

Research Paper Critique

- See Guide Questions below for Critiquing a Research Paper

INTRODUCTION

Problem

- Is there a statement of the problem or qualitative topic of study? Does the problem or topic indicate a particular focus of study?
- Is the problem “researchable”; that is, can it be investigated through collecting and analyzing data?
- Is background information on the problem presented?
- Is the educational significance of the problem discussed?
- Does the quantitative problem statement indicate the variables of interest and the specific relationship between those variables that were investigated?
- Does the qualitative problem statement provide a general indication of the research topic or issue?
- When necessary, are variables directly or operationally defined?
- Does the researcher have the knowledge and skill to carry out the proposed research?

Review of Related Literature

- Is the review comprehensive?
- Are all references cited relevant to the problem under investigation?
- Are most of the sources primary (i.e., are there only a few or no secondary sources)?
- Have the references been analyzed and critiqued, and the result of various studies compared and contrasted? That is, is the review, more than a series of abstracts or annotations?
- Is the relevancy of each reference explained?
- Is the review well organized? Does it logically flow in such a way that the references least related to the problem are discussed first and the most related references are discussed last?
- Does it educate the reader about the problem or topic?
- Does the review conclude with a summary and interpretation of the literature and its implications for the problem investigated?
- Do the implications discussed form an empirical or theoretical rationale for the hypotheses that follow?
- Are the reference cited completely and accurately?

Hypotheses

- Are specific questions to be answered listed or specific hypotheses to be tested stated?
- Does each hypothesis state an expected relationship or difference?
- If necessary, are variables directly or operationally defined?
- Is each hypothesis testable?

METHOD

Participants

- Are the size and major characteristics of the population studied described?
- Are the accessible and target populations described?

- If a sample was selected, is the method of selecting the sample clearly described?
- Does the method of sample selection suggest any limitations or biases in the sample?
- Are the size and major characteristics of the sample described?
- If the study is quantitative, does the sample size meet the suggested guideline for minimum appropriate sample size?

Instruments

- Do instruments and their administration meet guidelines for protecting human subjects? Have needed permissions been obtained?
- Is the rationale given for the selection of the instruments (or measurements) used?
- Is each instrument described in terms of purpose, content, validity, and reliability?
- Are the instruments appropriate for measuring the intended variables?
- Does the researcher have the needed skills or experience to construct or administer an instrument?
- Is evidence presented to indicate that the instruments are appropriate for the intended sample?
- If appropriate, are subtest reliabilities given?
- If an instrument was developed specifically for the study, are the procedures involved in its development and validation described?
- If an instrument was developed specifically for the study, are administration, scoring or tabulating, and interpretation procedures fully described?
- Is the correct type of instrument used for data collection (e.g., using a norm-reference instrument when a criterion-referenced one is more suitable)?

Design and Procedure

- Are the design and procedures appropriate for examining the research question or testing the hypotheses of the study?
- Are the procedures described in sufficient detail to permit them to be replicated by another researcher?
- Do procedures logically relate to each other?
- Are instruments and procedures applied correctly?
- If a pilot was conducted, are its execution and results described as well as its impact on the subsequent study?
- Are control procedures described?
- Did the researcher discuss or account for any potentially confounding variables that he or she was unable to control?
- Is the application of the quantitative method chosen described in detail?
- Is the context of the quantitative study described in detail?

RESULTS

- Are appropriate descriptive statistics presented?
- Was the probability level at which the results of the tests of significance were evaluated specified in advance of the data analyses? Was every hypothesis tested?
- If parametric tests were used, is there evidence the researcher avoided violating the required assumptions for parametric tests?
- Are the tests of significance described appropriate, given the hypotheses and design of the study?
- Was the inductive logic used to produce results in a qualitative study made explicit?
- Are the tests of significance interpreted using the appropriate degrees of freedom?
- Are the results clearly described?

- Are the tables and figure (if any) well organized and easy to understand?
- Are the data in each table and figure described in the text?

DISCUSSION (CONCLUSIONS AND RECOMMENDATIONS)

- Is each result discussed in terms of the original hypothesis or topic to which it relates?
- Is each results discussed in terms of its agreements or disagreement with previous results obtained by other researchers in other studies?
- Are generalizations consistent with the results?
- Are the possible effects of uncontrolled variables on the results discussed?
- Are theoretical and practical implications of the findings discussed?
- Are recommended for future action made?
- Are the suggestions for future actions on practical significance or on statistical significance only (i.e., has the author avoided confusing practical and statistical significance)?

ABSTRACT OR SUMMARY

- Is the problem restated?
- Are the number and type of subjects and instruments described?
- Is the design used identified?
- Are procedures described?
- Are the major results and conclusions restated?