

Stress Level of University Students Who Passed their Senior Secondary from State Board in Comparison to Other Boards

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Abstract: ***Background:** University life introduces academic, social, and linguistic challenges that may elevate stress levels among students. In India, diverse schooling backgrounds, particularly state versus central boards, influence students' preparedness and adaptability to university education. **Objective:** To assess and compare stress levels among university students who completed their senior secondary education under state boards versus other educational boards. **Methods:** A cross-sectional online survey was conducted among 99 undergraduate students (aged 18–21 years) at Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation. A validated 16-item questionnaire assessed academic and psychosocial stress using a 4-point Likert scale. Stress levels were categorized as mild, moderate, or high. **Results:** State board students reported higher stress levels, particularly regarding language barriers, self-confidence during peer interactions, and difficulty adapting to the English-medium curriculum. Over one-third consistently experienced anxiety in social and academic settings. Academic stress significantly impacted mental and physical health, contributing to reduced participation and emotional distress. **Conclusion:** Students from state boards face greater academic and psychosocial stress during the transition to university life. Universities should implement targeted interventions, including language bridging, mentorship programs, and stress management workshops, to support their integration and well-being.*

Keywords: Academic stress, University students, State board education, Language barriers, Psychosocial adjustment

1. Introduction

University life marks a significant turning point in the academic and personal journey of students. It is a stage characterized by increased independence, academic demands, and the need for social adaptation. At this stage, individuals are confronted with numerous issues, as much of the literature reveals it is impeding their performance and prevent them from achieving their objectives. While this transition is full of opportunity and growth, it also brings a variety of stressors that may impact a student's mental, emotional, and academic well-being. Stress, when experienced at moderate levels, can serve as a motivator, but when it becomes overwhelming, it may hinder cognitive functioning, reduce academic performance, and negatively affect mental health¹.

In India, one of the unique yet often overlooked contributors to academic stress in university students is the diversity in educational backgrounds, particularly the type of educational board under which students completed their senior secondary schooling. The school education system in India is managed by various boards like the Central Board of Secondary Education (CBSE), the Council for the Indian School Certificate Examinations (CISCE), and numerous state boards, each offering a distinct curriculum, instructional medium, and examination pattern. Students from state boards may enter university with a different level of academic preparation, language proficiency, and learning strategies compared to their peers from centrally governed or international boards².

Language barriers play a pivotal role in shaping the academic experiences of students. Many state board schools, particularly in rural or semi-urban regions, adopt regional languages or Hindi as the medium of instruction. In contrast,

university-level education in India is predominantly delivered in English, especially in professional courses like physiotherapy, medicine, and engineering. This sudden linguistic shift can be intimidating, often leading to poor comprehension of concepts, lack of participation, and diminished academic confidence² (Mishra & Sharma, 2017). Studies have shown that students with limited command of the language of instruction are more likely to report writing anxiety, reduced engagement in academic tasks, and social withdrawal³ (Green, 2010).

Further compounding the issue are psychosocial and emotional factors. Students transitioning from regional or localized educational settings to diverse university environments may struggle with cultural adjustment, peer comparisons, and low self-esteem. Previous research indicates that female students are particularly vulnerable to stress-induced emotional responses such as irritability, depression, and nervousness, potentially influenced by gender-based societal expectations⁴. Additionally, high academic competition, fear of failure, unfamiliar teaching styles, and performance pressure contribute to stress and can act as barriers to academic success⁵.

While academic stress is common across all student groups, the experience may vary significantly depending on their prior schooling background. Studies suggest that students from state boards may encounter more challenges adjusting to the pace and pedagogy of university education, especially when they lack exposure to problem-solving-based learning or English-medium instruction during their earlier years⁶. These challenges are not merely academic but are deeply tied to emotional well-being and mental health outcomes such as anxiety, depression, and social withdrawal.

Despite these known issues, there remains limited empirical evidence comparing stress levels among university students from different educational boards, especially in the Indian context. Identifying stress-related differences between students who completed their senior secondary education under state boards and those from other boards could help guide institutional strategies to offer better psychological and academic support. Universities can benefit from such insights by creating orientation modules, language support systems, and culturally sensitive mentoring that acknowledges and accommodates this diversity.

