Indian Secondary Education Classroom Learning Environment - Do Public and Private Schools Matter?

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ABSTRACT

The current study was conducted for investigating the perception of students on the learning environment in Indian secondary education classrooms, specifically concerning government and private schools. The study intended to compare the perception of secondary school learners on their classroom environment with regard to management of schools and gender of learners. The study also aimed to compare the perception of government and private secondary school boys as well as girls towards their classroom learning environment in East Delhi. The data were collected using the survey method with the help of a self-made questionnaire on the classroom learning environment and data were analysed with the help of percentage analysis. The researcher gathered data from 428 students, comprising 254 from government schools and 174 from private schools. The main results of the study revealed that on different parameters of Indian secondary school classroom environment like teacher-student interpersonal relationship, teaching-learning materials, infrastructural resources, and safety features the private schools excel the government schools whereas on two parameters i.e. peer group interaction and discipline the government schools excel the private schools as per the perception of the students. The study suggests to ensure a conducive classroom environment wherein both the private and public schools should deliberately focus on ensuring a healthy peer group interaction, constructive teacher-taught relationship, development and use of advanced teaching-learning materials, ensuring better infrastructural facilities and moreover utmost attention on ensuring a safe classroom environment and nurturing discipline among the learners for their holistic development.

Keywords: Classroom Learning Environment, Secondary School Students, Government School, Private School

Introduction

The education system plays a significant role in shaping the future of a nation. Through education, individuals can develop their personality and boost their self-confidence. It has also a significant role in the development of a country. Education is a two-way process where both students and teachers learn from each other.

Therefore, everyone must contribute to its improvement so that the education system continues to improve year after year. There are so many factors that influence education and learning in which classroom

learning environment is a major factor to effect education. In Indian secondary education, the perception of students regarding their classroom learning environment holds significant importance. It directly impacts their academic growth, motivation, and overall learning outcomes (Doll et al., 2010). For better education, the classroom learning environment is one of the most critical aspects of education. So, the classroom learning environment should be free from stress and fear. Classroom learning is where students feel free to share their views and thoughts. The classroom learning environment shapes students' academic experiences and outcomes (Bizimana et al., 2022). A well-designed learning space can significantly enhance student engagement, concentration, and well-being. Elements including temperature, humidity, air quality, lighting, and classroom layout create a favorable learning environment. By carefully addressing these factors, educators can establish learning environments that encourage students' academic success, comfort, and contentment, ultimately resulting in a more prosperous and pleasurable educational experience. Students spend one-third of their day at school in diverse activities that cater to their academic growth (Negilon et al., 2019). It is well-known that no one can learn in an unhealthy environment. The learning environment is crucial in developing the best possible group of students who will go on to become outstanding managers and leaders (Folami et al., 2021). Students' growth depends on the classroom learning environment as it strongly predicts their motivation and self-regulation. A classroom learning environment is a place where students feel safe and motivated (Cai & Lombaerts, 2024).

In the classroom, students deal with a variety of difficulties. In addition to being a place where education takes place, this is also where we spend most of our early life. A classroom is not the only part of a learning environment; it is a place where students feel safe and supported by their teachers and friends and the future of the nation is built. Friends and peer groups are all significant parts of one's life, but it is also fair to argue that everyone has a different learning environment, which varies from person to person. Everyone has a unique perspective and individual students have diverse learning environments. The environment is one of the most significant determiners influencing student interaction, education, and learning (Li & Singh, 2022; Taylor, 2023). It is one established fact that that all the dimensions of the classroom learning environment are related to each other (Amirul et al., 2013; Stewart, 2016). A classroom learning environment study is one way to improve the quality of an education. The learning environment includes student or teacher interactions, teaching and learning activities, adequate physical resources, and psychosocial factors (Arzuman et al., 2016). Other researchers who focused on the concept of a classroom learning environment characterized it as a location where students and teachers interact with each other and use various tools and resources to engage in learning activities (Peng et al., 2014; Bizimana et al., 2022).

