

THE ACHIEVEMENT LEVEL OF
STUDENTS IN THE SUBJECT OF
SCIENCE AND THE
OPPORTUNITIES FOR SCIENCE
EDUCATION WITH SPECIAL
REFERENCE TO KALMUNAI
EDUCATIONAL ZONE

A THESIS SUBMITTED TO THE OPEN UNIVERSITY OF SRI
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Abstract of the Thesis

This study was undertaken to understand what effect the opportunities and facilities for science education has on the achievement level of the students in science. The educational zone of Kalmunai was selected for the study as it is one of the regions in Sri Lanka with lesser opportunities and facilities for science education. This study was planned as a non experimental, correlation research as well as descriptive designs.

The variables selected included seven component variables of Home Factor and five component variables of School Influence Dimension. In addition to that the dependent variable Achievement Marks in Science of the pupils were also taken into account. All the variables were hypothesized on the basis of previous theories and research.

Nine tools were used for data collection. The sample consisted of three hundred year 11 pupils from nine Tamil medium government schools having three different grades such as IAB, IC and 2. Numerical values were assigned for the variables to enable statistical analysis. For quantitative results of the variables means, standard deviations, t-ratios, F-ratios, chi-squares and correlation coefficients were used. These results were supported by qualitative analysis.

This study has revealed the positive significant relationships between four of the component variables of 'Home Factor' and the 'Achievement Level of the Students in Science' while the other three were not. Similarly, There were positive significant relationships between three of the component variables of 'School Influence Dimension' and the 'Achievement Level of the Students in Science' while the other two were not.

However, the composite variables Home Factor, and School Influence Dimension both have shown significantly equal positive correlations to the Achievement Level of the Students in Science.

Finally, there was a highly significant positive correlation at $\alpha = 0.05$ level between the 'Educational Opportunities', whose component variables were Home Factor and School Influence Dimension, and the 'Achievement level of the Students in Science'.