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**RESEARCH PAPER**

# Physical Environment at University: Investigating the Impact on Students' Motivation and Engagement

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**ABSTRACT**

This quantitative study examined how university students' Motivation and Engagement were impacted by their Physical Environment. The sample have been selected from five universities of the Punjab Province. Using the cluster sampling technique, 200 BS Honors students from education departments were selected as the sample. The data was gathered using a closed-ended questionnaire in order to comprehend the students' perceptions about the Physical Environment at the university. There were 13 items which made up this instrument. A 20-items questionnaire that was used to evaluate the students' engagement and motivation. Both of the instruments have been adapted from adapted from Mamoona (2022).The results revealed a significantly high effect of Physical Environment on the students' Motivation and Engagement. Therefore, it is recommended based on the results that the Physical Environment for learning should be focused and made better for the students so that their learning could be enhanced.

| **Keywords:** | Motivation, Physical Environment, Students' Engagement, University Students |

## Introduction

The saying, "A man who is shaped by his environment will be conscious and knowledgeable in creating a better environment" is widely accepted. It suggests that the environment has a direct impact on students' learning, and this impact may be good or detrimental (Yang et al., 2017). Studies have shown that children do better when their physical and social circumstances are better (Kuuskorpi & González, 2011).

A research study was carried out to learn more about how the school environment impacts students' motivation and engagement. The twenty-first century is a time of advancements and change. New educational opportunities have emerged in the age of new dimensions (Ahmad et al., 2017). According to Ali and Hassan (2018), there is a direct correlation between the kids' development and learning and the social and physical aspects of the school environment.

It goes without saying that giving students a peaceful and enjoyable atmosphere to study in is crucial to their performance. A student's day used to be mostly dedicated to attending class. It is essential that schools provide kids with a social and physical learning environment that fosters their development and creativity (Al-Nakib, 2011). The research study included the social and physical factors that have an impact on the learning environment in schools. In addition, student perceptions of their motivation and participation will be assessed (Akomolafe & Adesua, 2016).

A school's physical and social environment has a direct impact on how effectively students learn. A secure and suitable learning environment is essential for enhancing children's learning. The school setting includes educational activities, a healthy, warm, and secure atmosphere, opportunities for social interaction, and a range of instructional

techniques. The atmosphere at school greatly affects the children. The physical environment in which students are taught may have a direct influence on their learning situations (Hassan et al., 2018). The question of whether or not students should adapt to their surroundings has been the subject of several research (Chan, 1996; Kuuskorpi & González, 2011). However, the only valid solution to the question is that the learning environment shapes and influences the learner.

The concept of a school environment places an emphasis on the available furniture, technology, and operational processes. Physical environment is associated to effective reflective teaching, creative learning, and interactive learning settings. Learning settings that are flexible and adaptive encourage development and learning in all areas (Malik & Rizvi, 2018). The social environment reflects the positive interactions between students and staff as well as the positive connections inside the institution. Teachers are frequently seen as the best individuals to assess, mold, and influence students' behavior. They may also provide adaptable learning environments in classrooms to aid students in learning more efficiently (Kidger et al., 2012).

The saying, "A man who is shaped by his environment will be more conscious and knowledgeable in creating a better environment" is a common one. It suggests that the environment has a direct impact on students' learning, either favorably or unfavorably. Studies show that when students' physical and social settings are better, they perform better (Chan, 1996).

The concept of a school environment places an emphasis on the available furniture, technology, and operational processes. An engaging learning environment, creative learning, and successful reflective teaching are all influenced by the physical setting. The equipment, spaces, supplies, and other facilities offered to students make up the physical environment of a school. In all ways, modified and flexible learning environments foster development and learning (Kuuskorpi & González, 2011).

Among the four elements of a good learning environment are the visual, aesthetic, thermal, and aural settings. Older schools are progressively undergoing renovations and increases in quality due to the dire need. Studies show that students do better in modern, well-equipped schools than in older ones that lack such amenities (Chan, 1996).

