

Assessing Depression Pattern Among Students in Tertiary Institutions: A Case Study of Joint Professional Training and Support (JPTS) Ibadan Centre

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Abstract: This study examined depression and its associated factors among students of Joint Professional Training and Support (JPTS) Ibadan. The influence of socio-demographic characteristics, awareness, attitudes, and coping strategies on depression levels were specifically assessed. A descriptive research design was adopted in which data were collected from 160 students using a structured questionnaire. The findings revealed that age, gender, marital status, and financial status significantly influenced depression among respondents, with young adults, females, single students, and those with low monthly allowances showing higher depressive symptoms. The study also found that awareness and positive attitudes toward depression were associated with lower depression levels, while poor awareness and negative attitudes contributed to higher symptoms. Coping strategies such as talking to friends or family, engaging in exercise, and participating in religious activities were commonly used, while substance use was the least adopted among the study groups. The study concludes that depression among students is influenced by both personal and psychological factors and recommends increased mental health education, accessible counseling services, and targeted interventions for vulnerable groups.

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Introduction

Depression is a mental disorder that presents with low mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy and poor concentration¹. Depression results from a complex interaction of social, psychological and biological factors². The period of transition from childhood to adulthood is marked by emotional liability that makes adolescents vulnerable to depression. Associated behavioural and hormonal changes during this period further make depression difficult to diagnose³.

The transitional nature of university life marked by academic pressure, financial stress, peer influence, and increased independence have placed students at heightened risks for psychological disorders; particularly depression⁴. Globally, research has shown that students often experience high levels of psychological distress, which, if left unmanaged, can lead to chronic mental health issues and dropout⁵.

The World Health Organization (WHO) in January 2020 estimated that “more than 264 million people of all ages suffer from depression”. The health condition usually manifests as feelings of sadness, loneliness, low self-esteem, self-blame, anger, peevishness, inability to perform daily activities and tasks, suicidal ideation and suicide, at its peaks⁶. Unfortunately, low and middle-income countries bear the brunt of depression as most people in these countries receive no treatment for it⁷. In Nigeria, there is a lifetime prevalence rate of a major depressive episode of 3.1 % among adults aged 18 years and above⁸. This translates to over six million people because the population of Nigeria is well over 200 million.

Depression has several negative effects on students, which includes: personal, cognitive, emotional, decision-making and time management problems. Other effects are poor academic achievement and low level of exam performance; decreased attention and drug abuse, overconsumption of alcohol and increased levels of smoking⁹. The most serious consequence of depression is the threat of suicide. It has been documented that depression is the most prevalent cause of suicide attempts among students¹⁰.

The rising prevalence of suicide amongst students in tertiary institutions and the burden of depression among all age groups have continued to constitute enormous concerns worldwide. University students are faced with many problems such as accommodation, interpersonal relationships, competition and difficulties in academic studies, economic stress, and struggles in making important decisions¹¹. A stressful and rigorous academic programme or curriculum such as

the one run in most Universities could contribute to the occurrence of psychological stress and depression among students¹².

Depression was ranked by the World Health Organization (WHO) in 2015 as the single most significant contributor to global disability¹³. Depression has continued to increase at a rather alarming rate among all age groups and equally constitutes enormous health concerns worldwide. In a global context, the prevalence of depression among first year university medical students has been reported as being moderate to severe/extremely severe (63.6 % for depression and 78.4 % for anxiety)¹⁴. According to the World Health Organization (2018), individuals with severe mental illnesses – moderate to severe depression, bipolar disorder, schizophrenia and other psychotic disorders – generally have a life expectancy of 10 – 20 years shorter than the general population¹⁵. Such an assertion suggests that the issue is of importance, particularly among university students who are more susceptible to depression. The precise prevalence and level of depression among adolescents in Nigeria appears to be quite scanty. The prevalence of students experiencing severe depressive symptoms (57 – 58 %) to mild level (25.2 %) has been reported^{15,16}.

