

Impact of Students' Perceptions on Classroom Learning Environment at University Level

Hukum Dad*, Shazia Zamir**, *Nazir Haider Shah****

Abstract

The focal point of this research was to measure the impact of student perception on the classroom learning environment. The nature of this study was descriptive and collected the data by survey method. Sixteen male and four female doctoral students were selected from the International Islamic University of Islamabad. A standardized questionnaire "WIHIC" developed by Dorman in 2003 was used to collect data which have seven subscales. Each subscale was analyzed using an independent sample t-test. There were no statistically significant differences in student cohesion, teacher support, survey, task orientation, collaboration, and equity. The participation scale was not statistically significant in terms of gender. Teachers are advised to create a collaborative learning atmosphere and use discussion methods in the classroom to engage students in classroom learning activities.

Key words: *Student's perception, classroom learning environment*

Introduction

The whole activities that are occurring in the university, classroom, faculty, department, and surroundings are known as a learning environment. Learning environment involved different infrastructure, circumstances and society through learner can understand. This term includes the idea of a class or school and its control philosophy as well as uniqueness, together with in what way students cooperate with and take care of one another, as well as how teachers may systematize learning situations to makes studying easier. In a learning environment many elements have a dominant placement, which are school policies and governance structures as well, so by the help of these factors qualities and characteristics of a learning environment are determined.

The teaching process cannot be carried out in a vacuum. The formal education environment is generated by interactions between classroom members. In the classroom environment, the fundamentals of the teaching procedure contain content, teachers, students, learning processes and studying situations. Learning situations mean the conditions of knowledge and every classroom has exclusive teaching settings. Arends (2007) stated that categories imply the same in distance but differ in terms of ways and processes.

There are two main components of the classroom environment i. e physical and human components. The physical components include all physical things present in the classroom, such as blackboards, furniture, lighting, projectors, books, computers, etc., while human components include individuals like teachers and students

*Associate Professor/Head of Department, National University of Modern Languages, Islamabad

**Assistant Professor, Department of Education, National University of Modern Languages, Islamabad

****Assistant Professor, Department of Education, Mohi-Ud-Din Islamic University, Nerian Sharif AJ&K*

. It usually involves the nature of the communication between the teacher and the student. This interaction creates a specific environment that can be called a learning condition or environment and also known as the psychosocial classroom environment. Many scholars believe that the academic performance of students differs according to the settings of study (Malik and Rizvi, 2018). The most powerful beliefs of classroom environment exploration are to study the connection between the classroom setting and students' intellectual and emotional consequences. The various characteristics of a learning environment influence learning outcomes (Fraser 1999 & Henderson, 2000).

The classroom environment includes classrooms, computers, laboratory instruments, and teaching methods. The term learning environment is associated with psychology, sociology and education.

The background of learning and its impact on students' achievements in cognitive and emotional areas. The environmental concept applicable to the educational environment indicates the climate of a specific environment. Research on the classroom environment focuses on its socio-psychological dimension, focusing on the environmental aspects of the origin or outcome of human behavior (Boy & Pine, 1988).

According to Grubaugh and Houston classroom organizations may play a vital role in learner regulation. When a learner walks and finds that there is a mess of things on the teacher's desk, and the items scattered on the floor into the classroom, the learners can think that the teacher is not paying attention to details. Students may start to study other deficiencies that teachers may have with this mentality. The student is likely to improve this attitude as well if the teacher does not indicate that they care about the organization (Hannah, 2013).

However, teachers can take advantage of this knowledge by building their classrooms in an organized way. They can place rules on the wall so that each learner knows accurately what they expect of them and the circumstances they accept not to pursue them. They can save resources in a single location that students can easily access. They can find particular files at work or achieve lost jobs. These will help the organization between students because students will now have a model and then build belongings in persons' experiences. Besides, it will show students the details of the teacher's concern, and it is likely to capture the student's attempts to escape the violation of the rules (Hannah, 2013).

Objective

1. To find out the effect of male and female perception of students on the classroom learning environment.

Research Hypotheses

H01: There is no significant difference in the average score of cohesion between male and female students.

H02: There is no significant difference in the average scores of male and female students in terms of teacher support.

H03: The difference in the average scores of male and female students in the Involvement scale is not significant.

