

**FACTORS AFFECTING MATHEMATICS PERFORMANCE OF GRADE 10 STUDENTS IN DIVISION 2 SCHOOLS AT HATTON EDUCATIONAL ZONE**

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The General Certificate of Education (Ordinary Level) (G.C.E. (O/L)) examination is an important public examination in Sri Lanka. Mathematics plays a key role in this examination, and passing mathematics is a fundamental requirement for students to advance to advance higher level classes. Grade 10 is the foundational year for the G.C.E. (O/L), and this study aims to identify the factors influencing the mathematics performance of Grade 10 students in schools within the Hatton Division 2. The study explores how four main themes: interest for mathematics, home environment, parents' education level, and the type of school attended, affect students' performance in mathematics. Under these themes, we examined the relationship between students' performance in mathematics and the factors; private tuition attendance, homework completion, time spent on self-studying mathematics per week, parental conflict at home, paternal alcoholism, education level of both parents, the location of the school (urban or rural), and the category of the school (1AB, 1C, Type 2). The data for this study were collected from 125 students and 6 teachers from schools in the Hatton Educational Zone Division 2. A convenience sampling method was used to select schools, ensuring representation from 1AB, 1C, and Type 2 schools in both urban and rural areas. Data were gathered through a structured questionnaire and semi-structured interviews. The Chi-square test and Cramér's V rule were applied for data analysis using SPSS software. The results show that the amount of time spent on self-studying mathematics per week is strongly associated with students' mathematics performance in Grade 10. Additionally, completing assigned homework, father being an alcoholic, the relationship between parents, the education levels of both parents, the location of the school, and the type of school attended all show a moderate association with students' mathematics performance. The study also revealed that attending private tuition classes does not have a significant relationship with students' mathematics performance in Grade 10.

**Keywords:** Chi-square test, Cramér's V rule, G.C.E. (O/L), SPSS software