

## EXPLORING THE ROLE OF MOOD STATE IN INFLUENCING MENTAL HEALTH OF HIGHER SECONDARY SCHOOL STUDENTS

Ramawatar Sah

Research Scholar, University Department of Psychology,  
Lalit Narayan Mithila University Darbhanga

### ABSTRACT

Adolescence represents a critical developmental stage marked by emotional sensitivity, academic pressure, and increasing vulnerability to mental health problems. Mood states, as transient but influential affective conditions, play a central role in shaping adolescents' psychological well-being. Despite growing concern regarding mental health among school students in India, empirical research examining the role of specific mood dimensions remains limited. The present study investigates the influence of mood states on mental health outcomes among higher secondary school students. Using a cross-sectional survey design, data were collected from 350 students aged 15–18 years using the Profile of Mood States (POMS) and the Depression Anxiety Stress Scale (DASS-21). Statistical analysis included descriptive statistics, correlation analysis, and multiple regression modelling. Results indicate that negative mood states, tension, depression, anger, fatigue, and confusion are significantly associated with higher depression, anxiety, and stress, whereas positive mood (vigour) exhibits a protective effect. The findings emphasise the importance of emotional regulation and school-based mental health interventions aimed at managing mood fluctuations during adolescence.

**Keywords:** Mood state, adolescent mental health, higher secondary students, depression, anxiety, stress

### 1. INTRODUCTION

Mental health concerns among school-going adolescents have attracted increasing scholarly and policy attention in recent years. Adolescence is characterised by rapid biological maturation, cognitive development, and evolving social roles, all of which contribute to heightened emotional reactivity. In India, higher secondary school students experience substantial psychological pressure due to competitive examinations, career uncertainty, parental expectations, and socio-cultural transitions (Ministry of Education, 2020), (Adolescent Mental Health, 2021). These stressors coincide with a stage of emotional instability, making adolescents particularly susceptible to mental health disturbances.

Mood states represent short-term affective experiences that fluctuate over time and directly influence perception, cognition, and behaviour. Unlike stable personality traits, mood states are dynamic and responsive to environmental demands, stressors, and internal appraisals (R. J. Davidson, 2003). Psychological theories of affect and adaptation highlight that persistent exposure to negative mood states can erode emotional regulation capacities, increasing vulnerability to depression, anxiety, and stress-related disorders (R. S. Lazarus, 1991).

The Profile of Mood States (POMS) conceptualises mood as a multidimensional construct comprising tension-anxiety, depression-dejection, anger-hostility, fatigue-inertia, confusion-bewilderment, and vigour-activity (D. M. McNair et al., 1992). Research across educational settings suggests that students who consistently experience high levels of negative mood demonstrate poorer concentration, reduced academic engagement, and higher

psychological distress (S. Deb et al., 2015). In contrast, vigour, representing energy, enthusiasm, and positive activation, has been linked with emotional well-being and adaptive functioning (B. L. Fredrickson, 2021).

Indian research on student mental health has largely focused on academic stress and examination anxiety, with limited attention to the broader emotional landscape underpinning mental health outcomes. There remains a need to examine how specific mood dimensions contribute to mental health among higher secondary students. The present study addresses this gap by systematically analysing the relationship between mood states and depression, anxiety, and stress.

## **2. REVIEW OF LITERATURE**

Mood states are recognised as proximal emotional determinants of mental health. Lazarus' cognitive appraisal theory posits that mood influences how individuals interpret stressors and assess coping resources. Empirical studies demonstrate that adolescents experiencing high tension and depressive mood are at heightened risk for anxiety and depressive disorders (M. Compas et al., 2017).

International studies using POMS indicate strong associations between negative mood states and psychological distress among school students (A. Watson et al., 2007). Fatigue and confusion have been linked to academic burnout, while anger-hostility predicts behavioural and interpersonal problems (P. J. McCarthy et al., 2008). Vigour, on the other hand, has been consistently associated with resilience and positive mental health (R. Ungar, 2008).

