



UMS
UNIVERSITI MALAYSIA SABAH

KURSUS METHODOLOGI PASCASISWAZAH SEMESTER 2 SESI 2017/2018

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Philosophy of Research Methodology and Literature Review (Science)

PROBLEMS





CHAPTER INTRODUCTION

1. Background of the Problem of your study -
2. Rationale, theoretical or conceptual background -
3. Statement of problem –
4. Purpose of the study / objective -
5. Research Questions –
6. Statement of the Hypotheses –
7.

Purpose of Literature Review

- To provide background information.
- To establish importance.
- To demonstrate familiarity.
- To “carve out a space” for further research.
- To know what has been known or unknown/researched.
- To develop explanation on certain phenomena, state-of-the art .
- To learn how other researchers define words, concepts and identify hypothesis that can be studied.
- To identify relationships between concepts and hypothesis.
- To identify sources of data used by earlier researchers.
- To explore issues, theories in scholarly writings .
- To identify what had been published on a certain topic .
- To critically analysis a segment of a particular knowledge through classification, summary, comparison.
- Identify key landmark studies: key sources and authors.
- To explore and analysis previous approaches and methodologies.
- To identify how to fill a bit in the existing **Research Gap**.

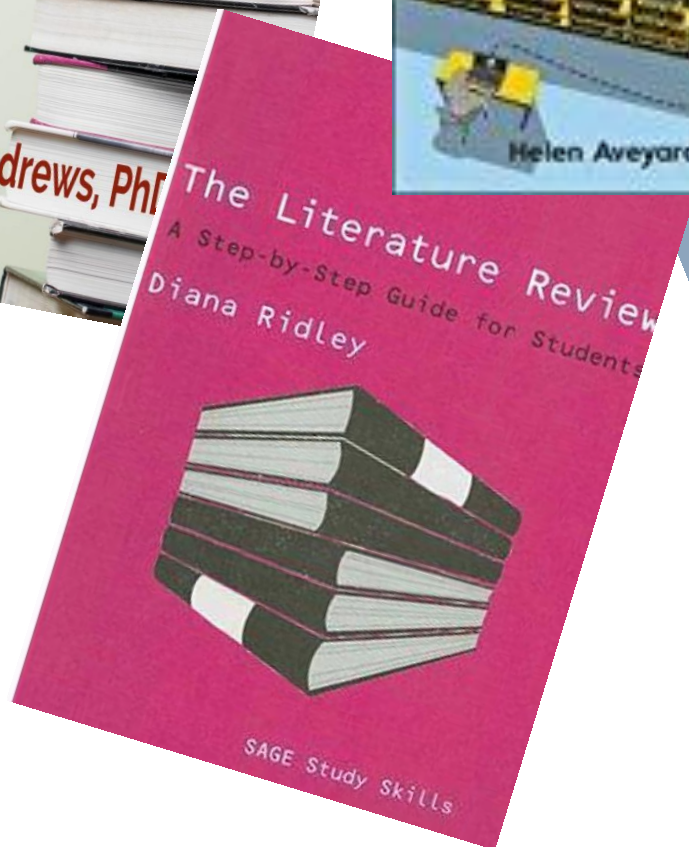
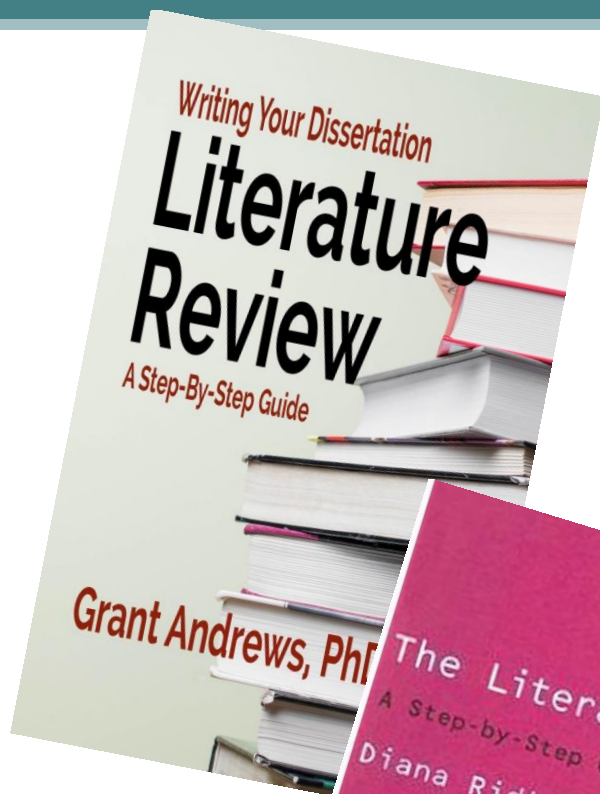
- Writing a literature review is often the most daunting part of writing an article, book, thesis, or dissertation.
- “The literature” seems (and often is) massive - it helpful to be as systematic as possible when completing this task.



