

**ANALYSIS OF G.C.E. (O/L) EXAMINATION RESULTS OF SCHOOLS IN
MAWANELLA EDUCATION DIVISION**

P.L. Adikaram¹ and S.P. Abeysundara^{1,2*}

¹*Postgraduate Institute of Science, University of Peradeniya, Peradeniya, Sri Lanka*

²*Department of Statistics and Computer Science, Faculty of Science, University of Peradeniya,
Peradeniya, Sri Lanka*

**sachitha@pdn.ac.lk*

The General Certificate of Education (G.C.E) Ordinary Level (O/L) is conducted by the Department of Examinations of the Ministry of Education, Sri Lanka. This examination consists of six main subjects; First language, Religion, Mathematics, Science, English, and History, along with three elective subjects. This examination has become very competitive as it is a qualifying milestone for the G.C.E. Advanced Level (A/L), which determines the University entrance. The objective of the study is to analyse and identify the factors that affect the performance of students who sit the G.C.E. (O/L) examination. Of the 37 secondary schools in the Mawanella Division, Kegalle, 18 are classified as 1AB and the remaining as 1C. The examination results of all the secondary schools of the division from 2015 were used in the study. Among them, 26 schools were Sinhala medium, while 11 were Tamil medium. A student must earn at least six ordinary passes to pass the examination, including three credit passes. Preliminary analysis revealed that more than 40% of students failed the G.C.E. (O/L) examination. A chi-squared test for association indicated that the ability to pass the Language subject did not depend on the medium of delivery ($\chi^2 = 1.273, p = 0.259$). However, there was a significant effect of the medium of delivery to pass other main subjects. Moreover, there was an effect on passing the English language for Sinhala- and Tamil-medium students ($\chi^2 = 216.4, p < 0.001$). Further, there is an association between the type of school and the performance of the six main subjects. The odds ratios (OR) showed that the students of 1AB schools had a higher passing rate than the students in 1C schools ($OR = 2.365$). The students who sat the G.C.E. (O/L) examination in the Tamil medium had a higher passing rate than those in the Sinhala medium ($OR = 1.999$). Similar performances were noted in passing rates of individual subjects of Mathematics, Religion, Science and History. A Path Coefficient Analysis revealed a positive and significant correlation between overall results and the individual passing rates of main subjects. One of the key findings from the study includes a significant positive relationship between the passing of Mathematics and other main subjects. The result of this study is helpful for the decision-makers to identify the issues of the current education system and take remedial actions for the betterment of society.

Keywords: G.C.E. (O/L) Examination, Mawanella Division, Odds Ratio, Path Coefficient Analysis