When examining the classroom learning environment, several dimensions or factors can be considered. These dimensions encompass various aspects of the classroom learning environment that can influence student's perceptions. According to (Persad, 1980) there are some components of the classroom learning environment such as peer group interaction, student-teacher interpersonal relationships, teaching-learning materials, infrastructural resources, discipline, and safety that make the classroom learning environment conducive. When students feel free to express their ideas, take chances, ask questions, and face obstacles in their learning, the classroom learning environment is generally constructive. Students can concentrate and retain material better in a distraction-free environment or an attractive, well-furnished classroom (Folami et al., 2021). Several factors influence the classroom learning environment, such as intellectual factors, physical factors, environmental factors, and mental factors. The classroom learning environment in India differs greatly from one another. However private schools generally have better infrastructure,

including well-maintained classrooms, modern technology, and ample resources. They employ qualified teachers who often use interactive and innovative pedagogies to engage students (Kundu & Bej, 2021).

In contrast, government schools mostly use Hindi as the medium of instruction, leading students to excel in spoken Hindi but struggle with spoken English. Private schools usually teach in English, so their students are more proficient in spoken English but often lack strong Hindi skills (Parkash & Hooda, 2016). The student-teacher ratio in private schools is much lower, usually around 20 to 30 students per teacher, allowing for more personalized attention in spite of the low pay scales compared to government schools (Goyal & Pandey, 2009). A supportive classroom always enhances students' performance and always focuses on improvement (Pickett & Fraser., 2010; Doppelt & Schunn, 2008; Bierman, 2011). A supportive classroom social environment emphasizes student learning and competency, uses various kinds of modern instructional strategies to engage and inspire students, and offers opportunities for achievement and development of high-quality relationships among teacher and students (Ames, 2012; Deemer, 2004; Luftenegger et al., 2014; Patrick et al., 2007; Ryan & Patrick, 2001).

Research shows that private schools have higher achievement and better infrastructural resources than government schools (In, 2016; Goyal & Pandey, 2009). And, boys have better peer interaction (Samuelsson & Samuelsson, 2016). However, girls have better interpersonal relations with teachers (Qureshi et al., 2021). India is a diverse country, and there is a lot of diversity. In a classroom, students from different cultures study together, learn together, and grow together. They learn so many things from each other, like- cooperation, respect, and living together to help each other (Milkie & Warner, 2011; Pickett & Fraser, 2010; Cheung et al., 2021).

This study has the purpose of looking into whether the learners actively help each other to create a classroom environment that fosters support and inclusivity. This study, helps readers to know about the interpersonal relationship between a teacher and students and also readers can comprehend whether teachers consider students' ideas, values, support, and initiative. Moreover, how they teach in the class and to what extent they use the learning teaching resources. It helps readers and policymakers to understand whether students are taking adequate interest in the class. The readers understand whether punishments are being imposed to create an environment of discipline in the class and on many more aspects of Indian classroom environment.

Objectives

1. To compare the perception of government and private secondary school students towards their classroom learning environment
2. To compare the perception of secondary school boys and girls towards their classroom learning environment
3. To compare the perception of government and private secondary school boys towards their classroom learning environment
4. To compare the perception of government and private secondary school girls towards their classroom learning environment

Research Questions

1. How do government and private secondary school students perceive their classroom learning environment?
2. How do secondary school boys and girls perceive their classroom learning environment?

3. How do government and private secondary school boys perceive their classroom learning environment?
4. How do government and private secondary school girls perceive their classroom learning environment?

Methods and Materials

Research Design: This research aimed to compare the students' perceptions of their classroom learning environment. Therefore, given the nature of the study and its objectives, the researcher followed the survey method of descriptive type of research.

Population and Sampling Frame: The population in the present study covers 9th and 10th grade students enrolled in East Delhi. As per the Unified District Information for Education Plus (UDISE Report 22-23), the total number of students enrolled in 9th and 10th grade in different schools of East Delhi in India is 48950.

Sample of the Study: Data were collected from 9th and 10th grade students studying in government and private schools affiliated with the CBSE board, East Delhi. As per the Rao soft sample size calculator, a sample of 382 was required with a 95% confidence level. However, data were collected from 428 students studying in 9th and 10th grade students in government and private schools. The sample was drawn proportionately from government and private schools ensuring representativeness and two strata namely government and private schools in the study.

