East African Scholars Journal of Psychology and Behavioural Sciences
Abbreviated Key Title: EAS J Psychol Behav Sci
ISSN 2663-1865 (Print) | ISSN 2663-6751 (Online)
Published By East African Scholars Publisher, Kenya
OPEN ACCESS
Volume-7 | Issue-1 | Jan-Mar-2025 | DOI: https://doi.org/10.36349/easjpbs.2025.v07i01.002

Original Research Article

Investigating Perception on Learning Environments among Higher Education Students

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Article History
Received: 14.01.2025
Accepted: 21.02.2025
Published: 15.03.2025

Journal homepage:
https://www.easpublisher.com

Quick Response Code

Abstract: The perception of the learning environment refers to how students understand, experience, and evaluate their educational surroundings, considering physical, social, and psychological aspects. This concept is important in educational research as it directly impacts students' academic performance, motivation, and overall well-being. This study examined the perception of the learning environment among higher education students in Kolkata, focusing on variations based on gender, habitation, type of institution, educational stream, and educational level. A cross-sectional survey was conducted with 257 students from higher education institutions. Descriptive and inferential statistical methods were used to analyze differences in perceptions across these variables. The findings revealed that female students had a significantly higher perception of their learning environment compared to male students ($p<0.05$). Urban students showed better perceptions than their rural counterparts, although the difference was not statistically significant. Similarly, students from private institutions reported a better perception than those studying in government institutions. Students from the science stream demonstrated a higher perception of the learning environment compared to those from arts and commerce streams. Additionally, undergraduate students exhibited significantly higher perceptions than postgraduate students ($p<0.05$). This study highlighted key differences in students' perceptions of their learning environments and emphasizes the need to consider these variations to improve the overall educational experience.

Keywords: Learning Atmosphere, Student Engagement, Academic Performance, Institutional Quality, Socio-Cultural Factors.

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INTRODUCTION

The learning environment in higher education plays a crucial role in shaping students' academic success, engagement, and well-being. As universities adapt to evolving educational paradigms, it is vital to understand the various factors that contribute to the learning experience, including physical, social, psychological, and technological elements. These components influence how students engage with their studies and the broader institutional structures that impact learning outcomes (Fraser, 2012). While the physical classroom environment remains important, contemporary education increasingly emphasizes the dynamic interaction between classroom design, teaching methods, and the social climate established by both instructors and peers. Research shows that a positive, collaborative learning environment enhances student engagement, retention, and academic achievement, as students transition from passive recipients of information to active participants in their learning (Chickering & Gamson, 1987).

As higher education institutions become more diverse, understanding the social and cultural context of the learning environment is essential. Students from varied racial, ethnic, and socioeconomic backgrounds may face unique challenges, and institutions must foster inclusive environments that address these differences. Research indicates that students who feel a sense of belonging and respect in their learning environment are more likely to persist in their studies and perform well academically (Pascarella & Terenzini, 2005). Conversely, environments that fail to consider students' diverse needs can lead to disengagement and academic underperformance (Astin, 1993). Therefore, promoting

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diversity and inclusion is vital for institutions aiming to improve student outcomes and equity in higher education.

Technological advancements have also reshaped the learning environment, with digital tools, online resources, and virtual learning platforms providing greater flexibility and access to education. These innovations enable collaboration, resource sharing, and personalized learning experiences (Garrison & Kanuka, 2004). However, challenges such as the digital divide—where students from disadvantaged backgrounds may lack access to technology—can exacerbate inequalities (Selwyn, 2016). Additionally, the shift toward online and hybrid learning models requires a reevaluation of teaching methods to ensure continued student engagement and a sense of community, as technology can sometimes isolate students (Allen & Seaman, 2015). Thus, technology should be integrated thoughtfully to complement, not replace, human interaction, which remains central to effective learning.

Psychological and emotional factors also significantly impact the learning environment. With rising levels of stress, anxiety, and depression among students, addressing mental health has become a priority for many institutions. Mental health issues can negatively affect academic performance and student engagement (Eisenberg, Golberstein, & Hunt, 2009). Research suggests that universities should not only provide academic support but also promote mental well-being, offer counseling services, and create a supportive community. Institutions that integrate mental health support into the learning environment tend to see improved academic outcomes and higher student satisfaction (Kitzrow, 2003).

