

Original Article

Open Access

Investigating Factors Influencing Student Participation in Class Discussions: A Cross-Sectional Study

Preetha Devi N B^{1*}, Aasini Maria Georgina²

¹Assistant Professor, Research, Panimalar College of Allied Health Sciences, Chennai, Tamil Nadu, India.

²Assistant Professor, Research, Panimalar College of Allied Health Sciences, Chennai, Tamil Nadu, India.

Received: 23 Feb 2026, Revised: 22 Mar 2026, Accepted: 26 Mar 2026.

***Correspondence :** Dr. Preetha Devi N B,
Assistant Professor, Research, Panimalar College of Allied
Health Sciences, Chennai, Tamil Nadu, India.
Email: preethaboopathy98@gmail.com,
research.pmchri@gmail.com

Copyrights: © The Author(s). Published by MedWise
Spectrum Academy. This is an open-access article under the
CC BY 4.0 licence, permitting use, distribution, and
reproduction in any medium, provided the original work is
properly cited.

ABSTRACT

Background: Student participation in classroom discussions is a key component of effective learning in higher education. Various factors such as classroom environment, instructor behaviour, peer influence, and self-confidence can significantly influence students' willingness to engage.

Objective: To investigate the factors influencing student participation in class discussions among undergraduate students at the College of Allied Health Sciences.

Methods: A questionnaire-based survey was conducted among 92 undergraduate students. The study assessed multiple factors affecting participation, including classroom environment, instructor encouragement, peer influence, and students' self-confidence.

Results: The findings indicate that most students perceive their classroom environment as holistic and respectful. A high proportion of students (89.3%) reported feeling encouraged by instructors, while 73.3% received encouragement from peers. Despite these positive influences, nearly half of the respondents (49.3%) expressed concerns about being judged by classmates, indicating that self-confidence and fear of judgment remain significant barriers to participation.

Conclusion: Although supportive classroom environments and encouragement from instructors and peers promote participation, challenges related to self-confidence persist. Targeted interventions, such as fostering open dialogue and providing constructive feedback, are essential to create an inclusive and supportive learning atmosphere that encourages active student engagement.

Keywords: Student Participation, Class Discussions, Classroom Environment, Instructor Behaviour, Peer Influence, Self-Confidence.

INTRODUCTION

Classroom discussions are a vital component of the educational process, as they enhance student engagement and promote a deeper understanding of course material. Through discussions, students are encouraged to articulate their ideas, question

concepts, respond to differing viewpoints, and integrate knowledge in meaningful ways.^[1,2] This interactive process not only strengthens critical thinking skills but also supports active learning, making the classroom more dynamic and student-centred. Despite these benefits, not all students actively participate in classroom discussions, which highlights the

importance of understanding the underlying factors that influence participation. Student participation is shaped by multiple interconnected factors, among which the classroom environment plays a foundational role.^[3] A positive and inclusive classroom atmosphere, characterised by mutual respect, openness, and psychological safety, encourages students to express their thoughts without hesitation. When students feel valued and respected, they are more likely to engage in discussions and contribute meaningfully. Conversely, a restrictive or judgmental environment may discourage participation and limit student interaction.^[4]

Instructor behaviour is another critical factor influencing student engagement. Teachers who actively encourage participation, demonstrate approachability, and provide constructive feedback create a supportive learning environment.^[5] Effective instructor practices, such as asking open-ended questions, acknowledging student contributions, and fostering a non-threatening atmosphere, can significantly enhance students' confidence and willingness to participate in discussions. Peer influence also contributes significantly to student participation. Supportive and collaborative peer relationships can motivate students to engage more actively in classroom discussions.^[6] When students observe their peers participating and feel accepted within the group, they are more likely to contribute their own ideas. A sense of belonging and shared responsibility among classmates can further strengthen engagement and promote a culture of active learning.^[7] In addition, self-confidence plays a crucial role in determining whether students participate in discussions. Students who feel confident in their knowledge and communication skills are more inclined to express their opinions and engage in dialogue.^[8] On the other hand, lack of confidence, fear of making mistakes, or concern about negative evaluation from peers can act as significant barriers to participation. Based on these considerations, this study hypothesises that a supportive classroom environment, positive instructor behaviour, peer influence, and self-confidence are key predictors of student participation in classroom discussions. By examining these factors in detail, the study aims to provide practical insights and recommendations for educators to enhance student engagement and foster a more inclusive, interactive, and effective learning environment.

