

Student's perception: Responsive Environmental Assessment for Classroom Teaching (REACT) at undergraduate Level

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Abstract

This research study is conducted to evaluate the perception of the students about their learning environment in this class room, as well as the opportunities to build social skills provided by the class room environment. The study is conducted on the undergraduate university students and the data is collected by the 100 participants by using sampling techniques. Quantitative research design is used for this research study and data is analyzed by using SPSS software. The questionnaire is divided in different sub groups to analyze the perception of the students. The results show highest perception for the Total Instructional Presentation (TIP) with 24% and lowest perception for Total Formative Feedback with 12%. Means scores of the two different genders were compares and the results shows that there is no significant different between the perception of male and female for classroom environment.

Keywords: classroom environment, learning environment, social skills, students' perception

1. Introduction

In recent years, the social, psychological, and behavioral features of classrooms that foster the success of school students have been identified by researchers and educational policymakers. Their interest was caused by evidence that the activity of the students in education can partly be attributed to the characteristics of their education context (National Research Council and the Institute of Medicine, 2004). The quality of the classroom is one of the most important factors in student results (Chetty et al, 2014).

Many of the instruments include characteristics related to social and educational interaction between students and the teacher. How the environment of the classroom is measured differ by assessment; (Pianta & Hamre, 2009). In addition, research has reported specific teacher behaviors, and class environmental characteristics that can help to promote positive academic and behavioral results of the students, providing additional guidance for broad class assessments (Hattie, 2013).

Students who are not only attentive but also engaging in their work in the classroom are involved both in cognition and action. Students achieve much greater academic achievement if they are not only on track and engaged but also aim for information, set personal learning goals, and manage their effort to achieve these goals (Pintrich, 2003). The research on the academic involvement of students describes the classroom skills that promote school success in addition to cognitive and intellectual skills. Students

working in academics demonstrate high levels of working behavior, such as completing tasks, complying with requests from the teacher, working independently, seeking assistance, volunteering during instruction to answer questions (Liaupsin et al, 2006).

Environmental support refers to the use of tools, social and emotions to help students meet environmental problems (Zhang et al, 2009). In support of the environment, two features are of particular importance. The first is the support of motivations, teacher support, and support for the motivation of the students in the classroom (Sansone & Harackiewicz, 2000), self-sufficiency, development of an interest (Hidi & Renninger, 2006). (Bandura, 1977). In sum, the classroom environment reflects the background of students and their interests and provides the autonomy needed to express themselves and their interests.

Secondly, supporting partnerships and relationships. This sub-dimension covers relationships and interactions between teachers and students (Roorda et al, 2011). For example, the teacher reacts emotionally, shows concern for the wellbeing of students, and shows concern for individual students. Moreover, positive reinforcement, instructional presentation, and goal setting provide more confidence to students. But peer relations are just as critical students demonstrate to each other mutual positive regard, teamwork, and cooperation. (Ruzek et al., 2016).

Several instruments are designed to evaluate students' environmental ratings as are the various observational measures (Kurien, & Foley, 2010). The response environmental assessment for teaching in classroom is one of the broader interventions for classroom education (REACT) (Theodore & Colleagues, 2015). It evaluates different aspects of the classroom. The research comprises six subscales that are unique to class events: educational presentations, differential education, educational input, guidance, and the visibility scale of the student, which is of particular interest in this study.

1.1 Statement of the problem

One of the major factors influencing student learning is the classroom environment. As well as learning better when students consider a safe and hospitable learning environment (Dorman & Fraser, 2006). A supportive atmosphere is one in which different students are motivated to respond to challenges, and to ask quires (Bucholz & Sheffeler, 2009). This atmosphere offers related material, delivery of learning goals, outcomes of the learning and social skills development opportunities, and strategies to help students outshine (Weimer, 2009).

Furthermore, building a supportive atmosphere has a strong ripple effect that helps to improve learning. Emotions have a major effect on learning, according to a lot of studies. Stress, for example, harms cognitive performance. As a result, this study aims to determine whether the classroom environment offers opportunities for students to develop social skills as well as students' perceptions of the learning environment at the undergraduate level. Prior research findings mostly centered on learning processes, and the impact of disruptive actions far outweigh the impact of positive events (Baumeister & Vohs, 2001). While this study argued that offering positive reinforcement, instructional presentation, formative feedback, and goal setting will help students avoid getting caught in a negative spiral. In this regard, the literature is inconsistent in supporting the claim that REAT has a significant impact on each field of assessment classroom teaching.

