

Prevalence and Comparative Analysis of Depression, Stress, and Anxiety Among Higher Secondary Students in Ukhrol Town, Manipur

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Abstract

Adolescence is characterised by significant physical, psychological, and emotional changes that heighten susceptibility to mental health disorders, including sadness, anxiety, and stress. This is particularly apparent in rural areas such as Ukhrol town, Manipur. This study sought to ascertain the prevalence of these psychiatric problems and to compare them between Grade 11 and Grade 12 higher secondary pupils. A descriptive survey methodology was employed utilising the standardised Depression Anxiety Stress Scale (DASS-42), with a stratified random sample of 300 adolescents from five schools. Data were examined using chi-square testing and percentage analysis. Results indicated that 71 per cent of students encountered sadness, 63.3 per cent experienced stress, and 79.3 per cent suffered from anxiety. Grade 12 pupils exhibited elevated levels of despair and stress compared to Grade 11 students. The research underscores the necessity for school-based mental health interventions, early detection systems, and awareness programmes specifically designed for the adolescent demographic in Ukhrol.

Keywords: Adolescent, Mental Health, Depression, Anxiety, Stress Trainee Teachers

INTRODUCTION

The outdated belief that kids and adolescents are immune to mental diseases, or that such conditions exclusively affect adults, must be contested. The adolescent stage is a notably critical period for mental

health issues in human development. The various physiological changes during adolescence results in upheaval and stress, with mental health issues such as sadness, stress, and anxiety being significant concerns. These mental health

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concerns can significantly impact their future, relationships, and academic pursuits, among other domains. Global research indicates that mental health disorders commonly arise during this period, affecting roughly 14 per cent of adolescents (World Health Organisation, 2023). Depression, anxiety, and behavioural problems are substantial contributors to morbidity and dysfunction in teenagers. Mental health disorders render teenagers vulnerable to stigma, physical health complications, social isolation, academic difficulties, hazardous behaviours, discrimination, and abuses of rights. Certain adolescents exhibit heightened susceptibility to mental health disorders attributable to their living circumstances, experiences of discrimination and marginalisation, inadequate support and access to professional services, adolescent pregnancies, child marriages, chronic illnesses, intellectual disabilities, abuse and trauma, physical disabilities, financial difficulties, and various other factors. Adolescents affected by these diseases face an elevated risk of stigma, marginalisation, deteriorating physical health, scholastic underperformance, and potential infringements of their fundamental rights (UNICEF, 2023).

In recent decades, awareness of mental health has markedly increased, with heightened global concern for psychological well-being, particularly among the youth. Mental health difficulties persistently impact substantial portions of the population

and have a greater prevalence than numerous other health issues. The World Health Organisation (2021) reports that suicide is among the foremost causes of mortality for those aged 15 to 29, resulting in over 700,000 fatalities worldwide each year, frequently due to untreated depression and anxiety. The figures indicated a pressing necessity for early identification, prevention, and support systems. Local observations corroborate these trends, as numerous communities in India, particularly in the North-East, report increasing instances of suicide attempts, self-harm, and emotional distress among youth (Rathod *et al.*, 2017). Despite this, development is nevertheless hampered by institutional responses that are insufficient, social stigma, and systemic silence.

Mental health problems affect a large number of kids worldwide and contribute considerably to the disease burden. Poor mental health in adolescents is linked to educational underachievement, substance addiction, aggression, and reproductive health issues (Gore *et al.*, 2011). Some effective interventions exist, but most juvenile mental health needs go unmet, especially in high-income nations, requiring more accessible and inexpensive treatment alternatives. Even in high-income countries, mental health experts are few, non-specialist personnel are underprepared, and stigma persists, limiting access to care (Kohn *et al.*, 2004). The lack of mental health specialists, the inability of non-specialist health workers to give appropriate care, and the stigma

surrounding mental disorders make the problem worse. These issues must be addressed to help youth reach their potential and contribute to their communities.

This study examines mental health issues in Ukhrul teens. The alarming rise in suicides, suicide attempts, and drug overdose deaths in our culture indicates a growing mental health problem, especially among the young. Today's youth are under intense academic pressure to meet parental, school, social, and peer expectations. This constant pressure to perform can cause stress, anxiety, and depression. Divorce and family separation have also harmed children's mental health. Family disintegration can affect a child's emotional development and mental health by creating a sense of uncertainty and instability. Poverty also matters because many children grow up without parental support and guidance, as their parents are typically too busy working and cannot afford to attend school or buy other essential needs. Family dysfunction can increase mental health difficulties and impair relationships. A recent study by Meitei *et al.* (2022) in several regions of Manipur indicated that a significant proportion of school-aged adolescents exhibited signs of depression, primarily due to scholastic pressure, socio-economic challenges, and insufficient psychological support. Their findings emphasise the necessity of targeted mental health evaluations in tribal communities such as Ukhrul.

