

# Critical review of Published article

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# Meaning

- ▶ A **critical review** of a journal article refers to process of evaluation of the strengths and weaknesses of an article's ideas and content.
- ▶ It provides description, **analysis** and interpretation that allow readers to assess the article's value.

# What is research critique

- ▶ It is careful and critical appraisal of strength and limitations of a piece of **research**, rather than hunting for and exposing mistake.
- ▶ A critical review is an evaluation of an academic article or essay.

# Definition

- ▶ It is a systematic unbiased careful examination of all aspects of the study to judge the merits ,limitations ,meaning and significance based on the previous experience and knowledge of the topic.(Burns,N.&Grove,S.)

## Critical Review of a Research Article

- Research critique is a planned, careful critical evaluation of a piece of research work against the prespecified criteria to judge the strengths and weaknesses of the research study. Critique should be balanced, where alternative suggestions must be provided to further enforce the strengths and eliminate the weaknesses of the study to improve overall quality of the research project.

# What are the requirement of a researcher

- ▶ Critical review requires,
- ▶ Critical thinking
- ▶ Appraisal
- ▶ & intellectual skill

# Importance of research critique

- ▶ To Broaden understanding to use in practice
- ▶ For implementing an evidence based nursing practice
- ▶ Encourages Nurses to participate in clinical enquiry and provide evidence for use in practice.
- ▶ Advance the nursing knowledge and profession
- ▶ Written critique is a guide for a researcher.

## Purposes

- To provide inputs regarding the strength and weakness of a study to the researchers.
- To provide suggestions to the students regarding the methodological flaws in their research project and also to evaluate the understanding of research by the students.
- To judge the scientific merits of the study.
- To take a decision whether to publish the study in journal or not.



## **Guidelines for Writing a Research Critique**

- Read and understand the research report carefully.
- Carryout the critical appraisal of all the aspects of the research report before writing the critique of a research report.
- Avoid general vague statements; be objective and sensitive while framing the negative comments, and be practical by considering all the limitations of the research.

# Guidelines contd...

- Keep a balanced approach in the research critique by presenting both strong and weak points of report, because certainly no report without any negative aspects.
- Positive and negative points must be supported with examples to make a clear stand about the strengths and weaknesses of the research report.

## **Guidelines for critiquing the research report**

- Some of the positive points of the study can be gathered from the questions formulated; more the number of questions answered with ‘yes’, the better the study is considered. A rating scale may be used for critiquing a research report.

## CRITIQUE OF THE STUDY BACKGROUND

### ✓ *Research problem*

- Is the problem statement clearly and concisely articulated?
- Is the problem significant for nursing profession and has the researcher provided good argument for the significance?
- Is the research problem within the professional domain?
- Is the problem not complex to study and appropriately delimited in its scope?

## Cont....

- Does the problem statement clearly depict the variables, population, and place of the study?
- Is the research problem feasible to study in reference to time, resources, researcher's ability and availability of respondents?
- Is the research problem directed to develop or test the nursing theories?



✓ *Objectives*

- Are the objectives in accordance with research problem?
- Are the objectives stated in clear and concise form?
- Are the objectives stated using accepted action verbs in logical manner?

✓ *Operational definitions*

- Are all the study variables operationally defined?
- Are operational definitions stated in logical and measurable form?

### ✓ *Hypotheses*

- Are the hypotheses stated? If not, does the researcher provide sufficient information for not stating the hypotheses?
- Are hypotheses logically related with the research problem and objectives?
- If stated, are the hypotheses clear? Specific? Testable?
- Whether hypotheses are stated in measurable terms by stating the level of significance to accept or reject the hypothesis?
- Are hypotheses stated in a way that they express a predicted relationship between two or more variables?
- Are hypotheses based on conceptual framework used in research study?

### ✓ *Conceptual framework*

- Is conceptual framework appropriate and in accordance with research problem?
- Is conceptual framework based on a nursing theory or a theory from other related disciplines?
- Are all the concepts in conceptual framework clearly, adequately, and logically defined and articulated in a way that they help either in the testing or generation of a theory?



✓ *Literature review*

- Is the literature completely in accordance with research problem and covers majority of available studies on the topic under study?
- Is the literature reviewed from the current and primary sources?
- Is the literature review well-organized under subheadings in a chronological order according to the year of the study?
- Is the literature review presented in an analytical way to draw the meaningful inferences?

## CRITIQUE OF THE METHODOLOGICAL ASPECTS

### ✓ *Research design*

- Is the design specified correctly? What was the design used?
- Is the design appropriate to answer the research question?
- Did the researcher attempt to control for threats to internal and external validity?

✓ *Sample and sampling technique*

- Is the sample size adequate?
- Is the sample likely to be similar to members of population overall?
- Are the criteria for including and/or excluding people or items from sample clear and appropriate?
- Is an appropriate sampling technique used to draw a sample from population?

✓ *Data collection method and tools*

- Are the instruments or other means for data collection described sufficiently?
- Are the reliability and validity of instruments addressed? Are those adequate?
- Are data collection method described clearly?
- Are the data collection methods appropriate?  
Could the researcher mentioned the specific benefits and problems faced by the research with particular methods of data collection?