## Literature Review

The school's physical environment places an emphasis on a well-planned, balanced, and structured environment as well as a proper classroom environment with enough space, lighting, desks, blackboards, sitting benches, and other teaching aids, recreational activities, and an adequate ventilation system. Every student at the school has distinct needs, thus the infrastructure that is provided needs to be carefully planned and built to fulfill those needs (Purkait, 2019).

The infrastructure that is currently in place has to be properly planned and developed in accordance with the needs and wants of each student attending the school. The physical features of the school environment also include management of labs, library facilities, health facilities, hygiene care, activities like school exhibitions, and educational excursions in order to satisfy the academic expectations of every student (Alderaiwaish, 2014).

Since it makes it easier to integrate technology, host extracurricular events, and utilize the classroom and its space, a conducive physical environment in the classroom is also essential for new teaching techniques. Students' knowledge and learning are enhanced when they exhibit interest in difficult concepts. The process of planning for education runs smoothly if there are enough facilities and a favorable physical environment (Arthur & Peterson, 2013).

Despite the fact that students learn at their own pace, most institutions use a one-way interaction paradigm in which professors only provide lectures. When there is simply one-way communication between the teacher and the student, learning challenging material becomes incredibly confusing for students (Wang, & Degol, 2016). The instructor should read, write, and reflect for the sake of the students' education. The social atmosphere in schools is evolving, nevertheless, throughout time. Children of today want to interact with their peers and teachers while they are studying. The social atmosphere of schools is shifting from one-way communication to a two-way process where students and teachers learn by exchanging ideas (Barton & Walker, 2011).

To learn, students must actively engage in the lesson. Teachers are changing their pedagogical strategies and instructional techniques to give students access to a more engaging and socially acceptable learning environment. It was completed In order to highlight the importance of technology-supported schools in increasing student and teacher motivation and engagement, Chuang (2014) conducted a study. The study was experimental, thus the researcher participated in it as a teacher. The purpose of the study was to highlight how motivating a learning environment is for students. According to the study's conclusions and explanation, technologically advanced classroom environments encourage student collaboration and participation. It was shown that classroom activities and feedback significantly benefited children in swiftly grasping difficult concepts (Traficante et al., 2017).

The learning preferences and racial backgrounds of students are diverse. Students' engagement and motivation may rise as a result of the teaching methods. Additionally, the results of the study suggest that pedagogical and environmental changes can enhance the learning environment in schools (Chuang, 2014).

In order to understand how student teacher interactions and the learning environment affect students' learning, Ahmad, Shaharim, and Abdullah (2017) conducted a study. A survey-based quantitative study was used to evaluate the ideas. The primary goal of the study was to ascertain the reasons behind the decline in science interest among Malaysian students. Investigating the problem's causes was the researchers' choice. Four questionnaires were utilized by the researchers to gather information from a sample of 400 biology students. The study's findings suggested that a number of variables, including the physical environment and instructor qualities, contribute to students' learning after data were evaluated using descriptive and inferential statistics. The outcomes of multiple regression also demonstrated that the learning environment has a considerable and powerful contribution to students' learning (Psacharopoulos & Patrinos, 2018).

In Pakistan, it is crucial to develop and improve the foundations for the educational system. A number of reforms have been implemented to enhance Punjab's education system, which has improved. In order to provide a summary of the steps and modifications made by the political parties in the preceding years to improve Pakistan's educational system, a research was conducted. The audit has shown important adjustments made to schools in Punjab province. The researcher summarizes Pakistan's most important changes while also briefly describing the Punjabi educational system (Ali, 2018).

In Pakistan, the educational system is presently under the control of the provincial governments, including the creation and implementation of course curricula. Investing in buildings and infrastructure does not ensure high-quality education, according to studies. Raising the standard of education in Pakistan necessitates a number of structures and skills (Norrish, 2013).

