

This study is carried out to examine the effect of classroom learning environment on students' academic achievement at secondary level in the Mathematics classroom. The study was focused on formal school system in Pakistan. The study was delimited to secondary and higher secondary schools located in Tehsil Rawalpindi and Islamabad (Federal Area). Out of these institutions 299 (237+62), 24 schools were selected by random sampling. Initially, 530 students of 10th grade studying Mathematics in 27 classrooms (one class for each school included in the study) were taken into consideration.

In order to measure the student's perception, three internationally validated and used instruments, namely, Classroom Environment Instrument (Personal Form), Classroom Environment Instrument (Class Form) and Questionnaire on Teacher Interaction (QTI) were used and translated into Urdu for Urdu medium schools because these Instruments were developed in English. The validity of the questionnaires was also checked by experts and were found satisfactory. Their reliability was also rechecked using statistical formula. The Cronbach Alpha values of these Instruments were 0.855, 0.862 and 0.878. The pilot testing was carried out before the actual application of these Instruments to the whole sample included in the study. Validation of these instruments confirmed that these instruments are reliable tools to measure classroom learning environment in Pakistani context. For measuring student's academic achievement, the marks obtained by students in the subject of Mathematics in annual examination in 10th grade conducted by both BISE Rawalpindi and FBISE Islamabad were taken into account. The eight (8) Null hypotheses were formulated in the light of objectives of the Study. The data was analyzed using multiple regression, Pearson 'r' formula for correlation, t-test (independent samples), ANOVA to assess the effects of classroom learning environment on students' academic achievement. The results of study revealed that classroom learning environment contributes 15% and 6% towards students' academic achievement when measuring through individual and collective perceptions of the students respectively.

The results of the study can be summarized in the following assertions. First, the subscales, 'Involvement', 'Personal relevance', 'Emphasis on understanding', related to students are major predictors affecting classroom learning environment and academic achievement whereas subscales 'Investigation' and autonomy' related to students have negative effect on students' academic achievement. Second, teachers are not playing their significant role in improving the classroom learning environment especially in rural areas. Third, gender of the students is not a major player affecting their academic achievement. This study may benefit curriculum developers, teachers, educational managers, teacher educators, policy makers etc. in Pakistan and will prove to be a basis for further studies at other levels, grades and subjects as well.