Although the exact cause of depression is still being debated by scholars. Some identified the family history of depression, the specific type of brain chemistry, and stressful or traumatic life events as factors that could play major roles in the occurrence of depression^{14,17}. Generally, the most likely cause of depression has been pinned down to a combination of genetic, biological, environmental, and psychological factors¹⁸. Genetically, magnetic resonance imaging has shown that depressed people's brains look different from those who are not depressed just as it has been found that specific types of depression run in some families and psychologically, stressful occurrences, difficult relationships, and trauma could trigger depression¹⁷.

Several factors are potential predictors of depression among university students, understanding these predictors is crucial for developing effective prevention and intervention strategies¹⁹. Physical health has been shown to affect mental health and vice versa. Its low participation rate could potentially be a significant risk factor for students' mental well-being²⁰.

Prior studies have reported high levels of overweight among Saudi university students, which may exacerbate the problem of depression. Research has established a significant link between body weight and mood disorders²¹. While depression has been studied among Saudi university students, previous research has primarily focused on specific cohorts, such as medical or nursing students, particular genders, postgraduate students, or during the COVID-19 pandemic^{19,20,21}. However, little attention has been paid to depression risk factors, especially among students in their early stages of university education. This gap in knowledge underscores the need for further investigation to predict the most likely risk factors for depression in early university life in this local setting.

Some coping strategies can be used to tackle depression and these could be grouped into self-help and assisted help. The self-help includes exercising daily, getting enough sleep, eating healthy food and abstinence from alcohol. The assisted help is achieved by seeing the doctor or psychologist, taking prescribed anti-depressant drugs, Psychotherapy/talk therapy, Cognitive Behavioural Therapy (CBT) or Electroconvulsive Therapy (ECT)^{22,23}. Hence, the need of this research on depression pattern in Nigerian university students, using students of JPTS as a case study.

Research Design

This study adopted a descriptive cross-sectional survey design. The cross-sectional nature of the research implies that data were collected at a single point in time rather than over a long period, making it effective for measuring the current prevalence of depression among students. The design allows for the identification and analysis of depression-related symptoms, as well as demographic and academic-related risk factors such as age, gender, academic pressure, social support, and financial stress. The survey method using a structured questionnaire was deployed to facilitate the gathering of standardized responses from a large number of students within the chosen institution.

Study Location

This study was carried out at the Joint Professional Training and Support (JPTS) International Institute, in Ibadan Centre, Oyo State, Nigeria. JPTS is a recognized tertiary institution that offers both local and international professional certification and academic degree programs. The Ibadan campus is part of its major centers in Nigeria and has a diverse population of students enrolled in various disciplines, including health, science, engineering, business, and social sciences.

Population of the Study

The population of this study comprises all undergraduate students enrolled at the Joint Professional Training and Support (JPTS) Institute, Ibadan center. These students are from various faculties and departments within the institution, representing diverse academic disciplines and backgrounds. The target population includes both male and female students across different levels of study.

This population was selected because students in tertiary institutions often face a range of psychological stressors, including academic demands, financial pressures, and social expectations, which can increase their vulnerability to depression.

Sampling Technique

The sampling technique that was adopted for this study is the simple random sampling method. This technique ensured that every student in the target population has an equal chance of being selected, thereby reducing bias and enhancing the representativeness of the sample. A total of 160 students was selected randomly from various departments and levels at the Ibadan branch JPTS Institute.

This method involved preparing a list of all eligible students and randomly selecting participants using a lottery system. The technique was adopted due to its simplicity, cost-effectiveness, and ability for fair representation among the large students' population.