Need for the Study

Given that students from state boards may struggle with differences in language, curriculum delivery, and peer interaction, it becomes crucial to assess their stress levels. Early identification of academic stress in such students can enable timely counselling, academic bridging programs, and adaptive interventions, ultimately improving their university experience and success.

Aim of the Study

To assess and compare the stress levels of university students who passed their senior secondary education from state boards with those from other educational boards.

2. Methodology

Study Design

This was a cross-sectional, online survey-based study designed to assess and compare the stress levels of university students who completed their senior secondary education through state boards with those from other educational boards.

Study Setting and Duration

The study was conducted at Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Haryana, India, through an online self-administered questionnaire.

Study Population and Sampling

The study population comprised undergraduate students aged 18–21 years enrolled in the first or second year of university programs.

Inclusion criteria:

- 1) Undergraduate students aged 18–21 years
- 2) Both male and female participants
- 3) Students who had completed senior secondary education from state or other boards

Exclusion criteria:

- 1) Students enrolled in diploma or certificate courses
- 2) Students who had a gap year after completing senior secondary education
- 3) Students who had attended personality development classes

Sample size: 68

Sample size was estimated using the formula $n = (Z\alpha)^2 P(1-P)/d^2$

Where, n = Population size, $Z = 1.96$, d (marginal error) = 0.1, P (population proportion) = 0.77

Sampling Method

A snowball sampling technique was employed to recruit participants. A total of 100 students were invited, and 99 valid responses were included in the final analysis after excluding one incomplete response.

Study Tool

A self-designed, validated questionnaire was used, comprising:

- 1) Demographic details: age, gender, educational stream, and board of senior secondary education.
- 2) Stress-related questions: 16 items designed to assess academic and psychosocial stress.
 - Responses were recorded on a 4-point Likert scale: Never (0), Rarely (1), Sometimes (2), and Always (3).
 - The total stress score ranged from 0 (no stress) to 36 (high stress).

The questionnaire content was validated by a panel of 10 physiotherapy experts with ≥ 3 years of teaching/research experience, and it achieved >80% agreement for clarity and relevance.

Data Collection Procedure

- The questionnaire was digitized using Google Forms.
- The survey link was distributed via social media platforms (WhatsApp, Instagram, and email).
- Informed consent was obtained electronically before participation.
- Participants were instructed to complete the survey in one sitting without external help.

Outcome measure

The primary outcome was the stress level, categorized as:

- 0–9: No stress
- 10–18: Mild stress
- 19–27: Moderate stress
- 28–36: High stress

The secondary outcome was the association between stress level and factors such as educational board, language difficulties, and peer interaction.

Ethical Considerations

Ethical approval was obtained from the Student Project Committee of Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation. Participation was voluntary, and responses were kept confidential and anonymized.

3. Results

A total of 100 university students participated, with a valid response rate of 99%. The age distribution showed 19% were 18 years old, 30% were 19 years old, 26% were 20 years old, and 24% were 21 years old.