In Pakistan, private education makes up a sizeable portion of the broader educational system. Private schools are becoming more and more popular among parents who want to educate their children to high standards not available in public schools. Parents are attracted to private schools by a range of features and benefits. An additional major and crucial element of the Punjabi educational system is the development of the female

education system to increase the enrollment proportion of girls. The government has also put in place a variety of programs to encourage children to attend school, such as the Education Voucher Scheme (EVS) for parents who are battling with poverty. It was introduced in 2006 by the Punjab Education Foundation in Punjab. The BISP launched a separate campaign in 2012 called Waseela-e-Taleem (Sarfraz et al., 2020).

A program for teachers' continued professional development was also started by the government in an effort to improve the secondary school education system. In addition, Habib (2013) made report cards, student assessment cards, and reports mandatory for a high-quality educational system. For ease of use and convenience, Urdu was substituted for English as the primary language of instruction at the basic level. To encourage children to attend school often, the school environment has attracted a lot of attention (Mason, 2012).

The physical setting of the school places a strong emphasis on a purposefully pre-planned, well-balanced, and structured environment, as well as a proper classroom environment with the necessary space, lighting, desks, blackboards, benches for sitting, and other teaching aids, as well as recreational activities and a suitable ventilation system. The infrastructure that is currently in place has to be properly planned and developed in accordance with the needs and wants of each student attending the school (Mameli, & Passini, 2017).

The physical features of the school environment also include management of labs, library facilities, health facilities, hygiene care, activities like school exhibitions, and educational excursions in order to satisfy the academic expectations of every student (Purkait, 2019).

It is asserted that kids' participation in academics is directly impacted by the school environment. A study was conducted to look at the aspects of the educational setting that directly affect students' engagement. It was a quantitative study, and the information was gathered via a survey questionnaire. 777 students who were enrolled in 41 different learning situations were chosen as the study's sample. The purpose of the study was to ascertain the attitudes of students on their participation in their academics. The study used the social environment as a predictor of students' engagement in their academic work. Teachers were associated with the social environment factors of the research as helpful and successful instructors who may boost student involvement. The results of the study show that teachers can assist improve the management of classroom activities to promote student participation and academic engagement. According to the study's findings, instructors may help manage classroom activities more effectively to encourage student participation and academic engagement (Opdenakker & Minnaert, 2011).

Student progress is directly impacted by the educational environment. Purkait (2019) did a study in India to determine the association between class IX students' academic performance and their learning environment. 120 male and 120 female students from both urban and rural locations were randomly chosen to make up the study's sample. The study's findings showed that there was no obvious difference between male and female students' academic achievement, but there was a clear difference between students in rural and urban areas. The results of the study demonstrated a clear connection between academic achievement and the learning environment at school. According to the study, ninth-graders do better academically when they are in a welcoming learning atmosphere at school. Two factors that have an impact on students' academic progress were also found by the study's findings. Natural variables included drive, intellect, learning, physical fitness, aptitude, creativity, and mental health. The environment, which also comprised socioeconomic status, friends, the environment at home, the environment at school, and the environment in the classroom, was the other factor. The findings concluded the direct impact of school environment on 9th grade students (Soutter et al., 2014).

School and the classroom have an impact on children's academic engagement and academic achievement. In Abu Dhabi, Yang et al.'s (2017) study aimed to shed light on how the learning environment affects students' engagement. The research was descriptive, and the participants' responses were gathered by questionnaires. The study looked at a number of social factors that affect the school atmosphere, such as parental involvement, teaching methods, teacher concern, interpersonal interactions, student behavior, and physical facilities. The results of the study show that supportive classroom environments and institutional settings at schools might influence students' emotional and cognitive participation. The research also produced some recommendations for policymakers, who should focus on students' academic achievement as well as engagement because this is a sign of future learning ability (Traficante, 2017).