Tools of Data Collection: To collect data on the classroom learning environment of government and private schools the researcher used a self-made questionnaire on classroom learning environment. The classroom learning environment questionnaire consisted of 34 items under six dimensions of the classroom learning environment. The questionnaire was prepared by considering different dimensions, such as peer group interaction, teacher-student interpersonal relationships, teaching-learning materials, infrastructural resources, discipline, and safety. The number of items under each dimension are as follows; Peer group interaction (4), Teacher-students interpersonal relationship (9), Teaching-learning materials (4), Infrastructural resources (8), Discipline (5), and Safety (4).

Techniques of Data Analysis and Interpretation: The researcher used percentage analysis statistical technique for interpreting the data collected by using a questionnaire.

Analysis and Interpretation

The results are summarized below, highlighting the perception of students on different dimensions of learning environment in Indian secondary education classrooms, specifically concerning government and private schools.

Research Question No 1

How do government and private secondary school students perceive their classroom learning environment?

Peer Group Interaction: Students studying 9th and 10th grades in private schools (75.57%) have better peer interaction than government school students (74.9%). Government school students are more friendly with their peers, but they do not feel free to share their views and thoughts and do not feel supported by their peers. 40.55% of government school students feel isolated compared to private schools (26.43%).

Teacher-Students Interpersonal Relationship: The finding shows that private school teachers (80.26%) consider students' ideas, support their initiatives, provide full opportunities to participate in classroom activities, solve their issues, encourage them to ask questions and interact in a friendly manner with students, compared to government school teachers (72.39%).

Teaching-Learning Materials: The finding shows that government school teachers (80.50%) use various teaching-learning materials that are also relevant and interesting, and they also provide online materials compared to private school teachers (71.11%).

Infrastructural Resources: The data suggest private schools (79.01%) have better infrastructural resources than government schools (64.51%). Private schools have more comfortable seating facilities, enough space for movement, ventilation facilities, fans, lights, projectors, and smart boards than government schools.

Safety: The result shows that private school (60.05%) students feel safe and have more safety measures compared to government schools (53.14%).

Discipline: The finding shows that private school teachers (78.27%) enter and leave at the right time, clean the black/white boards after teaching, and solve students' conflicts compared to government school teachers (66.67%).
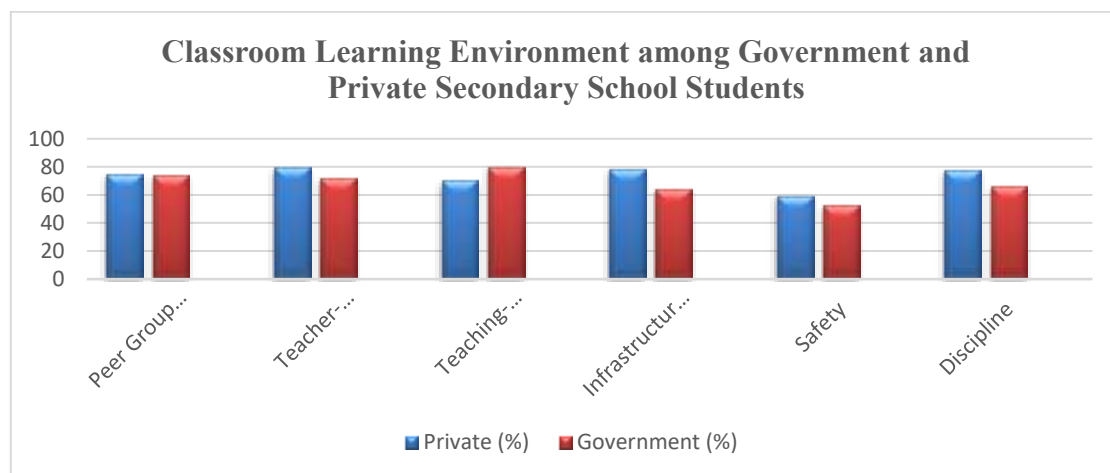

Figure 1: Histogram on Classroom Learning Environment among Government and Private Secondary School Students

Research Question No 2

How do secondary school boys and girls perceive their classroom learning environment?

