

Learning Objective

- What is Research limitation?
- How to write Research limitation?
- How to conclude the research paper?
- What is recommendation in research?
- Plagiarism in research.
- How to avoid plagiarism?

Limitations in Research



Limitations of the Study

- Every research endeavor encounters challenges.
- These uncharted boundaries and abrupt constraints are known as **limitations in research**.

Limitations of the Study

- Research limitations are **the practical or theoretical shortcomings of a study that are often outside of the researcher's control.**
- Study limitations represent weaknesses within a research design.

Common Examples of Limitations

- Each study will have its own unique set of limitations.
- In quantitative research, :
- Participant dropout
 - Small sample size, low power.
 - Non-representative sample.
 - Non-experimental design, lack of manipulation of variables, lack of controls.
 - Potential confounding variables.
 - Limits of an instrument to measure the construct of interest.
 - Data collection methods (e.g., self-report).

Common Examples of Limitations

- Each study will have its own unique set of limitations.
- **In quantitative research, :**
 - Participant dropout.
 - **Small sample size, low power**
 - Non-representative sample.
 - Non-experimental design, lack of manipulation of variables, lack of controls.
 - Potential confounding variables.
 - Limits of an instrument to measure the construct of interest.
 - Data collection methods (e.g., self-report).

Common Examples of Limitations

- Each study will have its own unique set of limitations.
- **In quantitative research, :**
 - Participant dropout.
 - Small sample size, low power.
 - **Non-representative sample**
 - Non-experimental design, lack of manipulation of variables, lack of controls.
 - Potential confounding variables.
 - Limits of an instrument to measure the construct of interest.
 - Data collection methods (e.g., self-report).

Common Examples of Limitations

- Each study will have its own unique set of limitations.
- **In quantitative research, :**
 - Participant dropout.
 - Small sample size, low power.
 - Non-representative sample.
 - **Non-experimental design, lack of manipulation of variables, lack of controls**
 - Potential confounding variables.
 - Limits of an instrument to measure the construct of interest.
 - Data collection methods (e.g., self-report).

Common Examples of Limitations

- Each study will have its own unique set of limitations.
- **In quantitative research, :**
 - Participant dropout.
 - Small sample size, low power.
 - Non-representative sample.
 - Non-experimental design, lack of manipulation of variables, lack of controls.
- **Potential confounding variables**
 - Limits of an instrument to measure the construct of interest.
 - Data collection methods (e.g., self-report).

Common Examples of Limitations

- Each study will have its own unique set of limitations.
- **In quantitative research, :**
 - Participant dropout.
 - Small sample size, low power.
 - Non-representative sample.
 - Non-experimental design, lack of manipulation of variables, lack of controls.
 - Potential confounding variables.
 - Limits of an instrument to measure the construct of interest
- Data collection methods (e.g., self-report).

Common Examples of Limitations

- Each study will have its own unique set of limitations.
- **In quantitative research, :**
 - Participant dropout.
 - Small sample size, low power.
 - Non-representative sample.
 - Non-experimental design, lack of manipulation of variables, lack of controls.
 - Potential confounding variables.
 - Limits of an instrument to measure the construct of interest.
 - Data collection methods (e.g., self-report)

Common Examples of Limitations

- In **qualitative research**, common limitations include the following:
 - **Lack of generalizability of findings**
 - Inability to draw causal conclusions.
 - Researcher bias.
 - Limitations in participants' ability/willingness to share or describe their experiences.
 - Any factors that might limit the rigor of data collection or analysis procedures.

Common Examples of Limitations

- In **qualitative research**, common limitations include the following:
 - Lack of generalizability of findings.
 - **Inability to draw causal conclusions.**
 - Researcher bias.
 - Limitations in participants' ability/willingness to share or describe their experiences.
 - Any factors that might limit the rigor of data collection or analysis procedures.

Common Examples of Limitations

- In **qualitative research**, common limitations include the following:
 - Lack of generalizability of findings
 - Inability to draw causal conclusions.
 - **Researcher bias.**
 - Limitations in participants' ability/willingness to share or describe their experiences.
 - Any factors that might limit the rigor of data collection or analysis procedures.

