عنوان مقاله:

A simple method for determining the limiting distribution of sample central moments for two-point and Binomial distributions

نویسندگان:

Narges Abbasi - *Department of Statistics, University of Payame Noor, Tehran, Iran*

Narges Keshavarz - *Department of Statistics, University of Payame Noor, Tehran, Iran*

Masoud Yarmohammadi - *Department of Statistics, University of Payame Noor, Tehran, Iran*

Abdollah Saadatmand - *Department of Statistics, University of Payame Noor, Tehran, Iran*

خلاصه مقاله:

Moments play an essential role in the characterization of statistical distributions and criteria such as dispersion, skewness, and kurtosis. This article is a dissection of the central moments of two-point and binomial distributions. First, we consider the Bernoulli distribution of the population and generalize the results. With a simple method, we present the condition that when the sample size is large, the structure of the sample central moment consists of random variables independent of standard normal or chi-square or a combination of both. In the obtained results, the role of points that have a probability of $1/2$ is very influential in the limit distribution.

کلمات کلیدی:

Binomial distribution, Central moment, Convergence in probability

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/1853908