Rationale of the Study

The learning environment in higher education plays a critical role in shaping students' academic outcomes, engagement, and overall well-being. As higher education institutions face the challenges of an increasingly diverse student population, rapid technological advancements, and shifting pedagogical approaches, understanding how these factors influence the learning experience has become essential for fostering environments that promote success. With the growth of online and hybrid learning models, institutions must reconsider traditional methods of teaching and learning, ensuring that the learning environment is both accessible and inclusive for all students, regardless of their background or mode of study (Allen & Seaman, 2015; Garrison & Kanuka, 2004). In particular, research has highlighted the importance of creating a supportive social and cultural atmosphere that fosters a sense of belonging, as students who feel connected to their peers and the institution are more likely to thrive academically (Astin, 1993; Strayhorn, 2012). Furthermore, understanding the interaction between the physical, technological, and psychological dimensions of the learning environment is essential for identifying best practices that enhance student learning and mitigate challenges such as digital inequality or mental health issues (Selwyn, 2016; Kitzrow, 2003).

In addition, the growing focus on student well-being in higher education underscores the need for institutions to address not only academic support but also the emotional and psychological factors that influence student success. Research has shown that high levels of stress and mental health concerns negatively affect students' ability to engage with their studies and persist through challenges (Eisenberg, Golberstein, & Hunt, 2009). As universities seek to enhance retention rates and improve academic outcomes, they must consider how to create environments that support both the intellectual and emotional needs of students (Tinto, 1993; Chickering & Gamson, 1987). By exploring these dimensions of the learning environment, this study aims to provide insights into how universities can design more effective, inclusive, and supportive educational experiences that foster student success in an ever-evolving higher education landscape.

Delimitations of the Study

Due to a lack of adequate time and some unavoidable circumstances, it was not possible to undertake all aspects, therefore the study has been delimited on the following grounds –

i. This study focused on a specific region, limited to Kolkata district in West Bengal.
ii. A total of 257 higher education students participated in the study.
iii. The study considered five key background or demographic identifiers, such as gender, habitation, type of institution and streams of study and educational level.

Objectives of the Study

i. To understand students' perceptions of their learning environment.
ii. To examine students' perceptions of their learning environment regarding gender, habitation, type of institutions, streams of study and educational level.

Hypotheses of the Study

$H_0$1: There is no significant mean difference in students' perceptions of their learning environment concerning gender.

$H_0$2: There is no significant mean difference in students' perceptions of their learning environment concerning habitation.

$H_0$3: There is no significant mean difference in students' perceptions of their learning environment concerning type of institutions.

$H_0$4: There is no significant mean difference in students' perceptions of their learning environment concerning streams of study.

$H_0$5: There is no significant mean difference in students' perceptions of their learning environment concerning educational level.

METHODS

The present study adopted a cross-sectional survey research design to achieve its objectives. The sample comprised 257 higher education students from both urban and rural areas within the Kolkata district of West Bengal. Convenience sampling technique was employed to ensure a representative sample. The study focused on assessing students' perceptions of their learning environment, which was considered the dependent variable. Furthermore, it examined the potential variation of various independent or demographic variables, i.e., gender, habitation, type of institutions, streams of study and educational level on it.

Tools Used for Data Collection

The Dundee Ready Education Environment Measure (DREEM) was developed in 1997 by Professor Sue Roff and her team at the University of Dundee, Scotland. It was specifically designed as a diagnostic tool to evaluate the educational environment in medical and health-related academic institutions, providing a standardized framework for assessing and improving learning experiences. It consists of 50 statements rated on a five-point Likert scale, covering five subscales: perception of learning, perception of teachers, academic self-perception, perception of atmosphere, and social self-perception. The total score ranges from 0 to 200, with higher scores indicating a more positive environment. DREEM helped identify strengths and areas for improvement, enabling educators to enhance the quality of teaching and learning experiences.

RESULTS

Descriptive Statistics

Table 1: Independent Variables wise mean distribution by Students Perception of their Learning Environment.

Independent Variables	Category	Number of Participants	Mean	SD
Gender	Male	118	148.39	18.671
	Female	139	152.63	13.406
Habitation	Rural	115	150.37	17.309
	Urban	142	150.94	15.198
Type of Institutions	Govt.	126	148.97	16.188
	Private	131	152.34	15.994
Streams of study	Arts	140	150.47	15.274
	Science	66	152.30	17.803
	Commerce	51	149.18	16.379
Educational level	UG	145	154.76	16.061
	PG	112	145.41	14.726

