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# Empirical Acceleration Functions and Fuzzy Information

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**Abstract :** In accelerated life testing approaches life time data is obtained under various conditions which are considered more severe than usual condition. Classical techniques are based on obtained precise measurements, and used to model variation among the observations. In fact, there are two types of uncertainty in data: variation among the observations and the fuzziness. Analysis techniques, which do not consider fuzziness and are only based on precise life time observations, lead to pseudo results. This study was aimed to examine the behavior of empirical acceleration functions using fuzzy lifetimes data. The results showed an increased fuzziness in the transformed life times as compare to the input data.

**Keywords :** acceleration function, accelerated life testing, fuzzy number, non-precise data
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