Common Examples of Limitations

- In **qualitative research**, common limitations include the following:
 - Lack of generalizability of findings
 - Inability to draw causal conclusions.
 - Researcher bias.
- Limitations in participant's ability/willingness to share or describe their experiences.
- Any factors that might limit the rigor of data collection or analysis procedures.

Common Examples of Limitations

- In **qualitative research**, common limitations include the following:
 - Lack of generalizability of findings
 - Inability to draw causal conclusions.
 - Researcher bias.
 - Limitations in participants' ability/willingness to share or describe their experiences.
- Any factors that might limit the rigor of data collection or analysis procedures.

How to write limitation

- Describe each limitation in detailed but in concise terms.
- Explain why each limitation exist.
- Provide the reasons why each limitation could not be overcome using the method(s) chosen to acquire or gather the data.

Example

- Although interesting findings were obtained, this study has limitations embedded within it. Having only 40 participants limited the study's statistical power, and may have contributed to the marginally significant findings described above.
- It is also possible that the presence of an observer and a tape recorder may have reduced the ecological validity of the parent-child reading session. Efforts were made to make the experience as noninvasive as possible by keeping the sessions informal, with the observer sitting well away from the dyad as they read and having the same observer work with the child each year of the study.

Example

- Despite this, the mere presence of an outside individual may have altered the behaviors of the child or adult. Future research could partly address this by providing families with tape recorders to self-record their interactions. This would eliminate the influence of an observer, but that of the tape recorder would remain.

Research Paper Conclusion



Conclusion Section of Research Papers

- Last section of a research.
- Just as important as introductions.
- Some academic readers will even jump to read the conclusion to help them decide if they should read the whole paper!
- It is the most challenging part of a research paper to write.

Content of good conclusions

- Conclusions are what the Middle sections/ or Discussion chapter has been arguing for.
- Should be a separate chapter from the "Discussion" chapter.
- No scope to analyze, hence only give a constructive and precise evaluation of the work.
- Should respond to the aims that were stated in the first chapter.

Basic functions of conclusions

- **To summarize about:**
 - What did you research?
 - What was the rationale?
 - How did you research?
 - What did you discover?

Basic functions of conclusions

- **To provide an overview of:**
- The new knowledge or information discovered.
- The significance of your research.
- The limitations of your research.
- Areas for further development and research.

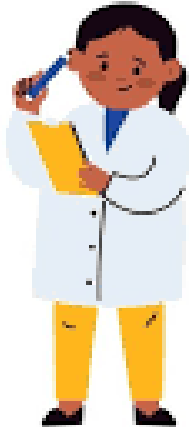
The "4 Avoids"

- Findings that you have not proven throughout your research.
- Introducing new data.
- Hiding weaknesses or limitations.
- Being too long or too short.

How to construct conclusion

- Focus on what you researched and how you did it.
- Focus on what are the main findings were.
- Focus on possible areas for future research.
- Reminding readers of the original contribution and significance of your research to your field.

Research Recommendations



- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Recommendations

- Suggested action that is based on the conclusion.
- Recommendations answers WHAT NOW.
- The suggested action should be explicit and detailed.
- Included a brief "how" to implement or the next step the researcher should take.

What should recommendations in research look like?

- Directly related to research question or objectives or significant findings.
- Concrete and specific.
- Supported by a clear reasoning.

How to write recommendations

- **Specific.**
- **Measurable.**
- **Attainable.**
- **Relevant.**
- **Timely.**

Example

- The current study can be interpreted as a first step in the research on differentiated instructions. However, the results of this study should be treated with caution as the selected participants were more willing to make changes in their teaching models, limiting the generalizability of the model.
- Future research might consider ways to overcome resistance to implementing differentiated learning. It could also contribute to a deeper understanding of the practices for suitable implementation of differentiated learning.