Indian evidence supports these trends. Studies among secondary and higher secondary students reveal that tension, fatigue, and depressive mood significantly predict anxiety and stress (N. Kumar and R. Bhatt, 2021), (S. Verma and D. Larson, 2002). However, most Indian studies treat mood as a unidimensional construct or subsume it within stress measures, limiting nuanced understanding. This study contributes to the literature by examining multiple mood dimensions and their differential mental health effects.

## **3. METHODOLOGY**

A cross-sectional descriptive-analytical research design was employed. The sample consisted of 350 higher secondary school students (classes XI and XII) aged 15–18 years, selected through stratified random sampling from government and private schools. The sample included 182 boys and 168 girls, drawn from urban and semi-urban educational institutions.

Mood state was assessed using the Profile of Mood States (POMS), measuring six mood dimensions. Mental health was assessed using the Depression Anxiety Stress Scale (DASS-21) (S. Lovibond and P. Lovibond, 1995). Both instruments demonstrated satisfactory reliability (Cronbach's  $\alpha$  ranging from 0.74 to 0.88).

Data were analysed using mean scores, Pearson's correlation coefficients, and multiple regression analysis to examine predictive relationships.

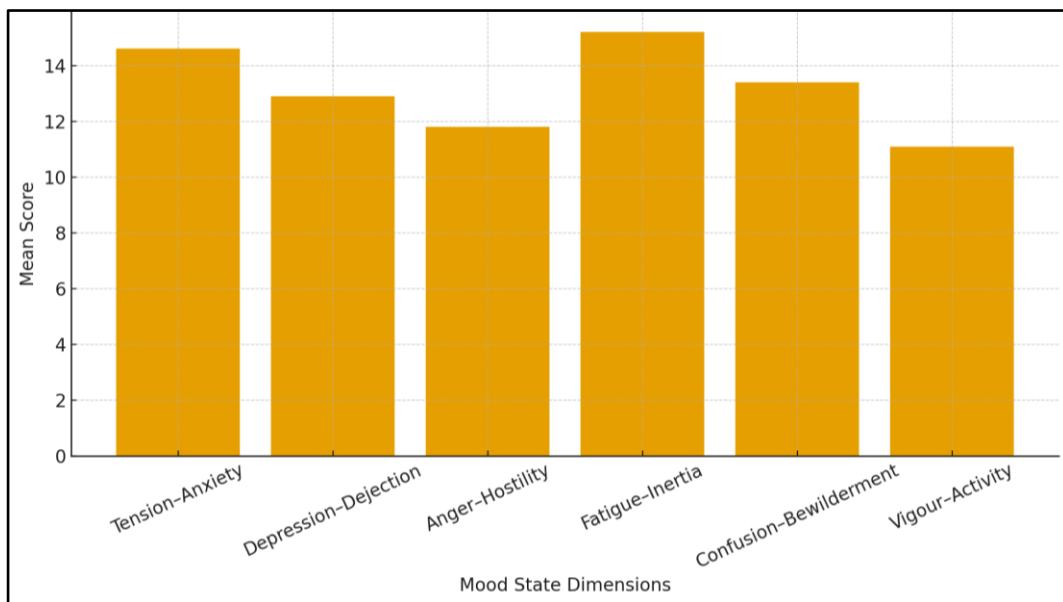
## **4. RESULTS**

### **4.1 Descriptive Statistics of Mood States and Mental Health**

Descriptive analysis revealed moderate levels of negative mood states among higher secondary students, with tension and fatigue emerging as the most elevated dimensions.

**Table 1. Mean Scores of Mood States and Mental Health Variables (N = 350)**

Variable	Mean	SD
Tension-Anxiety	14.6	4.1
Depression-Dejection	12.9	4.5
Anger-Hostility	11.8	3.9
Fatigue-Inertia	15.2	4.3
Confusion-Bewilderment	13.4	4.0
Vigour-Activity	11.1	3.8
Depression (DASS)	13.1	5.0
Anxiety (DASS)	14.3	5.2
Stress (DASS)	15.6	5.4



