

Students' Attitudinal Variables as Correlates of Achievement in Secondary School Mathematics in Barbados

Ryan O Wilkinson and *Babalola J. Ogunkola

*School of Education, Faculty of Humanities and Education, The University of the West Indies
Cave Hill Campus, Barbados*

This study was designed to determine the relationship between and amongst variables: students' perceptions of mathematics usefulness, parents' involvement and mathematics teacher influence on achievement in mathematics. A sample of 170 4th and 5th form students who comprised of 116 girls and 54 boys participated in this study. Two instruments were used for data collection. Data analysis involved the interpretation of frequencies, t-test and regression analysis. Results of the frequencies showed that students had positive perceptions of the usefulness of mathematics and the influence of their mathematics teachers. However they displayed negative perceptions of their parents' involvement in reference to their achievement of mathematics. The results also showed there was no significant differences amongst male and female students on any of the three variables as it pertained to mathematics achievement. Mathematics usefulness ($t = -.770$; $df = 168$; $p = .442$), teacher influence ($t = 1.120$; $df = 168$; $p = .228$) and parental involvement ($t = -.728$; $df = 168$; $p = .467$). Additionally the contribution of the three variables though small contributed to mathematics achievement accounting for 6.2% ($R^2 = 0.062$, $P < 0.05$) of the total variance. Also, all the variables except students' perceptions of parental involvement contributed significantly to mathematics achievement with students' perception of their mathematics teacher contributing the most and students' perception of parental involvement, the least. Hence teachers ought to continue to encourage and show interest in the progress of their students and provide the necessary intervention students might require to enhance their problem solving skills; which would directly improve students' performance in mathematics. Likewise parents should become more involve in their children education in mathematics and be more aware of the challenges they encountered in the subject.

Key words: students' perceptions, teacher influence, parental involvement, mathematics usefulness and mathematics achievement

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