

**A REMARK ON THE CONVOLUTION OF THE
GENERALIZED LOGISTIC RANDOM VARIABLES**

M.O. OJO

Department of Mathematics, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.

ABSTRACT

In statistical inference on the population mean such as finding confidence intervals or carrying out test of hypothesis, the distribution of the simple mean is a primary requirement. This has prompted many authors to embark on finding the distributions of sample means for different populations. In particular, Ojo and Adeyemi (1989) went on to find the distribution of sum of independent random variables from the generalized logistic population. The authors used the inversion methods for the Mittag-Leffler expansion of the characteristic function. In the present paper, a simpler and shorter method is used to obtain the same distribution. A direct method of inverting the characteristic function is simply used. More importantly, this method gives an easier way of evaluating the density function of the convolution.