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A new Entezar distribution for lifetime modeling. (English) [Zbl 1391.60031](#)
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Summary: In this paper, we introduce a new four-parameter Entezar distribution and study its properties. This new distribution has a more general form of failure rate function. With appropriate choice of parameter values, it is able to model six ageing classes of life distributions displays with decreasing, increasing, bathtub shaped, Unimodal, increasing-decreasing-increasing, decreasing-increasing-decreasing failure rates and probability distribution has a bimodal density function. The moments is obtained. The method of maximum likelihood is used for estimating the model parameters. Also, the observed information matrix is obtained. Two applications are presented to illustrate the proposed distribution.

MSC:

[60E05](#) Probability distributions: general theory

Keywords:

[beta distribution](#); [exponentiated Weibull](#); [generalized modified Weibull](#); [maximum likelihood](#); [modified Weibull](#); [observed information matrix](#); [Weibull distribution](#)

Software:

[GLIM](#)

Full Text: [DOI](#)

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