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RESEARCH PAPER

Impact of Learning Environment on Academic Performance of **Colleges Students**

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ABSTRACT

The study focuses on the impact of learning environment on academic performance of Colleges students. Quantitative method was applied. Therefore, survey research design was used. Population was comprised of 85 five colleges of five districts of Punjab including Layyah, Bhakhar, Rahim Yar Khan, Dera Ghazi Khan, and Bahawalpur. A sample of 384 students was selected through stratified sampling method out of 50893 under the guidelines of Krejcie and Morgan (1970) sample table. Dundee Ready Education Environment Measure (DREEM) was applied to assess the learning environment of the colleges whereas academic performance of students was assessed by different dimension which identified by Lateef (2020). Researcher validated the instrument by using Content Validity Ratio (CVR) in which all the items falls between the acceptable range whereas the reliability score of DREEM and academic performance scale estimated .873 and .799 respectively. Pearson product correlation, linear regression, t-test and ANOVA were used. The study concluded that learning environment has positively and significantly impact on the students' academic performance. It is recommended that teachers and college administration work together to build a positive learning environment through mutual understanding and cooperation in order to produce a productive learning environment which enhance the academic performance of students.

KEYWORDS Academic Performance, College Level, Learning Environment

Introduction

Environment of any educational institutions play a significant role in quality of learning. It is the duty of legislators, administrators, authorities, and course designers to establish a learning environment in which every student has an equal chance to grow as a person and gain new abilities in addition to knowledge. A well-equipped learning environment is essential for teaching pupils the necessary knowledge and skills. Effective learning occurs when the course addresses contemporary issues and the learning activities are engaging and significant (Aneke, 2022). Dörnyei and Muir (2019) state that a variety of factors, including instructional materials, learning activities, resource materials, classroom amenities, teaching aids, and the fundamental requirements of both teachers and students, influence a learning environment. The importance of instructors and learning environments in this context cannot be understated. To guarantee highquality education, fundamental teaching and learning facilities as well as qualified instructors are essential. A competent, well-trained, and dedicated instructor will be able to impart knowledge in an efficient manner. In addition to these, there are a plethora of other aspects, such having access to pure and clean drinking water, having well-lit classrooms, having comfortable student chairs, having restroom facilities, having ICTs installed in the classrooms, etc.

According to Pavalache-Ilie and Cocorada (2014), instructors are the ones that directly influence students' learning processes and help shape their personalities. Teachers serve as role models for students, and they can leave a positive or negative effect on them. A teacher's appealing demeanor will have a positive effect on the kids. According to Ahmad et al. (2017), instructors' actions have a significant impact on the learning environment and the personal growth of their pupils. The nation is built by its students. They will eventually have to contribute to the future development of civilization. In order for students to understand their duties and be able to contribute positively to the growth of society, it is imperative that they receive the education and training they need.

A positive learning atmosphere in the classroom is strongly correlated with students' performance, according to numerous research studies. Students learn with interest in a motivated setting, and when they are happy in the classroom, the attendance ratio also rises. The setting is suited to easy student adjustment. Thus, school administrators should focus on improving the school environment in order to boost both the school's reputation and the academic performance of its pupils (Choudhry, et. al., 2016; Muzaffar, 2016; Muzaffar, et. al., 2020; Pekrun, 2014). Noreen et al. (2018) claim that because college and university students are more mature than school pupils, the environments at these institutions differ slightly from those in schools. Consequently, needs of the students should be met in all educational settings.

Ahmad et al. (2023) stated that although most studies have focused on the environments of schools, universities, and medical facilities, learning environments are an intriguing subject for researchers to explore the effects of environment on the learning process as well as pupils. Few scholars have looked into the college environment as well. When the learning environment is examined in relation to the academic performance of the students, this disparity is frequently noted. Students cannot feel at ease in any way in a stressful atmosphere, according to Zada et al. (2021). They require good atmosphere since it is beneficial to their academic performance. For these reasons, the researcher is curious to find out how a diversified environment affects students' academic performance in a college setting.

