Abdullahi, Ibrahim; Phaphan, Wikanda
A generalization of length-biased Nakagami distribution. (English) [Zbl 07491345]

Summary: The aims of this paper is to develop and establish the theoretical properties of a new survival distribution based on a preceding well-known distribution. The proposed distribution is called the length-biased Nakagami distribution. Also, we apply the proposed distribution to a set of actual data to show that the length-biased Nakagami distribution is appropriate for generating a survival model for data.

MSC:
62E15 Exact distribution theory in statistics
62E17 Approximations to statistical distributions (nonasymptotic)
62E10 Characterization and structure theory of statistical distributions
62N99 Survival analysis and censored data

Keywords:
Nakagami distribution; length-biased; survival function; moment

Full Text: Link