JUSTIFICATION OF THE STUDY

Adolescents are facing many problems and pressures that cause mental health issues such as depression, stress, and anxiety. This study is important for many reasons. Firstly, it is important to know and be aware of the mental health situation of the young people in our society. Secondly, for those who are suffering from depression, stress and anxiety, to make them feel that they are not alone and that they can overcome it. Thirdly, to know the importance of mental health and its effects on society and not to ignore the problem. The purpose of this study is crucial in shedding light on the prevalence of mental health issues among the adolescents of Ukhrul town.

Mental health of people has become increasingly important in our societies, but there are still stigmas surrounding mental health and its treatment. Many would rather hide their suffering than seek professional help due to the stigmas and misconceptions about mental health and its professionals, such as counsellors, psychologists, and psychiatrists. They are often thought to be able to read minds, which scares them, or they think their problems should not be shared with strangers. The old mindset where those who suffer from mental illness are often considered as having gone mad or crazy still exists in parts of our society. So, it is very important for studies to be done to create awareness on mental health and that those who are suffering, can receive healing.

PROBLEM STATEMENT

Adolescents in rural and tribal areas, such as Ukhrul in Manipur, face a unique combination of psychological stresses, including scholastic pressure, parental expectations, and inadequate mental health resources. Despite a growing body of literature on adolescent mental health, limited empirical data exists concerning the frequency of depression, stress, and anxiety in these circumstances.

The lack of context-specific data hinders the development and implementation of mental health interventions in educational settings. This study aims to fill the gap by thoroughly assessing the psychological well-being of higher secondary students in Ukhrul and finding class inequalities.

KEY TERMS

- **Depression:** A mood condition assessed with DASS-42 (Depression Anxiety Stress Scales), characterised by pervasive melancholy, diminished interest, and low self-esteem.
- **Stress:** A psychological condition induced by external forces, quantified by the DASS-42 stress scale.
- **Anxiety:** A psychological disorder characterised by apprehension and fear, evaluated using the DASS-42 anxiety scale.
- **Mental Health:** A state of well-being wherein adolescents can navigate life's challenges,

excel in academic endeavours, and maintain interpersonal relationships.

OBJECTIVES OF THE STUDY

- To find out access and determine the prevalence of depression, stress, and anxiety among higher secondary students in Ukhrul town.
- To evaluate and contrast the levels of depression between students of the standard class to the senior class.
- To examine and compare the stress levels among students of the standard class and to senior class
- To analyse and differentiate the anxiety levels between the standard class and to senior class

HYPOTHESIS OF THE STUDY

In light of the objectives of this study, the following hypotheses have been formulated.

H₀₁: Higher secondary students in Ukhrul town experience depression, stress and anxiety.

H₀₂: There is no significant difference in the level of depression between Grade 11 and 12 students.

H₀₃: There is no significant difference in the level of stress between Grade 11 and 12 students.

H₀₄: There is no significant difference in the level of anxiety between Grade 11 and 12 students.

MATERIALS AND METHODS

The present cross-sectional study was conducted to assess the prevalence of depression, anxiety, and stress among higher secondary students in Ukhrul town, Manipur using a descriptive survey research design. The study population consisted of over 2,800 students from five higher secondary schools, encompassing individuals from both Grade 11 and Grade 12.

A sample of 300 students was selected by stratified random sampling. Sixty students were picked from each school, comprising 30 from Grade 11 and 30 from Grade 12, to ensure equal representation across both classes, as shown in Table 1. The sample size, representing approximately 10.7 per cent of the entire population, was considered adequate according to established sampling criteria in educational research, ensuring a balance between statistical reliability and practical feasibility.

In this inquiry, the researcher employed the standardised DASS (Depression Anxiety Stress Scale) questionnaire. This four-point rating system consists of 42 statements intended to assess negative emotional

states, including anxiety, stress, and depression. It is divided into three domains, each including 14 components. The DASS-42 (Depression Anxiety Stress Scale) was developed by S.H. and P.F. Lovibond in 1995. The DASS-42 (Depression Anxiety Stress Scale) questionnaire consists of three scales, each containing 14 items, designed to assess the negative emotional states of depression, anxiety, and stress. The scores from the three scales will be aggregated based on the rating scale provided below, and the levels of depression, anxiety, and stress will be assessed according to the subsequent Table 1.