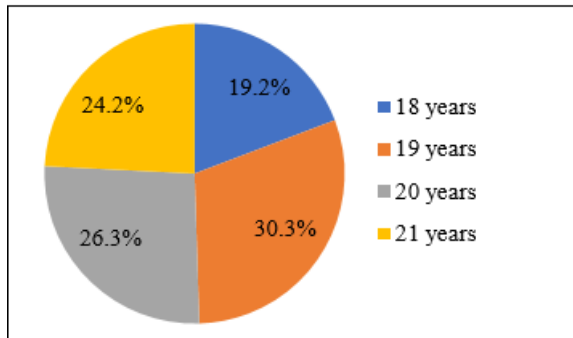


Figure 1: Age of the participants

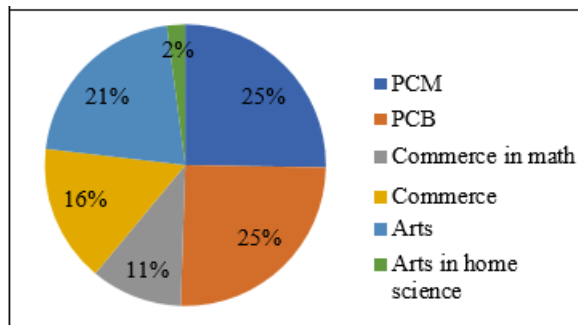


Figure 2: Stream of the participant

Regarding their educational streams, 25% were from PCM, 25% from PCB, 11% from Commerce with Mathematics, 16% from Commerce, 21% from Arts, and 2% from Arts (Home Science).

Stress-related findings

Overall, students reported varying levels of academic and psychosocial stress. The most common stressors included lack of self-confidence, difficulty adjusting to the university environment, and language comprehension issues.

- 33% reported sometimes facing strain in understanding the language, while 22% reported never facing it.
- 36% sometimes lacked self-confidence when interacting with peers, and 36% always lacked it.

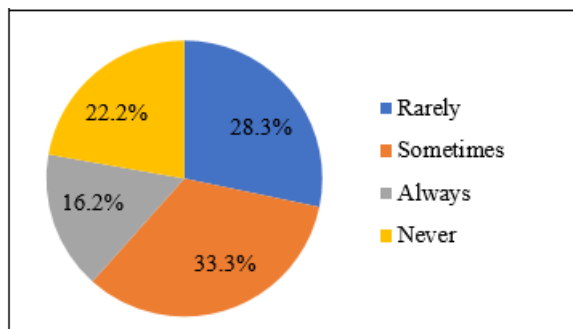


Figure 3: Face strain in understanding language

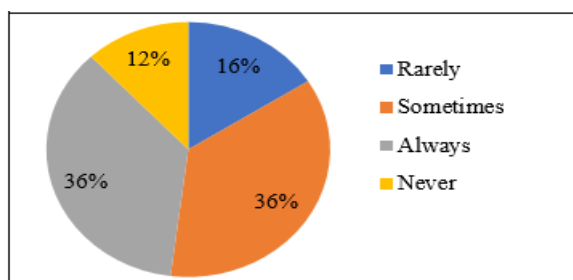


Figure 4: Faced lack of self confidence while interacting with people.

- 35% sometimes faced difficulty in entrance exams, while 33% always experienced this.
- 38% reported never facing difficulty adjusting to the university environment, while 26% rarely experienced it.

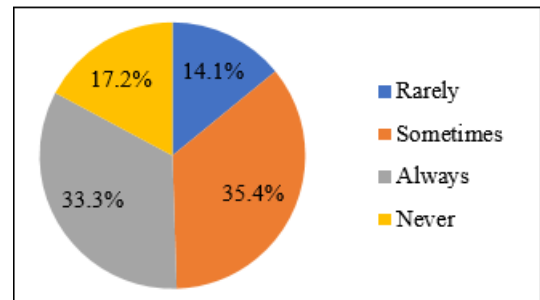


Figure 5: Faced difficulty in attempting the entrance exam.

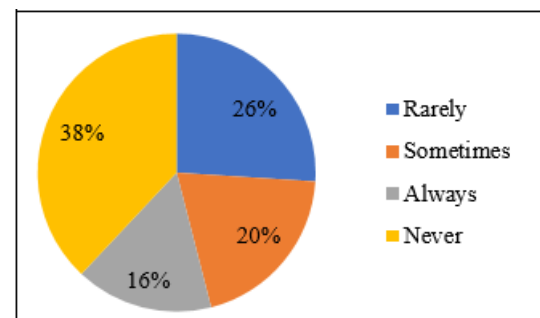


Figure 6: Face difficulty in adjusting in university environment.

- 37% sometimes felt scared to confront stressful situations, whereas 24% always felt fear.
- 38% reported that assignments were sometimes affected by stress, while 29% reported they were always affected.