H04: There is no significant difference in the average scores of the investigation between male and female students.

H05: There is no significant difference in the average score of the task orientation for male and female students.

H06: There is no significant difference in the average cooperation score between male and female students.

H07: There is no significant difference in the average scores of equity between male and female students.

Literature Review

From an educator's perspective, the learning environment is contemplated as a feature of education. The purpose of the learning environment is to increase student learning consequences (Husain, Mustapha, Malik, & Mokhtar, 2014). Similarly, the learner can clout their learning environment. By Bandura (1977) the concept of exchanged communication between men described by social learning theory. Pupils are found to be familiar with their learning environment in the classroom exercises. The learning environment may let teachers know how to arrange their teaching process. Advancement may be made based on the evaluation and assessment of the learning environment (Çakir, 2011).

Various vital elements of the learning environment, involving student intimacy, teacher support, participation, collaboration, and equality have been quantified utilizing "What is Happening in This Class" by Fraser and colleagues (1995) measuring. When there is an unparalleled mapping between teacher expectations and student achievement, the gap between teacher and student relationships is found (Davis, Gabelman & Wingfield, 2011). When the teacher does not provide a method of warmth, the student will be at risk. This access will enhance the motivation and achievement of students when used in a learning environment (Hunt, 2003). Through cooperation, the learning environment can be an interesting place to acquire awareness. However, if the student's attention is disjointed from the teacher's attention, the student will not be able to perform and there is a tendency to fail (Brackett, Reyes, Rivers, Elbertson, & Salovey, 2011). Also, prejudice between students can lead to inattention in the classroom teaching process. Therefore, an effective measurement of the learning environment is one of the reasons for this study.

According to Dorman (2002), a review of classroom environment research described at least 10 classroom environmental research areas like learning styles and assessment methods. The study based on the learning environment examines educational attainment and other learning outcomes in the cognitive and emotional areas to assemble a broad consideration of the variables involved (Barak, 2002). Research into the classroom learning environment puts efforts to determine which environmental features contribute to learning and why these factors manipulate other factors. According to Lewin (1936), behavior and experience are interactive functions between people and the environment. His mathematical method $B = f(P, E)$ specifies that behavior (B) reveals the environment (E) and the person (P) in the environment. It also highlighted the need for new research strategies in which behavior is measured a purpose of the individual and the environment. Past research has shown that there is a correlation between environmental types and the nature of student teaching (Fraser, 1999).

Learning outcomes of students

According to Brown and Campione (1994) at the classroom and school level, learning emerges to be strengthened by common customs that emphasize understanding and for learning purposes, students and teachers are freely allowed to make mistakes. Distinctive schools and classrooms indicate various customs and beliefs. These specifications may hinder students' willingness to ask questions without understanding the materials or exploring new materials and assumptions. Students always can test their learning activities by themselves. The purpose of this being that students initially can learn about, in this case, source criticism without teaching the teachable agent the wrong things (Khine and Fisher, 2003).

The student's learning outcomes and teaching process depend on the learning activities involved. As a result of all learning activities is learning outputs; therefore, these activities needed for very careful design and execution of the classroom. (Kim, Fisher, & Fraser, 2000).

According to Gronlund (1970), the learning processes and learning outcomes are associated with each other. He does not believe that the teaching process itself is the teaching process, but that the educational learning process is the goal of achieving the goal. Different teaching methods and supportive material used in A.V. The consideration of teaching as a tool for achieving ideal learning outcomes. Those Learning outcomes also contribute to the teaching process as it provides guidance for teachers to choose different methods and materials related to the teaching used in a classroom. If the learning outcomes are properly communicated, the student's learning activities can be enhanced both in and out of the school. The study "The Impact of Student Perception on the University's Classroom Learning Environment" also assesses how teachers can create a healthy environment for improvement in learning outcomes.

Different scales of classroom learning environment

The utilization of systematic observation and investigation questions is a common method of learning environmental research. Conducting prearranged or formless interviews with learners and instructors is another useful way to understand their perception of the classroom. But each of these techniques tends to create a major problem in data collection and its analysis (Tessmer & Harris, 1992). The questionnaire about learning environment sounds to be a time-consuming and cost-effective issue for students and teachers. Several studies have been documented about the development of classroom environmental research tools and their applications. Fraser (1999) reports using tools to assess students' observations of the classroom environment. These include the Personalized Classroom Environment Questionnaire (PCEQ), the Scientific Laboratory Environmental Checklist (SLEI), the Teacher Interaction Questionnaire (QTI), and the Constructivist Learning Environment Survey (CLES). All of these tools are intended to measure the precise functions and distinctive extents of the classroom environment.

