

Critique Tool for Quantitative Research

1. Source

- * Is the report from a peer reviewed publication?
- * Is the research current?

2. Abstract

- * Is the abstract Informative and well structured?

3. Introduction / Literature Review

- * Is it convincing that the author reviewed a sufficient amount of literature? (More than one source?)
- * Is it balanced, presenting literature that supports and that differs from the researcher's position?
- * Is the review written critically (giving strengths and weaknesses of previous work)?
- * Are references current, or a combination of current and classic?

4. Research Problem and Significance

- * Is the problem identified clearly?
- * Is it significant--does the researcher provide a good argument for significance?
- *

5. Purpose

- * Is the aim of the study well written?

6. Design

- * Is the design specified correctly?
- * Is the design appropriate to answer the research question?
- * Did the researcher attempt to control for threats to internal and external validity?
- * If the study include intervention, is there sufficient detail given of the nature of the intervention and the comparison intervention?
- * Is the allocation of study groups described?

7. Setting

- * Within what geographical and care setting was the study carried out?
- * Is it suitable to the study?

8. Sample

- * Is the sample size adequate?
- * Is the sample appropriate to the aims of the study?
- * Is the sampling technique clarified?
- * Is the sample likely to be similar to members of the appropriate population overall?
- * Are the criteria for including and/or excluding people or items from the sample clear and appropriate?

Source:

Adapted from Guidelines for Critique Research Reports by Beth L. Rodgers, Ph.D., RN, FAAN, University of Wisconsin-Milwaukee, School of Nursing
Adapted from Evaluation Tool for Quantitative Research Studies. Prof Andrew Long, School of Healthcare, University of Leed

9. Variables

- * What are the independent and dependent variables?
- * Are the variables in the study appropriate to the problem?
- * Are the means to measure the variables appropriate?

10. Data Collection

- * Are the instruments or other means for data collection described sufficiently?
- * Are reliability and validity of instruments addressed? Are these adequate?
- * Are data collection methods described clearly?
- * Are the data collection methods appropriate?
- * Could the researcher have affected the results of the study in some way related to the collection of data?
- * Are the data collected current/ updated?

11. Data Analysis and Results

- * Is the process used to analyze data clear?
- * Were the processes for data analysis appropriate to answer the research question?
- * Do the results provide an answer to the research question?
- * If tables are provided, are these clear and understandable and appropriate in number?

12. Discussion and Interpretation of Findings

- * Does the discussion "fit" with the data? Is it logical based on the data and results presented?
- * Does the researcher discuss the findings in regard to previous research?
- * Does the researcher discuss the findings in regard to the theoretical framework if any?
- * Does the researcher identify limitations of the study? How do these affect the quality of the study?
- * Does the researcher discuss implications for practice? Are these appropriate?

13. Ethical Considerations

- * Does the researcher indicate that approval was obtained from appropriate review boards?
- * Were the rights of human subjects protected (confidentiality)?

14. Application & Feasibility

- * How similar are the conditions of the study (setting, sample, interventions, etc.) to our setting?
- * How feasible would it be to make a change in practice based on this research?

15. Overall

- * Strengths and weaknesses,
- * The key findings of the study
- * Suggestions for how the study might be improved.

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