



Effect of Classroom Environment on Learning Motivation of College Students

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ABSTRACT

The school environment plays a very critical role in defining motivation, interest, and academic success of students. In this paper, the relationship between learning motivation among college students and classroom environment will be discussed. Data on 250 students were gathered using questionnaires and interviews. The findings indicated that physical organization of the classroom, relationships between teacher and students, relationships between peers and between students and teachers as well as the instructional strategies are the factors which have great influence on learning motivation. The intrinsic and extrinsic motivation among the students would be more through the participation, positive and inclusive classroom environment leading to better performance and satisfaction. The schools should thus emphasize on the positive classroom environments to ensure the academic performance and good health of the students.

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Introduction

It is an important aspect where the success and sustenance of learning among students depends on motivation. It determines the style of learning activities, concentration and academic achievement by the learners. This motivation is directly brought about by the classroom environment i.e. physical organization, socialization, instructions and emotional climate in the classroom (Ryan and Deci, 2000). The school climate is positive and supportive thus it encourages curiosity, creativity and involvement as compared to the negative school climate which tends to lead to lack of engagement and anxiety and poor performance (Reeve, 2012). The classroom is an important motivating area of learning in the tertiary education where students are expected to encounter greater academic autonomy and self-regulation that can lead to or prevent the learning enthusiasm. The teachers can promote positive positive attitudes towards the students by encouraging them, involving them equally, giving positive feedback and conducting inclusive discussions (Wentzel, 2010). Similarly, a physical environment that is clean (proper lighting, space, and technology) will help to ease discomfort and distractors (Cheryan et al., 2014). According to Dornyei and Ushioda (2021), motivation is situational and dynamic in the learning scenario; that is, the classroom situations are constantly changing to drive the motivation of students to learn and their perception of success.

The modern day educational setting has been witnessing a growing need to determine the motivation within classrooms among college students. The transition between the secondary and the tertiary education level is linked with the added responsibility, self directed learning and exposure to the various learning environments in the classroom. The emotional involvement of the students and their endurance also depends on gestures and way of communication of the teachers, peer association, and classroom environment. As has been determined, students who attend classrooms with good conditions present superior academic results, sustainability, and self-improvement compared to those studying in rigorous or hostile environments (Kim and Schallert, 2020;

Fraser, 2012). Therefore, investigating the effect of the classrooms environment on learning motivation can help an educator to develop a more student centered and inclusive learning activity.

The major research objective is to study how various conditions of classroom environment such as physical, social and instructional environment affect the learning motivation of college students. Specifically, it attempts to examine the relationship between teacher support, peer conversation, classroom structure and intrinsic and extrinsic student motivation. It is also credible to the study that may help to make evidence-based recommendations that can be applied to enhance the classroom climates so that the academic performance can be improved. The importance of this study is the fact that it will be conducted in an increasing field of educational psychology and pedagogy since it will contribute to filling the gap between the variables of the environment and the motivational outcomes. This research can be very valuable to educators, administrators and policymakers in that it can take into account the most significant environmental predictors of motivation that they can in turn develop learning environments that facilitate interest, innovation and lifelong learning habits.

Literature Review

One of the key topics in the educational psychology field has concerned classroom environment and student motivation. The theory of Self-Determination (Deci and Ryan, 2000) provides a conceptual model that brings forth three essential needs of intrinsic motivation namely autonomy, competence, and relatedness. When such psychological needs are met in the classrooms, the learners are more engaged and self-directed in learning (Niemiec and Ryan, 2009). Research also reveals that supportive work environments will promote the continuance, positive moods, and strength (Skinner et al., 2008). The kind of classroom climate (teacher support, student involvement and cooperation) directly influences motivation to learn as pointed out by Fraser (2012) among students. Similarly, Patrick, Kaplan, and Ryan (2011) found out that, more motivated students were created in the more collaboration-oriented learning structure, grounded on mutual respect classes.

Classroom as a material aspect is also significant. Both Cheryan et al. (2014) and Barrett et al. (2019) found out that cognitive processing and concentration depend on light, temperature, color, and flexibility of the seats design of the classroom. When students study in comfortable and aesthetically interesting environs, they get motivated and have a better attention. The psychological and digital nature of the modern classes also contributes to the further expansion of this dynamic. Zhou and Hasegawa (2022) demonstrated that the technologies used in the classroom to make the interaction with students more like an interactive tool and real-time feedback positively influence the level of their satisfaction and motivation. Also, Wang et al. (2023) confirmed that inclusive and culturally responsive classrooms develop the feeling of emotional safety and belonging that are essential in the long-term motivation. The recent research (Dornyei and Ushioda, 2021; Reeve, 2012) suggests that the rise of self-efficacy and internal motivation should become evident in the classroom where peer collaboration and open communication are promoted. Kim and Schallert (2020) have also added that the growth in self-efficacy and internal motivation will presumably be witnessed in the classroom where connection through collaboration and open communication between the student and the classroom is supported. The classroom strategies, which empower the students by providing them with opportunities of learning through participation, problem solving through cooperation and respecting one another, produce more interested learners in a higher learning institution. Altogether, the 2000-2025 literature is quite uniform in its conclusions that classroom environment, including physical, emotive, and instructional components, is one of the factors that influence the degree of learning motivation and academic achievement.