Peer Group Interaction: Secondary school girls (73.9%) have better peer interaction than boys (70.12%).

Teacher-Students Interpersonal Relationship: The secondary school boys (75.89%) have good interpersonal relations with their teachers compared to girls (75.25%).

Teaching-Learning Materials: According to 85.93% of girls, their teachers use a variety of relevant, engaging, and enjoyable TLM, and their teachers provide online TLM more than secondary school boys, 69.32%.

Infrastructural Resources: According to 77.47% of girls, their infrastructural facilities are better than boys 66.56%.

Safety: 57.72% of secondary school boys feel safer than girls (53.77%).

Discipline: In secondary schools, girls (71.43%) believe their teachers enter classroom at the right time but do not leave at the right time. They gave less punishment to discipline them and hardly clean the black board after teaching compared to boys' teachers, as perceived by 67.7% of boys.
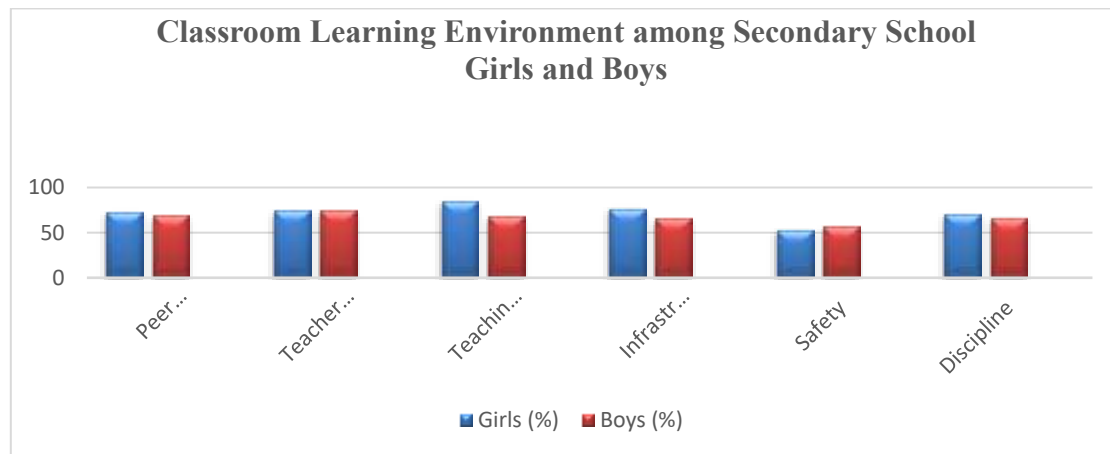

Figure 2: Histogram on Classroom Learning Environment among Secondary School Girls and Boys

Research Question No 3

How do government and private secondary school boys perceive their classroom learning environment?

Peer Group Interaction: Private secondary school boys (76.40%) have good peer interaction and feel free to share their thoughts compared to government school boys (75.89%).

Teacher-Student Interpersonal Relationship: In private schools, boys (81.70%) have good interpersonal relations with their teachers because their teachers consider students' ideas, support their initiatives, provide full opportunities to participate in classroom activities, solve their issues, encourage them to ask questions and interact in a friendly manner with students compared to government schools (69.43%).

Teaching-Learning Materials: According to 71.64% of government school boys, their teacher uses a variety of relevant, engaging, and enjoyable TLM, compared to private school boys (66.90%). However, private school teachers provide more online materials to students than government school teachers.

Infrastructural Resources: 76.81% of boys of private schools are of the opinion that such schools provide better infrastructural facilities as compared to 55.23% of government school boys.

Safety: The results show that boys (62.49%) in private schools consider their classroom learning environment safer as compared to 52.45% of government secondary school boys.