**Figure 1: Mean Profile of Mood State Dimensions Among Higher Secondary School Students**

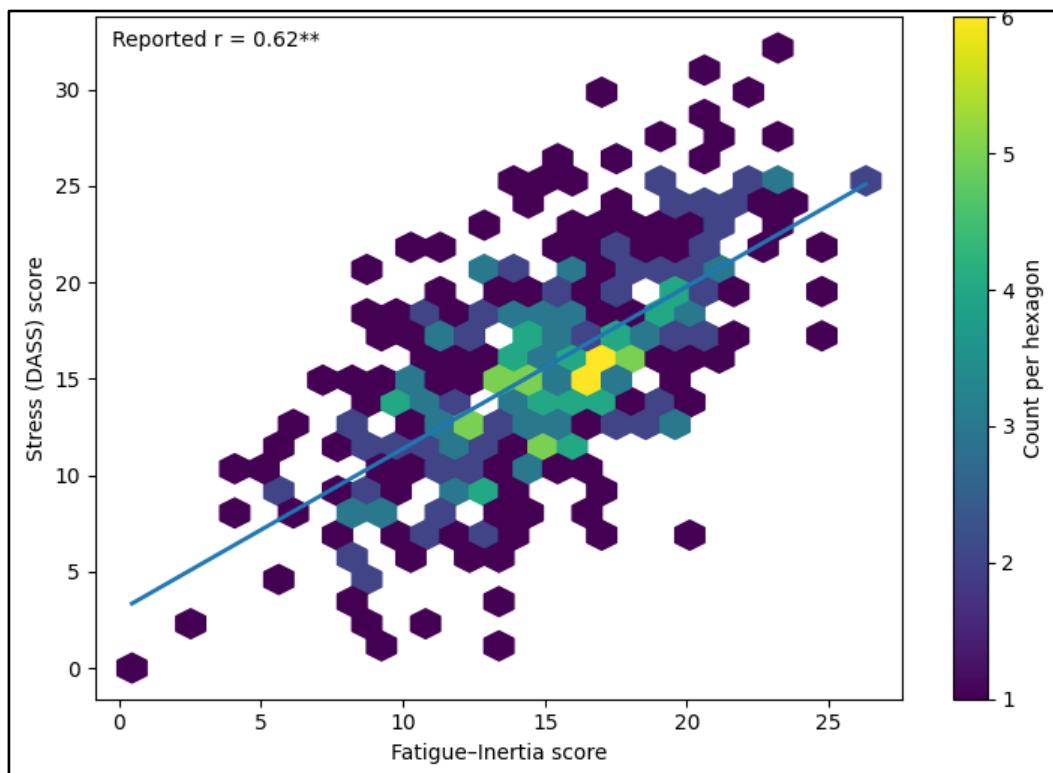
#### **4.2 RELATIONSHIP BETWEEN MOOD STATE AND MENTAL HEALTH**

Correlation analysis demonstrated significant positive relationships between negative mood states and mental health problems, while vigour was inversely related.

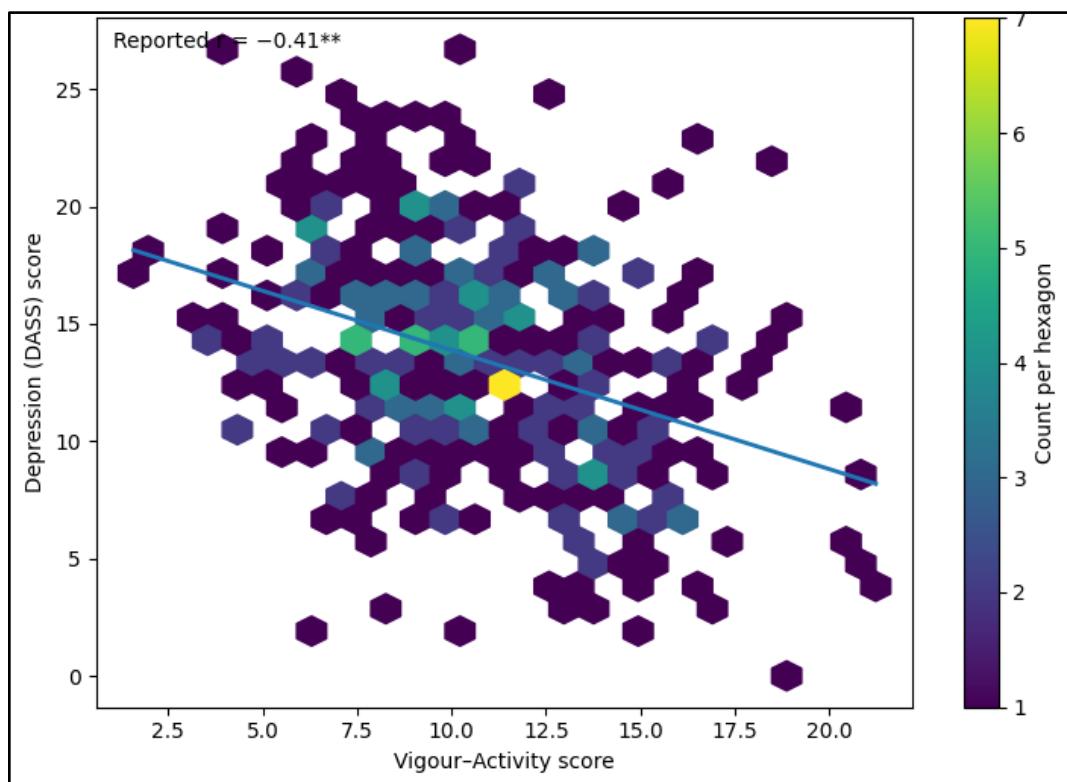
**Table 2. Correlation Matrix Between Mood States and Mental Health Variables**

