

Conducting effective Literature review

Lecture No. 6

Objectives:

- 1. Define literature review
- 2. Understand the purpose of literature review
- 3. Identify the components of literature review
- 4. Construct literature review

~ This lecture was presented by **Dr. Shatha Alduraywish**

- ~ It is included in the Midterm Exam
- ~ We highly recommended reading the **Ayah** in the first page

<u>Slides</u>

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Conducting effective literature review



Steps for Conducting a Research

- 1. Selecting the **research topic**
- 2. Explore the research topic (literature review)
- 3. Develop research **question** and specify the research **objectives** and **hypothesis**
- 4. Select the appropriate the study **design**
- 5. Design the research **methods**
- 6. Implement the data collection
- 7. Analyze and interpret the results.
- 8. Write a Final research report/manuscript
- 9. Prepare the presentation

Introduction

- One of the important first steps in conducting a scientific health research is to **explore what others have done** in relation to your proposed research topic.
- The main purpose of this process is to **identify the existing related research** and to **recognize the gap** in the knowledge that your research aims to address.

What is a literature review?

A systematic, precise, critical method for:

- Reading
- Analyzing
- Evaluating
- and summarizing,

the existing body of completed and recorded work produced by others.

• It is one of the most important early steps prior to initiating any research study



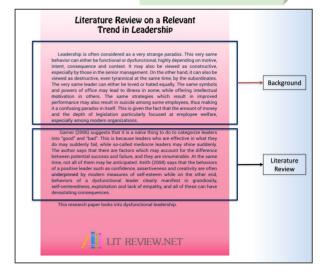
والذين جاهدوا أنفسهم ابتغاء مرضاتنا لنوفقنهم لإصابة الطريق المستقيم، وإن الله مع المحسنين بالعون والنصر والهداية.

> The literature review (LR) should not exceed more than 2000 or 2500 words.

Don't include all details in LR, like a shopping list.

New age group or different population, makes the paper stronger, and more likely to get published.

If you couldn't find papers in your topic, just widen the circle of search.



Conducting effective literature review Cont..

The aim of a literature review

Literature review is important step in planning a research project because:

- It helps the researcher **understand the existing body of knowledg**e in a specific field and **updated on the most recent findings** in that field.
- It identifies areas of consensus and debate among different studies, and highlights the gaps in knowledge that exist in the literature, which in turn justifies carrying out the research project.
- It provides **details of different research methodology** that were adopted by different researchers, which in turn helps in adopting the most appropriate study methodology in the proposed study.

Functions of the Literature Review

- It provides a **theoretical background** to your study.
- It helps you establish the **links** between what you are proposing to examine and what has already been studied.
- It helps you to **integrate** your research findings into the existing body of knowledge.

Midlie, websinse, Saudi digital library and different databases gives free access to papers.

Balanced: imp for publication, need to view all papers, even against your hypothesis

الأشياء اللي بتتقيمون عليها:

- comprehensive
- referenced
- relevant - balanced

Characteristics of a good literature review

A good review should have the following characteristics which make it of value:

- **Comprehensive**: Evidence should be gathered from all relevant sources.
- **Referenced**: Providing full references for reviewed papers.
- **Selective**: Using appropriate search strategies to find the most important evidence.
- **Relevant**: Focusing on related studies.
- **Balanced**: Providing objective evidence from papers with different findings.
- **Critical**: Following valid scientific critical appraisal of the literature.
- **Analytical**: Developing new ideas and understandings from the evidence.

Process of conducting literature review

Steps of a literature review

Develop a research question

• The first step is to define a specific research question, which identifies the research or clinical problem the research is aiming to solve.

Step 1: Identify the Key Words

Start developing a search strategy by **identifying the key words** and concepts within your research question.

Example

What strategies can healthcare workers use to communicate effectively with clients with a hearing disability?

- Treat each component as a separate concept
- For each concept —> list the key words derived from your research question, and any other relevant terms or synonyms. Also consider singular and plural forms of words, variant spellings, acronyms and relevant index terms (subject headings).

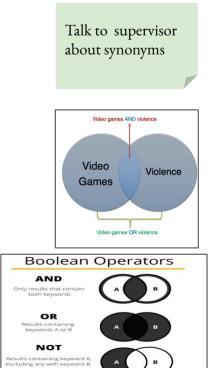
Step 2: Combine search terms with OR/AND/NOT (Boolean operators)

- OR
 - Link keywords related to a single concept with OR
 - Linking with OR broadens a search (increases the number of results) by searching for any of the alternative keywords
 - **Example**: hearing impaired OR deaf
- AND
 - Link different concepts with AND
 - Linking with AND narrows a search (reduces the number of results) by retrieving only those records that include all of your specified keywords
 - **Example**: hearing impaired AND communication
- NOT
 - using NOT narrows a search by excluding certain search terms
 - Most searches do not require the use of the NOT operator
 - **Example:** hearing impaired NOT deaf, will retrieve all results that include the words hearing impaired but don't contain the word deaf.