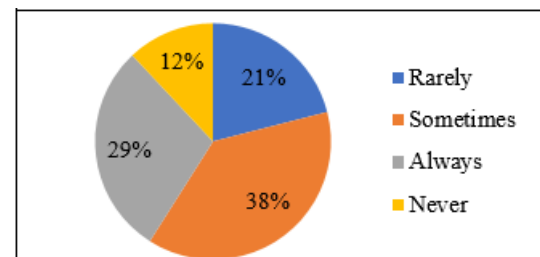


Figure 7: Scared to confront with stressful situations.

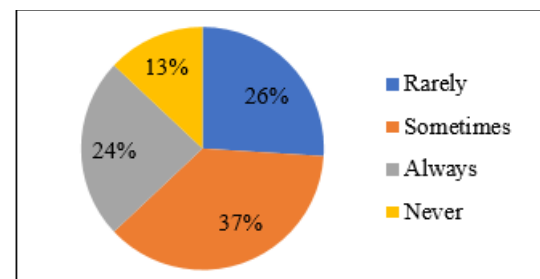


Figure 8: Completion of assignment/project is affected by stress.

- 31% always felt depressed when interacting with students from other boards, while 30% never felt this.
- 40% never felt pressure to fit in with peers, while 29% rarely felt it.

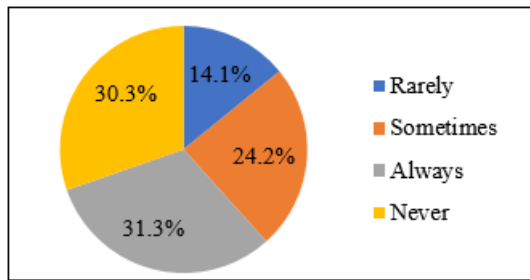


Figure 9: Feel depressed while interacting with other students passed out from different board

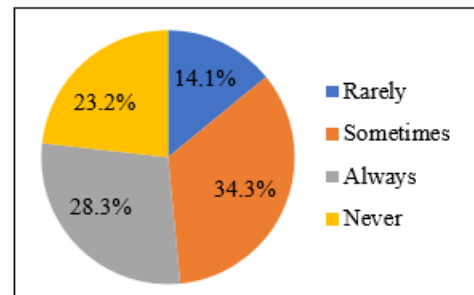


Figure 13: Feel more stress when you see your batch mates as a competition

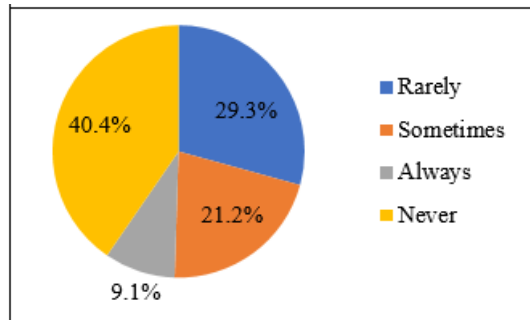


Figure 10: Feel pressure to fit in with peers/companion

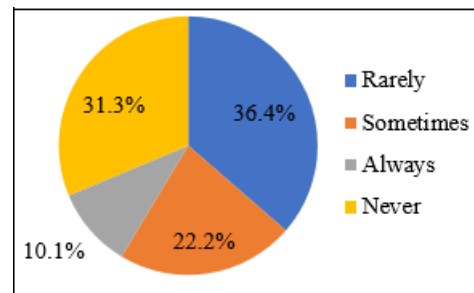


Figure 14: Face any kind of disagreements with individuals in university

- 38% sometimes felt a lack of self-confidence, while 21% always experienced it and another 21% rarely felt it. In contrast, 19% reported never feeling a lack of confidence.
- 30% sometimes reported that academic stress affected their mental and physical health, while 33% always experienced such effects. 23% rarely felt it, and only 13% never faced this issue.

- 38% sometimes felt criticized or judged by batchmates, while 18% always felt judged, 19% rarely, and 24% never experienced criticism.
- 33% sometimes felt irritated in stressful situations, while 38% always felt irritation, 16% rarely, and 12% never reported irritation.