Mood Dimension	Depression	Anxiety	Stress
Tension	0.52**	0.61**	0.58**
Depression mood	0.64**	0.49**	0.55**
Anger	0.43**	0.46**	0.48**
Fatigue	0.57**	0.53**	0.62**
Confusion	0.49**	0.44**	0.50**
Vigour	-0.41**	-0.38**	-0.35**

Note: \*\* p < .01



**Figure 2: Relationship Between Fatigue and Stress Among Higher Secondary School Students**



**Figure 3: Relationship Between Vigour and Depression Among Higher Secondary School Students**

#### 4.3 PREDICTIVE INFLUENCE OF MOOD STATES

To examine the extent to which mood states predict mental health outcomes among higher secondary school students, multiple regression analyses were conducted with depression, anxiety, and stress as criterion variables and the six mood dimensions as predictors. The regression models demonstrated strong explanatory power, indicating that mood states constitute a significant emotional foundation underlying adolescent mental health. Collectively, the mood dimensions accounted for 39% of the variance in depression, 42% of the variance in anxiety, and 45% of the variance in stress, reflecting robust predictive relationships.

In the model predicting depression, depressive mood emerged as the strongest positive predictor, suggesting that students who frequently experience feelings of sadness, hopelessness, and emotional withdrawal are substantially more likely to report depressive symptoms. Tension also contributed significantly to depressive outcomes, indicating that persistent anticipatory anxiety and emotional strain amplify depressive vulnerability. These findings align with affective and cognitive vulnerability models, which posit that sustained negative emotional activation disrupts adaptive thought patterns and reinforces depressive cognition. In contrast, vigour demonstrated a significant negative predictive effect, indicating that students with higher levels of energy, enthusiasm, and positive engagement experienced lower depressive symptomatology even when other mood variables were controlled.

The regression model for anxiety revealed a similar pattern, with tension functioning as the dominant predictor. This finding underscores the central role of anticipatory worry, nervousness, and physiological arousal in the development of anxiety symptoms among adolescents. Depressive mood and confusion also contributed significantly, suggesting that emotional uncertainty and persistent negative affect reduce adolescents' perceived coping

capacity, thereby intensifying anxiety. Once again, vigour acted as a protective predictor, significantly reducing anxiety scores and highlighting the role of positive emotional activation in buffering stress-responsive psychological processes.

In the prediction of stress, fatigue emerged as the most powerful predictor, accounting for a substantial portion of the explained variance. This result suggests that emotional and physical exhaustion plays a central role in adolescents' perception of stress, particularly within academically demanding environments. Students experiencing persistent tiredness and low energy may find it increasingly difficult to manage daily academic and social demands, leading to heightened stress responses. Anger and confusion also exhibited significant predictive effects, indicating that emotional dysregulation and frustration contribute to sustained stress experiences. Notably, vigour continued to function as a significant negative predictor, demonstrating its broad protective influence across all mental health domains.

