

November 5, 2018

To: Dr. Amjad D. Al-Nasser
Professor & Editor in Chief of *Electronic Journal of Applied Statistical Analysis*
Science Faculty Yarmouk University, Jordan

From: Dr. David Han
Associate Professor
The University of Texas at San Antonio, TX, USA

RE: Submission of Manuscript for Publication in *Electronic Journal of Applied Statistical Analysis*

Dear Dr. Al-Nasser, Editor in Chief of *Electronic Journal of Applied Statistical Analysis*,

This is David Han from the University of Texas at San Antonio, Texas, USA and I am submitting the research manuscript titled "ON THE MAXIMUM LIKELIHOOD ESTIMATION FOR PROGRESSIVELY CENSORED LIFETIMES FROM CONSTANT-STRESS AND STEP-STRESS ACCELERATED TESTS" to *Electronic Journal of Applied Statistical Analysis* as the corresponding author of the work. I have attached herewith the manuscript in PDF format.

In this work, we propose an alternative approach to determine the maximum likelihood estimates (MLE) of the regression parameters of exponentially distributed lifetimes from the general k -level constant-stress and step-stress accelerated life tests (ALT) under progressive Type-I and Type-II censorings based on a simple and easy-to-apply graphical method, which also proves the existence and uniqueness of the MLE. This approach has never been explored before due to the modeling complexity of the ALT under progressive censorings in general. It is also the very first time to show the existence and uniqueness of the MLE in this context, and in this regard, the submitted work is new original contribution to the literature of statistical reliability engineering. In fact, the results of this and subsequent research based on this (submitted elsewhere) have a very strong application and practical significance to statistical reliability engineers and quality assurance practitioners as well as to the research community in applied statistics and biostatistics for survival analyses.

We sincerely hope that you will find this paper to be acceptable and suitable for publication in *Electronic Journal of Applied Statistical Analysis*. The submitted work is partially based on the doctoral dissertation of Mr. Tianyu Bai as he is close to graduation completing his thesis on stochastic reliability and life testing methods. For so, we would greatly appreciate an expedited review process. We thank you very much for your time and consideration as well as the scientific effort of the dedicated reviewers. If you have any question, please don't hesitate to contact me via email or phone +1-210-458-7895.

We will look forward to your positive and favorable reply.

Sincerely yours,

David Han, M.Sc., Ph.D.

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