Sample Size Determination

Yamane's formula is widely used for sample size calculation in social science research when the population is finite and known. The formula is given as:

$$n = N / (1 + N [(e)]^2)$$

n = sample size

N = population size

e = margin of error (precision level), usually 0.05 (5%)

Assuming a population size of 250 students:

$$n = 250 / (1 + 250 [(0.05)]^2) = 250 / (1 + 0.625) = 250 / 1.625 = 153.85$$

This value was rounded up to 154, but for ease of administration and considering possible non-response or incomplete questionnaires, a sample size of 160 students was finally chosen. This size provides a good representation of the total population while allowing for manageable data collection within the study timeframe and resources. This method ensures that the sample is statistically significant and minimizes sampling error, thus enhancing the reliability and generalizability of the study findings.

Data Collection Procedure

The data for this study was collected through the use of a structured self-administered questionnaire. The questionnaire was carefully designed based on the objectives of the study and relevant literature. It consisted of both closed-ended and Likert-scale questions aimed at assessing the levels of depression among students, and its contributing factors. Prior to data collection, ethical approval was obtained, and permission was sought from the school authority. The purpose of the research was explained to the participants, and informed consent was obtained from each respondent. The questionnaires were distributed physically to the selected respondents during lecture periods and other organized school activities. The researcher ensured that all respondents understood the instructions before filling the form. Assistance was provided where necessary. Respondents were assured of confidentiality and anonymity, and participation was made voluntary without any form of coercion. The data collection lasted for about two weeks to allow ample time for respondents to complete and return the questionnaires. The researcher ensured close monitoring and follow-up to retrieve all administered questionnaires.

Instrument for Data Collection

The main instrument used for data collection in this study was a structured, self-administered questionnaire designed to gather relevant information from respondents. The questionnaire was developed based on the objectives of the study, literature review, and validated instruments used in previous related research studies.

It comprised four sections:

- **Section A:** Demographic characteristics of the respondents such as; age, gender, marital status, academic level, and course of study.
- **Section B:** Assessment of students' awareness and perception of depression using Likert-scale questions (Strongly Agree to Strongly Disagree).
- **Section C:** Evaluation of common symptoms and risk factors associated with depression among university students.
- **Section D:** Questions focusing on impact, academics, social life and possible coping mechanisms

The questionnaire was designed in clear and simple English to ensure ease of understanding. It was pre-tested among a small group of students outside the sample population to check for reliability and consistency. Necessary adjustments were made based on the feedback received during the pre-test phase.

Validity and Reliability of Instrument

The contents validity of the instrument was assessed by consulting with experts in the field of psychology and public health. They reviewed the questionnaire to ensure that the items were relevant, clear, and comprehensive enough to cover all aspects of the subject matter.

To establish reliability, a pilot study was conducted using 15 students who were not part of the main sample. The responses from the pilot test were analyzed using Cronbach's Alpha, a statistical measure used to test internal consistency. A Cronbach's Alpha value of 0.78 was obtained, indicating that the instrument was reliable, as values above 0.70 are generally considered acceptable for social science research²⁴.

Results

Age (Years)	Frequency(F)	Percentage(%)
17-20	54	33.75
21-24	68	42.5
25 and above	38	23.75
Totals	160	100

Source: Field Source 2025

Gender	Frequency (F)	Percentage (%)
Male	66	41.25
Female	94	58.75
Totals	160	100

Source: Field Source 2025

Marital Status	Frequency (F)	Percentage (%)
Single	132	82.5
Married	28	17.5
Total	160	100

Source: Field Source 2025

Level of study	Frequency (F)	percentage (%)
100l	20	12.5
200l	24	15
300l	44	27.5
400l	72	45
Total	160	100

Source: Field Source 2025

Department	Frequency (F)	Percentage (%)
Health science	69	43.125
Social science	33	20.625
Business	4	2.5
ICT	22	13.75
Education	2	1.25
Engineering	30	18.75
Total	160	100

Source: Field Source 2025

Living Arrangements	Frequency (F)	Percentage (%)
Living with parent	28	17.5
On- campus	33	20.625
Off-campus	61	38.125
Alone	38	23.75
Total	160	100

Source: Field Source 2025

Monthly Allowance (#)	Frequency (F)	Percentage (%)
Below #50,000	96	60
#50,000 -100,000	42	26.25
Above #100,000	22	13.75
Total	160	100