Literature Review

Learning Environment

According to Korir and Kipkemboi (2014) the term "learning environment" refers to a variety of elements, including lesson planning, basic facilities, teaching materials, audio-visual aids, ICTs, teachers' credentials and skills, teachers' commitment to their profession, use of instructional technology, and teachers' behavior and interactions with students. The term "learning environment" relates to the classroom, student-teacher interaction, physical amenities, cozy setting, and student social interaction. Bakhshialiabad et al. (2019) assert that the setting in which children are educated determines the quality of that education. The actions and policies implemented by the school administration, which includes teachers and principals, have a significant impact on the learning environment. Adequate funding is also necessary for a good learning environment, allowing for the provision of the greatest number of facilities to pupils.

Malik and Rizvi (2018) contend that an effective environment still requires a physical location. For instance, every student should be able to see the white board. Students with visual impairments ought to be assigned to appropriate seats in the classroom. Certain students are also hard of hearing. In order to prevent them from falling behind the other kids, these students should also receive attention. Should information and communication technology be provided in the classroom, every student may gain equally from it. Thus, audio-visual aids in the classroom should be utilized appropriately.

According to Usman and Madudili (2019), a student's interest, aptitudes, capabilities, physical and mental health, emotions, and mindset all play a significant part in their education. Every pupil has a unique background. Therefore, it is the school's duty to assist each student in adjusting to life in the classroom. Some children find it difficult to fit in at school, which makes them uninterested in the in-class instruction. So, there is duty of college administration and teachers to provide positive learning environment.

Physical Environment

Suleman and Hussain (2014) assert that the physical aspect of learning is important in light of students' accomplishments. In the physical realm, a number of items, including teacher chairs and tables, white boards, student chairs, and the installation of ICTs and other technical tools. An appealing learning environment in the classroom depends on the placement of the students' seats. According to Baafi (2020), every student should have a designated space so that they all have an equal chance to learn in a classroom setting. For students to feel comfortable and focus on their studies, it's also essential that the environment be both normal and airy. The classroom should be arranged such that all of the students can see the white board, each other, and other objects.

Psychological Environment

Closs et al. (2021) stated that the term "psychosocial dimension" refers to both conduct and environment. It addresses the general school environment as well as the behavior of instructors, pupils, and other school staff. Since instructors serve as role models for their students, kids are influenced positively by the positive behavior of their teachers. Harmony in the classroom is mostly dependent on the campus environment and positive student connections. Students appreciate their teachers and take an interest in the learning activities if they are morally upright and act politely toward them. Students perform well when there are qualified and dedicated teachers in the classroom, as well as a pleasant school atmosphere.

Social environment

The phrase "social environment," according to Magzamen et al. (2017), refers to one's surroundings as well as one's interactions with family, friends, coworkers, and other members of the community. In terms of the school, building trust with parents, instructors, students, and other interested parties in school-related topics is a necessary task for the heads of the institutions. Good relations between all parties involved make it easier for school administrators to confer with relevant parties about school-related issues and make prompt decisions that will guarantee both student performance and school success.

Academic Performance

Academic performance depends on a number of factors, including teachers' qualifications, commitment to their careers, the school and classroom environments they teach in, the curriculum, the quality of learning activities, extracurricular activities, facilities, the basic infrastructure of the school building, students' mental health, their aptitudes, attitudes, and capacities, their home environments, their teaching approaches, their teaching methods and techniques, the relationships between students and teachers, and the harmony among teachers. Student cooperation, teacher conduct, technology accessibility, ICT use for instruction in the classroom, improved lesson design, and other significant elements all have a significant impact on students' performance (Shoaib & Hussain, 2022).