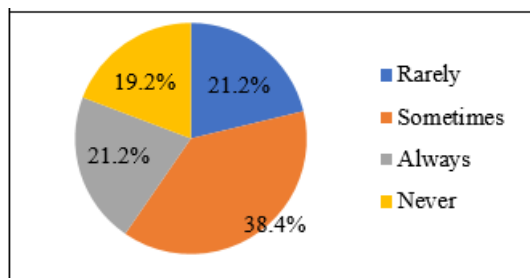


Figure 11: Feel lack of self confidence

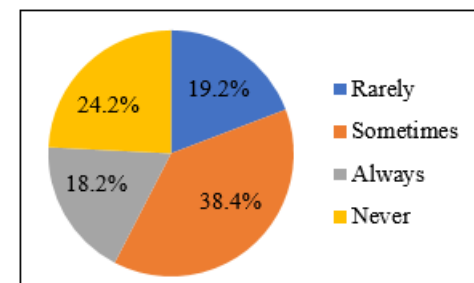


Figure 15: Criticized or judged by the batch mates.

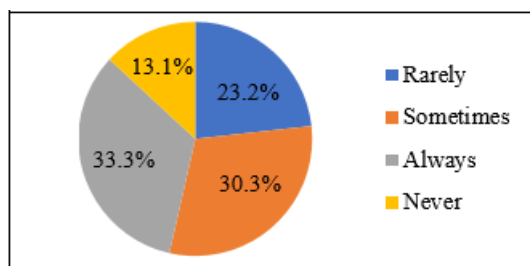


Figure 12: Academic stress is affecting your mental and physical health.

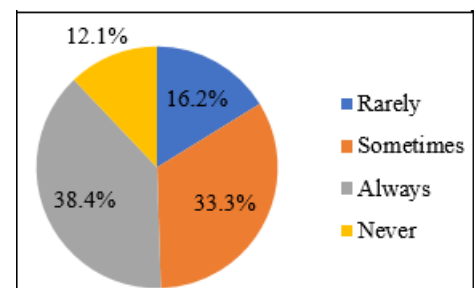


Figure 16: Feel irritated in stressful situations.

- 34% sometimes felt more stress when viewing batchmates as competition, while 28% always experienced this, 14% rarely, and 23% never felt such stress.
- 22% sometimes faced disagreements with individuals in university, while 10% always experienced disagreements, 36% rarely, and 31% never faced such situations.

- 31% sometimes found difficulty in completing tasks assigned by teachers, while 29% always struggled, 19% rarely, and 20% never faced this problem.
- 37% rarely faced difficulty keeping up with the English-medium curriculum, while 13% sometimes struggled, another 13% always had difficulty, and 36% never faced such issues.

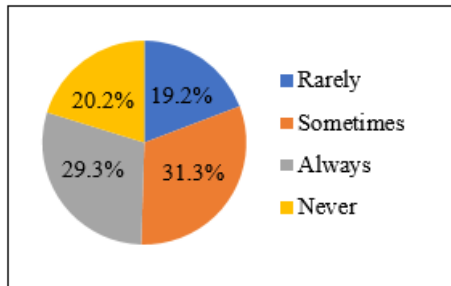


Figure 17: Find difficulty to complete the task given by the teachers.

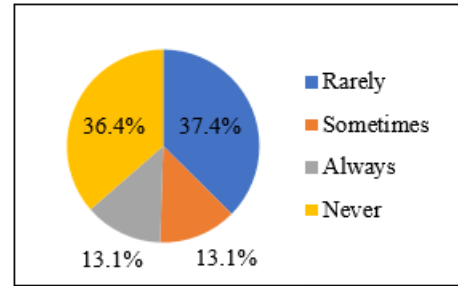


Figure 18: Face any difficulty in keeping up with the curriculum designed in English language.

