

Everyone has a distinct style of thinking and learning. Because of individual differences, the cognitive learning style of every individual is different. Cognition explains an individual's usual mode of perceiving, thinking, remembering, or solving problem. Cognitive learning style is typically explained as a personality aspect which influences values, social interaction, and attitude. Researches have revealed that cognitive learning styles and attitude are joint contributors to behavior.

This study was designed to understand, identify and compare cognitive learning styles and science related attitude of undergraduate science students, to compare science related attitudes of science students with respect to cognitive learning styles, to find relationship of cognitive learning styles with science related attitude and academic achievement, to find relationship between science related attitude and academic achievement of undergraduate science students. The population of the study consisted of all undergraduate science students of basic sciences (physics, mathematics, and bio sciences), computer sciences, and engineering sciences (electrical and computer engineering) of public and private sector universities/Degree Awarding Institutes of Islamabad. For sample selection, stratified random sampling was used. The data was collected using demographic inventory, Hidden Figure Test (SHAPES) and convergent/divergent test. A self-developed science related attitude questionnaire was used to identify student's science related attitude. The academic results of students were obtained from the respective universities/Degree awarding institutes. Descriptive and inferential statistics were used for data analysis. Frequency distribution, percentage, mean, and standard deviation were used for data analysis. The hypotheses were tested using Chi-Square and t-tests at 5 percent level of significance. Results were presented in tabular and graphical form.

The findings revealed that Field-Dependent and convergent cognitive learning style have been found the most prevailing cognitive learning styles of science students at undergraduate level. Moreover the Field-Independent and divergent learners have more science related attitude and academic achievement than other learners. The findings also revealed that cognitive learning styles have positive relationship with science related attitude and academic achievement. It has been recommended that teachers must use varied teaching methods and provide academic and career guidance to the students so that they can be motivated to develop more positive science related attitude towards the study of science and may improve their academic achievement.