While the learning environment research tools described above help to better understand the psychosocial atmosphere of the classroom, some researchers believe that a single tool is needed, including some of the best aspects of earlier built tools. The foundation on past research, Fraser, Fisher, and McRobbie (1996) proposed a new learning environment tool known as "What is Happening in This Class?" (WIHIC).

Related Studies

Dorman (2002) describes an article entitled "Classroom Environmental Research: Progress and Possibilities." He used ANOVA for data analysis. The results showed that students' cohesiveness, teacher support, and task orientation were not found to be statistically significant. In another study Dorman (2001) found an important relationship between the "What happened in this Class" questionnaire and academic achievement (Aldridge & Fraser, 2000). He stated a significant positive relationship among academic achievement and teacher support, participation, investigation, task orientation and fairness.

Hunus and Fraser (1997) elaborate on the chemistry learning environment at Brunei Darussalam Middle School. They used a modified version of WIHIC for 644 chemistry students. In their study, a reliability factor of 0.75 to 0.89 was found. Simple and multi-relevant analysis shows a significant correlation between environmental size and student attitude toward chemistry. Using individual students as the unit of analysis, it is found that the cohesiveness of the students, the teacher support and the task vector table are positively related to the attitude of the students. They further recommended that students understand the active learning environment in the chemistry theory class in terms of participation.

Methods and procedures

The nature of this study was descriptive and collected the data by survey method was used. The study was intended to examine students' perceptions of the classroom learning environment in Pakistan. Population of the study was compromised on only doctoral students of the International Islamic University of Islamabad, Pakistan. There were doctoral students in the fall semester of 2018. All students were selected by using universal sampling techniques. For testing of test the impact of student perception on the classroom learning environment, seven criteria of "What is happening in this class?" were chosen. WIHIC is a mature and widely used classroom environment research questionnaire (Aldridge & Fraser, 2000; Dorman, 2003). The seven WIHIC scales include: student cohesion, teacher support, participation, survey, task orientation, collaboration and equity. A five-point Likert response format (never = 1, rarely = 2, sometimes = 3, usually = 4, always = 5). The researchers visited the sampling university and personally collected data from the respondents. The obtained data was analyzed by using Social Science Statistical Software Package (SPSS) version 20. In this study, the average and standard deviation of students' perceptions of the classroom environment were calculated. To study the classroom learning environment an independent sample t-test was used. To check each scale a two-tailed t-test was performed

Table 1

Scales and the Respective Items in the WIHIC

Sr.No	Scale	Items
1.	Student cohesiveness	1,2,3,4,5,6,7,8
2.	Teacher support	9,10,11,12,13,14,15,16
3.	Investigation	17,18,19,20,21,22,23,24
4.	Involvement	25,26,27,28,29,30,31,32
5.	Task orientation	33,34,35,36,37,38,39,40
6.	Cooperation	41,42,43,44,45,46,47,48
7.	Equity	49,50,51,52,53,54,55,56

This table 1 shows number of items comprised by WIHIC questionnaire. Every scale has 8 number of items in it whereas total number of items were 56.

Results

Table 2

Student cohesiveness scale

Gender	N	Mean	SD	Df	t-value	Sig
Male	16	8.00	1.673	18	1.180	.271
Female	04	7.25	.957			

In this table an independent sample t-test was performed to link student cohesion scores among boys and girls. In response to this, a hypothesis was put forward: "The average scores of the boy cohesiveness table for boys and girls are not significantly different." There is no significant difference because $t(18) = 1.180$ and $p = .271 > 0.05$, so the null hypothesis fail to rejected.

Table 3

Teacher support scale

Gender	N	Mean	SD	df	t-value	Sig
Male	16	7.63	1.408	18	.974	.343
Female	04	6.75	2.363			

Table 3 shows the results regarding comparison of the teacher support scale scores. To this end, the hypothesis was described as "the average score of the male and female student teacher support scale is not significantly different." The score was 974, $p = .343 > 0.05$, and there was no significant difference, so the null hypothesis was accepted.