The educational setting has a direct bearing on student success (Purkait, 2019). To ascertain the relationship between class IX pupils' academic performance and their educational environment, A study was conducted a study in India. To create the study's sample, 120 male and 120 female students from both urban and rural areas were selected at random. The study's findings showed that there was no obvious difference between male and female students' academic achievement, but there was a clear difference between students in rural and urban areas. The results of the study demonstrated a clear connection between academic achievement and the learning environment at school (Yang et al., 2017). According to the study, ninth-graders do better academically when they are in a welcoming learning atmosphere at school. Two factors that have an impact on students' academic progress were also found by the study's findings. Natural variables included drive, intellect, learning, physical fitness, aptitude, creativity, and mental health. The environment, which also comprised socioeconomic status, friends, the environment at home, the environment at school, and the environment in the classroom, was the other factor. The findings demonstrated that ninth-grade students were directly impacted by the school environment (Wang & Degol, 2016).

## Hypothesis

Ho: There is no significant impact of Physical Environment on the university students' motivation and engagement.

## Material and Methods

This quantitative study examined how university students' Motivation and Engagement were impacted by their Physical Environment. The sample have been selected from five universities of the Punjab Province. Using the cluster sampling technique, 200 BS Honors students from education departments were selected as the sample. The data was gathered using a closed-ended questionnaire in order to comprehend the students' perceptions about the Physical Environment at the university. There were 13 items which made up this instrument. A 20-items questionnaire that was used to evaluate the students' engagement and motivation. Both of the instruments have been adapted from adapted from Mamoona (2022).

## Results and Discussion

The data has been analyzed with the help of Pearson's r and Regression analysis. The detail is as under:

**Table 1**
**Correlation of Physical Environment with the Students' Motivation and Engagement**

|  | Physical environment | Motivation & Engagement |
|---|---|---|
| Physical Environment | 1 | .786 |
| Motivation & Engagement |  | 1 |

Note: N=200; $p < 0.05$; Correlation is significant at the 0.01 level (2-tailed)

It is revealed that the Physical Environment and the students' Motivation and Engagement have a positive and a significantly high relationship as Pearson's r values (r =.786, p =.000, less than 0.05).

**Table 2**
**Regression Analysis to Measure Impact of Physical Environment on the Students' Motivation and Engagement**

|  | B | Standardized Beta | R | R Square | *df* | F | Sig. |
|---|---|---|---|---|---|---|---|
| (Constant) | 18.79 |  |  |  |  |  |  |
|  |  | .78 | .78 | .618 | 198 | 320.69 | .000 |
| Physical Environment | 1.20 |  |  |  |  |  |  |

Predictor (constant): Physical Environment
Dependent Variable: Motivation & Engagement

After the relationship shown in Table 1 had been verified, the linear regression was used on the data. According to the results, there is a 78% variance in the Physical Environment when it comes to the students' Engagement and Motivation. Furthermore, the F= 320.69 with a p value of .000, which is less than 0.05, illustrates the model's fitness. The value of =.78 with a p value of.000, which is less than 0.05, indicates that the Physical Environment has a significantly high effect on the students' Motivation and Engagement. Therefore, it was statistically proven that the "Ho: There is no significant impact of Physical Environment on the university students' Motivation and Engagement." was rejected.

**Conclusion**

This quantitative study examined how university students' Motivation and Engagement were impacted by their Physical Environment. The sample have been selected from five universities of the Punjab Province. Using the cluster sampling technique, 200 BS Honors students from education departments were selected as the sample. The data was gathered using a closed-ended questionnaire in order to comprehend the students' perceptions about the Physical Environment at the university. There were 13 items which made up this instrument. A 20-items questionnaire that was used to evaluate the students' engagement and motivation. Both of the instruments have been adapted from adapted from Mamoona (2022). The results revealed a significantly high effect of Physical Environment on the students' Motivation and Engagement. Therefore, *"Ho: There is no significant impact of Physical Environment on the university students' motivation and engagement."* was statistically rejected based on the results.

**Recommendations**

Therefore, it is recommended based on the results that the Physical Environment for learning should be focused and made better for the students so that their learning could be enhanced.

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