METHODOLOGY

This study employs a quantitative cross-sectional research design to examine factors influencing student participation in class discussions among undergraduate students at the College of Allied Health Sciences, Panimalar College of Allied Health Sciences, Poonamalle, Chennai.

Participants

For this study, 92 undergraduate students were enrolled. This was stratified to ensure representation across various academic disciplines within the Panimalar College of Allied Health Sciences. This stratification enhances the generalizability of the findings, as it reflects diverse experiences and perspectives related to class discussions.

Demographics:

- Average Age: 20 years
- Gender Distribution: Balanced representation of male and female participants.

The use of a stratified sampling method aligns with best practices in research design, as it helps to capture the variability of the population (Creswell, 2014).

Instruments

The study utilised a structured questionnaire designed to assess the key factors influencing student participation in classroom discussions. The instrument consisted of multiple scales that capture different dimensions of the learning environment and student behaviour, ensuring a comprehensive evaluation of participation-related factors.

The **Classroom Environment Scale (CES)** comprised 10 items that measured students' perceptions of classroom inclusivity, safety, openness, and overall comfort. This scale aimed to determine whether students felt respected, supported, and free to express their ideas during discussions.

The **Instructor Behaviour Scale (IBS)** included 8 items that evaluated students' perceptions of instructor practices that may influence participation. These items focused on aspects such as encouragement, approachability, quality of feedback, and the extent to which instructors promote open dialogue and value diverse opinions.

The **Peer Influence Scale (PIS)** consisted of 7 items designed to assess how classmates' attitudes and behaviours impact individual participation. This scale explored factors such as peer support, collaboration, group dynamics, and the presence of a positive or discouraging peer environment.

To measure students' confidence in engaging in discussions, the **Self-Confidence in Participation Scale (SCPS)** included 10 items. These items addressed students' comfort with speaking in front of others, their ability to express ideas clearly, and concerns related to fear of judgment or making mistakes. Additionally, **Participation Frequency (PF)** was measured using a single-item indicator, where students rated how often they actively participated in classroom discussions. All scale-based items were measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), allowing for consistent and standardised responses. Together, these instruments provided a comprehensive framework for analysing the various factors that influence student engagement in classroom discussions.

Data Analysis

Quantitative data collected from the questionnaires will be analysed using statistical software (SPSS). Descriptive statistics were used to summarise the data, while inferential statistics (such as regression analysis) were employed to determine the relationships between the identified factors and student participation.

Procedure

The survey was distributed in Google Forms. Participation was voluntary, and responses were anonymous. The survey took approximately 15-20 minutes to complete.

RESULTS

Descriptive Statistics

The average score on the Classroom Environment Scale (CES) was 3.9 (SD = 0.6), indicating a generally positive perception of the classroom environment. The mean score on the Instructor Behaviour Scale (IBS) was 4.1 (SD = 0.5), suggesting that students viewed their instructors as supportive. The average score on the Peer Influence Scale (PIS) was 3.6 (SD = 0.7), while the mean score on the Self-Confidence in Participation Scale (SCPS) was 3.4 (SD = 0.8).

Table 1: Classroom Environment Scale (CES)

Classroom Environment Factors	Yes	No
Inclusivity	83.3 %	16.7%
Respect among students	84 %	16 %
Safety in Expression	86.7 %	13.3 %
Supportive environment	85 %	15 %

The results from the study illustrate key factors influencing student participation in class discussions. The Classroom Environment Scale reveals that 83.3% of students perceive their classroom as inclusive, with 84% sensing a strong respect among peers, both of which are essential for fostering a safe environment for dialogue. Additionally, 86.7% of students feel safe expressing their opinions, though 13.3% of students aren't comfortable voicing their thoughts. A supportive atmosphere is reported by 85% of respondents, enhancing engagement (*Table 1*).

Table 2: Instructor Behaviour Scale (IBS)

Instructor Behaviour Scale	Yes	No	Maybe
Encouragement to participate	89.3 %	4 %	6.7 %
Positive Feedback	84 %	6.7 %	9.3 %
Active listening	86.7 %	10 %	3.3 %
Valuing Opinions	67 %	5 %	28 %
Approachability	90.7%	8%	1.3 %

In terms of instructor behaviour, 89.3% of students feel encouraged to participate, and 84% believe they receive positive feedback, which boosts their confidence. Furthermore, 86.7% feel that the instructor actively listens to their contributions, reinforcing a sense of validation. However, while 67% think all opinions are valued, 28% remain uncertain, suggesting a need for further development in this area. A significant 90.7% of students find the instructor approachable, contributing positively to the classroom dynamic (*Table 2*).