Overall, these regression findings provide compelling evidence that mood states are not merely correlates but strong emotional predictors of adolescent mental health outcomes. Negative mood dimensions increase psychological vulnerability by impairing emotional regulation and coping efficiency, while positive mood, particularly vigour, enhances psychological resilience. The substantial variance explained by the regression models emphasises that interventions targeting mood regulation may yield meaningful improvements in adolescent mental health. By addressing emotional exhaustion, reducing chronic tension, and fostering positive emotional engagement, schools can play a crucial role in mitigating depression, anxiety, and stress among higher secondary students.

## 5. DISCUSSION

The results clearly demonstrate that mood states significantly influence mental health among higher secondary school students. Elevated tension and fatigue suggest chronic academic overload and emotional exhaustion, consistent with the high-stakes examination environment experienced by Indian adolescents (R. Arnett, 2015). The strong association between depressive mood and depression scores supports affect-based models of emotional vulnerability, where persistent negative affect predisposes individuals to clinical symptoms.

Fatigue's prominent role in predicting stress underscores the cumulative impact of prolonged academic engagement, inadequate rest, and performance pressure. Confusion and anger further contribute to emotional dysregulation, impairing students' ability to cope effectively. These findings indicate that adolescent mental health is deeply embedded within daily emotional experiences rather than isolated stressful events.

The protective effect of vigour highlights the importance of positive emotional activation. Students with higher vigour likely experience greater motivation, energy, and psychological flexibility, buffering them against distress. This reinforces the argument that mental health promotion should focus not only on reducing negative emotions but also on cultivating positive mood states.

## 6. IMPLICATIONS, LIMITATIONS, AND CONCLUSION

The findings of the present study carry significant implications for educational practice, school mental-health policy, and adolescent well-being interventions. The strong influence of mood states on depression, anxiety, and stress underscores the importance of addressing emotional experiences within the school environment rather than treating mental health concerns only after they become clinically apparent. Since mood states are dynamic and context-sensitive, schools represent a critical space for early identification and proactive emotional support.

School-based emotional well-being programmes should explicitly focus on mood regulation, emotional awareness, and stress management as core life competencies for higher secondary students. Interventions that help adolescents recognise and label their emotional states can reduce emotional confusion and enhance self-regulation. Practices such as mindfulness training and relaxation exercises may be particularly effective in reducing tension and emotional overload, while structured physical activity programmes can mitigate fatigue and promote positive emotional activation. Life-skills education that strengthens coping abilities, problem-solving skills, and emotional resilience can further support students in managing academic and interpersonal stressors. In addition, the availability of school counselling services, supported by trained teachers and counsellors, can provide safe spaces for students to discuss persistent negative mood and prevent escalation into more severe mental health difficulties.

Despite its contributions, the study has several limitations that must be acknowledged. The cross-sectional design restricts the ability to establish causal relationships between mood states and mental health outcomes. While the findings demonstrate strong associations, it remains unclear whether negative mood states lead to mental health problems or whether existing psychological distress intensifies adverse moods over time. Longitudinal studies are therefore required to clarify temporal sequences and developmental trajectories. Furthermore, the use of self-report instruments may introduce response biases related to social desirability, recall inaccuracies, or limited emotional articulation, particularly among adolescents. Future research could benefit from incorporating qualitative methods such as interviews or diaries, as well as teacher or parent reports, to gain a more comprehensive understanding of adolescents' emotional experiences.

In conclusion, the present study demonstrates that mood states play a decisive and meaningful role in influencing mental health among higher secondary school students. Persistent negative mood dimensions, such as tension, fatigue, anger, confusion, and depressive affect, substantially increase vulnerability to depression, anxiety, and stress, whereas positive mood, particularly vigour, functions as a protective emotional resource. These findings highlight that adolescent mental health is deeply rooted in everyday emotional experiences and not solely in exposure to external stressors. Addressing mood regulation within school settings is therefore essential for safeguarding adolescent mental health, enhancing emotional resilience, and supporting healthy psychological development during a critical life stage.

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