- * What is the content and how to arrange the materials in it..
- * How does it different with the introduction chapter, discussion chapter

- efficient and effective way of writing a literature review.

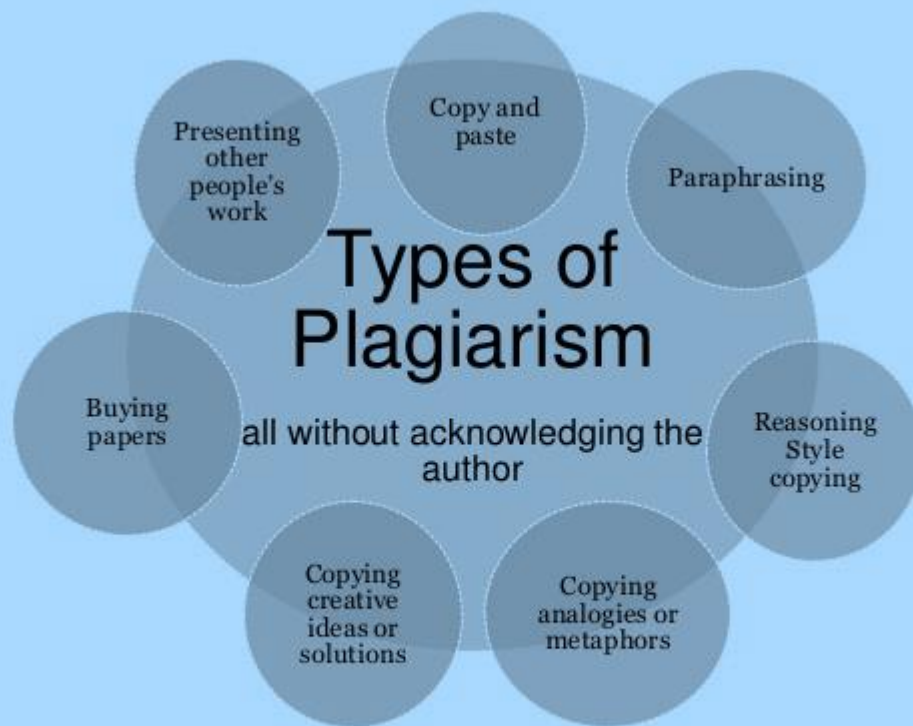
Step-by-step guide



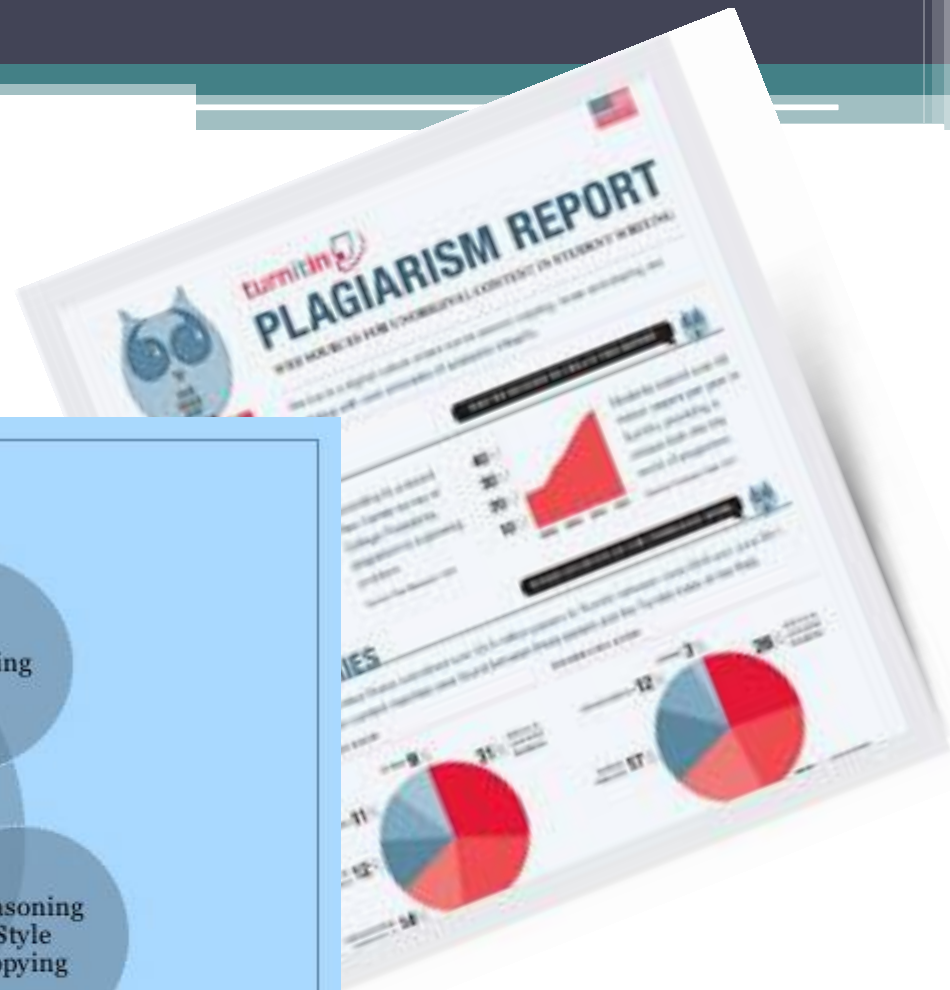


☒ Articles (☒ include patents) ☐ Case law

- ✓ LR must be well structure,
- ✓ your ideas must flow logically from one point to the next
- ✓ Ensure sources of references are current and relevant
- ✓ Cited appropriately according to your discipline



(Five Types of Plagiarism n.d., Wilson, 2007)



Writing a Literature Review

- How to Read Efficiently
 - Read abstract
 - If paper is relevant, read introduction and conclusion
 - If still relevant, read literature review and approach/overview
 - If relevant, read evaluation and results
 - Only if absolutely necessary, read detailed design/implementation

Methodology

Methodology Chapter: Thematic Structure



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Type of the research design (Quantitative, Qualitative, or Mixed method)



Respondents/participants: Sampling procedures




Data collection: instruments and methods of collecting data



Data analysis: Procedures/steps of analysis




Ethical considerations: Permissions to conduct the research



tips for writing a dissertation methodology

• 1. Problem

- The methodology typically follows your literature review, so for the purposes of clarity and regaining focus it is useful briefly **to recap the central research questions** .
- Define and explain the problems which you seek to address.



Key to justifying your methodology
is demonstrating that it is fit for
the purpose of answering the
research problem or questions you