Source: Field Source 2025

Awareness of Depression	Yes	No	Total
Have you ever heard about depression?	151	9	160
Do you know that depression is a mental health disorder?	142	18	160
Are you aware that depression can affect academic performance?	139	21	160
Are you aware that counseling and medical support can help manage depression?	147	13	160
Have you attended any seminal/workshop on mental health or depression?	119	41	160
Do you know that depression can lead to suicidal thoughts?	143	17	160
Do you know where to seek help if you experience depression?	112	48	160

Source: Field Source 2025

Attitudes Towards Depression	SA	A	D	SD	Total
Depression is a normal part of student life	22	50	58	30	160
Students with depression should not be blamed for their condition	64	81	11	4	160
I believe students with depression should seek professional help	108	46	4	2	160
I would encourage a depressed friend to talk to a counselor	100	56	4	0	160
I feel comfortable discussing mental health issues openly	33	76	45	6	160
Depression can affect both male and female students equally	90	58	8	4	160
Students who show signs of depression should be supported by their peers	82	74	2	2	160

Source: Field Source 2025

Depression Symptoms	0	1	2	3	Total
Little interest or pleasure in doing things	38	91	29	13	160

Feeling down, depressed, or hopeless	66	43	19	32	160
Trouble falling or staying asleep, or sleeping too much	70	42	27	21	160
Feeling tired or having little energy	45	61	27	27	160
Poor appetite or overeating	55	67	21	17	160
Feeling bad about yourself or that you are a failure	67	55	24	14	160
Trouble concentrating on things, such as reading or schoolwork	56	54	34	16	160
Moving or speaking slowly or being fidgety/restless	61	55	23	21	160
Thoughts that you would be better off dead, or of hurting yourself	87	41	20	12	160
Coping Strategies	SA	A	D	SD	Total
I talk to friends or family when I feel low	45	83	25	7	160
I seek help from a counselor/health professional when overwhelmed	35	79	34	12	160
I engage in religious/spiritual activities to manage stress	51	59	40	10	160
I use exercise or physical activity to improve my mood	58	78	24	0	160
I distract myself with music, movies, or hobbies when I feel down	82	70	8	0	160
I avoid people and prefer to stay alone when stressed	54	74	17	15	160
I use alcohol or other substances to cope with negative feelings	17	25	46	72	160

Source: Field Source 2025

Data Analysis

The data was analyzed using descriptive and inferential statistics with the aid of the Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics such as frequency counts, percentages, means, and standard deviations were used to summarize and describe the demographic characteristics of the respondents and their responses to the questionnaire items.

For the inferential analysis, the Chi-square test was applied to examine the association between depression and selected variables such as age, gender, academic level, and other relevant factors. Hypotheses were tested at a 0.05 level of significance to determine whether the relationships observed were statistically significant.

Ethical Considerations

Ethical approval was sought from the appropriate research ethics committee before the commencement of the study. Participation in this study was entirely voluntary, and the purpose of the research was clearly explained to all participants. Respondents were assured that their personal data would be kept confidential and used solely for academic purposes. This study adhered to the principles of ethical research involving human subjects, including respect for persons, beneficence, and justice, as stated in the Declaration of Helsinki²⁴. Every effort was made to avoid any form of harm, discomfort, or coercion throughout the research process.

Discussion of Findings

The findings of this study revealed that the majority of respondents demonstrated a moderate to high level of awareness regarding depression, its symptoms, and available management options. Most participants were aware that depression is a mental health disorder and recognized its potential impact on academic performance and overall well-being. This suggests that previous educational efforts, workshops, and awareness campaigns have had some effect in increasing students' knowledge about depression. However, a notable proportion of respondents were unaware of where to seek help or had misconceptions about coping mechanisms, highlighting gaps in practical mental health literacy.