Discipline: 80.45% of private school boys think their teacher enters and leaves class at the right time, cleans black boards after teaching, and solves students' conflicts as compared to the opinion of government school boys (59.64%).
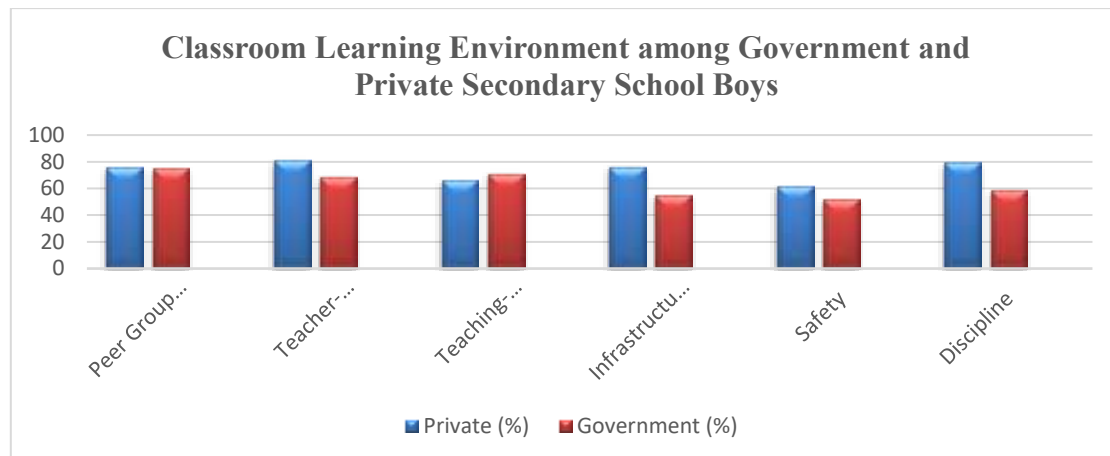
Figure 3: Histogram on Classroom Learning Environment among Government and Private Secondary School Boys

Research Question No 4

How do government and private secondary school girls perceive their classroom learning environment?

Peer Group Interaction: The result of the study revealed that 75.26% of girls in government secondary schools have better peer interaction than private secondary school girls, 73.93%.

Teacher-Student Interpersonal Relationship: The analysis of data reveals that the private school girls (75.31%) have better interpersonal relations with their teachers as compared to government secondary school girls (74.72%).

Teaching-Learning Materials: 81.5% of girls in private schools believe that their teachers use more relevant, engaging content and provide more online materials compared to 79.51% government secondary school girls.

Infrastructural Resources: The result suggested that private school girls (84.5%) believe that they have better infrastructure than 74.99% government school girls.

Safety: The results revealed that private school girls (59.56%) feel safe in their classroom learning environment as compared to government secondary school girls (53.69%).

Discipline: Government secondary school girls (72.24%) believe that their teachers enter the class at the right time and leave at the right time, clean boards after teaching, and solve students' conflicts as compared to 69.2% private secondary school girls.
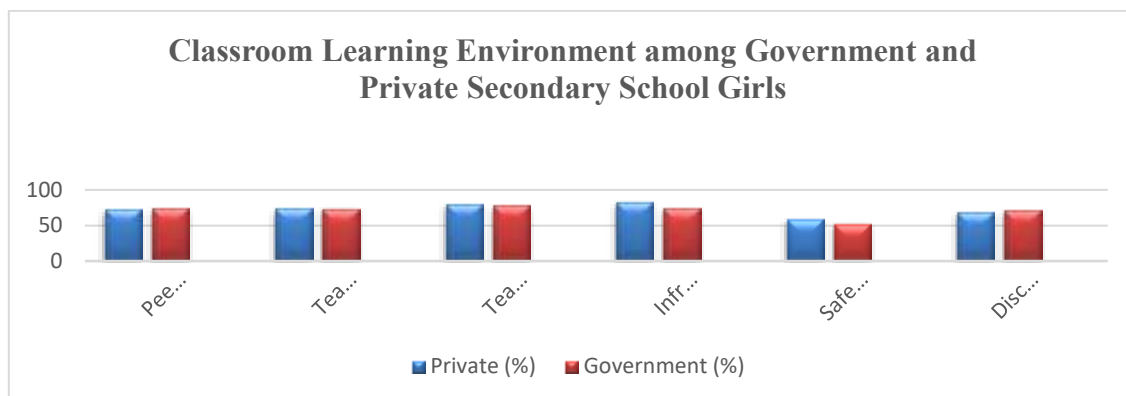