1.2 Objectives of the study

The objectives of this study are

1. To assess the classroom environment provides the opportunity to build social skills in students.
2. To evaluate students' perception of the learning environment at the undergraduate level.

2. Literature review

One of the most important factors affecting students' results is the standard of the institution environment (Chetty, Friedman, & Rockoffen, 2014). However, many of the instruments include characteristics that contribute to social and educational experiences between the teacher and the students. The classroom atmosphere is different by evaluation; (Pianta & Hamre, 2009). The research has established unique teacher behavior and class environment characteristics that may help promote positive results of education and behavior between students to give additional guidelines for broad evaluations of classroom environments (Hattie,2013).

Teachers use classroom characteristics that can be changed to help students succeed, so it seems fair that they can gather and use data to improve classroom characteristics. Indeed, according to a recent analysis of the literature, there is a need to establish brief, accurate, and reliable classroom measures for teachers to use in guiding and evaluating practice (Gettinger et al., 2011). According to Gettinger et al., (2011), easy-to-use, accurate interventions will enable teachers to determine the degree to which their activities and teaching practices were successful in helping students achieve social and academic goals.

2.1 Student perception of the classroom environment

The theory of evolution another way to measure the classroom environment is by student experiences. Students' impressions of different aspects of the classroom environment are linked to their commitment, self-efficacy, ability to learn, and achievement of the students in academics as well as in co-curricular activities, according to research (Fauth, & Büttner, 2014). The data of student's perception can be useful for evaluating the classroom environment because those ratings provide valuable insight into how students interpret instruction and other classroom experiences (Wang & Holcombe, 2010). Students' perceptions of the classroom setting may vary from teachers' perceptions, as students and teachers may have opposing viewpoints on certain topics.

Although direct methods which is used for the classroom observation can be useful for determining the extent to which specific attitudes and the behaviors of the teachers are present at any given time (Pianta et al, 2009), student ratings of the classroom environment can provide meaningful and unique insight into the student experience (Wang et al, 2010). Furthermore, classroom interactions of students have high predictive validity for a range of social and outcomes of academics (Burnett, 2002). Students' impressions of the classroom setting can affect their commitment, self-efficacy, ability to learn, and achievement of the students in their academics (Fauth, et al, 2014).

The experiences of students in the classroom are relatively easy to collect, and they are linked to significant social and academic outcomes (Fraser, 1998; Lam et al). Aside from their predictive value, student expectations provide valuable insight into how students view the classroom, which may vary from how an outside observer or instructor sees it.

2.2 As a tool for classroom evaluation, students' perceptions are included

Efficient assessments of the classroom setting are based on extensive evidence for the above teaching behaviors. As a result, teachers receive performance input through a range of approaches and sources (for example, student work, instructional coaches, principals, and school psychologists). (Gregory, Allen, et al, 2014) There is evidence for the efficacy of feedback provided by students, observations by the externals, and more subjective coaching experiences. However, it might be more reasonable to think about positive performance feedback in broader terms, regardless of the approach used. Consider the

related data to the classroom teachers, the duration of the extent to which the teachers are engaged in the process of getting feedback (Desimone, 2009; Garet et al., 2010; Guskey, 2002). Although direct classroom observation is useful for determining the extent to which teaching behaviors are present at any given time (Pianta & Hamre, 2009), student perception of the classroom atmosphere can provide a meaningful and unique perspective into the student experience (Wang et al, 2010).

Additionally, classroom interactions have high predictive validity for a range of social and academic outcomes (Burnett, 2002; Dorman, 2002; Patrick, Ryan, & Kaplan, 2007). Fauth, Decristan, Rieser, Klieme, & Büttner (2014) found that students' perceptions of the classroom environment affect their involvement, self-esteem, ability to learn, and achievement in academics. In comparison to other sources of knowledge, such as teacher and principal impressions, student assessments of the environment of the classroom may have higher predictive validity (Bernaus & Gardner, 2008). As a result, research backs up the idea that student expectations are a useful, easily accessible source of data for improving the environment of the classroom.

