

**CHECKLIST OF REVIEW CRITERIA\*****Problem Statement, Conceptual Framework, and Research Question**

- The introduction builds a logical case and context for the problem statement.
- The problem statement is clear and well articulated.
- The conceptual framework is explicit and justified.
- The research question (research hypothesis where applicable) is clear, concise, and complete.
- The variables being investigated are clearly identified and presented.

**Reference to the Literature and Documentation**

- The literature review is up-to-date.
- The number of references is appropriate and their selection is judicious.
- The review of the literature is well integrated.
- The references are mainly primary sources.
- The ideas are acknowledged appropriately (scholarly attribution) and accurately.
- The literature is analyzed and critically appraised.

**Relevance**

- The study is relevant to the mission of the journal or its audience.
- The study addresses important problems or issues; the study is worth doing.
- The study adds to the literature already available on the subject.
- The study has generalizability because of the selection of subjects, setting, and educational intervention or materials.

**Research Design**

- The research design is defined and clearly described, and is sufficiently detailed to permit the study to be replicated.
- The design is appropriate (optimal) for the research question.
- The design has internal validity, potential confounding variables or biases are addressed.
- The design has external validity, including subjects, settings, and conditions.
- The design allows for unexpected outcomes or events to occur.
- The design and conduct of the study are plausible.

**Instrumentation, Data Collection, and Quality Control**

- The development and content of the instrument are sufficiently described or referenced, and are sufficiently detailed to permit the study to be replicated.
- The measurement of instrument is appropriate given the study's variables; the scoring method is clearly defined.
- The psychometric properties and procedures are clearly presented and appropriate.
- The data set is sufficiently described or referenced.
- Observers or raters were sufficiently trained.
- Data quality control is described and adequate.

**Population and Sample**

- The population is defined clearly, both for subjects (participants) and stimulus (intervention), and is sufficiently detailed to permit the study to be replicated.
- The sampling procedures are sufficiently described.
- Subject samples are appropriate to the research question.
- Stimulus samples are appropriate to the research questions.
- Selection bias is addressed.

**Data Analysis and Statistics**

- Data analysis procedures are sufficiently described, and are sufficiently detailed to permit the study to be replicated.
- Data analysis procedures conform to the research design; hypotheses, models, or theory drives the data analyses.
- The assumptions underlying the use of statistics are fulfilled by the data, such as measurement properties of the data and normality of distributions.
- Statistical tests are appropriate (optimal).
- If statistical analysis involves multiple tests or comparisons, proper adjustment of significance level for chance outcomes was applied.
- Power issues are considered in statistical studies with small sample sizes.
- In qualitative research that relies on words instead of numbers, basic requirements of data reliability, validity, trustworthiness, and absence of bias were fulfilled.

**Reporting of Statistical Analyses**

- The assumptions underlying the use of statistics are considered, given the data collected.
- The statistics are reported correctly and appropriately.
- The number of analyses is appropriate.
- Measures of functional significance, such as effect size or proportion of variance accounted for, accompany hypothesis-testing analysis.

**Presentation of Results**

- Results are organized in a way that is easy to understand.
- Results are presented effectively; the results are contextualized.
- The results are complete.
- The amount of data presented is sufficient and appropriate.
- Tables, graphs, or figures are used judiciously and agree with the text.

**Discussion and Conclusion: Interpretation**

- The conclusions are clearly stated; key points stand out.
- The conclusions follow from the design, methods, and results; justification of conclusions is well articulated.
- Interpretations of the results are appropriate; the conclusions are accurate (not misleading).
- The study limitations are discussed.
- Alternative interpretations for the findings are considered.
- Statistical differences are distinguished from meaningful differences.
- Personal perspectives or values related to interpretations are discussed.
- Practical significance or theoretical implications are discussed; guidance for future studies is offered.

**Title, Authors and Abstract**

- The title is clear and informative.
- The title is representative of the content and breadth of the study (not misleading).
- The title captures the importance of the study and the attention of the reader.
- The number of authors appears to be appropriate given the study.
- The abstract is complete (thorough); essential details are presented.
- The results in the abstract are presented in sufficient and specific detail.
- The conclusions in the abstract are justified by the information in the abstract and the text.
- There are no inconsistencies in detail between the abstract and the text.
- All of the information in the abstract is present in the text.
- The abstract overall is congruent with the text; the abstract gives the same impression as the text.

**Presentation and Documentation**

- The text is well written and easy to follow.
- The vocabulary is appropriate.
- The content is complete and fully congruent.
- The manuscript is well organized.
- The data reported are accurate (e.g., numbers add up) and appropriate; tables and figures are used effectively and agree with the text
- Reference citations are complete and accurate.

**Scientific Conduct**

- There are no instances of plagiarism.
- Ideas and materials of others are correctly attributed.
- Prior publication by the author(s) of substantial portions of the data or study is appropriately acknowledged.
- There is no apparent conflict of interest.
- There is an explicit statement of approval by an institutional review board (IRB) for studies directly involving human subjects or data about them.

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