

# Review of: "Influence of Meta-cognition, Self-efficacy, and Self-regulated Learning on Students' Achievement in Biology in Ibadan, Nigeria"

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Potential competing interests: No potential competing interests to declare.

Thank you for the opportunity provided to review the manuscript "Influence of Meta-cognition, Self-efficacy, and Self-regulated Learning on Students' Achievement in Biology in Ibadan, Nigeria." This manuscript explores an important and relevant research area, linking the concepts of metacognition, self-efficacy, and self-regulated learning in the biology class. Although the topic holds potential, I suggest a few inputs, particularly in terms of background study, rationale, research gap, and the application of a more detailed methodology. This research has significant potential to contribute to the literature in the fields of metacognition and learner autonomy. Congratulations to the authors for coming up with a wonderful research study; the data analysis section has been analysed effectively.

## Abstract

1. The author needs to convey the main points regarding the methodology and the reason for selecting the biology class for research.
2. Emphasize how this research fills existing knowledge gaps and why its results are important.

## Introduction

1. The author needs to integrate the metacognition theory concept more closely with self-efficacy and self-regulated learning pertaining specifically to the biology classroom and explain its relevance in this research context more specifically.
2. The hypotheses or research questions were well framed and tested.
3. A rationale for the study could be included, stating why the researcher has specifically selected biology students despite the fact that metacognition can be applied in varied subjects.

## Literature Review

1. It would be effective if the researcher included a literature review of related studies and elucidated the research gap and its implications.

## Method

1. The methods used need to be explained in greater detail, especially the descriptive research and the reason for selecting descriptive research with quantitative analysis, and regarding the process of determining research respondents with population and sample size.
2. The author should detail how the validity of the instruments used (MSSQ and BAT) is appropriate in this research context. The author could also explain the rationale for selecting this particular questionnaire for the study.

## Results

1. Connect the study findings with the hypotheses or research objectives to help readers understand how the findings support or refute the proposed hypotheses.

## Discussions

1. The author needs to explain how the research results can be applied in a practical context, particularly in understanding metacognition, self-efficacy, and self-regulated learning.

## Conclusion

1. Present a brief summary of the main research findings and their implications. This should include how this research contributes to the theoretical and practical understanding of the topic.