"In a Nutshell"

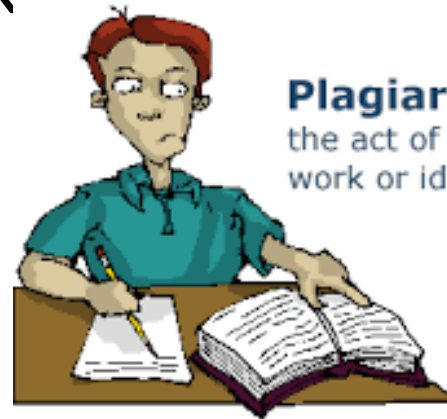
Definition	Recommendations in research are suggestions/solutions that address certain problems based on study results.
Purpose	Lists specific actions to be taken with regard to policy, practice, or subsequent research.
Questions answered	What's next in this field of research?
Examples	Based on our findings, we recommend conducting periodic assessments to benefit fully from the interventions.

Plagiarism

- Plagiarism originated in early 17th century from the Latin word 'plagium' - means "Kidnapping".
- It is an intellectual theft and a serious scientific misconduct.
- According to the American Heritage Dictionary of the English Language, Plagiarism refers to the using of ideas or words of another person without giving appropriate credit.'

Plagiarism

- The basic concept of plagiarism refers to one author taking another's work



Plagiarism:

the act of presenting another's work or ideas as your own.

- It may be intentionally or unintentionally; may be in the form of an idea, a method, data, results, or text, and presenting it as their own work without giving credit to the person whose work it was.

Reasons behind plagiarism

- Desire or urge to be successful.
- Desire to increase the number of publications.
- Lack of knowledge of the ethics of scholarly writing.
- Poor writing skills.
- Demand for publications during interviews.
- Pressure from seniors.

Types

- Copying.
- Patchwork Plagiarism.
- Paraphrasing Plagiarism.
- Unintentional Plagiarism.
- Self-plagiarism.

Levels of Plagiarism

- Level 0
- Level 1
- Level 2
- Level 3

- Keep track of your sources.
- Acknowledge.
- Quotation marks.
- Block.
- Paraphrasing.
- Citations/References.
- Use plagiarism checker.



Avoiding Plagiarism

- Keep track of your sources.
- Acknowledge.
- Quotation marks.
- Block.
- Paraphrasing.
- Citations/References.
- Use plagiarism checker.

Paraphrasing a Source - Example

- Let's say we want to paraphrase the following bit of information...
- "Many say they had initially chosen to remain in their homes in Myanmar's northern Rakhine state despite repeated threats to leave or be killed. They finally fled when their villages were set on fire," he added.
- Though they were threatened with violence and death, many people from the northern Rakhine state did not leave their homes until their villages were set on fire ("Thousands of Rohingya refugees stranded near Bangladesh-Myanmar border - UN").

Quoting a Source - Example

- UNICEF spokesperson Marixie Mercado emphasized the need for more funding, stating "Rohingya children have already endured atrocities. All of them need the lifesaving basics--shelter, food, water, vaccinations, protection--not tomorrow or next week or next month, but right now" ("Thousands of Rohingya refugees stranded near Bangladesh- Myanmar border -- UN").
- UNICEF spokesperson Marixie Mercado emphasized the need for more funding, stating "Rohingya children have already endured atrocities. All of them need the lifesaving basics...not tomorrow or next week or next month, but right now" ("Thousands of Rohingya refugees stranded near Bangladesh-Myanmar border - UN").

Works Cited - Example

- "Thousands of Rohingya refugees stranded near Bangladesh- Myanmar border -- UN." UN News Centre. United Nations, 17 October 2017. Web. 18 October 2017.

Important reminders

- Always double check all your citations for accuracy, proper formatting, author and page number.
- Make sure all your in text citations match the sources listed in the Works Cited.
- Anyone reading your work should be able to easily locate the original source of any material you use in your own work.

Anti- plagiarism software

- Turnitin
- i-Thenticate
- Copycatch
- Plagiarism detector
- EVE
- Cross Check
- Wcopy Find
- Word-CHECK

Take Home Messages

- Regardless of how, when, or why they arise, **limitations are a natural part of the research process and should never be ignored.**
- Conclusions aren't simply an overview of a paper. Instead, they should reiterate why your research is important.
- The conclusion section is where students both summarize and 'wrap up' their work.

Take Home Messages

- Honesty is the best policy-everywhere. Choose honest colleagues and seniors for research and writing. Plan ahead and don't rush. Learn medical writing like learning medical science. Explore online resources and share whatever you learn. Lead by example.

Thank
You...

Knowledge Sharing