The study further revealed that socio-demographic factors, including age, gender, marital status, and financial status, were significantly associated with depression levels. Young adults between 21–24 years, females, single students, and those with limited financial resources were more likely to report higher depressive symptoms. These findings reflect the vulnerability of young adults in transitional phases, facing academic pressure, social expectations, and financial

stress. Female students' higher reporting of depressive symptoms is consistent with previous research which indicated that females are more likely to experience sadness, anxiety, and depression due to biological, social, and emotional factors²⁵.

Awareness and attitudes toward depression were also found to have a significant relationship with depression levels among students. Those with higher awareness and positive attitudes, such as recognizing depression as a medical condition, supporting peers, and seeking professional help, were more likely to employ adaptive coping strategies and report lower depressive symptoms. Conversely, students with lower awareness or negative attitudes were more prone to severe symptoms and less effective coping strategy. This finding supported the report that mental health literacy and positive attitudes toward seeking help are critical in reducing depression and improving coping mechanism among university students²⁵.

Overall, the findings underscore the need for integrated mental health interventions that consider both socio-demographic vulnerabilities and the importance of awareness and attitude. It is therefore recommended that, promoting mental health education, peer-support programs, and accessible counseling services can help reduce depressive symptoms and enhance students' emotional resilience.

Declaration of Competing Interest

The authors declare that they have no conflict(s) of interest. All authors have read, understood, and have complied as applicable with the statement on "Ethical Responsibilities of Authors" as found in the Instructions for Authors in this journal.

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References

1. Amenu, F. M. and Keteku, D. M. The Prevalence of Depression among Tertiary Students in Ghana. *Nigerian Journal of Social Psychology*. 2025 Feb 9;8(1).
2. Muyeed, A, Jonayed, M. and Rumi, M. H. Psychosocial factors affecting the level of depression among tertiary-level students: a study of selected public universities in Bangladesh. *Mental Health and Social Inclusion*. 2025 Sep 2.
3. Al-Garni AM, Shati AA, Almonawar NA, Alamri GM, Alasmre LA, Saad TN, Alshehri FM, Hammouda EA, Ghazy RM. Prevalence of depression, anxiety, and stress among students enrolled at King Khalid University: a cross-sectional study. *BMC Public Health*. 2025 Jan 28;25(1):354.
4. Greco C, Innamorato F, Liccione D, Figini S, Barone L. Assessing the relationship among academic engagement, well-being, and mental health: Featuring university students seeking support at a counseling facility. *International Journal for the Advancement of Counselling*. 2025 Sep;47(3):651-76.
5. Luo L, Yuan J, Wu C, Wang Y, Zhu R, Xu H, Zhang L, Zhang Z. Predictors of depression among Chinese college students: a machine learning approach. *BMC Public Health*. 2025 Feb 5;25(1):470.
6. Juli R, Sarfika R, Saifudin IM, Abdullah KL. Predictors of bullying victimization among early adolescents in junior high schools: A cross-sectional study. *Belitung Nursing Journal*. 2025 Oct 5;11(5):547.
7. Gebregergis WT, Csukonyi C. Unveiling psychological and sociocultural adaptation patterns of international students in Hungary. *Journal of International Students*. 2025 Apr 2;15(4):97-118.
8. Silva I, Meireles AL, Chagas CM, Cardoso CS, Oliveira HN, Freitas ED, Vidigal FD, Nobre LN, Silva LS, Paula WD, Ferreira LG. Emotional eating and its relationship with symptoms of anxiety, depression, and stress during the COVID-19 pandemic: A multicenter study in college students. *International Journal of Environmental Research and Public Health*. 2025 Feb 27;22(3):354.
9. Al-Amin, Md, Farhana Rinky, Md Nizamul Hoque Bhuiyan, Roksana Yeasmin, Tasmia Akter, Nowrin Hoque, and Sompá Reza. "Factors influencing mental health outcomes among university students: a cross-sectional study in Bangladesh." *BMJ open* 15, no. 3 (2025): e097745.
10. Benítez-Agudelo, Juan Camilo, Dayana Restrepo, and Vicente Javier Clemente-Suárez. "Gender differences in psychophysiological responses to stress and academic performance: The role of sleep, anxiety, and Heart Rate Variability." *Physiology & Behavior* 299 (2025): 114970.