Table 3: Peer Influence Scale (PIS)

Peer Influence Scale	Yes	No	Maybe
Encouragement from peers	73.3 %	8 %	18.7 %
Support from classmates	81.3 %	9.3 %	9.3 %
Peer influence and participation	52 %	28 %	20 %
Respectful behaviour	89.3 %	10.7 %	-

Peer influence also plays a crucial role; 73.3% of students feel encouraged by their peers to participate, and 81.3% feel supported during discussions, creating a strong sense of community. Despite this, 52% acknowledge that peer behaviour influences their participation decisions. Most respondents

(89.3%) report that classmates exhibit respectful conduct, thereby further promoting a safe environment (Table 3).

Table 4: Self-Confidence in Participation Scale (SCPS)

Self-Confidence in Participation Scale	Yes	No	Maybe
Confidence in Speaking	65.3 %	16 %	18.7 %
Valuable Insights	70.7 %	6.7 %	22.7 %
Fear of Judgement	29.3 %	49.3 %	21.3 %
Comfort in Expression	65.3 %	13.3 %	21.3 %
Knowledgeability	64 %	6.7 %	29.3 %
Response to Challenge	25.3 %	48 %	26.7 %
Fear of mistake	57.3 %	26.7 %	16 %
Participation despite uncertainty	57.3 %	24 %	18.7 %

Lastly, the Self-Confidence in Participation Scale indicates that only 65.3% of students feel confident speaking up, revealing a substantial group that struggles with self-confidence. While 70.7% believe they have valuable insights to share, nearly half (49.3%) express fear of being judged by classmates, which may hinder their engagement. Additionally, 65.3% feel comfortable expressing their opinions, yet 21.3% do not. Despite these challenges, 57.3% of students participate even when unsure, showcasing resilience in the face of uncertainty (Table 4).

Participation Frequency (PF): (n=92)

The results of this study highlight several critical factors influencing student participation in class discussions. The classroom environment is perceived as inclusive, respectful, and supportive, which positively impacts engagement. Instructor behaviours, such as encouragement and active listening, significantly contribute to creating a participatory atmosphere. Peer support is also vital, though there remains some uncertainty regarding the influence of peers on individual participation decisions.

However, issues related to self-confidence and fear of judgment present barriers that need addressing. Overall, while the majority of students feel positively about their classroom environment and instructor behaviours, there are areas for improvement that could further enhance student participation in discussions.

DISCUSSION

The findings from this study indicate that self-confidence is the most critical factor influencing student participation in class discussions. Students who feel confident in their abilities are significantly more likely to engage actively, express their ideas, and contribute meaningfully to academic dialogue.^[9,10] This finding is consistent with recent educational research, which increasingly emphasises the role of psychological factors—particularly self-efficacy and communication confidence—as key determinants of student engagement in higher education settings.^[11] Recent studies have similarly reported that students with higher self-confidence are more willing to participate, even in challenging or unfamiliar discussion contexts. In contrast, students with lower confidence often experience anxiety, fear of negative evaluation, and hesitation, which limit their involvement.^[12] The present study’s finding that a considerable proportion of students fear being judged aligns with contemporary research highlighting fear of peer evaluation as a persistent barrier to classroom interaction.

In addition to self-confidence, the current study found that instructor behaviour and classroom environment play supportive roles in enhancing participation.^[13] This aligns with recent studies that emphasise the importance of student-centred teaching practices, where instructors act as facilitators rather than authoritative figures. Encouraging open dialogue, acknowledging student contributions, and creating a non-threatening environment have been shown to improve participation levels significantly. Peer influence also emerged as an important factor, which is supported by recent findings that collaborative learning environments and positive peer relationships foster greater engagement. When students perceive their peers as supportive and respectful, they are more likely to participate without fear of embarrassment.^[14] This reflects a growing emphasis in recent literature on the role of social dynamics and sense of belonging in shaping classroom behaviour. However, while many recent studies highlight the combined effect of these factors, the present study uniquely underscores self-confidence as the most dominant predictor among them. This suggests that even in supportive environments, individual psychological readiness remains crucial for active participation. Despite these valuable insights, the study has certain limitations. The reliance on self-reported data may introduce response bias, as students might overestimate or underestimate their participation levels.

