

## Parameters Estimation of Power Function Distribution Based on Selective Order Statistics

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**Abstract :** In this paper, we discuss the power function distribution and derive the maximum likelihood estimator of its parameter as well as the reliability parameter. We derive the large sample properties of the estimators based on the selective order statistic scheme. We conduct simulation studies to investigate the significance of the selective order statistic scheme in our setup and to compare the efficiency of the new proposed estimators.

**Keywords :** fisher information, maximum likelihood estimator, power function distribution, ranked set sampling, selective order statistics sampling

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