



Proportional reversed hazards model for discrete data

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Many times a product lifetime can be described through a non-negative integer valued random variable. In this paper, we propose a proportional reversed hazards model for discrete data analogous to the version for continuous data. Some ageing properties of the model are discussed. Stochastic comparison of pair of random variables that follow the model are also done. A new test based on U-statistics is developed for testing that the proportionality parameter in the proposed model is 1 and the asymptotic properties of the proposed test are studied.

Keywords: Discrete reliability, Proportional reversed hazards model, U-Statistics.