✓ *Ethical considerations*

- Are the participants safe from any physical harms, risks, psychological and social distress and discomfort?
- Is confidentiality of information and anonymity and privacy of subjects was maintained?
- Was an appropriate written or verbal consent taken from all the study participants?
- Was a written permission obtained from competent authority to conduct the research study?

## Cont.....

- If vulnerable populations were involved, was special consideration given to informed consent and study procedure?
- Was the benefits of the study outweighed the risk for individual subjects and a risk/ benefit assessment considered?
- Were subjects recruited, selected and assigned to groups in an equitable way?

## CRITIQUE OF RESULTS, CONCLUSIONS, AND MISCELLANEOUS ASPECTS OF THE STUDY

### ✓ *Analysis of data*

- Is the process used to analyze data clear?
- Whether the processes for data analysis appropriate to answer the research question?
- Do the results provide, are they clear and understandable?
- Of tables are provided, are they clear and understandable?

*For qualitative studies, some additional items for critique include:*

- Does the researcher provide sufficient examples of the data?
- Does the researcher describe processes that were used to avoid biasing or influencing the data obtained and the analysis procedures used?

✓ *Interpretation and discussion of data*

- 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?
- 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?

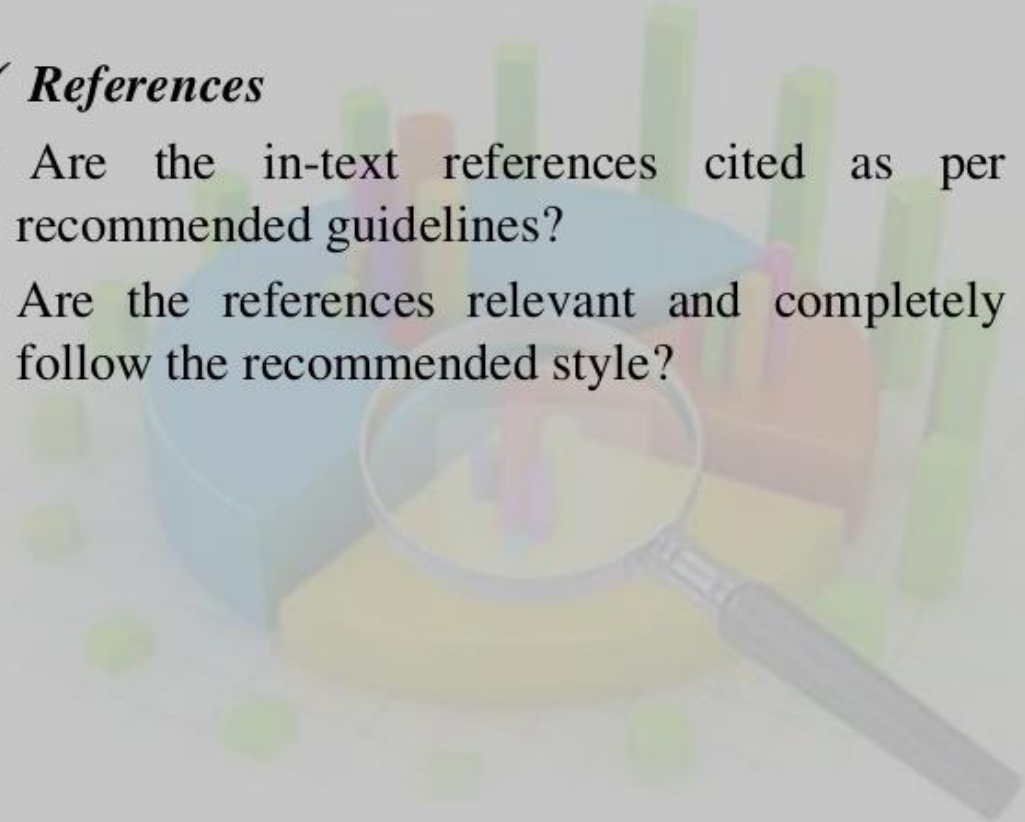


✓ *Conclusion and recommendations*

- Has the study concluded concisely and precisely depicting most significant findings?
- Are the conclusions drawn in accordance with study objectives, hypotheses/ assumptions, and conceptual framework?
- Are practical recommendations made towards improvement in the nursing practices?
- Are the recommendations consistent with the research findings and results?
- Are the recommendations made with suggested changes and improvements in the methodologies of the further researcher studies on similar topics?



✓ *References*

- Are the in-text references cited as per recommended guidelines?
  - Are the references relevant and completely follow the recommended style?
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## **Analyzing and synthesizing information**

Once all the relevant studies have been retrieved, read abstracted, and critiqued, the information has to be analyzed and synthesized. A thematic analysis essentially involves detecting patterns and regularities, as well as inconsistencies. Several different types of themes can be identified. Clearly, it is not possible even in lengthy free-standing reviews to analyze all the themes identified. Reviewers have to make decisions about which patterns to pursue.

## References

- Sharma SK. Nursing Research & Statistics. Second Edition. Published by Elsevier India Private Limited; 2014.
- Polit DF, Beck CT. Nursing Research. Ninth edition. Published by Wolters Kluwer India Private Limited; 2014.