posed at the start.

• 2. Approach

- Give an overview of your approach to primary research in order to guide the reader and contextualise your methodology.
- By identifying all methodological aspects to which to will attend – rationale, justification, sampling issues, etc. – you can signal unambiguously to the reader that you fully understand the implications of thorough, astute methodology.

Purpose of the Research Design

- The goal of a good research design is to provide credible answers to research questions.
- According to Beiger and Gerlach (1996), the research design enables the researcher to develop a set of methods and procedures that lead him to answer the research problems and test research hypotheses with a high degree of confidence.

- 3. Reproducibility

The ability to reproduce the results of an experiment is a hallmark of proper scientific method; in the humanities also, reproducibility indicates greater **credibility** and usefulness.

Provide a detailed description of your techniques, such that those wishing to challenge your position could, if they wished, reproduce the same research.

• 4. Precedence

- Consider whether your research methodology is **typical** of comparable research projects within your particular subject area.
- A review of the relevant literature will doubtless find some comparable endeavours, in which case the adoption of those methodologies may lend **authority** to your approach.

• 5. Justification

It is absolutely essential that you provide sound reasons for the methods you have chosen to conduct your research.

This aspect is particularly important when adopting a **novel or non-standard** methodology.

Approaches at odds with comparable endeavours require considerable rigorous justification.