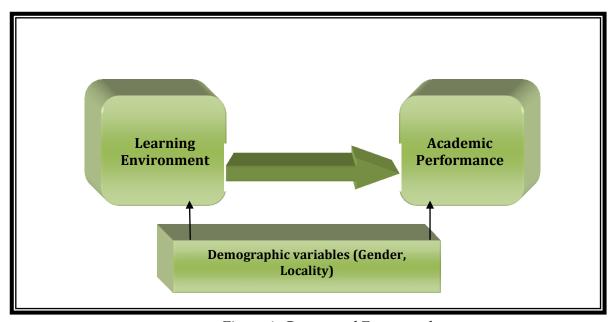


Figure 1: Conceptual Framework

Material and Methods

Nature of the Study

Survey research design was utilized because this study was quantitative in nature. According to Rahi (2016), surveys are the primary method of data collecting used in "survey research," a particular type of study methodology. Surveys are one method that researchers use in this study design to gain a better understanding of individual or group perspectives on a certain concept or issue of interest.

Population

The participants in this study were all students from the five districts of Punjab, which are Layyah, Bhakhar, Rahim Yar Khan, Dera Ghazi Khan, and Bahawalpur. There are 85 colleges total in which 28 for boys and 45 for girls and 12 colleges in which both girls and boys are enrolled constituted the population of the study So, there are 45,278 boys and 50,615 girls are enrolled in all 85 colleges.

Sample Size

Krejcie and Morgan (1970) table was used to find the sample size when population proximally reach to 0.1 million. The population proportion fixed as .5 with

degree of accuracy is .05. Thus, a sample of 384 students was included in the present study.

Sampling technique

Sampling is process of selection for the sample size. Researcher used stratified sampling technique in which 187 boys and 197 girls were selected. Stratification based on gender.

Instrumentation

Researcher used Dundee Ready Education Environment Measure (DREEM) to assess the learning environment of the colleges whereas academic performance of students was assessed by different dimension which identified by Lateef (2020). Instrument was developed on five point Likert scale.

Pilot Testing

Pilot testing refers as small scale study in which feasibility of the tool is checked. In the present study, 38 teachers were selected randomly for pilot testing. Corrections were made on the basis of pilot testing.

Validity and Reliability

Researcher validated the instrument by using Content Validity Ratio (CVR) in which all the items falls between the acceptable range whereas the reliability score of DREEM and academic performance scale estimated .873 and .799 respectively.

Data Analysis

Pearson product correlation, linear regression, t-test and ANOVA were used.

Ethical consideration

Data was collected under some research ethics. Consent was taken from the participants. Rules of the institutions were followed while data gathering.

Results and Discussion

Table 1
Showing Relationship of Learning Environment with Academic Performance of students

Variable	Statistics	Learning Environmen	t Academic Performance	
Learning	Pearson	1	.664**	
Environment	Correlation	1	.004	
	Sig.(2-tailed)		.000	
	Sample(n)	361	361	

The outcome of the Pearson product displays in the table 1 regarding relationship between students' academic achievement and their learning environment. There is a positive link (r=.664**) between students' academic performance and their learning environment, as the table shows. The aforementioned table clearly shows the strong correlation between students' academic achievement and the learning environment. This leads to the rejection of the hypothesis, which claimed that there was no meaningful connection between students' academic achievement and their learning environment

(p=.000<.05). As demonstrated by the graph, pupils' academic performance improves in an improved learning environment.

Table 2
Showing Regression Summary regarding impact of Learning Environment on the mental health of the students

R	R ²	Adjusted R ²	B-value	F-Value	Sig.
.806a	.649	.648	.39078	664.305	1.998

Result of Regression summary regarding impact of learning environment on students' mental health shows in table 4.26. The result indicates the value R-Square was estimated.649 which reveals that 64.9% variation was found in academic performance of students due to learning environment. The above table indicates that the value of F=664.305 means sample data provide sufficient evidence about the regression model fitness. The value of p=.000<.05 which shows that learning environment has significant impact on the academic performance of students.

