

**MATHEMATICS ACHIEVEMENT OF GENERAL CERTIFICATE  
OF EDUCATION (ORDINARY LEVEL) STUDENTS IN  
DEHIOWITA EDUCATIONAL ZONE OF SRI LANKA**



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**MATHEMATICS ACHIEVEMENT OF G.C.E. (O/L) STUDENTS IN DEHIOWITA EDUCATIONAL ZONE OF SRI LANKA****M.A.P. PRIYADARSHANI 5238088 SHEM/M****M.ED. (EDUCATIONAL MANAGEMENT)****THESIS ADVISORY COMMITTEE: ARISARA LEKSANSERN, ED.D. NARANAN SURIYAMANEE, ED.D, PATREEYA KITCHAREEN, PH. D. (EDUCATIONAL MANAGEMENT)****ABSTRACT**

The purpose of this study was to analyze mathematics achievement and factors affecting the achievement of mathematics in General Certificate of Education (Ordinary Level) students in the Dehiowita educational zone of Sri Lanka. Students must pass the Ordinary Level examination in order to take the Advanced Level examination. Students must pass at least 6 out of 9 subjects on the G.C.E.(O/L) exam. However, mathematics is the most important subject in the examination in Sri Lanka. Because there are 6 required subjects, mathematics must be one of them. The data (N = 360) were mathematics test marks of grade 11 Ordinary level students in Dehiowita educational zone collected during the last term of the 2009 school year. F-test, t-test and Pearson correlation were used to explain the relationship of mathematics achievement to characteristics such as student problems, family problems, and teacher problems. Sets of independent variables were used and their causal priority explaining mathematics achievement was determined by putting schools in the Dehiowita educational zone into a sociologically specified context.

The purpose was also to identify the factors that represent relationships among sets of interrelated variables using a Student Background Questionnaire (30 items) and to examine the contribution of each factor in explaining the variance in students' mathematics achievement and the total variance explained by the determined factors. It is worth mentioning that school climate did not enter into the equation. The findings of the present study are important for the Sri Lankan educational system since changing self-concepts and students' attitudes towards mathematics, and improving the teaching procedures in the classroom, are much easier to achieve than changing background factors affecting students' performance.

The findings showed that the majority of the students (68.1%) of the sample had mathematics marks between 0-35 out of 100. Regarding income 48.3% of the students' parents had incomes of not more than 10,000 Sri Lankan rupees. Most parents (94.7%) were married. Most of the students' fathers (76.7%) had occupations in agriculture or were self-employed. The most common family group size was 2 siblings (33.1%) and a minority (16.9%) of the families had a single child. There was a significant difference in student's mathematics achievement in relation to their parents' income.

**KEY WORDS: MATHEMATICS ACHIEVEMENT/ STUDENTS' PROBLEMS/  
FAMILY PROBLEMS/ TEACHER PROBLEMS**

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