The scoring system is as follows:

- 0—Does not apply at all
- 1—Applies to some extent or occasionally
- 2—Applies to a considerable degree or quite often
- 3—Applies very much or most of the time

Analysis of the data for the present study was done in conformity with the objectives and hypothesis as formulated by the investigator. After the collection of data, the same was entered in tabular form to make the analysis easier. A comprehensive data

Table 1

Levels	Depression	Anxiety	Stress
Normal	0–9	0–7	0–14
Mild	10–13	8–9	15–18
Moderate	14–20	10–14	19–25
Severe	21–27	15–19	26–33
Extremely Severe	28+	20+	34+

analysis approach was employed to find out the prevalence and patterns of mental health issues among the higher secondary students in Ukhrul town. Percentage analysis was utilised as the primary method to quantify the proportions of students experiencing depression, stress and anxiety, providing a clear idea of the overall mental health landscape. To search deeper into the difference between different classes, a chi-square test was conducted. These tests examined the associations between Grade 11 and 12 and their levels of depression, stress, and anxiety. The chi-square analysis allowed us to determine whether there was a significant relationship between class and the various mental health issues. Descriptive statistics mean was also used to find out the mean age of the students participating in the study.

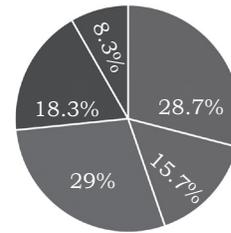
RESULTS

- To find out access and determine the prevalence of depression, stress, and anxiety among higher secondary students in Ukhrul town.**

Table 2 shows that 71 per cent, 63.3 per cent, and 79.3 per cent of higher secondary students in Ukhrul Town experience mild to extremely severe depression, stress, and anxiety, respectively. So, the hypothesis H_{01} is accepted.

Only 29 per cent of the participants were observed to be normal, whereas 15.7 per cent, 28.7 per cent, 18.3 per cent, and 8.30 per cent had mild, moderate, severe and extremely severe levels of depression, respectively (Fig. 1).

Depression Pie Chart



•Normal •Mild •Moderate •Severe •Extremely Severe

Fig. 1: Depression Pie Chart

Similarly, for stress, as shown in Fig. 2, 36.7 per cent of the sample was observed to be normal, whereas 17.6 per cent, 29 per cent, 15.7 per cent, and 1 per cent had mild, moderate, severe, and extremely severe levels of stress, respectively,

Table 2
Levels of Depression, Stress, and Anxiety

Variable	Normal (%)	Mild (%)	Moderate (%)	Severe (%)	Extremely Severe (%)
Depression	87 (29%)	47 (15.7%)	86 (28.7%)	55 (18.3%)	25 (8.3%)
Stress	110 (36.7%)	53 (17.6%)	87 (29%)	47 (15.7%)	3 (1%)
Anxiety	62 (20.7%)	28 (9.3%)	73 (24.3%)	75 (25%)	62 (20.7%)

were observed among participants of the study.

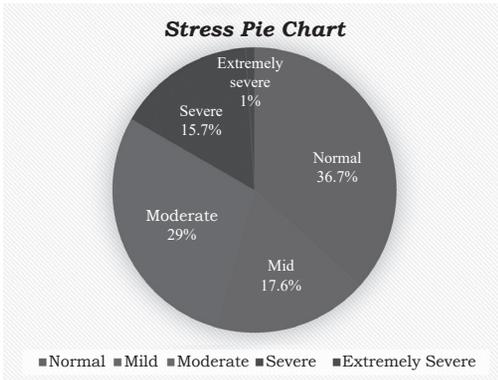


Fig.2: Stress Pie Chart

Likewise, the level of anxiety observed among the participants of the study was 20.7 per cent, 9.3 per cent, 24.3 per cent, 25 per cent, and 20.7 per cent, as shown in Fig. 3, normal, moderate, severe, mild, and extremely severe, in that order.

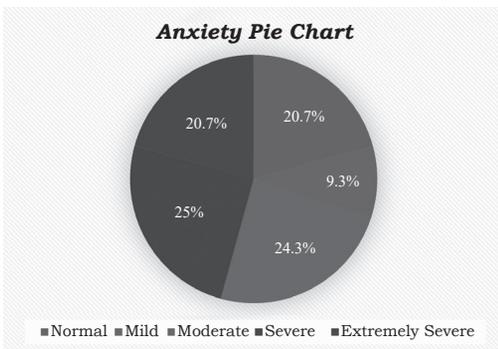


Fig. 3: Anxiety Pie Chart

Therefore, we can interpret that a big part of the sample population, which are the higher secondary students in Ukhrul town, suffers from mental health disorders, particularly depression, stress and anxiety, according to the analysis of this study.

