

Review Form 3

Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_129673
Title of the Manuscript:	A Comprehensive Study on Stability and Data Dependency for a New Jungck-Type Iteration
Type of the Article	Comprehensive Study

PART 1: 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>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript presents a novel Jungck-type iterative algorithm that addresses critical aspects of stability, convergence, and data dependency in fixed-point approximation methods. By enhancing the scope of existing Jungck-type iterations, the study contributes to the development of more efficient and reliable iterative processes, which are foundational in applied mathematics and computational sciences. The proposed algorithm's superior convergence properties, validated through rigorous numerical experiments, have potential applications in various fields such as optimization, economic modeling, and coupled differential equations. This work not only advances theoretical understanding but also provides practical insights into solving complex mathematical problems efficiently.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title of the article is relevant and clearly conveys the main focus of the manuscript. However, for better clarity and alignment with the content, an alternative title is suggested: "A Comprehensive Analysis of Stability and Data Dependency in a Novel Jungck-Type Iteration Algorithm" This revised title highlights the analytical depth and innovation of the proposed method, making it more descriptive and engaging for readers.	

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<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 of the article is comprehensive and provides a clear overview of the study, including the proposed Jungck-type iterative algorithm, its focus on stability and data dependency, and its superior convergence characteristics compared to existing methods. However, a few suggestions for improvement are as follows:</p> <ol style="list-style-type: none"> Highlight Applications: Add a brief mention of the practical fields where the proposed algorithm can be applied, such as optimization or differential equations, to increase the abstract's relevance to a broader audience. Numerical Results: Include a more specific mention of the numerical results or the nature of the improvement achieved (e.g., faster convergence rate by a certain percentage or factor) to quantify the contribution. Contractive Conditions: Explicitly mention the type of contractive conditions considered in the study to provide more technical clarity. <p>Suggested Revision: "This study introduces a novel Jungck-type iterative algorithm for approximating coincidence points under specific contractive conditions. The research demonstrates the algorithm's strong convergence, stability, and data dependency through rigorous theoretical analysis and numerical experiments. Results indicate that the proposed method achieves a significantly faster convergence rate compared to existing Jungck-type iterations. These findings have practical implications in fields such as optimization, economic modeling, and coupled differential equations, where iterative techniques are vital." This revision retains the original content while adding more context and specificity.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>Yes, the manuscript is scientifically correct. The theoretical framework is rigorously developed, with clear definitions, lemmas, and theorems that are logically structured and well-supported by proofs. The inclusion of numerical examples and graphical representations further validates the proposed Jungck-type iterative algorithm, demonstrating its convergence, stability, and data dependency. The results align with the mathematical principles of fixed-point theory and iterative processes.</p> <p>However, to further enhance the scientific rigor:</p> <ol style="list-style-type: none"> Broader Comparisons: Including a comparison with a wider range of state-of-the-art iterative methods would solidify the claims of superiority. Limitations: A brief discussion of potential limitations or scenarios where the method may underperform could provide a more balanced perspective. Numerical Validation: Detailed numerical benchmarks, such as convergence rate comparisons quantified across different problems, would strengthen the manuscript's conclusions. <p>Overall, the manuscript meets the standards of scientific accuracy and robustness.</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 in the manuscript are relevant and cover a broad spectrum of foundational and contemporary works related to Jungck-type iterations and fixed-point theory. However, while the references are adequate, many of the cited works are older, with limited representation from the last 2–3 years. To enhance the manuscript's relevance and demonstrate engagement with recent advancements, the authors are encouraged to include more recent studies on iterative methods and their applications in computational mathematics.</p>	

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<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language quality of the article is generally suitable for scholarly communication, with appropriate use of technical terms and a formal tone. However, minor grammatical errors, overly complex sentences, and inconsistencies in phrasing could benefit from revision. Simplifying sentences, ensuring grammatical accuracy, and refining technical explanations will enhance clarity and readability. A professional proofreading pass is recommended for optimal language quality.</p>	
<p><u>Optional/General</u> comments</p>	<ol style="list-style-type: none"> 1. Numerical Comparisons: The numerical examples are effective, but additional comparisons with a broader range of iterative methods would further strengthen the manuscript. 2. Practical Applications: Including a dedicated section or paragraph discussing real-world applications of the proposed method would enhance its practical relevance. 3. Graphical Representations: While some figures are included, adding more visual comparisons (e.g., convergence rate graphs) can make the results more accessible and engaging. 4. Limitations: A brief acknowledgment of potential limitations or areas for improvement in the method would provide a balanced perspective. 5. Future Directions: Suggesting avenues for further research based on the proposed method would add depth to the conclusion. <p>These enhancements will improve the manuscript's overall impact and reader engagement.</p>	

PART 2:

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

Reviewer Details:

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