## A LOGISTIC REGRESSION MODEL TO IDENTIFY THE FACTORS INFLUENCING ON THE PERFORMANCE OF GRADE FIVE STUDENT'S SCHOLARSHIP EXAMINATION

S. Mufliha Saras and M.C. Alibuhtto<sup>\*</sup>

Dept. of Mathematical Sciences, Faculty of Applied Sciences, South Eastern University of Sri Lanka, Sammanthurai \*mcabuhtto@seu.ac.lk

The scholarship examination is a highly competitive examination for grade five students and this examination allows the students with exceptional skills to move on to better schools. This study was designed to investigate the factors influencing on the performance of grade five students in scholarship examination. Primary data used for this study was collected through questionnaire. One hundred and fifty students who set scholarship examination in 2013 were selected using stratified random sample method based on types of schools in Akkaraipattu zone. A binary logistic regression model was used to identify the influence factors such as the parent's socio economic level, school types, sex, mother's employment and self-assessment while using dependent variable as scholarship exam performance. This study concluded that the parent's socio economic level, type of school and mother's employment are the important significant factors on the performance of scholarship examination. However, the self-assessment andsex of students are not significant factors on the performance of scholarship examination.

**Keywords:** Logisticregression model, primary pata, Scholarship Examination, stratified random sample.