

THE IMPACT OF SCHOOL RESOURCES ON THE PERFORMANCE OF STUDENTS' G.C.E. O/L (ORDINARY LEVEL) MATHEMATICS RESULTS

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The reports of the Central Bank of Ceylon and other sources emphasise the substantial amount of financial and human resources spent on the Sri Lankan free education system. It is crucial to find out whether this expenditure is worthwhile and effective. This study aimed to identify the impact of school educational resources on students' G.C.E. (O/L) mathematics performance. The data was collected from 27 principals and 52 mathematics teachers from 27 selected schools in the Vadamaradchy Education Zone. Schools were selected using the cluster sampling method. Information regarding school resources and their efficient use was collected from principals and teachers through structured questionnaires. The G.C.E. (O/L) mathematics results in the last five years were used to evaluate students' performance. The statistical analysis was conducted using the Statistical Package for Social Science (SPSS) 17.0, employing Spearman's correlation coefficient to determine the correlation between variables. This study revealed that 1 AB schools had the highest average pass percentage in mathematics (85.55%) than 1 C schools (70.32%) and Type II schools (47.36%). The classroom size and teacher-student ratios did not have a significant impact on the pass percentage. More than 75% of scholarship-holding students got admission to 1AB schools, and this had an impact on the pass percentage. Considering the relationship between educational resources and mathematics performance as a whole, there was a significant and large correlation ($r=0.514$, $p=0.000$) between the availability of school buildings and classrooms and students' mathematics performance. A positive, moderate, but significant correlation ($r=0.489$, $p=0.000$) between the availability of instructional space and mathematics performance was observed. Availability of instruction materials also showed a positive moderate correlation ($r=0.481$, $p=0.000$) with G.C.E. (O/L) mathematics performance. The factors of developing their own lessons by the teachers, frequency of using computer software or applications for teaching, and frequency of using library resources demonstrated negative correlations with students' mathematics performance. Based on the results, it can be concluded that several school resource factors significantly impact G.C.E. (O/L) mathematics performance, although the magnitude of these impacts is not substantial. Thus, it remains uncertain that educational resources have a significant impact on students' G.C.E. (O/L) mathematics achievement. This conclusion suggests that while school resources play a role in shaping student performance in mathematics, they are only part of the equation, and other factors may also contribute to overall outcomes. This study encourages further research to delve deeper into the specific aspects of school resources that have a significant impact and explore strategies to optimise their effectiveness.

Keywords: G.C.E. (O/L) Mathematics, Impact, Performance, School resources