

## ABSTRACT

### STUDENTS' ATTITUDES TOWARDS MATHEMATICS AS A FUNCTION OF ACHIEVEMENT, PERCEPTION OF PARENTAL SUPPORT AND TEACHER INFLUENCE.

PRANITAWATEE PARSAUD

This study investigated relationships between students' attitudes towards mathematics and:

- (i) their mathematics achievement
- (ii) their perceptions of parental support
- (iii) their perceptions of teacher influence.

It also sought to discover whether there were interrelationships amongst these four variables as well as whether there were any significant differences between boys' and girls' attitudes towards mathematics. The study was conducted amongst form three mathematics students of 12 schools in the educational division of St. George. The sample consisted of 152 boys and 257 girls.

Questionnaires were used to test attitudes to mathematics, perceptions of parental support and teacher influence. A forty (40) item multiple choice test was utilized towards establishing achievement levels of the students. Data was analysed separately for boys and girls of each school.

Results showed that boys' achievement in mathematics correlated

significantly with all categories of mathematics attitude. Girls' achievement correlated with all these categories with the exception of intrinsic mathematics motivation. Except for mathematics usefulness and extrinsic mathematics motivation, all categories of boys' attitudes to mathematics correlated significantly with their perceptions of parental support. In the case of girls, there were significant correlations for all the categories.

With regards to the variable, teacher influence, there were statistically significant relationships with boys' attitude to mathematics (except for their perceptions of mathematics usefulness). In the case of girls' attitudes towards mathematics, only their intrinsic mathematics motivation and perceptions of mathematics usefulness correlated significantly with their perceptions of teacher influence whereas there was no significant differences between boys' and girls' attitudes towards mathematics.

A detailed analysis of the questionnaire revealed comparatively low mathematics anxiety and intrinsic mathematics motivation scores for both boys and girls. The highest scores for both sexes were obtained in the category of extrinsic mathematics motivation. Moreover, results of the multiple choice instruments revealed that although the mean scores of boys and girls were approximately the same, girls' scores deviated almost twice as much as boys' scores. The interpretations and implications of the findings are discussed.