

Review of: "Assessing students' attitudes and perceptions towards statistical literacy in a university system in a developing African country"

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Potential competing interests: No potential competing interests to declare.

Assessing students' attitudes and perceptions towards statistical literacy in a university system in a developing African country":

1. Introduction Strengths:

The introduction effectively highlights the importance of statistics education in higher education and its relevance across various fields.

It identifies common challenges faced by students in statistics education, such as anxiety and frustration.

The introduction provides a clear rationale for the study and establishes its significance within the context of higher education in Zimbabwe.

2. Introduction Weaknesses:

Some references are outdated or not cited correctly, which may affect the credibility of the literature review.

The introduction lacks a clear research gap or research question, making it challenging to understand the specific focus of the study.

3. Methodology Strengths:

The study employs a mixed-methods approach, combining quantitative surveys and qualitative interviews, which allows for a comprehensive analysis of students' attitudes and perceptions.

The sample size and response rate are adequate, enhancing the reliability and generalizability of the findings.

The use of validated instruments, such as the Survey of Attitudes towards Statistics (SATS), adds credibility to the data collection process.

4. Methodology Weaknesses:

The methodology lacks detail regarding the selection criteria for participants and the sampling technique used, which

could impact the representativeness of the sample.

There is limited discussion on potential biases or limitations of the study, such as social desirability bias in self-reported surveys or interviewer bias in qualitative interviews.

5. Results Strengths:

The results section provides a thorough analysis of demographic data, including school enrollment, gender distribution, and age ranges, enhancing the understanding of the study population.

The statistical analyses conducted, such as factor analysis and regression analysis, are appropriate for exploring students' attitudes and perceptions towards statistics education.

The presentation of results is clear and organized, with tables and figures to support data interpretation.

6. Results Weaknesses:

The interpretation of results lacks depth and critical analysis, primarily focusing on descriptive statistics without delving into underlying factors or implications.

The discussion of factors affecting statistics education is somewhat superficial and could benefit from a more nuanced analysis of the qualitative findings.

7. Overall Critique:

While the study addresses an important topic in higher education, there are areas for improvement in terms of research design, methodology, and data analysis.

The article could be strengthened by clarifying the research objectives, providing a more thorough literature review, and offering deeper insights into the findings.

Despite these limitations, the study contributes valuable insights into the challenges and opportunities associated with statistics education in a developing African country, laying the groundwork for future research in this area.