Desired sample size for estimating the skewness under skew normal settings

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Abstract

In this talk, the desired sample size for estimating the skewness parameter with given closeness and confidence level under skew normal populations. The confidence intervals for skewness parameter are constructed based on the desired sample sizes using two pivots, chi-square distribution and F-distribution. Computer simulations support our main results. At the end, a real data example is provided for illustration of constructed confidence intervals.

Keywords: Skew normal, confidence interval, skewness parameter