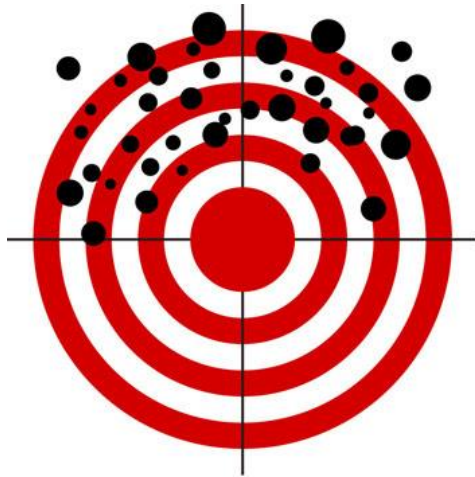
• 6. Rationale

No matter what type of research, there are almost always a number of methodological approaches available.

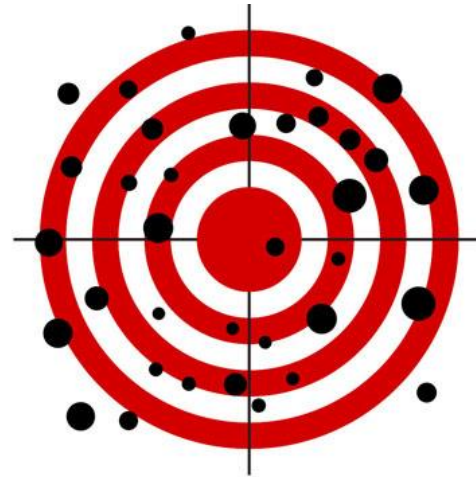
In your rationale, critically evaluate alternate approaches in order to **defend the methods** you have finally chosen. Weigh up the pros and cons of all relevant alternatives, including your own choice.

7. Reliability and validity

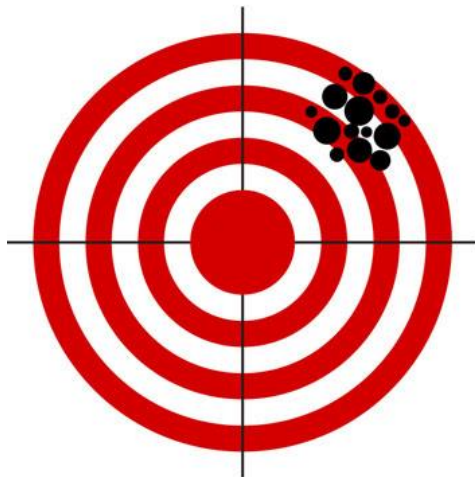
- Essential considerations in all types of research, issues of reliability and validity must be explicitly discussed.
- Many matters fall under this area, including accuracy, precision, sources of error and statistical significance.



Unreliable & Unvalid



Unreliable, But Valid



Reliable, Not Valid



Both Reliable & Valid

8. Sampling

- Questions concerning sampling techniques and sample size can be considered under reliability and validity, but are often important enough to be given special attention.
- The impact of sample size upon **statistical significance** of your results is an issue of such importance that you should be mindful of this when designing and writing up your methodology.

Questions:

How large should
my sample be?

Answer:

It depends...



*...large enough to be an accurate
representation of the population*

*...large enough to achieve
statistically significant results*

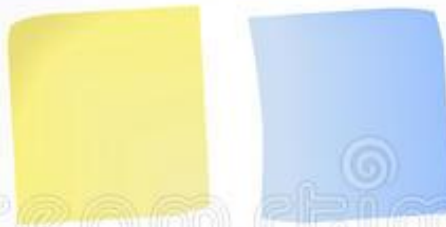
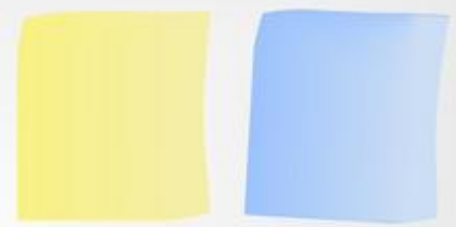
9. Appendix

- Keep your methodology chapter focused and lucidly written by appending indirectly relevant material to the end of your dissertation writing.
- Copies of **questionnaires** and other methodological material should usually be placed in the appendix.

TO DO

IN PROGRESS

COMPLETED





THANK YOU

ALL THE BEST
&
GOOD LUCK