2.3 Teacher-student relationship

The teacher-student relationship is the most critical in the university setting, and it should be highly effective, democratic, and supportive. Students' sense of well-being and satisfaction with the relationship is critical for the development of positive identities (Chhuon & Wallace, 2014). According to (Rich & Schachter 2012), 'teacher caring, teachers as a role model that nurtures the whole student rather than just academic learning.' Instead of focusing solely on teaching, teachers should engage in positive interaction and express an interest in learning about their students' lives and plans.

According to the American Psychological Association (2002), teachers can improve adolescents' moral growth and think by using teaching approaches that integrate democratic dialogue, promote experimentation, encourage students to express themselves, and persuade them to face challenges and resolve disputes in a pleasant atmosphere. Cooper (2014) added that teachers should choose activities that encourage students to consider relating their ideas and values to their classroom experiences, and Wallace, Ye, and Chhuon (2012) discovered that when students believe teachers are only there to teach mechanically, without connecting to students' needs and desires, they participate.

2.4 Students' engagement in the classroom at the undergrad level

Student involvement is a comprehensive term used to describe behavioral, cognitive, and emotional characteristics associated with being deeply engaged in an activity (Skinner, 2016; Wigfield et al., 2015). Researchers have described student participation in a variety of ways. The bulk of the study, however, focuses on two critical aspects of student participation. To begin, not all levels of student engagement are linked to positive student outcomes. As a result, distinguishing between positive and negative states of engagement among students is critical (Skinner, 2016). Positive student participation (such as listening carefully, questioning, supporting the teacher without prompting, or taking initiative) is regarded as a vital requirement for students' success in university and beyond (Abbott-Chapman et al., 2014).

Second, when it comes to student participation in the classroom, there are visible and hidden elements that can be differentiated based on how engagement is assessed. The majority of the related literature uses self-reports to assess student participation, which allows researchers to assess students' cognitive perceptions of their involvement. In other words, they tell us how they evaluate their class participation (behaviorally, cognitively, and/or emotionally; Van Uden et al., 2014). Students' classroom engagement can be thought of as a three-step method in which educational practitioners must figure out (a) what modules of environment of the classroom enhance student outcomes, (b) how to assess those modules, and (c) how to use those assessments to improve the status. Currently, there is much more research on how to use classroom-based data to make instructional improvements than there is on how to identify and assess successful teaching (Garet et al., 2010).

2.5 Components of the classroom teaching environment

A positive school environment is a type of social relationship in the classroom as well as a way for teachers and students to communicate. Students ask questions and seek answers about something that affects them in a supportive classroom setting, which is calm, understanding, and tolerant. According to studies, a positive social and emotional environment in the classroom includes a comfortable and spontaneous atmosphere, appreciation for each student's abilities and personality traits, and classroom activities that enable students to fulfill their learning interests and curiosity (Stojakovi, 2012).

Four aspects of the classroom environment are stated by V. Andrilovi and M. Udina (1985):

- Interaction between teachers and students
- social environment
- The climate that is both competitive and collaborative

(Stojakovi, 2002) calls this the emotional environment.

Positive reinforcement and instructional presentation are the main components of an effective classroom. Formative feedback also has a significant impact on student's performance at the undergrad level. One of the easily comprehend is that for the students to progress, they must learn to control the quality of their work while it is being produced.

3. Methodology

3.1 Research design

In this study, the Quantitative method of research is utilized.

3.2 Population & sampling

The respondents in this study are university undergraduate students. However, since collecting data from the whole population is difficult, it is preferable to use the sampling process. This study utilizes the snowball sampling methodology in this regard since it enables the researchers to ask participants to refer their questionnaires to their peers.

3.3 Research instrument

The measurement scales REACT from previous research studies were used to create a questionnaire for this study. This research uses Google Docs to create a survey research questionnaire.

3.4 Data collection

utilizes personal contacts and social media to spread the questionnaire's link. To collect data from as many people as possible, snowball sampling methods were used. However, once the data has been gathered, it is organized in an SPSS file and analyzed to present the results.