Methodology

In this research, mixed-method research design was adopted to capture both quantitative and qualitative research methodology to enable it to conduct a research on both statistical tendencies and experience of students. The sample included students (younger than 24) of the 3 government institutions in Rawalpindi, Pakistan undertaking various degrees. The stratified random sampling strategy made it possible to be represented in gender, academic fields and socioeconomic status. The final sample was of 250 participants.

Two standardized measures have been used, i.e. (1) the Motivated Strategies of Learning Questionnaire (MSLQ) (Pintrich et al., 1993) to measure the level of intrinsic and extrinsic motivation; (2) the Classroom Environment Scale (CES) (Fraser, 2012) to measure the perception of classroom support and peer cooperation as well as the physical space. It was on a five-point Likert scale of strongly disagree to strongly agree. Besides, semi-structured interviews were conducted with 20 students to get to know more about their classroom experiences, emotional climate, and behavior of their teachers. The quantitative data was analyzed with SPSS version 26. They employed descriptive statistics, Pearson correlation and multi regression analysis in finding out what a relationship between classroom variables and student motivation consists. Qualitative data were analyzed with the help of thematic analysis, which employed Braun and Clarke (2019), and indicated the existence of the most common themes: the encouragement of teachers, peer support, and environmental comfort (high internal consistency). The ethical considerations were followed closely and they comprised an informed consent, anonymity and voluntary participation. Data triangulation increased validity of survey and interview data in which the patterns of result were confirmed. The effect of the classroom setting on motivation was the other factor that was used to isolate the effect of the control variables (age, gender, and academic stream). This methodology alignment is in line with Creswell and Poth (2018), and Johnson and Onwuegbuzie (2021), who advocate using mixed-method research as the most suitable one in the learning process of the complex educational behavior. Overall, such a

powerful design would have been enough to provide a balanced image that could reflect not only measurable correlations but also emotional impressions on how classroom settings can help to motivate students and engage them.

Results and Discussion

The statistical data revealed that the facilitating learning environments in the classroom and the motivation to learn among the students had a high positive correlation ($r = 0.71$, $p < 0.01$). The regression analysis revealed that the most significant predictors of motivation are support of the teacher ($b = 0.45$), and collaboration with peers ($b = 0.33$). The classroom design ($b = 0.27$) and technological resources ($b = 0.21$) had also a significant but less significant effect. Students that believed their teachers were easy to communicate with, supportive and fair, said that they were more motivated and happy with their learning process.

Table 1: Relationship Between Classroom Environment Dimensions and Learning Motivation

Physical Environment	Seating arrangement, lighting, ventilation, classroom design, use of technology	Enhances attention, concentration, and comfort; increases students' focus and energy levels; reduces fatigue and stress	Cheryan et al. (2014); Barrett et al. (2019); Fraser (2012)
Social Environment	Peer collaboration, teacher-student relationship, classroom climate, inclusivity	Promotes emotional safety, belonging, and positive attitudes toward learning; encourages teamwork and participation	Reeve (2012); Kim & Schallert (2020); Wang et al. (2023)
Instructional Environment	Teaching strategies, feedback, autonomy support, teacher enthusiasm	Strengthens intrinsic and extrinsic motivation; develops self-efficacy and persistence; fosters curiosity and problem-solving skills	Deci & Ryan (2000); Dörnyei & Ushioda (2021); Patrick et al. (2011)

Qualitative data gave more details. A lot of interviewees said that the enthusiasm and the fairness of teachers created the feeling of belonging and desire to learn. Students stressed that participatory learning exercise, group discussions, and real-life examples made lessons to be more interesting. They also reported that comfy seating, brightness, and the availability of multimedia tools were able to keep the concentration. Quite the contrary, too big classes and strict pedagogical practices decreased motivation and concentration. These results are similar to Patrick et al. (2011), Kim, and Schallert (2020), and Cheryan et al. (2014), who have also indicated the importance of physical, social, and instructional dimensions of classroom motivation. A clean, bright and ventilated classroom is comfortable and energizing physically. Mutual respect and peer working together bring emotional safety and connectedness socially. Mastery and autonomy are encouraged by instructional means of supportive feedback, teacher enthusiasm, and active learning. These results are consistent with the Self-Determination Theory (Deci and Ryan, 2000) that demonstrates that intrinsic motivation is boosted by satisfaction of the autonomy, competence and relatedness (need) factors. In addition, inclusive teaching as emphasized by Wang et al. (2023) builds equity and sense of belonging, especially to marginalized students, whereas technology-enhanced learning (Zhou and Hasegawa, 2022) further enhances the engagement. Comprehensively, the findings indicate that an effective, emotionally supportive and inclusive classroom setting achieves remarkable advancement in academic performance and psychological growth among the college students.