Table 3
Presenting Mean difference in the learning environment of colleges as perceived by male and female students

Gender	n	Mean	SD	Levene'stest	t-cal	Sig.
Male	175	3.7863	.63721	.006	.030	.976
Female	186	3.7638	.88019			

The mean difference between male and female students' opinions about the college learning environment is shown in Table 3. The statistical analysis indicates that there is no significant difference between the opinions of male and female students on the quality of the learning environment at college (p=.976>.05). Therefore, the null hypothesis was accepted.

Table 4
Presenting Mean difference in college's learning environment as perceived students across districts

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.209	4	.052	.087	.986
Within Groups	213.769	356	.600		
Total	213.977	360			

Table 4 displays the average variation in students' perceptions of the college learning environment by district. The null hypothesis is supported by the evidence, as indicated by the result F=.087. There is no discernible variation in the college learning environment as perceived by students across districts, according to the value of p=.986>.05. Therefore, the null hypothesis, which claimed that there was no discernible mean difference in how college students viewed their learning environments among districts, was shown to be true.

Discussion

According to the study's findings, college learning environments and students' academic achievement are positively correlated. The study's outcome agrees with Ahmad et al. (2018). They discovered in their research that the institutions' learning environments contribute to improved academic achievement. They investigated the idea that the cooperative relationship between the instructor and his pupils constitutes the classroom environment. Students pick up knowledge by considering the connections

between the activities they participate in with their professors and the kinds of factors that affect the learning results they attain. Students' active participation in extracurricular activities and in class discussions are the main contributing elements. It serves as a barometer of how the pupils act in class. The attributes that he or she brings to the classroom will ultimately lead to such behaviors for improved academic performance scores, such as students talking through issues with one another to find answers. The study's findings are consistent with those of Munir et al. (2021). Each student is treated equally by the teacher in order to improve student progress. Students need the same respect and consideration as their important role in the educational system. Students' exemplary behavior to support, uplift and during class activities, students should assist one another, form friendships with other pupils, and work effectively together.

Conclusions

The study concluded that positive learning environment enhance the performance of students at college level. The findings suggest that students' academic performance is positively impacted by their perceptions of their academic selves. Accordingly, the study came to the conclusion that their participation with the teaching-learning process, learning style, and competencies improved academic success. The study's findings indicate a favorable relationship between students' mental health and their social self-perceptions. According to the study's findings, when students have positive relationships with their teachers and peers, they feel protected and have excellent mental health which ultimately positively impact on students' academic performance. The study's findings indicate a positive relationship between students' academic achievement and their social self-perceptions. The survey came to the conclusion that students believed that peer cooperation, involvement in extracurricular activities, and attendance at social gatherings were the reasons behind their strong academic achievement.

Recommendations

- It is recommended that teachers and college administration work together to build a positive learning environment through mutual understanding and cooperation in order to produce a productive learning environment that lessens academic stress.
- The study suggested that educators use student-centered learning, where students actively participate in the process of developing their social interactions and healthy mental health.
- The study suggested that in order to help students learn without stress and improve their academic performance over time, a learning environment should include student motivation and encouragement.

