), seeking emotional help 23 (10.6%), substance use 22 (10.1%), venting emotions and denial 21 (9.7%), guidance and Counselling 11 (5.1%) and crying 4 (1.9%). The coping strategies are helping the individuals to come out of the depression and resume their regular social functioning.

#### **SUGGESTIONS**

- 1. The students should adopt positive attitude towards their course, education, college, and living arrangements, which reduces the depression compared to their counterparts.
- 2. Religion provides peaceful life to individuals. The religious preachers should focus on the student youth and to increase their participation in religious activities. Spiritual counselling also plays an important role for life satisfaction
- 3. The students are suggested to take the help of professionals to get back to their peaceful and happy life.
- 4. The universities and colleges should conduct yoga and meditation camps for the students regularly.
- 5. Regular family meetings should be organized. It promotes interaction and ventilation among the family members. It may reduce their depression levels.
- 6. Counselling services should be provided to the students living in the private and university hostels.
- 7. The study found that female students have more depression than male students. The female students should disclose their problems with their close friends and family

members to reduce their stress and depression.

#### **SOCIAL WORK IMPLICATIONS:**

Social work is a practice-based profession and an academic discipline: It promotes the social justice, social change and empower the disadvantaged groups. It helps individuals, groups, and communities to help themselves. The role of the social workers in this setting is to provide counselling and psychosocial support to the students. Promotion of the student – family members' interaction and organize the family meetings to reduce the depression among young college students. The principles of social case work like acceptance, non-judgmental attitude, individualization, confidentiality and controlled emotional involvement should be helpful while working with the students. Undertake research to ensure the mental well-being of the students, to learn about the factors that may lead to depression among the students and to help them to overcome them. Referring the students to the necessary available services is important. Formation of students' support groups in the schools will be helpful to share their joys and sorrows among each other. Support groups promotes the "we feeling" among the students and they help each other (Abraham Mutluri, 2017)

#### **CONCLUSION**

This article presented the depression levels of college and university students in India and Lesotho using the Beck's Depression Inventory tool. In most cases, the students have to move away from their home villages or areas to study at colleges or universities based in the different cities. The living arrangement becomes different, and the environment also different from the home where there is more comfort. The students face many new challenges, more difficulties, home sickness, and workload becomes heavier. The academic life with pressure and some financial problems cause stress and lead to depression and sometimes to suicidal thoughts. The study found that among 216 students, the levels of depression is higher in those who study in Lesotho with 59% facing different levels, as compared to 47% studying in India. Depression seems to be common as the students who are found to be in normal state is only 99 while 117 have different levels of depression. The government and the NGOs should take initiative to curb the alarming situation of the students and maintain the healthy studying environment.

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