3.5 Data analysis

After collection of the data, the data was analyzed by using SPSS software. Different sub groups of items were computed to conduct different statistical tests. The results shows that, there no significant difference between the perception of male and female for Positive Reinforcement ($t= -1.358, p=1.78$). There is no significant difference between the perception of male and female for Instructional Presentation ($t=-2.569, p=0.12$). There is no significant difference between male and female for Goal Settings ($t=-1.547, p=0.125$). There is significant difference between the perception of male and female for differentiated instruction ($t= -2.690, p=0.05$). The mean value of female participants is greater as compare to male

participants, which means that female participants have better perception for Differentiated Instruction. There is no significant difference between the perception of male and female for Formative Feedback ($t = -2.142, p = 0.35$) and Instructional Enjoyment ($t = -1.90, p = 0.060$).

The total number of participants were 100 ($n=100$). Out of 100 participants, 51 were male and 49 were female. The mean value of female participants for all sub groups, such as PI, IP, GS, DI, FF and IE is greater as compare to the mean value of male participants, which means that the perception of female participants is better in all sub-groups in the items as compare to the perception of male participants.

Table no. 1

		Statistics					
		TPR	TIR	TGS	TDI	TFF	TIE
N	Valid	100	100	100	100	100	100
	Missing	0	0	0	0	0	0
Mean		8.7700	11.0300	7.5800	9.3200	5.6300	7.1500
Std. Deviation		2.55784	3.32865	2.68245	2.87054	2.10173	2.41366
Minimum		5.00	6.00	4.00	5.00	3.00	4.00
Maximum		15.00	24.00	14.00	20.00	12.00	14.00
Percentiles 100		16.0000	24.0000	14.0000	20.0000	12.0000	14.0000

In table no. 1, items of different groups were transformed to compute variables. There are six different sub-groups formed, which shows the mean values, standard deviations and their percentages. Total Instructional Presentation (TIP) shows the highest mean value ($M = 11.0300$) and highest percentage (24%) which means that 24% of the participants have better perception for Total Instructional Presentation (TIP), 20% of the participants have better perception for Total Differentiated Instructions (TDI) with mean value ($M = 9.3200$), 16% of the participants have better perception for the Total Positive Reinforcement (TPR) with mean value ($M = 8.7700$), 14% of the participants have better perception for Total Goal Setting (TGS) with mean value ($M = 7.5800$), 14% of the participants have better perception for Total Instructional Enjoyment (TIE) with mean value ($M = 7.1500$) and Total Formative Feedback (TFF) shows the lowest value of mean ($M = 5.6300$) with percentage of 12%.

4. Discussion

The effective measurement of REACT has recorded in this study. There were total 100 participants in this study which means that the sample size is 100. Out of 100 participants, 51 were male and 49 were female participants. The mean scores of both male and female is compared by using SPSS software and the results shows that, the perception of female participants is better as compare to the male participants in all sub-group of the questionnaire.

The reliability of all the items is analyzed which shows the value of 0.93 which means that all the items was highly reliable. The results of this study compare student's achievement and response to the class room environment of the students for the purpose of assessment. There is significant difference in the Differential Instruction in class room in students as well as in the perception of male and females.

This study contributes in the research field of classroom environment and in the difference of perfection within different subgroups such as PI, IP, GS, DI, FF and IE. A research gap is identified by the researcher if this study, there is need to investigate and explore the perception of the students about REACT.

5. Conclusion

This research was conducted to assess the classroom environment provides the opportunity to build social skills in students and to evaluate students' perception of the learning environment at the undergraduate level. For the purpose of the study the data was collected through 100 participants, 51 were males and 49 were females. There were six different sub-groups were created by the researcher and the results of these six sub-groups were compared in SPSS software. In conclusion of the results, it shows the perception of participants according to gender and the mean value of participants towards different sub-groups with their respective percentages. Instructional Presentation in the classroom environment shows the highest mean value and percentage of the participants while Formative Feedback shows the lowest mean value and percentage, which means that in Classroom environment, Instructional Presentation has the major impact to build the social skills of the students in compared to Positive Reinforcement, Goal Setting, Differentiated Instructions, Formative Feedback, and Instructional Enjoyment.

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