

CP 460 - Applied Cryptography

Systematic Literature Review

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Literature Review: The Concept

- An important section of a research proposal/ article/dissertation/thesis
- Written summary of literatures
 (journal articles, books and other documents)
- Link between past and current knowledge
- Describes past and current information of research
- Documenting a need for proposed study.

Systematic Literature Review

- The major advantage of a SR is that it is based on a well-defined methodology.
- SRs aim to find, assess, and aggregate all relevant evidence about some topic of interest in a fair, repeatable, and auditable manner.
- A researcher conducting a SR selects empirical studies that are relevant to the particular research question, assesses the validity of each one, and then determines the trend shown by those studies.

Writing of Systematic Review Step-by-step Guidelines

Planning the Review

- Identification of the need for a review
- 2. Commissioning a review*
- 3. Specifying the research question(s)
- 4. Developing a review protocol
- 5. Evaluating the review protocol*

Reporting the Review

- Specifying dissemination mechanisms
- 2. Formatting the main report
- 3. Evaluating the report*

Step One

Identifying Key Terms

Write a preliminary working title,

Select **a few important words** that capture the essence of the study.

What is Literature?

"...a collection of all scholarly writings on a topic.."

Fink, A. (2018). Conducting literature research reviews. Thousands Oaks, CA, p 3.

DIFFERENT SOURCES OF INFORMATION

Information Source	What it Does?	Examples	
General Source	 Provides an overview of a topic Leads to where more information can be found. 	Daily newspapers, news weeklies, popular periodicals and magazines, Reader's Digest Guide to Periodical Literature	
Secondary Source	Provides a level of information "once removed" from the original work.	Books on specific subjects and reviews of research, scholarly books,	
Primary Source	The original reports of the original work / experience.	Journals, abstracts, research articles and Educational Resources Information Centre (ERIC)	

Identification of Research

- Bibliography Management and Document Retrieval
 - Reference Manager (http://www.refman.com/)
 - Endnote (<u>http://endnote.com/</u>)
 - Mendeley (<u>http://www.mendeley.com/</u>)
 - Papers (http://papersapp.com/mac/)
- Documenting the Search (The process of performing a systematic literature review must be transparent and replicable (as far as possible)

Study Selection

- Study selection process:
 - Language
 - Journal
 - Authors
 - Setting
 - Participants or subjects
 - Research Design
 - Date of publication
- Reliability of inclusion decisions

Step Three

Analyzing & Checking the Relevance

Determining Relevance!

- 1. Topic Relevance
- 2. Individual and Site Relevance
- 3. Problem Relevance
- 4. Accessibility Relevance

If you answer **YES** to these questions, the literature is relevant!

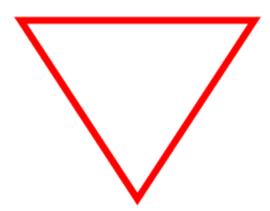
Review Grid: An Idea

Author/ Researc her, Title,	Journal/ Book/	Year of Publicati on	Area/ Theme	Purpose/ Objective	Type of Study Design	Findin gs
		2021		Effectiveness of co-operative teaching	Experiment al study	
		2019		Relationship between co- operative teaching, mental health & achievement of	Descriptive study	

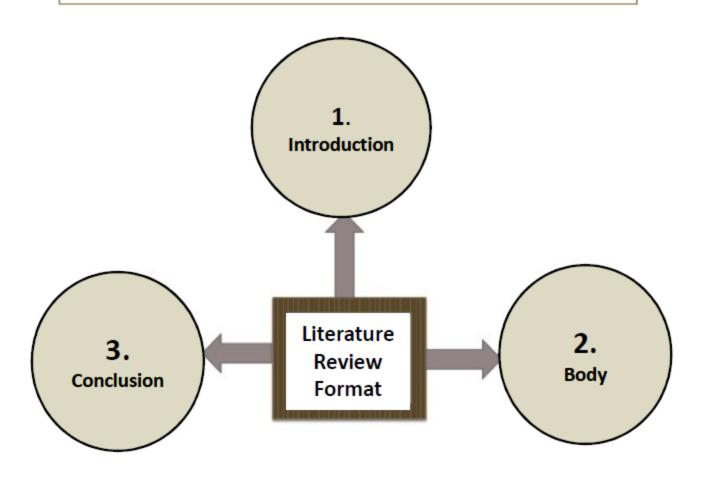
Organization of Literature

A general organization looks like a funnel

- Broader topics
- Subtopics
- Proposed study



Format of a Literature Review



Concluding Statement

- narrates comparison/contrast among literatures
- explains why the current literature is deficient
- explains why further study is needed
- ends with a statement of the proposed study



Some Suggestions

- Researcher must avoid Plagiarism and Fabrication
- Researcher must avoid using too Complicated Terms.
- It is important to separate the <u>literature review</u> from the rest of the study.

The <u>literature review</u> should be perfectly structured.

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