References

- Ahmad, C. N., Shaharim, S. A., & Abdullah, M. F. N. L. (2017). Teacher-Student Interactions, Learning Commitment, Learning Environment and Their Relationship with Student Learning Comfort. *Journal of Turkish Science Education*, 14(1), 57-72
- Aneke, J. (2022). Influence of Learning Environment on the Academic Performance of Secondary School Students in Makurdi Metropolis. *ScienceOpen Preprints*
- Baafi,R.K.A.(2020). School physical environment and student academic performance. *Advances in Physical Education*, 10(02), 121.
- Bakhshialiabad, H., Bakhshi, G., Hashemi, Z., Bakhshi, A., &Abazari, F. (2019). Improving students' learning environment by DREEM: an educational experiment in an Iranian medical sciences university (2011–2016). *BMC medical education*, 19(1), 1-10.
- Choudhry, I. A., Muzaffar, M., & Javaid, M. A. (2016). School Environment and Political Awareness at Secondary Level: A Case Study of Pakistan, *Pakistan Journal of Social Sciences*, 36(2), 991-1000
- Closs, L., Mahat, M., &Imms, W. (2022). Learning environments' influence on students' learning experience in an Australian Faculty of Business and Economics. *Learning environments research*, 1-15.
- Dörnyei, Z., & Muir, C. (2019). Creating a motivating classroom environment. *Second handbook of English language teaching*, 719-736.
- Korir, D. K., & Kipkemboi, F. (2014). The impact of school environment and peer influences on students' academic performance in Vihiga County, Kenya. *International Journal of Humanities and Social Science*, 4(5).
- Krejcie, R.V., & Morgan, D.W. (1970). Determining samplesize for research activities. *Educational and psychological measurement*, 30(3), 607-610.
- Lateef, A. (2020). Relationship of personality types with psychological well-being and academic performance of university students in Punjab. (PhD Dissertation). Arid agriculture university Rawalpindi Pakistan.
- Magzamen, S., Mayer, A. P., Barr, S., Bohren, L., Dunbar, B., Manning, D., ...&Cross, J. E. (2017). A multidisciplinary research framework on green schools: Infrastructure, social environment, occupant health and performance. *JournalofSchool Health*, 87(5), 376-387
- Malik, R. H., & Rizvi, A. A. (2018). Effect of Classroom Learning Environment on Students' Academic Achievement in Mathematics at Secondary Level. *Bulletin of Education and research*, 40(2), 207-218
- Munir, M., Ali, M. S., Iqbal, A., Farid, M. F., & Siddique, M. (2021). Relationship between learning environment and performance of students at university level. *Humanities & Social Sciences Reviews*, 9(3), 877-884.

- Muzaffar, M. (2016). Educational Institutions and Political Awareness in Pakistan: A Case of Punjab, Unpublished Ph. D Dissertation, International Islamic University Islamabad, Pakistan
- Muzaffar, M., Hussain, B., Javaid, M. A., Khan, I. U., & Rahim, N. (2020). Political Awareness in Educational Policies of Pakistan: A Historical Review, *Journal of Political Studies*, *27*(1), 257-273
- Noreen, K., Khan, K. A., &Nehra, R. A. (2018). Students' perception of learning environment using Dundee ready education environment measure (dreem) inventory. *Pakistan Journal of Public Health*, 8(2), 112-116.
- Pekrun, R. (2014). *Emotions and learning* (Vol. 24). Geneva, Switzerland: International Academy of Education (IAE).
- Pavalache-Ilie, M., &Cocorada, S. (2014). Interactions of students' personality in the online learning environment. *Procedia-Social and Behavioral Sciences*, 128, 117-122
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, samplingissues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.
- Shoaib, M., &Hussain, K. G. (2022). Revisiting classroom environment and academic performance of the students in higher education institutions. *Pakistan Journal of Social Research*, 4(03), 969-986.
- Suleman, Q., &Hussain, I. (2014). Effects of classroom physical environment on the academic achievement scores of secondary school students in Kohat Division, Pakistan. *International Journal of Learning & Development*, 4(1), 71-82.
- Usman, Y. D., & Madudili, C. G. (2019). Evaluation of the Effect of Learning Environment on Students' Academic Performance in Nigeria. *Online Submission*.
- Uzelac, A., Gligoric, N., & Krco, S. (2015). A comprehensive study of parameters in physical environment that impact students' focus during lecture using Internet of Things. *Computers in Human Behavior*, 53, 427-434.
- Zada, S., Wang, Y., Zada, M., &Gul, F. (2021). Effect of mental health problems on academic performance among university students in Pakistan. *Int. J. Ment. Health Promot*, 23, 395-408.