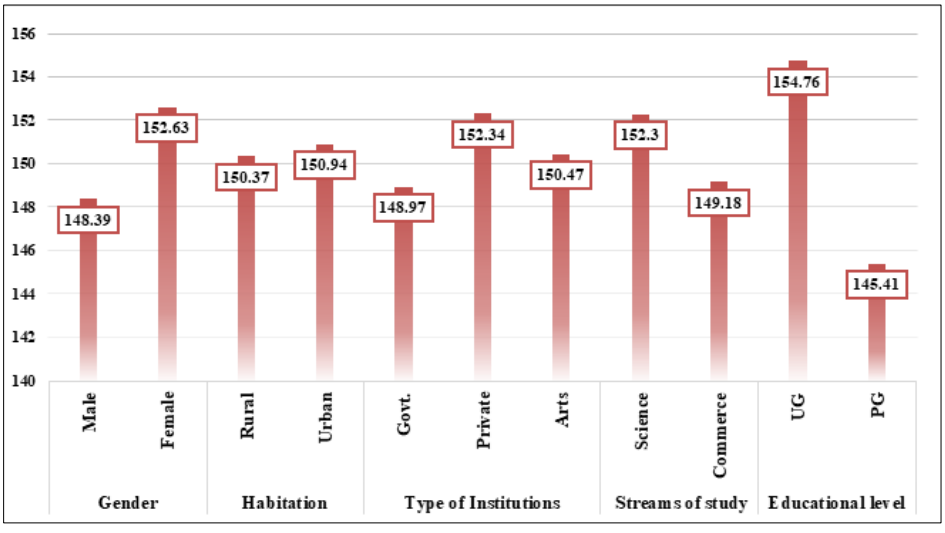

Figure 1: Showing independent Variables wise mean distribution

Table 1 and Figure 1 show the mean distribution of students' perceptions of their learning environment across different independent variables. Gender-wise, female students exhibited better perceptions of their learning environment compared to male students. Habitation-wise, students from urban areas exhibited better perceptions than those from rural areas. Institution type-wise, students attending private institutions had more positive perceptions of their learning environment than those studying in government institutions. Stream of

study-wise, science students showed higher perceptions of their learning environment than commerce students. Finally, educational level-wise, undergraduate students reported better perceptions of learning environment than post-graduate students.

Inferential Statistics

Table 2: Independent samples t-test based on students' gender, habitation, type of institutions and educational level

Independent samples t-test						
Dependent Variables	**Independent Variables**	**t- value**	**df**	**Mean Difference**	**Sig. (2-tailed)**	**Remarks (0.05 level)**
Perceptions of their Learning Environment	**Gender**	-2.114	255	-4.243	0.002	***Significant (p<0.05)**
	Habitation	-0.277	255	-0.563	0.782	***Not Significant (p>0.05)**
	Type of Institutions	-1.677	255	-3.368	0.095	***Not Significant (p>0.05)**
	Educational level	4.796	255	9.348	0.000	***Significant (p<0.05)**

Table 2 presents the results of the independent sample t-test based on students' gender, habitation, type of institution, and educational level in relation to their perceptions of the learning environment.

- Gender-wise, the calculated t-value was t (255) = -2.114, with a p-value of 0.002. Since the p-value is less than 0.05, the mean difference is statistically significant, and H_o1 is rejected.
- Habitation-wise, the calculated t-value was t (255) = -0.277, with a p-value of 0.782. Since the p-value is greater than 0.05, the mean difference is not statistically significant, and H_o2 fails to be rejected.
- Type of institution-wise, the calculated t-value was t (255) = -1.677, with a p-value of 0.095. Again, since the p-value is greater than 0.05, the mean difference is not statistically significant, and H_o3 fails to be rejected.
- Educational level-wise, the calculated t-value was t (255) = 4.796, with a p-value of 0.000. Since the p-value is less than 0.05, the mean difference is statistically significant, and H_o5 is rejected.

Table 3: One-way ANOVA based on students' streams of study

One-Way ANOVA							
Dependent Variables		**Sum of Squares**	**df**	**Mean Square**	**F-value**	**Sig. (2-tailed)**	**Remarks (0.05 level)**
Perceptions of their Learning Environment	**Between Groups**	295.234	2	147.617	0.564	0.569	***Not Significant (p>0.05)**
	Within Groups	66444.237	254	261.591			
	Total	66739.471	256				

Table 3 showed that the computed one-way ANOVA of perceptions of learning environment based on streams of study among students. The calculated f-value was found to be **[F (2, 254) = 0.569, p>0.05].** The mean difference was statistically not significant at 0.05 level (p>0.05) and the aforementioned $H_0$4 was failed to reject.

Major Findings

- Female students reported significantly better perceptions of their learning environment compared to male students.
- Students from urban areas exhibited better perceptions of their learning environment compared to those from rural areas but the mean difference was found to be statistically not significant.
- Students attending private institutions exhibited better perceptions of the learning environment than students attending government institutions but the mean difference was found to be statistically not significant.
- Undergraduate students had significantly better perceptions of their learning environment than post-graduate students.
- Students from the science streams had better perceptions of the learning environment compared to those from the arts and commerce streams but the mean difference was found to be statistically not significant.

