

Review Form 3

Journal Name:	Archives of Current Research International
Manuscript Number:	Ms_ACRI_123650
Title of the Manuscript:	AP STATISTIC FOR IDENTIFICATION OF OUTLIERS IN MULTI-RESPONSE EXPERIMENTS WITH CORRELATED ERRORS
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>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.</p>	<p>This manuscript provides significant value to the scientific community, particularly in the field of statistical analysis and experimental design. The development and adaptation of the AP statistic for identifying outliers in multi-response experiments with correlated errors is a crucial advancement, especially when dealing with incomplete rank design matrices. The approach can help researchers better understand and manage outliers, ensuring the integrity of statistical inferences. I appreciate the manuscript's clarity in methodology and its practical validation through simulated data, though further real-world applications could enhance its impact.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The current title of the article appears to be clear and relevant.</p>	
<p>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.</p>	<p>The abstract is mostly comprehensive but could be enhanced by adding a few key details. It should briefly mention the significance of outliers, clearly state the study's objective, provide a hint of the methodology and results, and summarize the main conclusions. This will give readers a clearer and more complete overview of the research.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The structure is mostly appropriate but could benefit from combining the Introduction and Literature Review for better context. Separating Results and Discussion into distinct sections would enhance clarity.</p>	
<p>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.</p>	<p>The manuscript demonstrates scientific robustness by employing a well-established statistical method, the AP statistic, and adapting it to a complex scenario of multi-response experiments with correlated errors. The methodology is technically sound, with clear mathematical derivations and modifications tailored to address rank deficiency in design matrices. The use of simulated data for testing further validates the approach, ensuring its practical applicability. Overall, the rigorous approach and thorough testing enhance the manuscript's credibility and technical integrity.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =</p>	<p>The references provided are generally sufficient and cover foundational and relevant works in the field. However, the inclusion of more recent studies or reviews on outlier detection and multi-response experiments could strengthen the manuscript. For instance, references to recent advancements in statistical methods for correlated errors or outlier detection in complex experimental designs could offer additional context.</p>	

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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language and English quality of the article are generally suitable for scholarly communication, but there are some areas where clarity and conciseness could be improved. Specifically:</p> <ol style="list-style-type: none"> 1. Technical Terms: Ensure that technical terms are clearly defined when first introduced. This will help readers who may not be familiar with the specifics of the AP statistic or multi-response experiments. 2. Sentence Structure: Some sentences are lengthy and complex. Breaking them into shorter, more straightforward sentences could enhance readability. 3. Consistency: Maintain consistent terminology and notation throughout the manuscript to avoid confusion. <p>Overall, while the manuscript is understandable, refining these aspects will improve its accessibility and impact.</p>	
<p>Optional/General comments</p>	<p>Here are the optional comments:</p> <ol style="list-style-type: none"> 1. Context: Expand on the practical implications of outlier detection in multi-response experiments to enhance relevance. 2. Examples: Include a real-world case study or example demonstrating the modified AP statistic's effectiveness. 3. Visuals: Add more figures or tables to clearly illustrate key results and comparisons. 4. Software: Briefly mention the software used for simulations and provide any relevant code or packages. 5. Limitations: Discuss potential limitations and suggest areas for future research. 	

PART 2:

	Reviewer's comment	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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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