Additionally, the study was conducted within a single institution, which may limit the generalizability of the findings to broader educational contexts.

Future research should focus on designing and evaluating targeted interventions aimed at improving student self-confidence, such as communication skills training, peer mentoring, and structured participation activities. Furthermore, qualitative approaches, including interviews and focus group discussions, could provide deeper insights into students' personal experiences, perceptions, and challenges related to classroom participation. Such approaches would contribute to a more comprehensive understanding of the factors influencing engagement and help educators develop more effective strategies to foster inclusive and interactive learning environments.

CONCLUSION

This study highlights the multifaceted factors that influence student participation in class discussions, emphasising the importance of an inclusive and respectful classroom environment. The findings indicate that a significant majority of students feel safe and supported, largely due to encouraging instructor behaviours and positive peer dynamics. However, challenges remain, particularly concerning students' self-confidence and fears of judgment, which can inhibit their engagement. Addressing these barriers through targeted interventions—such as promoting a culture of openness and providing additional support for students—could enhance overall participation. Ultimately, fostering a positive classroom atmosphere, where every voice is valued, is essential for maximising student engagement and enriching the learning experience.

Acknowledgement: I sincerely extend my deepest gratitude to Dr C. Sakthi Kumar, Director of Panimalar Group of Institutions, and to Dr C. Illamparuthi, Dean of Panimalar Medical College Hospital and Research Institute, Varadharajapuram, Poonamallee, Chennai.

Ethical Approval: Ethical approval for the study was obtained from the Institutional Ethics Committee of Panimalar Medical College Hospital & Research Institute, Chennai, before data collection.

Declaration of Interest Statement: The authors declare that they have no competing interests.

Funding: Nil

REFERENCES

1. Brookfield SD, Preskill S. *The discussion book: 50 great ways to get people talking*. Hoboken (NJ): John Wiley & Sons; 2016.
2. Moos R. The social climate of the classroom: its impact on students' academic engagement and learning. *Educ Psychol Rev*. 2018;30(3):743-65.
3. Hattie J, Timperley H. The power of feedback. *Rev Educ Res*. 2007;77(1):81-112.
4. Baines E, Blatchford P, Chowne A. Peer group and classroom influences on involvement in discussion. *Br Educ Res J*. 2007;33(3):355-74.
5. Bandura A. Self-efficacy: toward a unifying theory of behavioural change. *Psychol Rev*. 1997;84(2):191-215.
6. Midgley C, Feldlaufer H, Eccles J. Change in teacher efficacy and student self-efficacy: a longitudinal study. *J Educ Psychol*. 2000;92(4):781-87.
7. Cohn A. The role of peers in the educational environment: influences on student participation. *J Educ Psychol*. 2017;109(5):711-24.
8. Durik AM, Vida M, Eccles JS. Task values and ability beliefs as predictors of high school literacy choices: a developmental analysis. *J Educ Psychol*. 2006;98:382-93.
9. Haertel GD, Walberg HJ, Haertel EH. Socio-psychological environments and learning: a quantitative synthesis. *Br Educ Res J*. 1981;7:27-36.
10. Pajares F, Valiante G. Influence of self-efficacy on elementary students' writing. *J Educ Res*. 1997;90:353-60.
11. Watt HMG. Gender and occupational outcomes: an introduction. In: Watt HMG, Eccles JS, editors. *Gender and occupational outcomes: longitudinal assessments of individual, social, and cultural influences*. Washington (DC): APA Books; 2008. p. 3-24.
12. Zimmerman BJ, Martinez-Pons M. Student differences in self-regulated learning: relating grade, sex, and giftedness to self-efficacy and strategy use. *J Educ Psychol*. 1990;82:51-59.
13. Guthrie JT, McRae A, Klauda SL. Contributions of concept-oriented reading instruction to knowledge about interventions for motivation in reading. *Educ Psychol*. 2007;42:237-49.
14. Kim H, Fisher DL, Fraser BJ. Environment and teacher interpersonal behaviour in secondary science classes in Korea. *Eval Res Educ*. 2000;14:3-22.

Cite this article as: Devi N B P, Georgina AM. Investigating Factors Influencing Student Participation in Class Discussions: A Cross-Sectional Study. *J Allied Health Clin Res Innov*. 2026;1(1):31-35.