DISCUSSION

The findings of this study reveal several interesting patterns in students' perceptions of their learning environment. First, female students reported

significantly better perceptions than their male counterparts. This aligns with previous research suggesting that female students often perceive educational environments as more supportive and conducive to learning (Boulton-Lewis *et al*., 2001). In contrast, although students from urban areas exhibited better perceptions compared to those from rural areas, the difference was not statistically significant, which could indicate that factors such as infrastructure or access to resources may not differ as sharply in this context, or that urban-rural perceptions are more complex and influenced by variables not accounted for in this study (Stevenson *et al*., 2014). Similarly, while students attending private institutions reported better perceptions than those attending government institutions, the mean difference was also statistically insignificant. This is contrary to some studies that suggest private institutions, with typically smaller class sizes and more resources, provide a more positive learning environment (Liu *et al*., 2020), but could also reflect broader societal or systemic factors affecting student perceptions. Another key finding was that undergraduate students had significantly better perceptions of their learning environment compared to postgraduate students, which is consistent with previous literature showing that undergraduates tend to report higher levels of satisfaction, possibly due to more structured support systems and less pressure compared to postgraduates (Pillay *et al*., 2009). Finally, while students in the science streams had better perceptions of their learning environment than those in arts and commerce streams, this difference was not statistically significant. This finding contradicts some studies suggesting that science students generally report better learning experiences due to more hands-on learning opportunities and faculty engagement (Tinto, 2012), but could be attributed to varying expectations and experiences across disciplines. Overall, these findings contribute to the growing body of literature on student perceptions, while also highlighting the complexity of factors influencing those perceptions across different demographics and educational settings.

CONCLUSION

This study highlights the critical role that gender, educational level, and institutional factors play in shaping students' perceptions of their learning environment. Female students reported more perceptions than male students, and undergraduates exhibited higher satisfaction compared to postgraduates. Although urban students and those in private institutions reported better perceptions, these differences were not statistically significant, suggesting that other contextual factors may influence student experiences. Similarly, while science students showed slightly better perceptions than those from arts and commerce streams, this difference was not significant. These findings underscore the complexity of factors influencing students' perceptions and emphasize the need for higher education institutions to account for these variables in creating inclusive, supportive, and effective learning environments that enhance academic success and overall well-being.

REFERENCES

- Allen, I. E., & Seaman, J. (2015). *Grade Change: Tracking Online Education in the United States*. Babson Survey Research Group.
- Astin, A. W. (1993). *What Matters in College? Four Critical Years Revisited*. Jossey-Bass.
- Boulton-Lewis, G., Wilss, L., & Munt, I. (2001). Gender differences in learning environments: The role of motivation and personality. *Higher Education Research & Development*, *20*(1), 87-101. https://doi.org/10.1080/072943600200057595
- Chickering, A. W., & Gamson, Z. F. (1987). *Seven Principles for Good Practice in Undergraduate Education*. AAHE Bulletin.
- Eisenberg, D., Golberstein, E., & Hunt, J. B. (2009). *Mental Health and Academic Success in College*. The B.E. *Journal of Economic Analysis & Policy*, *9*(1).
- Fraser, B. J. (2012). *Classroom Environment*. In *Handbook of Research on Science Education* (pp. 103–118).
- Garrison, D. R., & Kanuka, H. (2004). Blended Learning: Uncovering Its Transformative Potential in Higher Education. *The Internet and Higher Education*, *7*(2), 95–105.
- Kitzrow, M. A. (2003). The Mental Health Crisis in US College Campuses: Causes, Impacts, and Recommendations for the Future. *NASPA Journal*, *41*(1), 167–181.
- Liu, W., Yi, W., & Zheng, H. (2020). The impact of institutional factors on students' perceptions of the learning environment in private versus public institutions. *Journal of Educational Administration*, *58*(5), 575-595. https://doi.org/10.1108/JEA-03-2020-0060
- Pascarella, E. T., & Terenzini, P. T. (2005). *How College Affects Students: A Third Decade of Research*. Jossey-Bass.
- Pillay, H., Singh, P., & Mphuthi, M. (2009). An investigation into the influence of support systems on student perceptions of the learning environment: A comparison of undergraduate and postgraduate students. *Studies in Higher Education*, *34*(3), 305-320. https://doi.org/10.1080/03075070902938579
- Selwyn, N. (2016). *Education and Technology: Key Issues and Debates*. Continuum.
- Stevenson, C., Allen, S., & Price, M. (2014). Urban and rural differences in student perceptions of the learning environment: A comparative study. *Journal of Rural Education*, *39*(1), 75-89. https://doi.org/10.1080/106054381234576
- Strayhorn, T. L. (2012). *College Students' Sense of Belonging: A Key to Educational Success for All Students*. Routledge.

- Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition*. University of Chicago Press.
- Tinto, V. (2012). *Completing college: Rethinking institutional action*. University of Chicago Press.

Cite This Article: Tinni Parial & Muktipada Sinha (2025). Investigating Perception on Learning Environments among Higher Education Students. *EAS J Psychol Behav Sci, 7*(1), 10-15.