Figure 4: Histogram on Classroom Learning Environment among Government and Private Secondary School Girls

Findings

The finding shows that private secondary school students perceive better their classroom learning environment as compared to government school students, this result is also supported by (In, 2016; Goyal & Pandey, 2009). The result indicates that secondary school girls perceive better their classroom learning environment as compared to boys, this result is also supported by (Qureshi et al., 2021). The result reveals that private secondary school boys perceive better their classroom learning environment as compared to government secondary school boys and also the result shows that private secondary school girls perceive better their classroom learning environment as compared to government secondary school girls. In a nutshell, it is concluded that on different parameters of Indian secondary school classroom environment like teacher-student interpersonal relational relationship, teaching-learning materials, infrastructural resources, and safety features the private schools excel the government schools whereas on two parameters i.e. peer group interaction and discipline the government schools excel than the private schools as per the perception of the students.

Educational Implications

The classroom learning environment is essential for students' development. The classroom learning environment should be cooperative and conducive. Schools can create supportive, engaging, and stress-free environments focusing on their lifelong learning. Teachers can motivate students to achieve their goals. A supportive environment encourages students to search for different solutions to the same problem. A positive classroom environment inculcates a sense of social belongingness and brotherhood. Teachers can consider improving their teaching methods and learning materials so students can easily understand. To ensure a conducive classroom environment both the private and public schools should deliberately focus on ensuring a healthy peer group interaction, constructive teacher-taught relationship, development of use of advanced teaching-learning materials, ensuring better infrastructural facilities and moreover utmost attention on ensuring a safe classroom environment and nurturing discipline among the learners for their holistic development.

Conclusion

The classroom learning environment plays a vital role in the student lives. It affects all the aspects of students' educational life. Students spend their major lives in the classroom and the classroom future of the nation is created. Hence environment should be conducive and flexible where students feel free to share their thoughts and where they are appreciated and valued. If the classroom learning environment is conducive and free from barriers then students' holistic development takes place in the classroom. In this context, it is the responsibility of teachers and administrators to make a conducive and flexible classroom learning environment for the holistic development of students. More extensive studies can be carried out on a regional or state level. The various classroom environments in India can also be investigated through the use of mixed-method research. It will help comprehend the educational environments of students' lives.

REFERENCES

1. Ames, C. (2012). Achievement goals and the classroom motivational climate. In *Student perceptions in the classroom* (pp. 327-348). Routledge.

2. Amirul, N. J., Ahmad, C. N., Yahya, A. F., Abdullah, M. F. N. L., Noh, N. M., & Adnan, M. (2013). The physical classroom learning environment. In *Proceedings of the International Higher Education Teaching and Learning Conference* (Vol. 2, No. 1, pp. 1-9).

3. Arzuman, H., Al-Mahmood, A. K., Islam, S., Afrin, S. F., Khan, S. A., & Schofield, S. J. (2016). Students perception of learning environment: A Base Line Study for identifying areas of concern at a Private Medical College, Bangladesh. *Bangladesh Journal of Medical Science*, *15*(2), 234-242.

4. Bierman, K. L. (2011). The promise and potential of studying the "invisible hand" of teacher influence on peer relations and student outcomes: A commentary. *Journal of applied developmental psychology*, *32*(5), 297-303.

5. Bizimana, E., Mutangana, D., & Mwesigye, A. (2022). Students' Perceptions of the Classroom Learning Environment and Engagement in Cooperative Mastery Learning-Based Biology Classroom Instruction. *Education Research International*, *2022*(1), 5793394.

6. Cai, J., & Lombaerts, K. (2024). Self-regulation matters: Examining the relationship between classroom learning environments and student motivation through structural equation modeling. *Social Psychology of Education*, *27*(2), 411-434.