Mesh word = synonym, you need it for search

Search concept 1	Search concept 2	Search concept 3	Search concept 4
strategies	healthcare workers	communication	hearing disability
methods	healthcare professionals	communicating	hearing impairment
	health personnel	interpersonal communication	hearing impaired
	health professional	communication skills	deaf
			hard-of-hearing



Truncation and Wildcards and phrase

Truncation

- The truncation symbol is commonly an **asterisk** * and is added at the end of a word.
- The asterisk applied <u>to the root of a word</u> captures other endings to that root word making it useful for retrieving singular, plural and other variations of a keyword.

Example: strateg* will retrieve strategy, strategies, strategic, strategize etc. **Note:** If you don't want to retrieve all possible variations, an easy alternative is to utilise the OR operator instead e.g. strategy OR strategies.

Wildcard

Wildcard symbols include the **question mark** ? and **hash** #.

They replace zero, one or more characters in the middle of a word.

- Example:
 - wom#n finds woman or women.
 - **p?diatric** finds pediatric or paediatric

Note: The symbols may vary in different databases - see the database operators guide on the left for details or check the help link in any database.

For different spellings, Eg. Wom#n, astrellian z instead of s.

Use symbols to retrieve word variations

Phrase Searching

Use quotes to keep word order when searching for phrases

• For phrase searching, place two or more words in "inverted commas" or "quote marks".

Example: "hearing impaired"

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يطلع كل المشتقات

Note Taking (LR Record)

pic.										
st.		Sugert	Author	Year	Title	Aims	Method	Sample	Conclusion	Comments
Main Ideas	Notes		Willis		Memory efficiency and critical thinking among entry-level students	Test whether memory correlates positively with critical thinking	Quiz	50	Good memory positively influences critical thinking	Interesting quiz structure. Framing of critical thinking and memory is too similar, leading to exaggerated correlation.
			Qinhua	2011	De Bono Mnemonic places technique and note taking		Quiz and note analysis	12	Significant improvement (20%) in 6- strong sample.	One of the better papers on memory impact of note taking. Method useful for constructing experiment for testing critical thinking skills
mmary			Summers	2007		Laking	anarysis	12	scrong sample.	critical chinking skins
			D'Brant	2012						

LR in September, final manuscript in may, a lot of time. So You need to make notes to discuss later.

Organize your Notes for LR writing

- After you take notes, re-read them.
- Then re-organize them by **putting similar information together.**
- Working with your notes involves **re-grouping** them by topic instead of by source.
- Review the topics of your newly-grouped notes. If the topics do not answer your research question or support your topic directly, you may need to do additional research or re-think your original research.
- Grouping your notes will enable you to outline the major sections and then the paragraphs of your literature review section

Importance of a Good Literature Review

A literature review may consist of simply a summary of key sources, a literature review usually has an organizational pattern and combines both summary and synthesis, often within specific conceptual categories.

- A summary is a recap of the important information of the source.
- A synthesis is a reorganization, or a reshuffling, of that information in a way that informs how you are planning to investigate a research problem.

Organization of Writing the Literature Review

The main aim in structuring your review of the literature is to **lead the reader to understand the need to conduct** a research paper that you propose or have done.

Sections of literature review

Introduction

- An overview of the subject, issue, or theory under consideration
- It include the purpose of the review and a brief overview of the 'problem'.
- It is important that the literature sources and the key search terms are outlined.
- The introduction will make a statement about the status of knowledge in this area of research.

Main body

- Division of works under review into **themes or categories** [e.g. works that support a particular position, those against, and those offering alternative approaches entirely].
- An explanation of how each work is **similar** to and how it **varies** from the others.

Conclusion

- The conclusion should provide a **summary of findings** from the literature review.
- Explain what your analysis of the material leads you to conclude about the overall state of the literature, what it provides and **where it is lacking.**

Example 1 (structured like an Annotated Bibliography)

The seven recent articles that were reviewed for this assignment are discussed in turn below.

