### **Review Form 3**

Journal Name:	Asian Journal of Probability and Statistics
Manuscript Number:	Ms_AJPAS_126107
Title of the Manuscript:	A New Modified Confidence Interval Estimate of Mean for Skewed Distribution: Applications and Simulation
Type of the Article	

#### **General guidelines for the Peer Review process:**

This journal's peer review policy states that <u>NO</u> manuscript should be rejected only on the basis of '<u>lack of Novelty'</u>, provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

https://r1.reviewerhub.org/general-editorial-policy/

### **Important Policies Regarding Peer Review**

Peer review Comments Approval Policy: <a href="https://r1.reviewerhub.org/peer-review-comments-approval-policy/">https://r1.reviewerhub.org/peer-review-comments-approval-policy/</a> Benefits for Reviewers: <a href="https://r1.reviewerhub.org/benefits-for-reviewers">https://r1.reviewerhub.org/benefits-for-reviewers</a>

#### **PART 1:** Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	<ol> <li>Give a name for the newly proposed estimator for confidence interval</li> <li>There is a confusion in using the terminology estimate and estimator. (Estimate will be used only when we have a sample of data, otherwise, we call as an estimator.</li> <li>Since the data for Eg. 2 is already available in the public domain, it is absolutely not necessary to give data, jut narrate that Mod ci validated and move to interpretation part, however, just inform for which random seed you got this sample of data is being generated.</li> <li>There is no clarity on how to estimate μ from equation 11.</li> <li>Write clearly when this method can be adopted in a better way, because all skewed distribution will not have outliers.</li> <li>In, Eg. 2 if the population parameter is not captured in Cl then it is no more a Cl. Give a different criterion in this case which says the modified Cl is best for the given scenario such as narrow interval, etc. Moreover, the results of Table 2. Shows that all Cl's are overlapping. Hence, there is no significant difference between the Cl, it says all methods of equally effective in this example. But, to show the suitability of this new method for this particular example where the data is negatively skewed. In fact, for this example Mad t Cl has the shortest Cl, one could see for negatively skewed distribution Mad t Cl proves to be best.</li> <li>Have you tried applying your methods for the data with outliers?</li> <li>Paper is written in the style of dissertation especially the way the applications were presented. More descriptions in terms of pros and cons of the new estimator must be discussed.</li> <li>Please justify the logic of choosing skewness levels such as 0.5, 1, 2, 4, 8, 12. Please refine choosing the level of skewness, choose a value negatively skewed (-0.5 to -1); severely negatively skewed ( &gt; +1); choose a value positively skewed (0.5 to 1); severely positively skewed ( &gt; +1);</li> <li>The authors didn't mention how they have conduc</li></ol>	
Is the title of the article suitable? (If not please suggest an alternative title)	A new modified confidence interval estimator of location parameter for skewed distribution (In a paper, it is necessary to have a real-life application and simulation study as an integral part, so that need not come in the title)	

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# **Review Form 3**

Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Abstract must start with a background of the paper. Please include.
Are subsections and structure of the manuscript appropriate?	Under section 3 (The new proposed t-CI), can be rewritten as the previous existing methods i.e. start with CI interval and then say how to estimate $\mu$ .
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The author should answer the queries. After a satisfactory reply to the comments; we can make a decision on this part.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	How your new mod CI, Johnson (1978), Kleijnen et al. (1986), Meeden (1999), Willink (2005), Kibria (2006), Shi and Kibria (2007), Islam (2018) is different from yours, is it similar in estimating the CI or how robust is it? And how the robustness of the same was assessed.
Minor REVISION comments  Is the language/English quality of the article suitable for scholarly communications?	Grammatical errors are there.
Optional/General comments	Requires a Major; Need a satisfactory response to the comments is needed to further take a final decision

# PART 2:

		Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

# **Reviewer Details:**

Name:	R. Amala
Department, University & Country	Indian Council of Medical Research – Vector Control Research Centre, India

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