Conclusion

The results of the current paper confirm the fact that the classroom environment is a strong predictor of learning motivation in college students, which has a direct impact on their engagement, participation, and academic performance. The environment which is multidimensional i.e. physical, social, and instructional in nature is a catalyst that increases or decreases the intrinsic and extrinsic motivation of the students. Once the classroom is designed to support the development of interaction, inclusiveness, and creativity, students will feel more connected, confident, and willing to learn. On the other hand, inflexible, crowded, or insensitive atmosphere may dishearten inquisitiveness and lower self-efficacy, which results in lack of academic engagement. According to the results, it is evident that teacher support, peer collaboration and aesthetically pleasing design of the classroom together creates a motivational climate that is favorable to learning.

Moreover, the conclusion describes the point that motivation is not some inner psychological characteristic but a situational phenomenon that is formed under the influence of the environmental signals and the interactions with others. Self-Determination Theory (Deci and Ryan, 2000) and Constructivist Learning Theory (Vygotsky, 1978; Dörnyei and Ushioda, 2021) are theories that focus on the idea that students need to feel autonomous, competent, and related to learn effectively. These basic needs are met where there is a positive classroom environment. Indicatively, when teachers make meaningful feedback to students, the latter acquire a feeling of competence; when students are given a choice when doing learning activities, autonomy increases; when mutual respect and empathy are enjoyed within the classroom, students are said to have the sense of relatedness. A combination of

these factors creates highly motivated learners who are able to maintain attention, decline academic difficulties and attain critical thinking. The transformative role of teachers is also listed in the conclusion. The role of instructors is not just to transfer information but to create the classroom atmosphere. Their emotional and cognitive climates, as established by their attitudes, communication styles and classroom management strategies directly influence motivation. A friendly, welcoming, and impartial teacher will arouse curiosity and perseverance in students (Reeve, 2012; Kim and Schallert, 2020). Conversely, punitive, drilling or dictatorial methods of teaching are likely to bring about compliance through fear instead of engagement. Hence, classroom management strategies, emotional intelligence, and culturally responsive pedagogy should be some of the main aspects of teacher professional development. The policies of an institution, as Wang et al. (2023) and Patrick et al. (2011) believe, are also vital in maintaining motivational climates. Colleges ought to ensure that classrooms are well equipped, well ventilated and are technologically integrated to accommodate the changing needs of the students in the digital generation. Interactive learning technologies, including smart boards, collaborative applications, and online simulations, can be used to improve interactions and autonomy provided that they are used properly (Zhou and Hasegawa, 2022). Moreover, it is possible to devise smaller classes, which will improve the interaction between students and teachers and provide them with more individual feedback. Inclusive learning environments in which students with varied learning styles, cultural heritages and special needs can learn effectively should also be a point of policy reforms. The results of the study are relevant to the field of educational psychology because they empirically associate environmental quality with motivational constructs and establish inclusiveness as a key factor in promoting educational equity and motivation in higher learning institutions around the world (UNESCO, 2023). Although the aspects of physical and structural features of the classroom have been mainly analyzed by previous researchers (Fraser, 2012; Cheryan et al., 2014; Barrett et al., 2019), this study takes it a step further and incorporates emotional, social, and pedagogical features in a cohesive structure. The combination of quantitative and qualitative findings will offer a more detailed view on how environmental characteristics influence motivation not only in terms of comfort or convenience. In a practical sense, the study indicates that emotional security, recognition, and enthusiasm by the teachers can be planned to help foster learning motivations. Collaborative learning, active discussion forums and context-based learning activities are some of the strategies that can be applied by teachers to make classrooms dynamic and participatory. Equally, schools can restructure their classrooms to encourage flexibility and engagement-seating can be in circles or groups, instead of straight rows, natural lighting should be introduced and access to online materials is made. Although such reforms are beneficial towards academic learning, they also foster emotional well-being, which is directly related to motivation (Skinner et al., 2008; Dornyei and Ushioda, 2021). In spite of its considerable advantages, this study does not overlook some limitations. The sample was representative, but it was only limited to three institutions, which could restrict the generalizability. Future research may broaden the scope by taking the sample to encompass private and international colleges with an analysis of cross cultural differences in classroom motivation. Longitudinal studies would also aid in establishing the impact of the long-term environmental modification in long-term motivation and academic endurance. Also, taking the opinion of teachers would be valuable in offering a broad perspective of the classroom situation on both sides of the learning process in promoting motivation in college students. Finally, the research reiterates that a good classroom atmosphere full of emotional warmth, intellectual stimulation, and social support is invaluable in motivating college learners. The classroom is not to be seen as a physical space and instead it is a living ecosystem of interaction where cognitive, emotional, social energies come together to produce meaningful learning experiences. The good classroom atmosphere fosters not only academic achievement, but also self-development, compassion, and life-long curiosity- the same attributes that 21 st century students should possess. By deliberately designing the classrooms in ways that are inspirational, engaging, and empowering, teachers and schools can make sure that motivation is not a one-time feeling but a lasting factor that leads to academic and personal achievement. As Dornyei and Ushioda (2021) point out, motivation is the heartbeat of education. Thus, to make this heartbeat louder, the redesign of classrooms as the places of happiness, intimacy, and development should take place- where all students will feel competent, appreciated, and encouraged to learn.

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