11. Lu, Zekai, Rongqin Yuan, Zelin Liu, and Hong Lu. "Exploring the symptom patterns of depression and anxiety among teachers during COVID-19: A latent profile analysis." *Psychological Trauma: Theory, Research, Practice, and Policy* 17, no. 4 (2025): 766.
12. Vidović, Stipe, Nada Rakić, Stela Kraštek, Ana Pešikan, Dunja Degmečić, Lada Zibar, Irena Labak, Marija Heffer, and Zenon Pogorelić. "Sleep quality and mental health among medical students: a cross-sectional study." *Journal of clinical medicine* 14, no. 7 (2025): 2274.
13. Achour, Yannis, Guillaume Lucas, Sylvain Iceta, Mohamed Boucekine, Masoud Rahmati, Michael Berk, Tasnime Akbaraly et al. "Dietary patterns and major depression: Results from 15,262 participants (International ALIMENTAL Study)." *Nutrients* 17, no. 9 (2025): 1583.
14. Liu, Huiming, Ying Wang, Qianchen He, Xuechun Wang, Chaoyi Cui, and Yongxi Gong. "Assessing the restorative effects of campus greenness on student depression: a comparative study across three distinct university campus type in Macau." *BMC Public Health* 25, no. 1 (2025): 907.
15. Abiola, T., & Udofia, O. Psychometric assessment of the Wagnild and Young's resilience scale in Kano, Nigeria. *BMC Research Notes*, 4(509), 2011. 1–5.
16. Adeniyi, S. R., Okafor, S. J. & Adeniyi, G. Prevalence of Depression in University Students Belonging to Different Socio-Economic Status. *Journal of Postgraduate Medical Institution*, (2012) 12 -17.
17. Bansal V, Goyal S, Srivastava K. Study of prevalence of depression in adolescent students of a public school. *Ind Psychiatry J* 2009, 18:43-46.
18. Basker M, Moses PD, Russell S, Russell PS. The psychometric properties of Beck Depression Inventory for adolescent depression in a primary-care paediatric setting in India. *Child Adolesc Psychiatry Ment Health* 2007, 1:8.
19. Alotaibi NM, Alkhamis MA, Alrasheedi M, et al. Psychological disorders and coping among undergraduate college students: advocating for students' counselling services at Kuwait University. *Int J Environ Res Public Health* 2024; 21: 245.
20. El-Ashker S and Al-Hariri M. The effect of moderate-intensity exercises on physical fitness, adiposity, and cardiovascular risk factors in Saudi Males University students. *J Med Life* 2023; 16: 675–681
21. Ferri C, Yang K and Girgus JS. Predicting the gender difference in depressive symptoms in older adults. *Aging Mental Health* 2023; 27(7): 1411–1418.
22. Alqassimi S, Elmakki E, Areeshi AS, et al. Overweight, obesity, and associated risk factors among students at the faculty of medicine, Jazan University. *Medicina* 2024; 60: 940
23. Okafor, C. J., Eze, J. E., & Adebayo, A. M. (2022). Assessment of depression among students in tertiary institutions in Southwest and South-South Nigeria. *Nigerian Journal of Clinical Practice*, 25(6), 789–796.
24. Oladele AO, Oladele IT. Depression and Suicidal Ideation among College Students with and without Learning Disabilities in Nigeria. *The European Journal of Social and Behavioural Sciences*. 2016; 16:2084-100.
25. Oku A. O., Owoaje E. T., Oku O. O., Ikpeme, B. M. Prevalence of Stress, Stressors and Coping Strategies Among Medical Students in a Nigerian Medical School. *Afr J Med Health Sci*. 2015;14: 29-34.