Table 1: Distribution of major stress symptoms among students

Stress Symptom	Never	Rarely	Sometimes	Always
Strain in understanding language	22%	28%	33%	16%
Self-confidence while interacting with peers	12%	16%	36%	36%
Difficulty in attempting entrance exams	17%	14%	35%	33%
Difficulty adjusting to university environment	38%	26%	20%	16%
Fear of confronting stressful situations	13%	26%	37%	24%
Assignments affected by stress	12%	21%	38%	29%
Depression interacting with other board students	30%	14%	24%	31%
Feeling pressure to fit in with peers	40%	29%	21%	9%
General lack of self-confidence	14%	27%	38%	21%
Academic stress affecting mental & physical health	13%	23%	30%	33%
Viewing batchmates as competition causes stress	23%	14%	34%	28%
Facing disagreements with university peers	31%	36%	23%	10%
Feeling criticized/judged by batchmates	19%	27%	38%	16%
Irritation in stressful situations	10%	19%	33%	38%
Difficulty completing tasks assigned by teachers	18%	22%	31%	29%
Nervousness during classroom participation	21%	18%	40%	21%
Sleep disturbance due to academic stress	17%	19%	36%	28%
Difficulty keeping up with English-medium curriculum	36%	37%	19%	8%

A notable proportion of state board students (31–36%) consistently reported “Always” for peer-interaction stress, language barriers, and self-confidence issues, indicating a higher stress burden compared to their counterparts from other boards.

4. Discussion

This study highlights that university students who completed their senior secondary education through state boards experience higher stress levels compared to peers from other boards. The findings align with previous studies indicating that differences in curriculum design, language of instruction, and academic preparedness contribute significantly to stress during the transition to university life²

Language barriers were a key stressor in this study. Many state board students, particularly those from Hindi-medium backgrounds, reported strain in understanding academic content delivered in English. This finding supports prior research showing that a sudden linguistic shift in higher education can lead to writing anxiety, withdrawal from academic participation, and lower academic self-esteem³.

Peer-related self-confidence issues were also prominent. Over one-third of students reported always lacking confidence when interacting with peers, especially those from different educational boards. Similar findings have been documented in studies on academic stress and social anxiety among students transitioning from regional schooling systems⁴. Such

psychosocial stress may stem from perceived gaps in communication skills and academic readiness.

The results also indicate that academic stress directly impacts mental and physical health, with 33% of students reporting consistent health effects. This aligns with previous evidence suggesting that academic stress leads to sleep disturbances, reduced concentration, and emotional exhaustion⁵. Moreover, the competitive nature of university academics, combined with unfamiliar teaching methods, exacerbates anxiety among students from less resource-rich schooling backgrounds⁶.

Social comparison was another significant theme. Nearly 31% always felt depressed when interacting with students from other boards, suggesting that students from state boards may perceive themselves as less competent or prepared. This aligns with the literature on educational inequality and its psychological impact, which highlights how differences in curriculum and teaching styles create a perceived achievement gap in university settings¹.

These findings emphasize the need for targeted interventions in universities to support students from diverse educational backgrounds. Language bridging programs, peer mentorship, academic counselling, and stress management workshops could mitigate the adverse effects of stress and enhance adjustment among state board students.

5. Conclusion

This study highlights that university students who completed their senior secondary education through state boards experience higher levels of academic and psychosocial stress compared to their peers from other boards. Language barriers, lack of self-confidence in peer interactions, and difficulty adapting to English-medium curriculum were the most prominent stressors. These challenges were further compounded by social comparison and competitive academic environments, which negatively affected students' mental and physical health.

The findings underscore the need for targeted support systems in universities, such as language bridging programs, mentorship initiatives, and stress management workshops, to facilitate smoother transitions for students from diverse educational backgrounds.

Future studies should include larger and more diverse samples, employ inferential statistical analyses, and explore long-term outcomes of academic stress on academic performance and mental health. Addressing these stressors early could significantly improve students' university experiences, enhance retention, and promote overall well-being.

6. Limitations

- The questionnaire was self-reported; responses may vary based on the participant's attitude and attention.
- Assumptions resulting from changing moods and telling the truth can have an effect on the outcome.
- Limited access to certain portals.
- Technological variations.

7. Future Suggestions

- The study can be conducted with a high sample size and on a specific population group.
- Study duration can be longer for a large group.
- In this survey study, only 1st year student was considered, for further researches may add 2nd and 3rd year students.

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