7. Cheung, S. K., Kwok, L. F., Phusavat, K., & Yang, H. H. (2021). Shaping the future learning environments with smart elements: challenges and opportunities. *International Journal of Educational Technology in Higher Education*, *18*(1), 16.

8. Deemer, S. (2004). Classroom goal orientation in high school classrooms: Revealing links between teacher beliefs and classroom environments. *Educational research*, *46*(1), 73-90.

9. Doll, B., Spies, R. A., LeClair, C. M., Kurien, S. A., & Foley, B. P. (2010). Student perceptions of classroom learning environments: Development of the ClassMaps Survey. *School Psychology Review*, *39*(2), 203-218.

10. Doppelt, Y., & Schunn, C. D. (2008). Identifying students' perceptions of the important classroom features affecting learning aspects of a design-based learning environment. *Learning Environments Research*, *11*(3), 195-209.

11. Folami, A. B., Riaz, A. S., &Musolihu, M. O. (2021, March 24). *Critical Environmental Factors Affecting Learning in College of Education*. Journal of Education and Learning Innovation. https://doi.org/10.35877/454ri.eduline400

12. Goyal, S., & Pandey, P. (2009). *How do government and private schools differ? Findings from two large Indian states* (Vol. 30). International Bank for Reconstruction and Development/The World Bank.

13. In, I. J. I. P. (2016). *The International Journal of Indian Psychology, Volume 3, Issue 4, No. 68*. RED'SHINE Publication. Inc.

14. Kundu, A., & Bej, T. (2021). Ingestion and integration of ICTs for pedagogy in Indian private high schools. *E-learning and Digital Media*, *18*(2), 163-184.

15. Li, Y., & Singh, C. (2022). Inclusive learning environments can improve student learning and motivational beliefs. *Physical Review Physics Education Research*, *18*(2), 020147.

16. Lüftenegger, M., Van de Schoot, R., Schober, B., Finsterwald, M., & Spiel, C. (2014). Promotion of students' mastery goal orientations: Does TARGET work?. *Educational Psychology*, *34*(4), 451-469.

17. Milkie, M. A., & Warner, C. H. (2011). Classroom learning environments and the mental health of first grade children. *Journal of Health and Social Behavior*, *52*(1), 4-22.

18. Negiloni, K., Ramani, K. K., & Sudhir, R. R. (2019). Environmental factors in school classrooms:

How they influence visual task demand on children. *PloS one*, *14*(1), e0210299.

19. Parkash, J., & Hooda, S. (2016). A comparative study of English language proficiency of students studying in 10th class in government and private secondary schools of Sirsa district. *International Journal of Current Innovation Research*, *2*(06), 403-409.

20. Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. *Journal of educational psychology*, *99*(1), 83.

21. Peng, W. J., McNess, E., Thomas, S., Wu, X. R., Zhang, C., Li, J. Z., & Tian, H. S. (2014). Emerging perceptions of teacher quality and teacher development in China. *International journal of educational development*, *34*, 77-89.

22. Persad, S. (1980). Relationship of classroom environment, teacher and student satisfaction and student self-concept.

23. Pickett, L., & Fraser, B. (2010). Creating and assessing positive classroom learning environments. *Childhood Education*, *86*(5), 321-326.

24. Qureshi, A. M., Fatima, Q., Kanwal, A., & Abiodullah, M. (2021). A Students' Perspective on Classroom Learning Environment in Secondary Schools of Pakistan. *Ilkogretim Online*, *20*(5).

25. Ryan, A. M., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American educational research journal*, *38*(2), 437-460.

26. Samuelsson, M., & Samuelsson, J. (2016). Gender differences in boys' and girls' perception of teaching and learning mathematics. *Open Review of Educational Research*, *3*(1), 18-34.

27. Stewart, K. (2016). Examining student and teacher perceptions of the classroom social environment across school context: Effects of individual factors.

28. Taylor, S. P. (2023). Students' perceptions of their first experiences of secondary-school science in New Zealand. *Learning Environments Research*, *26*(1), 291-310.