2. Evaluation and contrast of levels of depression between students of the standard class to the senior class

A chi-square independence test was conducted to examine the relationship between Grades (11 and 12) and levels of depression. The association among these variables was statistically significant, $\chi^2 (4, N=300) = 10.65, p = 0.031$ as shown in Table 3. Therefore, it concludes that class does appear to influence the prevalence of depression among the higher secondary students. Thus, ect the null hypothesis “There is no significant difference in levels of depression between Grades 11 and 12 students”.

The analysis revealed that a higher proportion of Grade 12 students suffered higher levels of depression, and Grade 11 students were less likely to suffer from high levels of depression. Many factors could be contributing to this result, such as exams, future, pressure about making decisions affecting their lives and more.

Table 3

Level of Depression among Grade 11 and 12 Students

Grade	N	X ²	df	P value
11	150	10.65	4	0.031
12	150			

Significance level, p = 0.05

3. **Examination and comparison of stress levels among students of the standard class and senior class.**

A chi-square independence test was conducted to examine the relationship between Grades (11 and 12) and levels of stress. The association between these variables was statistically significant, $\chi^2(4, N=300) = 10.57, p = 0.032$, as displayed in the Table 4. Therefore, we conclude that class does appear to influence the prevalence of stress among the higher secondary students. Thus, we reject the null hypothesis "There is no significant difference in levels of stress between Grade 11 and 12 students".

The analysis revealed that higher proportions of Grade 12 students suffered from higher levels of stress, and Grade 11 students were less likely to suffer high levels of anxiety. Similar to depression, many factors could be at play for Grade 12

students to be suffering from the statistically higher levels of stress than Grade 11 students, such as exam pressure, family pressure, and pressure from teachers to perform well academically and get into a good college, and more reasons.

4. **Analysis and differentiation of the anxiety levels between the standard class and senior class**

The association between anxiety levels and Grades (11 and 12) was investigated using a chi-square test of independence. Table 5 indicates that there was a statistically significant correlation between these factors, with $\chi^2(4, N=300) = 2.99$ and $p = 0.55$. Thus, we conclude that anxiety prevalence among upper secondary pupils does seem to be influenced by class. The null hypothesis, "There is no significant difference in the level of anxiety between Grade 11 and 12 students," cannot be rejected since the p-value is higher than 0.05.

Table 4
Levels of Stress between Grade 11 and 12 Students

Grade	N	χ^2	df	p-value
11	150	10.57	4	0.032
12	150			

Significance level, $p = 0.05$

Table 5
Levels of Anxiety between Grade 11 and 12 Students

Grade	N	χ^2	df	p value
11	150	2.99	4	0.55
12	150			

Significance level, $p = 0.05$

This analysis indicates that there is no significant difference in anxiety levels between students in Grade 11 and Grade 12, leading to the acceptance of the null hypothesis. This would mean that both Grade 11 and 12 students suffer from similar levels of anxiety.

MAIN FINDINGS, DISCUSSION, AND CONCLUSION

1. It was found that 29 per cent, 15.7 per cent, and 28.7 per cent, 18.3 per cent and 8.30 per cent of the students had normal, mild, moderate, severe and extremely severe levels of depression, respectively.

It was found that 36.7 per cent, 17.6 per cent, 29 per cent, 15.7 per cent, and 1 per cent of the students had normal, mild, moderate, severe and extremely severe levels of stress, respectively.

It was found that 20.7 per cent, 9.3 per cent, 24.3 per cent, 25 per cent, and 20.7 per cent of the students had normal, mild, moderate, severe and extremely severe levels of anxiety, respectively.

Based on the study's analysis, we can infer that there is a high prevalence of stress, anxiety, and depression among higher secondary students in Ukhrul town.

2. The study reveals that Grade influences the incidence of depression in higher secondary

students in Ukhrul town, with Grade 12 students demonstrating notably higher levels of depression compared to Grade 11 students.

3. The research indicates that socio-economic status does not seem to affect the incidence of anxiety in higher secondary students. It was noted that students in Grades 11 and 12 exhibited comparable levels of anxiety.