Table 4

Involvement scale

Gender	N	Mean	SD	df	t-value	Sig
Male	16	15.81	2.040	18	3.349	.004
Female	04	12.25	0.957			

An independent sample t-test was performed to compare the participation scale scores of male and female students. In response to this, a hypothesis was put forward: "The average scores of male and female students involved are not significantly different." Male ($M = 15.818.00$, $SD = 2.0401.673$) and female ($M = 12.25$, $SD = .957$), $t(18) = 3.349$, $p = .004 < 0.05$ scores are significantly different, so the null hypothesis is rejected.

Table 5
Investigation scale

Gender	N	Mean	SD	df	t-value	Sig
Male	16	7.38	1.088	18	1.392	.181
Female	04	6.50	1.291			

To compare the scores of the male and female student questionnaires an independent sample t-test was performed. In this regard, one hypothesis is moving forward: "The average scores of the survey scales for male and female students are not significantly different". The scores were not significantly different, so the null hypothesis was accepted.

Table 6

Task orientation scale

Gender	N	Mean	SD	df	t-value	Sig
Male	16	14.19	2.228	18	2.004	.060
Female	04	11.75	1.893			

To compare the task scores of male and female students an independent sample t-test was performed. In this regard, the hypothesis is based on the supposition that "the average score of the vector table for male and female students is not significantly different." Males (M = 14.19, SD = 2.228) and women (M = 11.75, SD = 1.893), $t(18) = 2.004$, $p = .060 > 0.05$ had no significant differences in scores, and therefore accepted the null hypothesis.

Table 7

Cooperation scale

Gender	N	Mean	SD	df	t-value	Sig
Male	16	7.31	1.352	18	-0.250	.08
Female	04	7.50	1.291			

For relating the score of student an independent sample t- test was performed in cooperation scale. In response, a hypothesis was put forward that "the average score of cooperation between male and female students is not significantly different". Males (M = 7.31, SD = 1.352) and females (M = 7.50, SD = 1.291), $t(18) = -.250$, $p = .0806 > 0.05$ scores were not significantly different, so the null hypothesis was accepted.

Table 8

Equity scale

Gender	N	Mean	SD	df	t-value	Sig
Male	16	7.81	1.223	18	.398	.65
Female	04	7.50	2.082			

For associating the score among gender an independent sample t- test was performed. To this end, a hypothesis was put forward: "The average scores of fair scores for male and female students are not significantly different". Male ($M = 7.81$, $SD = 1.223$) and female ($M = 7.50$, $SD = 2.082$), $t(18) = .398$, $p = .695 > 0.05$ scores were not significantly different, so the null hypothesis was accepted.

Discussion

Dorman (2002) found the results in his study that students' cohesiveness, teacher support, and task orientation were not found to be statistically significant. These findings support the research being discussed. On the contrary, surveys, cooperation and fairness are considered statistically inconsistent with the outcome of the discussions. Dorman (2001) and (Aldridge & Fraser, 2000) reported in their studies that there is a significant positive correlation between academic achievement and teacher support, participation, investigation, task orientation and fairness. The results of this study are consistent with Dorman's previous findings. The results of Hunus and Fraser (1997) are in contrast to the study being discussed, which indicates that there is no statistically significant difference in the perceived average scores of male and female students in terms of student cohesion, teacher support, and task orientation.

Conclusion

1. The average score difference between male and female students' cohesiveness table is not significant.
2. The difference in the average scores of the male and female student support scales was not significant.
3. There was no significant difference in the average scores of the survey scales for male and female students.
4. There is no significant difference in the average score of the table.
5. The average score for the scale of cooperation between male and female students is not significant.
6. There was no significant difference in the average score and acceptance for male and female students in the same proportion.
7. Although the assumption that the average scores of male and female student participation scales are not significantly different is rejected.

Recommendations

- ◆ Teachers are advised to establish a collaborative learning environment in the classroom so that students can participate in classroom learning activities.
- ◆ Discussion methods can be used to engage students in a classroom learning environment.
- ◆ The teacher may modify the learning environment to achieve their objectives.
- ◆ This study was focused on doctoral students but it may be done on other education levels as well.

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