(1) Smith (2003) reported on a survey of 287 senior managers in Victoria. Her study covered five major areas which were \dots Smith's results are summarised below \dots Smith (2003) concluded \dots While I agree with points A and B, I do not believe that they have presented sufficient evidence that X and Y should be related in the way that Smith suggests.

(2) In a more detailed study, Jones (2004) carried out in-depth interviews will all middle to senior managers of an American insurance company. Jones (2004) was attempting to clarify the relationship between X and Y. Based on prior research, Jones hypothesised that ... and later concluded that ... Although Jones's (2004) study covers only one organisation, I would suggest that their explanation of the relationship of X and Y is more convincing than that offered by Smith (2003) or by Bloggs (2002). This is because ... Bloggs (2002) ...

Examples for how to write literature review

	Example 2 (structured like a Critical Literature Review)
Introduction to the piece	 The seven articles that were reviewed focused mainly on the following fit major areas Each of these areas will be discussed below, with a sixth sectio briefly commenting on some minor points which arose in only one or two of t articles.
Topic one outlined	 (1) Relationship between X and Y
Writer compares and contrasts the literature on the topic	The relationship between X and Y was the major concern of the in-depth ca study of an American insurance company by Jones (2004), and it was one of ti five major areas covered in the survey of 287 Victorian senior managers conducted by Smith (2003). Bloggs (2002) also discussed this issue at a gener. level and the theory outlined by Young (2003) is also of some relevance. essence, there appear to be two basic positions on this issue. Smith (2003). Bloggs (2002) and Young (2003) can all be seen as maintaining
Writer analyses what this may mean	Jones (2004), on the other hand discusses that Overall, Jones's (2004) position appears more convincing. This is because Therefore, it can be stated that the relationships between X and Y have fundamental tensions between them that could possibly have an effect on the way Senior
Introduces next topic for discussion	 Management review and implement policy changes within an organisation (2) The importance of A
Comparing & contrasting ideas	All articles reviewed emphasised the importance of A except Jones (2004), wh did not address this issue at any great length in the literature, this could have been due to lack of research evidence at that time. However Bandoff (2011) ar
Writer draws own conclusions	Jones (2013) both agree that the importance of Similarly, Peuleve (as cited Brack 2012, p4) states that the drive to improve this implementation within organisations is of critical importance. To summarise the arguments presented here it can be said that there are fundamentally two distinct school of thought
	See <u>http://www.ssu.uts.edu.au/helps/resources/writing/literature.html</u> more help on writing literature reviews at UTS.

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Tips to consider from Doctor

- 1. Make sure that the idea of your research wasn't done before, or at least the data and methods are different but same topic, e.g (different age groups for topic that was done before) the results could be different.
- 2. References and methods that was used in similar studies you can benefit from them.
- 3. Find gap in the knowledge, "ask: what was missing?" and build your topic based on it, ideally we write our literature review based on researches in last 5 years.
- 4. You have to do citation even for just two words, phrasing is important! (لو اكثر من شخص كتب جزئية فبارت معين فالبحث ، لازم شخص معين يعيد صياغتها كلها عشان تكون الصيغة متناسقة)
- 5. If you didn't find relevant topic in the last 5 years for writing your literature review, you can expand to 7-10 years or expand in the topic itself and look for topics less specific (you should have a good justification for doing that and explain why you expand the review).

Critical analysis is not evaluated at the students level

في نواف التركي في ريان الغنامي القادة: عبدالله الشهري لمتحمي وهى المتحمي

الأعضاء:

رغد النظيف ديما الجريبة شهد البخاري نوف الضلعان أثير الاحمري وعد ابونخاع ی ثراء الہویش فى الدوسري منار الزهراني

عبدالله التركي عبدالله المياح محمد الزير عبدالله النجرس تركي العتيبي عثمان الدريهم عبدالله القرني عبدالعزيز القحطاني ناصر الغيث عامر الغامدي سعد السهلي سعد الاحمري رائد الماضي معاذ آل صلام سعود الشعلان محمد الحصينى

MCQ:

Q1: How to start your literature research?

- A. Write a review
- B. Identify the keywords you will use
- C. Find relevant articles to your topic
- D. Write the whole idea of your research

Q2: The things that you didn't or couldn't cover in your research, should be mentioned in which section?

- A. Main body
- B. Introduction
- C. Conclusion
- D. Secondary objectives

MCQ:

Q3: Adding AND to your search term will help in which way?

- A. Reduce the number of results
- B. Increase the number of results
- C. Exclude some of the results
- D. None of the above

Q4: When literature review provide objective evidence from papers with different findings we call it?

- A. Balanced
- B. Comprehensive
- C. Referenced
- D. Relevant