Discussion with Socio-Cultural Context and Policy Implications

The outcomes of this study should be viewed within the unique cultural, educational, and geographic context of Ukhrul town, a primarily tribal area situated in the hills of Manipur. A multitude of interrelated socio-cultural factors contribute to the elevated levels of depression, stress, and anxiety found among students. Academic pressure is particularly intense in distant areas like Ukhrul, where students face restricted access to quality tutoring, digital learning resources, and career counselling services. This pressure escalates in Grade 12, as adolescents confront key choices concerning college admissions or career paths, frequently lacking adequate support systems. Moreover, in rural and tribal groups, scholastic success is increasingly regarded as a crucial pathway to social mobility. Financial difficulties, elevated family expectations, and the lack of local educational role models frequently impose significant psychological pressures on pupils. A study in

Maharashtra by Shaikh, Doke, and Gothankar (2018) similarly highlighted scholastic pressures, familial stresses, and inadequate mental health assistance as the significant factors contributing to depression, anxiety, and stress among rural teenagers.

Cultural beliefs and social norms intensify the situation. A prevalent silence around mental health endures in the region, where emotional vulnerability is sometimes mistaken or mocked. Adolescents are typically discouraged from expressing anxiety or pursuing professional assistance, due to concerns about being categorised as “mentally weak” or “abnormal.” This causes several young individuals to internalise their emotional difficulties. Furthermore, while the current study did not investigate gender disparities, earlier research in Northeast India has indicated that female students in comparable situations experience heightened emotional burdens. This encompasses balancing the academic obligations with domestic responsibilities, addressing societal pressures on marriage, and confronting issues about personal safety.

The outcomes of this study closely correspond with data from India and South Asia. Karki *et al.* (2022) indicated that more than 55 per cent of school children in Nepal suffered from sadness and anxiety. Singh, Mohita, and Sharma (2015) discovered that anxiety, depression, and stress substantially impacted

the psychosocial functioning of Indian adolescents, highlighting the necessity for institutional mental health care within educational environments. Similarly, Singh, Gupta, and Grover (2017) conducted a study on adolescents in Chandigarh, revealing a significant incidence of depression associated with scholastic pressure and insufficient familial support, hence corroborating the trends identified in the current study. Likewise, Devi *et al.* (2023) discovered that over 60 per cent of senior secondary females in Punjab displayed signs of stress, melancholy, and anxiety. Kumar *et al.* (2014) reported elevated levels of depression and stress among higher secondary students in Imphal. Notwithstanding these similar findings, the execution of school-based mental health programmes remains inadequate in numerous distant areas, including Ukhrul. National initiatives like “Manodarpan,” established under the National Education Policy 2020 to offer counselling and emotional support to students, have not yet demonstrated a significant impact in tribal districts.

This study, therefore, underscores the urgent need for school-based mental health interventions that are locally relevant and culturally sensitive. Key strategies should include routine mental health screening using validated tools like the DASS-21 or teacher observations, training programmes for the educators to identify early signs of any

emotional distress, and engagement of parents and local communities through awareness campaigns to help break the stigma surrounding mental health. Furthermore, schools should ensure the availability of trained mental health professionals—either as full-time staff or through periodic visits—particularly for students in Grade 12 who are under heightened academic and emotional pressure. To address the mental health requirements of adolescents in remote and tribal regions, it is essential to prioritise the effective execution of government initiatives such as Manodarpan and Rashtriya Kishor Swasthya Karyakram (RKSK).

CONCLUSION

This study highlights a major mental health issue for higher secondary pupils in Ukhrul, Manipur. Mental health disorders are prevalent in adolescents, with 71 per cent of students feeling mild to severe depression, 63.3 per cent stress, and 79.3 per cent anxiety. Grade 12 students were more vulnerable to depression and stress than Grade 11 students due to increasing academic

demands, anxiety about the future, and social pressures.

These findings support national and international studies. This study is unique since it is set in a remote, tribal setting where cultural stigma and insufficient mental health resources may prevent early intervention and support. Even though mental health is becoming more mainstream, many communities, including Ukhrul, still stigmatise it and hinder people from obtaining professional care.

This problem requires immediate, multifaceted solutions. Educational institutions must institutionalise psychiatric symptom screening, school-based therapy, and comprehensive awareness campaigns. The comprehensive adolescent education must include mental health examinations and counselling to provide kids with academic and emotional assistance. Community sensitisation should remove stigma, promote open communication, and make mental health a shared responsibility. We can only protect our youth's mental health and help them succeed by providing a supportive, inclusive, and knowledgeable environment.

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