ABSTRACT

The present study is intended to find out the relationship between Multiple intelligences and achievement in Mathematics of students at secondary level. The total population were then classified in to sub samples based on gender, locality and management of the school. The survey method was used for the study. The sample size was 1500 high school students from three districts of Kerala. Stratified random sampling was used for data collection. The tools used were five tests namely test of Linguistic intelligence, test of Logical Mathematical Intelligence, test of Spatial intelligence, test of Interpersonal intelligence, test of Intrapersonal intelligence and an Achievement test in mathematics for standard IX. The statistical techniques used were the descriptive statistics mean, SD, skewness and kurtosis. The one sample t-test is used to test the significance of the levels of the students with respect to the variables. The chi square test is used to test different levels of the selected components of multiple intelligences and levels of achievement in mathematics. Karl Pearson’s correlation coefficient is used to study the relationship of each of the selected components of multiple intelligence on the achievement in mathematics. Fisher’s z-transformation test is used to test equality of correlation coefficients. The t-test is used for testing the significant difference in sub-samples. Multiple regression analysis is used to study the effectiveness of all the selected components of multiple intelligences together to predict achievement in mathematics. The study shows that the correlation coefficient of Mathematics achievement and linguistic intelligence is low. The correlation coefficient of Mathematics achievement and logical mathematical intelligence is very high. The correlation coefficient of Mathematics achievement and spatial intelligence is very high. The correlation coefficient of Mathematics achievement and inter-personal intelligence is moderate. The correlation coefficient of Mathematics achievement and Intra-personal intelligence is very high. The correlation analysis shows that selected components of Multiple Intelligences are positively correlated to the achievement in mathematics. It indicates that the relation between the selected components of Multiple Intelligences and Achievement in Mathematics are significant.